



Innovative Textile Design from the Swedish School of Textiles in Riga



## EDUWEAR WORKSHOP IN RIGA, LATVIA

### WORKSHOP: EduWear

Date: 4th of March - 7th of March, 2008

Length: 4 days

Tutors: Prof. Marion Ellwanger, Siw Eriksson,

Javier Ferreira Gonzalez

Venue: Kalku street 1, Riga, Latvia

The e-text+textiles (e-t+t) initiative in partnership with the Swedish School of Textile, Borås, Sweden and the Riga Technical University is organising the EduWear workshop which is one of several Body & Space events highlighting the emerging field of smart textiles and soft technologies from the perspective of Swedish researchers, design practitioners, technologist and academics.

Participation in the workshop is limited to 12 students and recent graduates from the Riga Technical University and the Art Academy of Latvia. The language of the workshop is English. Selection of the participants will be by competitive application.

### **Introduction**

The project EduWear, supported by the European Commission, aims at contributing to the reduction of inhibiting factors by employing an approach rooted both in education and in Information and Communication Technologies (ICT) development. The objective is to develop an educational low-cost construction kit for wearable and tangible interfaces.

Understanding ICT and being able to use them competently and confidently, and possibly to actively shape their development are competences that are

crucial for societal participation in the information society. Structural barriers and mechanisms of marginalisation as well as the high cost of educational ICT materials inhibit the development of such competencies. These new interfaces will open up opportunities for haptic, tactile and aesthetic experiences, thus a wider range of learner types can be included. Therefore thematic concepts for courses, workshops (for formal and informal learning settings) are being developed, implemented and evaluated.

The University College of Borås, as one of the leading partners of the project EduWear, is responsible for contributing an expertise rooted in traditional and state of the art smart textile fields to this project. It applies the EduWear approach in higher education and works with artists and design students that are not used to working with digital technologies. The aim is to teach students from various design fields as well as textile engineering, textile management and electronic engineering students how to create and program electronic textiles (e-textiles). It is expected that such hands-on focused activities will raise the awareness of digital media in combination with new textile materials and will contribute to the development of future applications in wearable technology

ooo For more information about the EduWear project please visit:  
<http://dimeb.informatik.uni-bremen.de/eduwear/>

EduWear project is supported by the European Commission.

### **Workshop Concept and Objectives**

The concept of the EduWear workshop is manifold:

- to introduce the students theoretically and practically to smart textile materials, e-textiles and relevant electronics
- to react to and meet the strong interest students have today in new communication technologies and advanced textile materials
- to interest male students in textile materials and technologies.

The thematic concept of the workshop is to develop smart design concepts, having in mind the various possibilities offered from the Eduwear tool kit, eg. sensors, actuators, the Arduino board and software. In combination with smart textile materials, these may be used to measure vital signs of the body or different parameters of the environment apart from many other applications. During the workshop the students will explore the new electronic components for textiles, how to implement and to program them.

The different applications will be discussed and presented during the workshop. Through active brainstorming, ideas will be developed in the beginning of the workshop and possibly tuned down to a more realistic and manageable scale, due to the limited time and technical equipment in the workshop. The tutors will support the students to realise their ideas during the workshop's practical part. At the end of the workshop the results will be presented and reflected upon in front of the whole group.

The final presentation is meant to describe the design process (which is the challenge for future wearable technology due to the interactive properties of the new textile products/fashion) to understand its complexity and interdisciplinarity, as well as to learn new ways of communication and high-tech production of textile products.

### **Workshop Structure**

The basic concept for the Eduwear workshops consist of five stages forming a cyclical path of empowerment with different phases starting with the student's fantasies (which refers to meaningful ideas and possible personal tasks), moving to the exploration of the technology (hardware, software and material), later getting to imaginative and artistic/aesthetic design, thereafter coming up with the overall group ideas and the conceiving as well as the constructing of these. The final presentation is meant to embed the students with the acknowledgment, skills and verbalization of what they have learnt into their everyday lives.

**Marion Ellwanger**, Professor of Textile Design  
The Swedish School of Textiles, University College of Borås, Sweden

### **Selection of Participants**

Participation in the workshop is limited to 12 places and it is free of charge. Students and recent graduates from the Riga Technical University and the Art Academy of Latvia who are interested in learning how to practically develop electronic textiles are invited to apply. A mixed group of participants will be selected from the fields of textile design and technologies, fashion, electronic engineering, computing, product design, art, etc. No previous practical knowledge is needed but an interest in smart textile or intelligent design concepts is necessary. This has to be demonstrated in the application in some explicit way.

It is highly recommended for all applicants to take part at the seminar The Challenge of Smart Textiles and to visit the Body & Space exhibition in order to expand their knowledge of intelligent textiles and related concepts (more information at [www.e-text-textiles.lv](http://www.e-text-textiles.lv))

In the selection process e-t+t (in consultation with the two higher education institutions) will consider the following:

- the quality of the submitted motivation letter (no more than A4 sheet, in English)
- the benefit to the applicant from participation in the workshop (based on the applicant's motivation letter, CV and/or previous work, depending on the discipline)

**The deadline for the application is February 19, 2008.** Please email your motivation letter in English, your CV and any support material (if applicable) to: [info@e-text-textiles.lv](mailto:info@e-text-textiles.lv)

Your motivation letter must include the following:

- your name and contact details including your mobile number and email
- university name in which you are currently studying or have studied stating the department and study year or year of graduation
- a statement explaining your interest in taking part at the workshop, how you expect to benefit from this experience and why should we choose you

The successful applicants, who will be awarded with the possibility to take part at the workshop, will be notified by email by February 25, 2008.

It will be expected that the **selected applicants confirm their attendance at the workshop not later than February 27**, otherwise we will assume that the offer has not been not accepted. It is important that the selected applicants attend all workshop days in order to follow the programme.

OOO For inquiries regarding the workshop and application you can email: [info@e-text-textiles.lv](mailto:info@e-text-textiles.lv)