



PROGRAMME & ABSTRACT BOOK

Conference in Tartu, ESTONIA
23–25 January, 2018

ISBN 978-9985-4-1087-5



Erasmus+





PROGRAMME AND ABSTRACT BOOK

Conference in Tartu, Estonia
23 – 25 January, 2018

ISBN 978-9985-4-1087-5



European Union
European Regional
Development Fund



Investing
in your future



Erasmus+

ORGANISERS

Organising Committee

Mari Karm, University of Tartu
Marek Sammul, University of Tartu
Ene Voolaid, University of Tartu

Scientific Committee

Mari Karm, University of Tartu
Marek Sammul, University of Tartu
Ene Voolaid, University of Tartu
Kristi Kuningas, University of Tartu
Anu Sarv, University of Tartu
Marvi Remmik, University of Tartu
Tiia Ristolainen, University of Tartu
Varmo Vene, University of Tartu
Kristol Mikkor, University of Tartu
Tiia Rütmann, Tallinn University of Technology
Larissa Jõgi, Tallinn University
Hanna Kanep, Universities Estonia
Svetlana Ganina, Estonian National Defence College
Kristiina Krabi-Klanberg, Estonian Academy of Art

SECRETARIAT

Publicon PCO
Gerta Sarv
Conference Producer
+372 5554 7965
gerta@publicon.ee

Kristin Lillemäe
Conference Secretariat Manager
+372 5668 3986
kristin@publicon.ee



WELCOME

Dear participants,

The theme of our conference, Teaching for learning – the university perspective, clearly points out that the aim of teaching is learning. At higher education institutions, we assume cooperation with self-directed learners who are independent enough to make decisions about their learning. The task of the university teachers in this case is to skillfully guide the student in the process of meaningful learning.

There are numerous ways how student learning can be supported, i.e. how students could be taught well. There is no single correct way of teaching. Depending on the situation, a teacher needs to use different tools and teaching methods. It is always important, however, to care about students, because then we can notice and understand their learning process and adjust our teaching accordingly. Good teaching is a dialogue and cooperation with students.

The concept of our conference Teaching for learning – the university perspective incorporates the idea that university teachers are self-directed and keen learners as well. A good opportunity for learning is discussions with colleagues about innovative and research-based ideas for the development of learning and teaching. An important component of the Scholarship of Teaching and Learning is sharing the experience and ideas with colleagues. The advancement of learning and teaching is an ongoing process, which needs collaboration between all parties as well as commitment and active support from the heads of universities and other higher education institutions.

I wish you a conference full of dialogues, a conference which would help you build a bridge between learning and teaching and would support continuous cooperation in the development of your teaching for learning.

Mari Karm
Head of the Organising Committee



TABLE OF CONTENTS

Welcome	5
Pre-conference workshop programme / 23 January	7
Scientific programme of day 2 / 24 January	8
Scientific programme of day 3 / 25 January	10
Introduction and abstracts of keynote speakers	12
Presentations of pre-conference workshops	17
Presentations of parallel session 1 / 24 January	23
Trends in Higher Education	24
Symposium on Educational Innovation in University Pedagogy on the Example of LIFE Projects at Tallinn University	27
Students' Perception of Teaching Learning Environment	28
Course and Curriculum Design	31
Field Specific Differences in Learning and Teaching	35
Presentations of parallel session 2 / 24 January	38
Workshop on European Principles for the Enhancement of Learning and Teaching	43
Reflections on Research Practice	44
Student Engagement	45
Learning Environment	47
Field-Specific Differences in Learning and Teaching	51
Innovations in Teaching	55
Presentations of parallel session 3 / 25 January	58
Workshop on Co-teaching – One Mind in Two Bodies	63
Co-operation in Teaching and Learning	64
Self-Directed Learning	65
Student Engagement	68
Approaches to Teaching of Academic Staff	72
Presentations of parallel session 4 / 25 January	74
Workshop on Collaboration in Project Work	79
Approaches to Teaching Academic Staff	80
E-learning	81
Student Engagement	84
Problem-Based Learning	87
Multicultural Classroom	90
Poster presentations	93
Participant list	96
Practicalities	113
	121

PROGRAMME OF THE CONFERENCE “TEACHING FOR LEARNING – THE UNIVERSITY PERSPECTIVE”

10:00 – 13:00	Workshop session I				
	Struve I	Struve II	Baer	Peterson	
	Rhonda Wynne, Community-Based Learning: Context, Outcomes and Models	James Groccia, Student Engagement: A Multidimensional Perspective	Ivar Männamaa, Simulation Games: Design, Facilitation, Debriefing	Erik de Graaff, Implementation of Different PBL Models	
11:15 – 11:45	Coffee break				
11:45 – 13:00	Work-shop session I continues				
13:00 – 14:00	Free time				
14:00 – 15:15	Workshop session II				
	Struve I	Struve II	Baer	Peterson	Pirogov
	Kimmo Vehkalahti, Open Data Science: Experiences and Possibilities	Andy Penaluna and Kathryn Penaluna, Hindsight, Insight, Foresight – New Way Forward	Linda Helene Sillat, ABC Learning Design	Erik de Graaff, Teaching in a PBL Curriculum	Leon Robinson. Re-Thinking Values in a Not- Quite-Secular World
15:15 – 15:45	Coffee break				
15:45 – 17:00	Workshop session II continues				

