Dirk Huylebrouck (BEL)

The Two Cultures in a Multicultural Society

Keywords: Mathematics, Art, Africa, Education

The first paper offers a mathematical perspective on learning art, design and architecture. The author points out that artists today need to be acquainted with science as well as the humanities. He reports on his own practice of teaching interdisciplinary mathsart courses to architecture students in which he promotes a creative approach to maths. He also argues for extending the horizons of the science and humanities by identifying and defining their own diverse cultures. Although societies are becoming increasingly multicultural, western and/or nationally oriented perspectives are still prevalent in educational institutions.

Ruth Mateus-Berr (A), Lilijana Radovic (SRB)

Op-Tiles and Interdisciplinarity Keywords: Art, Math, Education, Labyrinth, Op-Tiles

Connecting math and art in teaching as well as the relationship between tertiary and secondary education is the central focus of this paper. Two professors of mathematics and fine art describe case study research they carried out in an Austrian high school. Educators from two countries, who taught different subjects at different educational levels, engaged secondary school students in lessons organised around the topics of labyrinth and Op Art. The authors advocate increased interdisciplinarity in education and discuss the strengths and weaknesses of a number of international examples.

Stacey Salazar (USA)

Scenes from an Art School: Four **Pedagogical Practices**

Keywords: Pedagogy, College, Studio Art

The aim of this paper is to encourage artist-teachers to reflect on their own pedagogy, get in touch with different instructional strategies and intentionally shape their educational settings. The author offers out four practical suggestions for crafting creative learning environments inspired by her observations of studio art teachers at colleges in USA. She identifies a need to set up physical and social learning environments in which students feel more protected and empowered.

Judit Bényei, Zsófia Ruttkay (HU)

Digital Museum: A Multidisciplinary **University Course**

Keywords: Museums, Design Education, Digital Technologies

This paper reports on a cross-institutional, interdisciplinary research and development project. The

authors reflect on new challenges artists and designers in museums face in view of the omnipresent and rapidly developing digital technologies. Researchers with expertise in media technologies and education collaborated with a museum and implemented a course involving both arts and technology students from different universities. They identify a need for teaching and learning strategies that train students in collaborative, interdisciplinary methods of working and develop their communication skills.

Fares Kayali (A)

Educating Secondary School Teachers in Game Design and Game-Based Learning

Keywords: Game Design, Education,

Game-Based Learning

The author has developed a university-based course for future secondary teachers in response to widespread reservations about using games in class. The course develops their understanding of video games and their effect on children's behaviour. It also encourages teachers to create games with their students. This paper outlines practical strategies and instructional materials for game-based learning, game literacy and teaching game design.

Monika Farukuoye (A)

The Artist as Unreliable Narrator: Globalized **Cultures and Polymorphic Views**

Keywords: Unreliable Narration, Globalization, Polymorphic Views

This paper focuses on the role of the artist in educating us to understand the simultaneous validity of conflicting views produced by globalisation, increasing migration and the omnipresent media. From the perspective of a film artist, the author reflects on how contemporary art and film address and challenge "unreliable societal narrations".

Lourdes Cilleruelo, Augusto Zubiaga, Miriam Peña Zabal (ESP)

Desired Problems: An Artistic Experience in the Field of Neural Networks

Keywords: Cross-Disciplinary Practice, Making, Curiosity-Driven Learning

The practical example this paper reports was a cross-disciplinary collaboration involving Science, Technology, Engineering, Arts and Math (a response to the educational concept of STEAM). The authors stress the importance of curiosity-driven and problem-based learning as well as open access to knowledge and peer or community learning. They advocate tinkering as a worthwhile methodology with reference to the development and increasing use of virtual DIY platforms and fablabs.

Ernst Wagner (D), Rolf Laven (A)

Visual Literacy: An Universal Concept?

Keywords: Visual Literacy, Curricula, Europe

This paper offers insights into a comparative study of visual arts curricula and assessment in European schools. A finding was that in spite of slight differences in their design and implementation, 'responding' and 'making' and, in some cases, 'reflection and creative thinking' are the main domains of learning and competence. As part of a larger research program (ENVIL), a network of researchers and curriculum developers are building on this research to formulate a common model of assessment that could function as a framework for visual literacy and facilitate the work of teachers, curriculum developers, educators, textbook authors and students throughout Europe.

Torsten Meyer, Gila Kolb, Konstanze Schütze (D)

What's Next in Art Education?

Keywords: Next Art Education, Shift, Risk

This paper addresses the sweeping changes media technology is effecting in art education. The authors, who are researchers in media culture, art theory and art education investigate how art education might be defined in the future. If it is going to operate with the complexity of a networked society it will need to focus on the present instead of the past. Considering the way artists work it will need to focus on media literacy and basic IT skills. The authors argue in favour of individual teachers carrying out small changes to their practice instead of a radical turn.

