

## PATT sessions at ITEA's Annual Conference 2008, Salt Lake City

### **Thursday, Feb. 21, 2008**

11.00am – 11:50am

#### **Transdisciplinarity and the Definition of Competencies and Standards.**

In Germany, technology education, or 'Arbeitslehre' is the result of a cooperation between different technology-related disciplines. This transdisciplinarity was worked out to a concept for public schools with definitions of competencies and standards.

*Presenter: Walter E. Theuerkauf*

2.00pm - 2.50pm

#### **Student Views of Technology and Implications for Curriculum**

This presentation reports on a study about the entries in the Toshiba Exloravision competition in which over 15,000 students take part each year. Students have to present a vision on possible new technologies and the breakthroughs in science and technology that are required for them to be realized. 1000 entries from all grades have been studied.

*Presenter: Arthur Eisenkraft*

3.00pm – 3:50pm

#### **STL Inclusion of Biotechnology in the Korean Curriculum**

A comparison between USA and Korean biotechnology content and learning outcomes will be presented. A possible impact of the Standards for Technological Literacy (STL) on the Korean curriculum will be discussed.

*Presenters: John G. Wells and Hyoksoo Kwon*

4.00pm -4.50pm

#### **Impact of Play Opportunities on Responses to Design Situations**

In a research study qualitative and quantitative methods were used to investigate the way in which children's early play experiences impacted their emerging creative design capabilities.

*Presenter: Gill Hope*

### **Friday, Feb. 22, 2008**

11:00am – 11:50am

#### **Innovations and challenges of Korean Technology Education**

Since 1970 technology education is offered as an integral part of general education in Korea under the name of 'kisul'. Still there are challenges to be met: uncertainty about curriculum content, public understanding, and the difference between general and vocation education.

*Presenters: Sangbong Yi and Hyuksoo Kwon*

2:00pm – 2:50pm

#### **Technology Innovation Design Engineering (TIDE)**

The TIDE elements provide a robust structure for a robust curriculum experience. The nature of each element is explored and the way they can be combined into an overall curriculum.

*Presenters: David Barlex and Torben Steeg*

3:00pm – 3:50pm

**Food Technology in the English Secondary Curriculum**

This paper investigates how the elements of technology, innovation, design and engineering (TIDE) can be combined within the current teaching of food technology in the secondary curriculum in England.

*Presenter: Marion Rutland*

4:00pm – 4:50pm

**Designing Innovations for Global Sustainability**

In this era of globalization the dynamic interplay between technology and society along with sustainability concerns are paramount. This presentation will provide suggestions and tools for incorporating sustainability in designing innovations.

*Presenter: Balsy Kasi*

**Saturday, Feb. 23, 2008**

9:00am – 9:50am

**Technology Oriented Primary Teacher Education in Finland**

At the University of Oulu in Finland a technology-oriented primary teacher education program has been developed which combines the demands of design technology and science technology. A theory, crystallized in a figure called The Structure of Technology Learning has been developed to support this program.

*Presenter: Matti Lindh*

10:00am – 10:50am

**Engineering Design as a Contextual Learning Framework**

A study among sixty five elementary students in rural/suburban Massachusetts showed the positive impact of an integrated engineering and math after-school program upon children's learning of engineering concepts, technological awareness and understanding of mathematical concepts.

*Presenter: Araceli Martinez Ortiz*

11:00am – 11:50am

**Integrated Science, Technology, Arts and Math (STE@M) education**

In this presentation a framework for integrated Science, Technology, Arts and Math education will be presented in the form of the STEA@M pyramid. Consequences for programs, school buildings and school days will be discussed.

*Presenter: Georgette Yakman*