
Learning About a Moving World – Towards Living HCI Knowledge

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Abstract

We show how we learned from teaching, how we developed learning support, and how we intend our learning environments and resources may be used, adapted, and maintained by our colleagues and their students.

Author Keywords

Human-computer interaction; learning; learning resources; cross-cultural learning

ACM Classification Keywords

K.3.1. Distance learning
K.3.2. Information systems education

Introduction

HCI is about the relation between modern human societies and new interactive systems. Learning about HCI, at an academic level, aims at acquiring the competences for understanding, analyzing, and / or designing this relation. Human societies change, and technology applied to interactive systems changes, both at high speed, and both by being influenced by the other.

A Variety of Experiences

The authors are responsible for education in HCI at University level, and have long term experience in supporting learning at this level in many countries

(Romania, Italy, Belgium, Germany, Spain, China, the Netherlands) in a variety of curricula and faculties (Architecture and Design; Cognitive Psychology; Artificial Intelligence; Computer Science; Information Sciences) at Bachelor, Masters, and PhD level. Related to this geographical spread of educational responsibilities, as well as because students of this level in these domains in many cultures are at the same time already practitioners, the learning situation mostly can best be characterized as “blended learning” [1]. The different courses that we developed carry names like: Human Information Processing; Basic (or Advanced) Research Methods in HCI; Visual Design, Service Design; Basics in HCI; Task Analysis; Cognitive Ergonomics; Design for Cultural Heritage; and Service Design. Most of these courses are or were taught in several of the curricula mentioned above.

HCI – a Moving World

As we take our profession seriously we found ourselves collecting educational resources. The books by our colleagues certainly inspire us. And our students love to browse through them. Thanks to the generosity of our colleagues and their publishers, we are in fact building paper libraries in various universities in different countries. And these collections grow fast, since the world changes and our colleagues continue to build new insight, concepts, tools, and techniques. At the same time, the set of application domains and the varieties of functionalities and interaction modalities continues to grow. Consequently, printed books are very valuable for understanding the development, but their value for envisioning the next steps degrades quickly. Just providing books does not work, and the same is true for teaching from books, and even for teaching as such. The development just runs too quick for any teacher to

stay ahead of this. Learning, in many aspects of the HCI domain, means discovery, collaborative development of understanding, mutual teaching and learning, and peer-supported self assessment.

The Role of Teacher in HCI

We developed an understanding of our roles as a facilitator of learning: we help our students find multiple alternative relevant state of the art resources. In the HCI domain these resources by nature stem from a multitude of disciplines. As the educational and professional background of our students vary strongly, we experience many occasions where some of the learners are expert in a relevant discipline where the teacher is not. Learning mostly turned out to be joined discovery journey, where all learned and occasionally taught, where alternative solutions could be compared and analyzed, not for quality level but for uniqueness and differences in viewpoints. Our students, in all courses and classes we ever taught, were highly motivated and showed genuine primary learning goals for mastering the domain. In many cases they were more concerned about developing a valid portfolio showing their competences than about scoring high marks. In fact for most of the courses we developed and taught we could convince the educational authorities to refrain from individual grading. Occasionally a learner could not keep the pace of the rest of a group and decided to withdraw. Over the years, for our students this turned out to be less than 10%.

What we Provide to our Students

Because of the blended learning context of our courses, we are continuously developing electronic learning environments [2, 3, 4, 5] Some parts of the HCI

domain in fact contain knowledge (concepts, tools, techniques, methods) that have longer term validity. This means our students develop “stable worlds”, e.g., for sub domains like Human Information Processing (ref URL); Task Analysis (ref URL); Visual Design Patterns (ref URL). But even stable worlds are constantly developing: our websites need maintenance and updating. Because of this we choose for building on an open source platform (e.g., mcm.cs.ou.nl/staging).

Some domains are in full growth: Service Design is still in its infancy (we found an early resource at: www.servicedesigntools.org), as is Design for Cultural Heritage (see our first steps to this at www.gerritvanderveer.eu/portal/index.php). We will develop stable worlds when we think we are ready, and when some of our students are ready to cast their understanding in this form (see our draft task analysis environment www.terconsi.it/taskanalysis). Each actual course (meaning a group of students, tutors, and teachers at a certain University during a certain course period) is any how in full growth as long as it is alive. And, in addition to this, it is and should be, a safe environment or “living world” where students my upload their work during development of their understanding, where they can freely compare each other’s work. We ask our students to teach each other, to provide their analyses and design documents to each other, and we capture their presentations on video. All this is available only in the living world.

On the other hand, we, as the domain experts and teachers, provide video captures of all our lectures, cut into mini-courses of 10-15 minutes, e.g., at [www.youtube.com/user/{GTATaskAnalysis;designinglivmemory; ServiceDesignOCW}](http://www.youtube.com/user/{GTATaskAnalysis;designinglivmemory;ServiceDesignOCW})

We are Willing to Share

In fact we share already, though the HCI world may not know, and we intend to provide our open source templates for living worlds with Creative Commons licence. And sharing is a mutual activity: we need multiple visions and insights, we need continuous input and in the end a body more stable than the current individual authors (whose vision is not entirely supported by the business model of their institute) should become a major stakeholder. Maybe SIGCHI could play a role here.

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