Day 2

Scientific programme
Wednesday, 24 January 2018

Venue: Dorpat Convention Centre (Turu 2, Tartu)

9:00 – 10:00 Registration
10:00 – 12:00 **Conference opening**
Plenary presentation: Peter Felten, The Undergraduate Experience: What Matters Most for Student Success?

12:00 – 12:45 Lunch

12.45 – 14:15 Parallel session I

Struve I	Struve II	Baer
Trends in Higher Education	Learning Environment	Symposium
TRENDS 2018: Learning and Teaching in European Universities <i>Zhang</i> Pedagogical Innovation Projects: Sharing an Experience of the University of Porto <i>Remião Maria Pinto, Ilda Ginja, Pedro Teixeira</i> The Results of the Survey of the 2015 Alumni of Estonia's Higher Education Institutions <i>Roosimägi</i>	Teaching Experience with MOOCs in Analytical Chemistry at the University of Tartu <i>Helm, Leito</i> What Do MOOC Video Watching Patterns Reveal about Student Learning? <i>Marling, Miliste, Tammekänd, Piir, Krull</i> The Significance of Self-Regulation in Digitalized On-line Courses <i>Pyrhönen</i> Use of E-portfolio in Pharmacy Education – First Experiences from the Social Pharmacy Course at the University of Tartu <i>Volmer</i>	Educational Innovation in University Pedagogy on the Example of LIFE Projects at Tallinn University <i>Reiska, Jõesaar, Kangur, Koort, Sillaots, Uusküla</i>

14:15 – 14:45 Coffee break

14.45 – 16:15 Parallel session II

Struve I	Struve II	Baer
Reflections on Research Practice	Learning Environment	WORKSHOP
Beginning University Teachers and Their Approaches to Teaching and Professional Self-Perception <i>Švaříček, Vanderziel, Sucháček, Šedová, Čejková</i> Reflection on Formative Approach in the Academic Writing Course <i>Jurāne-Brēmane</i> Two Sides of the Same Coin - University Teachers' Experiences with Applying and Receiving Scholarship of Teaching and Learning Grants (SoTL) for Studying Their Teaching <i>Remmik, Lepp</i>	Examining the Unspeakable - a Critical Exploration of Learning Technologies <i>Robinson</i> Information Culture of Students in the Academic Environment – Finding One's Way through Studies <i>K. Lepik, Kannukene</i> Pedagogical Ecology <i>Kangur, Arro</i> Writing a Master's Thesis - Why Is It So Difficult? <i>Uibu</i>	European Principles for the Enhancement of Learning and Teaching <i>Zhang, Purser</i>

16:30 – 18:30 **Plenary presentations**
Andy ja Kathryn Penaluna, Future Proofing Education, the Entrepreneurial Imperative
Hilkka Hiiop, Art Detectives. The Natural Sciences and Infotechnology in the Service of Art Research

19:00 – 22:30 Social event

19:00 – 19:30 Excursion at the University of Tartu Museum (Lossi 25, Tartu)
19:30 – 22:30 Conference dinner at the University of Tartu Museum, White Hall (Lossi 25, Tartu)

Peterson	Pirogov	Parrot
Students' Perceptions of Teaching	Field-Specific Differences in Learning and Teaching	Course and Curriculum Design
"When You Know Who Stands Next to You, It No Longer Matters Who You Face" – Teacher Collaboration in CLIL <i>Boltovsky, Piirimees</i> Self-Assessment as a Tool for Enhancing Competence Development and Learning in Entrepreneurship Education <i>Täks, Öunapuu</i> Teacher's Perspective vs Learner's Perspective – How to Create Effective Communication? <i>Ugur</i>	How to Teach Values and Engage Students? Experience from Teaching Education for Sustainable Development <i>Kalle</i> Open-access Biodiversity Data in the Teaching Process – Some Possibilities and Lessons Learnt in Estonia <i>Kana, Runnel</i> Student Teacher Ecological Self in the Context of Education for Sustainable Development – A Longitudinal Case Study <i>Raus</i>	Using Creative Design Methods in Curriculum Development <i>Rehepapp</i> Mapping Student Learning in a Kinesiology Class, over the Three Stages of Performance of the Teaching for Understanding Framework <i>Lysaght</i> Course Design, Academic Procrastination and Students' Learning Experience <i>Värv</i>
Peterson	Pirogov	Parrot
Student Engagement	Field-Specific Differences in Learning and Teaching	Innovations in Teaching
Impact of the Digital Tools on the Learning and Teaching Processes: Both the Students' and the Teacher's Perspective <i>N. Lepik</i> Measuring Attention and Attendance with the Help of Clickers <i>Longarela</i> Teaching for Learning – Informal Education for Children at Universities: A Case Study at Tallinn University, Estonia <i>Liisa Puusepp</i>	Didactics of National Defence - Combining Teaching and Learning between Different Levels of Education <i>Kõlli, Karton, Ermus</i> Student's Education on the Use of Command Support Systems in Command Posts during the Military Decision Making Process <i>Biernacik, Marczyk</i> Perceptions, Beliefs, and Attitudes of First Year Engineering Mathematics Students: An Empirical Study of Irish and Estonian Students <i>Brown, Uukkivi, Labanova</i>	Do Simulation Exercises Provide Significant Learning Experiences? <i>Polikarpus</i> Constructing Student Centered Learning Environments at the University of Eastern Finland – on the Way to Excellence <i>Heide, Haapaniemi</i> Feedback to the Students' Efforts – an Essential Tool for Improving Teaching and Learning <i>Tavits</i>