Barbara Mahiknecht (A)

Uncanny Materials. On Research and (Un)learning the History of Art Education

Keywords: Research, Teaching, History, Art Education This paper reports on the institutional origins of art education. A group of students were challenged to carry out art education research "with" instead of "over" history. The author, who is a researcher, curator, art educator and teacher, offers insights in the processes involved in archival research. Strategies of curating, art education and performance were applied to present the results of the project to the public.

Lise Kjaer (USA)

The Artist as Writer

Keywords: Writing, Art, Post Graduate Theses, Vygotsky

Reflection and communication skills are the keys to developing self-reliant artistic practice. In arguing her case, the author, a researcher, artist and art history teacher, presents a series of creative writing techniques for teaching art students. She argues that writing about their own art and processes and presenting the results in public enables them to connect intuitive and analytical approaches to practice. She argues also that engaging in self-analysis and written expression helps them to clarify their artistic development in the context of contemporary art.

Karen Lee Carroll (USA)

Teaching and Learning at the Intersection of Poverty and Secondary Design Education

Keywords: Design, Urban Settings, Secondary Schools

This paper demonstrates how disadvantaged secondary students can benefit from engaging with arts, design and architecture using the example of the Baltimore Design School. The author, who is an artist-teacher, analyses the characteristics of designers and teachers and identifies empathy as an important skill they both share. She is convinced that everyone has potential to become a successful and confident learner so long as they are willing to take risks and accept every challenge as a possibility for learning.

Patricia Olynyk (USA)

Evolving the Third Culture

Keywords: Art, Science, Technology, Third Culture This paper addresses intersections between art, science and technology in tertiary education. It provides insights into recent discourse and debates about cross-disciplinary activities at academic institutions in the USA. The author is committed to advancing the role of the arts in the academy as a unique form of knowledge production. Her report of research models and collaborative projects emphasises the stimulating effect they can have on both interdisciplinary and cross-school relationships and collaborations.

Ruth Mateus-Berr, Albrecht Karlusch, Wolfgang Sachsenhofer (A)

The Case for Interdisciplinary Art and Design Education

Keywords: Interdisciplinary, Business, Art & Design Education

This paper is about dialoguing between Art, Design and Business in tertiary education. In reporting an ongoing research project into "clean tech energy startups" it offers many insights into how student's interdisciplinary abilities can be trained and the challenges they face. The interdisciplinary team of authors point out the proven impact of this project on the formulation of socially and economically grounded solutions.

Anton Falkeis (A)

Aspects of Space: Architecture for Non-Architecture Students

Keywords: Architecture, Spatial Behaviour, Learning This paper presents a program for art education and other students that aims to shape learners' ideas of space. An architect, researcher and professor reports on three projects and describes theories underpinning his teaching together with practical strategies and tools. The paper describes ways in which students without specific knowledge and skills in architecture can investigate space in order to experience and develop their own architectural ideas.

Judith M. Burton (USA)

Pedagogy as Spaghetti Junction!

Keywords: Reflection, Development, Materials, Art Education

The author of this paper draws on her experience as a professor of art education to argue that art student's lack the ability to reflect on and articulate their artistic practice. In order to develop these skills, future artists and art teachers need college/university art educators who exemplify these abilities. The author scrutinises the multidimensional role of art teachers in tertiary education as "maker-teacher-learner-researcher" and suggests that it is crucial to understand human development and materials, as well as re-examine history while searching for continuity.

Richard Jochum (USA)

The Changing Education of Artists

Keywords: Higher Education, Educating Artists

The author of this paper is concerned with changes in teaching and learning studio art and art education. He alerts us to three driving forces behind these changes and discusses them: (1) the hybridization of media and art practice (the mixing of genres, materials and concepts), (2) specialisation (and simultaneously increasing interconnectedness), as well as the (3) professionalization of learning.

Eduardo Benamor Duarte (USA)

Automated experience: prototyping adaptive artifacts in Art & Design pedagogy

Keywords: Automation, Fabrication, Social, Environment, Pedagogy

Digital technology applications are increasingly changing the production and analysis of design solutions in art and architecture. This paper focuses on the consequences this may have on art and design in tertiary education and a search for appropriate models of learning. The author argues that a procedure-based approach to design process offers beneficial new forms of augmented learning and social interaction. What this means in practice is illustrated in his report of a research and development project on sensory responsive components in architecture.

Eva Maria Stadler (A)

Perspectives on Art Education

A gallery exhibition will take place as part of the symposium Perspectives on Art Education. Presenters at the conference have been invited to submit an artwork related to the theme they have chosen to speak about. The exhibition will be assisted by Eva Maria Stadler. Her article in this publication reflects on art education by introducing artworks created by international artists who engage with educational concepts. Visual Perspectives on Art Education

May 28-30, 2015 @ Sala terrena Exhibition Centre Heiligenkreuzer Hof, Vienna