Symposium: Teaching ergonomics and human factors with a systems perspective

Martina Berglund

Logistics and Quality Technology, Department of Management and Engineering, Linköping University, Linköping, SWEDEN

1. Introduction
The symposium refers to teaching ergonomics and human factors with special attention to how to address the systems perspective. Ergonomics is a multidisciplinary field with a number of specialist areas, which needs to be conveyed in different educational contexts such as single guest lectures, courses in ergonomics or full educational programmes. At the same time as paying equal attention to the different areas within ergonomics, there is also a need to emphasize a necessary systems perspective. This is supported by e.g. Wilson (2014) stating that there should be stronger focus on the interaction between the system’s constituents than on specific areas. In teaching, this may be challenging in terms of the teachers’ abilities to cover the multidisciplinary field of ergonomics and human factors, how to design the courses as well as how to convey a systems perspective to the students, who in their turn need to gain understanding of how ergonomics and human factors can be integrated in the design of workplaces, products and/or services.

The aim of the symposium is to highlight, exemplify and reflect on teaching in ergonomics and human factors with a focus on the systems perspective. The symposium will give examples of how different Swedish universities approach the systems perspective of ergonomics in their teaching, reflections on challenges in doing this, and how these challenges are handled. A discussion of lessons learnt may hopefully serve as inspiration for the attendees in developing their own teaching in ergonomics and human factors. The symposium will be of interest to academics as well as practitioners who teach ergonomics and human factors, especially those who already cover or plan to cover the wide field of ergonomics.

2. Content of the symposium
The symposium consists of six contributing presentations as written below.

1. *Education into the future - Human factors courses with system perspectives*
   Authors: Åsa Ek, Mikael Blomé and Roland Akselsson, Lund University, SWEDEN

2. *Teaching design students to reflect on ergonomics design for all user groups in society*
   Authors: Anna-Lisa Osvalder and Erik Ohlson, Chalmers University of Technology, SWEDEN

3. *Understanding the user beyond ‘common sense’ – teaching product ergonomics to design engineering students*
   Authors: Martina Berglund, Torbjörn Andersson, Johan Hedbrant, Vanja Pavlasevic and Jonas Stålhand, Linköping University, SWEDEN

4. *Teaching maritime ergonomics in higher vocational education*
   Author: Cecilia Österman, Linnaeus University, SWEDEN

5. *EBooks as course literature in ergonomics and human factors*
   Authors: Lars-Ola Bligård and Cecilia Berlin, Chalmers University of Technology, SWEDEN

6. *Emphasizing the interactive systems view in a master’s programme in Ergonomics and HTO*
   Authors: Martina Berglund and Anette Karltun, Linköping University and Jönköping University, SWEDEN

Reference