Day 3

Scientific programme
Thursday, 25 January 2018

Venue: Dorpat Convention Centre (Turu 2, Tartu)

09:00 – 10:00 **Plenary presentation**
Erik de Graaff, Teaching Self-directed Learners

10:00 – 10:30 Coffee break

10.30 – 12:00 **Parallel session III**

Struve I

WORKSHOP

Co-Teaching – One Mind in Two Bodies
Johnson, Põlda

Struve II

Co-operation in Teaching and Learning

Campus Engage Ireland: Promoting Civic and Community Engagement in Higher Education
Wynne

Changing Learning and Teaching Cultures at University
Karu, Aava

Engaging Students and Faculty in Joint Learning Experiences
Bachmann

Baer

Self-Directed Learning

How to Trick Students into Self-Directed Learning?
Konsa

Developing Deeper Understanding of the Profession at the Beginning of the Studies: Based on the Example of the Estonian National Defence College
Aus, Kütt

Students' Perceptions of the Enhancing and Hindering Elements of the Teaching-Learning Environment (TLE)
Uiboleht

Development Seminar – Best Practice of Creating Real Transferrable Learning
Adler, Bogdanova

Peterson

Student Engagement

Disciplinary Thinking in Cultural History: Student Engagement as a Structured Experience
Oruaas

Fostering Students' Creativity in Engineering Graphics Courses
Kukk

Measuring the Impact of a Lecture in a First Year Undergraduate Course
Langemets

Pirogov

Approaches to Teaching of Academic Staff

Why Do We Need to Engage Practitioners and Real Organizations While Teaching Communication Management at the University?
Taur

University Teachers' Understandings about Teaching in the Context of a Pedagogical Course
Skaniakos, Karm, Sarv, Niilo

Self-Evaluation of Pedagogical Competencies of Academic Staff of Tallinn University of Technology in the Context of Career Management
M. Lõhmus, Rütmann

Lobby

Poster session

12:00 – 12:45 Lunch

12:45 – 14:00 **Parallel session IV**

Struve I

Problem-Based Learning

Implementing Research Based Teaching in an LLM Program
Schärfke, Kristiansen, Eghol Elgaard

Teaching Linear Algebra through Problem Based Learning
Hallik

Problem-Based Learning Case Study in Biology
Hindrikson, Voolaid, Öpik, Mägi Sõõrd

Struve II

Approaches to Teaching of Academic Staff

Beliefs, Identity and Teaching Practice of Academics in the Context of Structural Reform and Changes at the University
Jõgi, Ümaril, Põlda, Saia, Toros, Oder, Kangur, Puusepp, Paia

Expectations to Academic Staff (Academics and University Teachers)
Mets-Alunurm, Karm

Characteristics and Behaviours of Excellent Teaching: Perceptions of Military Educators
Soomere, Mansour, Groccia

Baer

E-learning

Teaching Academic and Work Life Communication Skills Online: Student and Teacher Perspectives
Gamache, Alanen, Männikkö

The Impact of E-teaching on the Components of Learning: Comparing In-Class and Online Study Groups
Beitane, Braghirioli

Domain-Specific Digital Competences for Providing High-Quality Professional Training in Higher Education
Sillat, Tammets, Laanpere

Peterson

Student Engagement

How to Nurture Learning and Feed Understanding in a Flexible Learning Environment. An Example from Food and Nutrition Education at Umeå University
Tieva, Malmros

Supporting Meaningful Discussions and Interaction in the Classroom
Karm, Sarv, Voolaid, Miliste, Niilo

Flip or not?
Velling

Pirogov

WORKSHOP

Collaboration in project work
de Graaff

Parrot

Multicultural Classroom

Contribution of Communication Theory to Understanding University Teaching: Cultural Discourse Analysis of Latvian - American Undergraduate Interaction
Lačmele, Burke

CLIL Teacher Training at the Narva College of the University of Tartu: First Outcomes and Future Perspectives of the International CLIL Programme
Raud, Orekhova

Cultural and Lingual Diversity Challenges Finnish Teacher Education
Kyttälä, Sinkkonen

14:15 – 15:15 **Plenary presentation:**
Anneli Saro, Performative Power of Teaching

15:15 – 15:30 **Closing session**

INTRODUCTION AND ABSTRACTS OF KEYNOTE SPEAKERS

Peter Felten

Elon University, United States

Peter Felten is professor of history, assistant provost for teaching and learning, and executive director of the Center for Engaged Learning at Elon University. He works with colleagues on institution-wide teaching and learning initiatives, and on the scholarship of teaching and learning. As a scholar, he is particularly interested in learning and teaching, individual and institutional change, and student experiences and agency in higher education.

The Undergraduate Experience: What Matters Most for Student Success?

In our book *The Undergraduate Experience* (Jossey-Bass, 2016), my co-authors and I identify six core themes that matter most for student success: learning, relationships, expectations, alignment, improvement, and leadership. This interactive keynote will explore the research that demonstrates why these themes are critically important not only for students but also for instructors and for the institutional culture. During the session, we will critically consider what each of us can do, no matter what our context and role, to cultivate a generative culture of learning and teaching.



Erik de Graaff

Aalborg University, Denmark

Erik de Graaff (PhD) is a professor at the Aalborg Centre for Problem Based Learning in Engineering Science and Sustainability under the auspices of UNESCO. He has contributed to the promotion of knowledge and understanding of higher engineering education with numerous publications and through active participation in professional organizations like SEFI, IGIP, IFEEES and ALE. Since January 2008, he is Editor-in-Chief of the *European Journal of Engineering Education*.

Teaching Self-Directed Learners

The past decades Universities around the world innovated their education, introducing methods like Active Learning, Problem-Based Learning and Project Organized Learning. There are many different varieties, but a common characteristic appears to be a shift from teaching to learning. The role of the teacher has to change. Instead of imparting knowledge, the teacher has to find ways to support the students in becoming independent learners. In a 'flipped' classroom the roles are even reversed and the students are to do the teaching. This keynote lecture will explore strategies for teachers to cope with the challenge of letting the students take the lead.



Hilkka Hiip

Estonian Academy of Arts, Estonia

Hilkka Hiip (PhD) is Professor at the Estonian Academy of Art, Department of Cultural Heritage and Conservation. In 2012 she finalised her PhD research on the conservation management of contemporary art. She has supervised a number of conservation and technical investigation projects in Estonia, curated exhibitions, and conducted scientific research on conservation and technical art history.

Art Detectives. The Natural Sciences and Infotechnology in the Service of Art Research

This presentation introduces the shift towards the interdisciplinary research of art, combining methods from arts and sciences and uses contemporary information and communication technology (ICT) for acquiring, processing, archiving, contextualising and visualisation of data. This type of research binds scientific investigation of the material, physical and technical sides of the artworks with traditional art historical methods: work with historical sources, stylistic analyses and iconographical interpretation. Research projects that integrate the humanities with the exact sciences create an excellent platform for tying different fields of knowledge together in both science and education.

The presentation introduces two major research projects, The Rode Altar in Close-up (2013-2016) and Christian Ackermann – Tallinn's Phidias, Arrogant and Talented (2016-2020), both of which are founded on broad-based interdisciplinary cooperation, one in analysing the medieval altarpiece of St. Nicholas' Church, and the other in analysing the oeuvre of Christian Ackermann, the top-notch master of baroque art in the territory of present-day Estonia. An important keyword for both projects is the popularisation of the field of heritage, and tying this heritage in with educational work at both the local and international levels.



Andy Penaluna and Kathryn Penaluna

University of Wales Trinity Saint David, United Kingdom

Professor Andy Penaluna is the director of International Institute for Creative Entrepreneurial Development at University of Wales Trinity Saint David. He is an expert on enterprise education at the United Nations in Geneva and the European Commission, where he was a part of the EntreComp team. He also led the development of teacher training for 8 countries in South East Europe (SEECCEL) and has worked on developing entrepreneurial schools and colleges / HE level creativity at the OECD in Paris. Andy is currently an education advisor on enterprise within the Westminster Government's Industrial Strategy Review and chairs the Quality Assurance Agency (QAA) for Higher Education's Enterprise and Entrepreneurship group.

Kathryn Penaluna is the Associate Professor and the Enterprise Manager of the University of Wales Trinity Saint David and Entrepreneurship Champion, Welsh Government. Kathryn uses her experiences as a bank manager and a partner in a graphic design studio to develop a contextualized entrepreneurship curriculum across the University's four faculties. She is engaged with the United Nations Conference on Trade and Development, the European Commission and Welsh Government. As an acknowledged specialist in delivering intellectual property awareness she is leading new educational initiatives with the UK Intellectual Property Office.



Future Proofing Education, the Entrepreneurial Imperative

The world of work is becoming increasingly complex, it changes quickly and the knowledge of today may not be the knowledge required tomorrow. Knowledge is not enough on its own, the task of harvesting knowledge suited to solving a new task or problem becomes more important than recollection of facts or figures. This requires new skills and thinking, so an educator has to be able to demonstrate they too can become more entrepreneurial – through their teaching approaches. Hence, becoming an entrepreneurial educator is an integral part of developing entrepreneurial learners, but what are the factors involved? This presentation introduces the educator to why entrepreneurial forms of education have evolved, offers insight into his/her personal/relevant skills and knowledge through alignment with the EntreComp Framework, and sets the scene for further discoveries in entrepreneurial learning.

Anneli Saro

University of Tartu, Estonia

Anneli Saro is the Professor of Theatre Research and the Vice Rector for Academic Affairs of the University of Tartu, Estonia. Prior to that she served as the Vice Dean for Academic Affairs of the Faculty of Arts and Humanities, University of Tartu. Professor Anneli Saro has published articles on the history and system of Estonian theatre, on performance theory and audience research.

Performative Power of Teaching

Performativity is a term that unites theatrical performances (incl. theatre) and educational practices. They both aim at a certain change through interpersonal interaction and use more or less theatrical devices to achieve this goal. In my presentation, I am going to compare different forms of theatre and teaching, and will analyse their pros and cons from the perspective of participants.



PRESENTATIONS OF PRE-CONFERENCE WORKSHOPS FACILITATORS

Implementation of Different PBL Models

Erik de Graaff

Aalborg University, Denmark

Problem-Based Learning (PBL) is known all over the world as a successful method for the innovation of higher education. Aalborg University in Denmark is one of the leading institutes in the development of PBL, in particular within the field of engineering. The integration of skills and knowledge from different disciplines in a problem-based learning environment prepares the students for the kind of challenges they will encounter in real life practice. Self-directed collaboration in small groups is a core characteristic of PBL. Students are expected to run their own group-meetings and to plan their own study activities. Implementing PBL entails a process of organisational change. The allocation of responsibility for tasks like educational design and assessment of learning outcomes must be re-considered and the teaching staff should acquire new competencies. For the people involved, adjusting to the process of educational innovation implies a process of cultural change. Introducing Problem-Based Learning (PBL) in a traditional University is a challenge. The professors are settled in their ways and it takes a lot of effort to shift them. In a situation where the experience of both the staff as well as the students is limited to the traditional teaching and learning environment, many people will choose to continue the ways they have known all their life. Changing to PBL involves a paradigm shift and the criteria for "good teaching" will have to be adjusted.



Community-Based Learning: Context, Outcomes and Models

Rhonda Wynne
University College Dublin, Ireland

Higher education institutions are increasingly keen to engage with society in a more structured and organised way. Such engagement can take multiple forms, including collaborative research projects, student and staff volunteering, public participation in science, and students learning in community settings. This workshop will commence with a broad overview of university engagement with society and will look at some of the agendas and drivers in this area, while also considering the philosophy and values inherent in social responsibility or community engagement endeavors. This will set the context for the more detailed discussion on Community-Based Learning (CBL). This term is understood differently but for the purposes of this workshop will be used as a broad concept to discuss the what, where, when, why and how of students learning in community settings. Community-based learning is a form of experiential education with a civic underpinning. It connects classroom learning with communities, and students gain academic credit for participating in, and reflecting on, a community project or experience. It is becoming more established as a pedagogical approach within higher education as it involves students in 'real-life' learning, builds social and civic graduate attributes, and contributes to learning outcomes such as team work, communication skills, problem solving and leadership. This workshop is based on the experience of considering community-based learning within a large research-intensive institution. One of the challenges is the variety of terminology in place and the multiple models, with subtleties and distinctions that are not always obvious. Discussions with academics and practitioners reveal a degree of confusion about the language and models in place nationally and internationally. Is it a project, a placement, a volunteering activity, or an event? Could it be all at the same time?! Community-based learning is organised variously to reflect the multiple ways students can learn from community experiences. Three different models will be presented to highlight the variety of approaches that can be adopted to suit institutional context – a student project approach, a volunteer learning module, and a collaborative research activity. Questions of process, assessment and partnership working will be considered. The workshop will be active and participative, with several tasks along the way to ensure discussion and involvement. In advance of the workshop, consider ways students from your discipline could contribute to a community organisation or a non-governmental organisation, and come ready to think and talk!



Student Engagement: A Multidimensional Perspective

James Groccia
Auburn University, United States; University of Tartu, Estonia

The concept of student engagement has played an increasingly significant role in efforts to understand and improve university student learning and persistence as well as overall institutional quality. I will present a multidimensional model that expands the definition and application of student engagement in higher education and discuss the increasingly important need for engaging today's university student. The impact of student engagement in learning, teaching and research as well as with faculty, community and other students is explored and suggestions are provided as to how the entire academic community can support these activities. Although comprehensive in scope and analysis of student engagement, this workshop is not, of course, the last word on the topic. Rather, it represents the current state of our understanding of student engagement and its effects on students as they navigate the tricky waters of higher education. There will be time for teachers, staff, and administrators to discuss how opportunities for this multidimensional view of student engagement can be created and supported in each of our universities.



Simulation Games: Design, Facilitation, Debriefing

Ivar Männamaa
University of Tartu, Estonia

In this workshop, characteristics and application types of educational games will be discussed, with a special focus on simulation games. After experiencing a couple of short simulation games, we will reflect on possible educational situations where use of simulation games is appropriate and discuss conditions when simulation games as educational means are effective. The most common reasons for the possible failure of gaming sessions will also be described. The general principles of a simulation game design will be introduced, participants of the workshop will be asked to discuss the facilitation and debriefing methods of the game-sessions. The selection of the sample-games to be demonstrated during the workshop depends largely on the number of participants, but if possible, preferences of the participants will be considered.



Teaching in a PBL Curriculum

Erik de Graaff
Aalborg University, Denmark

Learning in a PBL curriculum differs from learning in a traditional environment. Both for students and for teachers it is a challenge to adapt to the PBL conditions. Teaching in a PBL curriculum requires a different mind-set. Instead of being concerned with the learning content, the teacher should focus on the student, aiming to support the self-directed learning process. The biggest challenge for traditional teachers is to stop teaching and to step back, accepting a role as the facilitator of the learning process. A PBL teacher must be able to observe students' behavior and to make interventions without taking the lead. A PBL curriculum provides the conditions to stimulate self-directed learning, like group rooms and projects to work on. However, since the PBL mind-set of the teacher is such a dominant factor, teachers can also work in a PBL fashion within their own courses. In this short workshop, teachers will get the chance to reflect on their own 'compatibility' with the PBL principles. The workshop will engage the participants in practical exercises and interactive sessions aiming to enable practical application of PBL methods into their own lectures and courses.



Open Data Science: Experiences and Possibilities

Kimmo Vehkalahti
University of Helsinki, Finland

The idea of the workshop is to discuss, demonstrate and practice the various possibilities of openness related to Statistics or Data Science education. Openness refers to open courses, open materials, open software tools, open datasets and - in general - an open mind-

Hindsight, Insight, Foresight – New Way Forward

Andy Penaluna and Kathryn Penaluna
University of Wales Trinity Saint David, United Kingdom

Evidence across the globe demonstrates the need for innovation, new solutions and creative approaches to respond to today's and tomorrow's opportunities and challenges. Informed by neuroscience, this workshop explores the implications and consequent strategies for teaching, learning and assessment to develop creative thinking, opportunity recognition and problem-solving skills. The workshop focuses on an exploration of assessment strategies, drawing distinctions between assessment for innovation and assessment of implementation.



ABC Learning Design

Linda Helene Sillat
Tallinn University, Estonia

One of the most important aspects of learning today is the increase of blended learning due to distance learning. Therefore, it is necessary to find ways for implementing the curriculum in blending face-to-face lectures and online learning. The workshop will facilitate the subject of curriculum implementation with the aim of increasing collaboration among the academic staff in planning student centered learning design; changing the curriculum to a more blended format; integrating technology into the learning and teaching processes.



Re-Thinking Values in a Not-Quite-Secular World

Leon Robinson
University of Glasgow, UK

It is an interactive workshop intended to explore and critique values and values awareness in education. Drawing on moral and philosophical traditions both religious and secular, from sacred texts, folk wisdom and popular culture, the workshop will explore questions and concerns about values in contemporary education. The session will seek to map the territory of "values" in an increasingly complex world, where ideas of meaning, value and purpose are highly contested. A variety of tools, lenses and conceptual frameworks will be explored and critically examined, and their suitability tried against the most pressing concerns of participants. The main focus will be on university education, but the principles will be applicable to all levels of education. The session will draw upon a wide range of traditions, and no familiarity with these will be presupposed. Contributions from all perspectives will be encouraged and welcomed.



24 January, 2018

12:45-14:15 Parallel sessions

Trends in Higher Education

**Symposium on Educational Innovation in University Pedagogy
on the Example of LIFE Projects at Tallinn University**

Students' Perception of Teaching

Learning Environment

Course and Curriculum Design

Field Specific Differences in Learning and Teaching

TRENDS 2018: Learning and Teaching in European Universities

Thérèse Zhang
European University Association, Belgium

The European University Association (EUA) launched in Spring 2017 its eight TRENDS survey. The survey closed in Summer 2017, and collected responses from over 300 institutions. EUA's TRENDS reports have been published since 1999, with the view to feeding an institutional perspective into European higher education policy discussions, improving exchange and networking among universities, and support for them. The reports are mainly based on a questionnaire sent to European higher education institutions. These reports are designed to present reliable, longitudinal information about how the European Higher Education and Research Areas are being developed across the continent. Over time, TRENDS have become crucial sources of information and reference works for policy makers and the higher education community. TRENDS 2018 focuses on mapping the developments in learning and teaching, which is a more and more important topic at higher education institution, and also at policy discussions across Europe. The TRENDS 2018 report is expected to be published by Spring 2018. It will also be submitted to the 2018 Bologna Ministerial Conference in Paris, France, and complement the next Bologna Implementation report. In this session, we will share some first findings from the survey with participants. The areas explored by the survey are: learning and teaching policies and developments, study programmes and L&T practices, how L&T respond to society, profiles, careers and regulations of teaching staff, and teaching enhancement. We expect to discuss preliminary conclusions with participants, and elicit feedback on how they would relate these conclusions to their institutional or national contexts.

Pedagogical Innovation Projects: Sharing an Experience of the University of Porto

Fernando Remião, Pinto, M., Ginja, I., Teixeira, P.
University of Porto, Portugal

The University of Porto in Portugal created a Teaching and Learning Unit in 2015 (<https://inova-caopedagogica.up.pt/>). Since then, many programs have been created in order to promote educational models, following European Commission Recommendations (1): more centered on the students that use educative technologies, with distributed assessments that include transversal skills development as learning outputs, and with broad pedagogical and scientific approaches. In 2016/17 a "Pedagogical Innovation Projects" program was launched to promote, through financial support, the above described goals in U. Porto courses. This presentation will focus on the 15 course units from 36 proposals that were selected to be supported, by highlighting the main goals and obtained results. Several subjects were addressed in the different proposals to achieve the goals of the program. The following are some of the examples:

- Centering the learning on the students: one project proposed for "Physics" was an "Interactive and Collaborative Approach" in which students should discuss conceptual questions, do virtual experiments, solve problems and promote a final reflective session, by using online programs such as "Socrative", "Perusal", "Tracker" and "Moodle". With the same goal, another subject was the "Artificial Intelligence", in which the implementation of practical classes was proposed with students dealing with the necessity to make programs for robots that would be in the classrooms.
- Promoting the distribution of the assessments: one proposal, also on "Physics", transforms the magisterial classes in flipped classrooms and uses technologies as smart-phones to promote interactions with the students as well as their assessments.
- Transversal skills development: in one proposal on "Research Methodologies" in Educational Science, the teachers pretended that the students start to use photography and video in digital research diaries to communicate their research results in a final seminar.
- Inclusion of different pedagogical approaches: this aim was clearly proposed in a project that includes Fine Arts and Medical School, with students developing drawings in an anatomical museum. All the supported projects were presented to the University in January 2017, during the Annual Workshop of U. Porto dedicated to the sharing of experiences on pedagogical innovation. The results of these projects will be described in a video and in research paper format. A reflective critique on the results as well as some directives learned in this first year of the program will be shared with the audience.

Reference

(1) Report to the European Commission on "New modes of learning and teaching in higher education October 2014"

The Results of the Survey of the 2015 Alumni of Estonia's Higher Education Institutions

Heidy Roosimägi, Rõa, K.
Ernst & Young Baltic AS, Estonia

Baltic AS in cooperation with the Estonian Ministry of Education and Research has carried out a survey among the 2015 alumni of Estonia's higher education institutions. The aim of the survey was to provide an overview of the background of the alumni of Estonia's higher education institutions, their activities after graduation, their success on the labour market as well as their opinions regarding the quality of their studies and the level of professional competence thereby acquired, but also to give feedback to the higher education institutions about the quality of studies.

The survey included 20 Estonian higher education institutions that provided higher education in 2017. Survey questions were delivered via an online questionnaire and gathered 2,358 unique responses, including responses from 97 foreign students, with whom we carried out 20 additional interviews. In order to assure that the data corresponded to the population more accurately, it was weighed, considering three aspects: education institution, higher education level, and field of studies. The survey questionnaire was composed in Estonian, Russian and English and every respondent could choose their preferred language. The results of this higher education alumni survey could be compared to those previously collected in 2006, 2009 and 2012, and the changes assessed.

Survey results indicate that when compared to previous surveys (especially the alumni survey from 2012), alumni's expectations and positions have not significantly changed and Estonian higher education quality is valued quite highly. The most important conclusions of the survey can be summarized as follows.

The overall satisfaction rate of the alumni of Estonian higher education institutions is high: nine out of ten alumni are satisfied and eight out of ten alumni feel that they can compete on the labour market. Roughly 1/5 of the alumni participated in learning mobility (including short- and long-term mobility). Students of Estonian higher education institutions are very active on the labour market: more than ¾ of the alumni reported that they worked during their studies, mainly because they had to provide economic support for themselves. After being granted study allowances or stipendiums, 29% of doctoral students decreased their work load or left their jobs altogether. Almost half of the alumni are continuing or plan to continue their studies. Foreign alumni are generally satisfied with the education they received in Estonia (nine out of ten are satisfied), but alumni reported dissatisfaction with internship opportunities and mentoring.

Educational Innovation in University Pedagogy on the Example of LIFE Projects at Tallinn University

Priit Reiska, Jõesaar, A., Kangur, M., Koort K., Sillaots, M., Uusküla, M.
Tallinn University, Estonia

At universities, professional development is crucial and tight cooperation between the colleagues is needed. Still, these networks are usually discipline based and academics, who meet each other, are mostly colleagues from same academic field. In higher education the teaching practices are changing and there is need to foster new ways of teaching.

At Tallinn University the team-taught LIFE (Learning in Interdisciplinary Focused Environment) projects is the first attempt to change the teaching practices in university pedagogy. LIFE is a university wide obligatory interdisciplinary project course included in every BA and MA curriculum that started from the academic year 2016/2017. After just one year the number of projects per semester has reached 60 and the number of students 700. Most importantly, over 100 faculty members are involved in supervising these projects. It means, that over 27% of the academic staff of the university is involved in this activity.

The purpose of the LIFE projects is to integrate knowledge from various fields and to teach issues or topics from different perspectives. The students from at least three different academic fields work together in small, 6-8 people project teams. The teams have to have more than one supervisor.

The topics of LIFE projects are different, e.g. one LIFE project suggested the solutions for transportation, infrastructure and education after merging local municipalities.

We have set the following goals for LIFE projects:

For Students:

- Developing new knowledge and different (incl. learning) skills.

For Academics/Supervisors:

- Developing and practicing new teaching methods;
- Cooperation with academics from other disciplines and from other universities;
- Researching their own teaching practices, outcomes and impact.

For University:

- Changing the university academic environment (including teaching & research).

Interdisciplinary approach and its application in a LIFE project are based on:

- a) The idea of the topic or problem of a LIFE project. Life project ideas are coming from the teacher or students or outside the university.
- b) Cooperation between students from different disciplines. Cooperation is needed to develop students' negotiation skills, intercultural relationships, social competences, acknowledgement and fulfillment of your own role within a team.
- c) Cooperation between teachers/supervisors from different disciplines. In the LIFE projects, teachers to engage in interdisciplinary cooperation.

Academics and students will discuss why LIFE is innovative, useful and helps to change the learning and teaching practices at the university in the form of a panel discussion or symposium.

“When You Know Who Stands Next to You, It No Longer Matters Who You Face” – Teacher Collaboration in CLIL

Maia Boltovsky, Piirimees, A.
Estonian National Defence College, Estonia

Educational institutions are working hard on ways how to improve foreign language learning. As a result of this, the implementation of Content and Language Integrated Learning (CLIL) programs in schools is becoming commonplace, since it is believed that this kind of approach is the best way to increase students' foreign language proficiency without taking up additional time in an already crammed curriculum.

The aim of our presentation is to share the practical experience of applying CLIL to officer training in the Estonian National Defence College.

The current study of our own teaching focuses on the integration of Estonian National Defence College students' English language studies with their specialty training, putting it into practice in military exercises conducted in English as part of student training, and at the same time combining contact learning with an equal amount of independent study and handing responsibility and control over learning to students, thus promoting the development of motivated and self-directed learners.

Any development in our students' study program, let alone such major changes and integration, requires good collaboration between lecturers in various fields: language teachers primarily provide the linguistic content of the lessons, whereas tactics lecturers supply military content where the students' language production closely resembles their needs in future everyday service, be it cooperation with our allies, working in a multinational staff or participating in military exercises.

In addition to teaching and implementing acquired knowledge, feedback and reflection play an important role for student and teacher alike, each analyzing and reflecting on their own and others' performance – all with the aim of improving both learning and teaching, that is to say the overall ability to cope better in real-life situations in our students' military service. Analysis of our own teaching, plus teacher discussions alongside student feedback and reflection, all result in qualitative changes in course content and help design even more authentic tasks that are in turn put to test in military exercises, first as part of the students' studies, and later on as an integral part of their everyday service.

Keywords: integration, real-life tasks, independent study, self-directed learner, collaboration.

Self-Assessment as a Tool for Enhancing Competence Development and Learning in Entrepreneurship Education

Marge Täks¹, Õunapuu, T.²
¹University of Tartu, Estonia
²Estonian Entrepreneurship University of Applied Sciences, Estonia

Background: Self-assessment can be powerful tools to help learners to gain awareness and understanding of their strengths, abilities, and areas of competence development. Appropriately used self-assessment can encourage self-reflection, provide a compass for both personal and professional development, and help to determine the extent to which the set goals can be reached (ASTEE, 2014). Also, how the output of the assessment is used is very important (Kane, 2013).

Aim: This study aims to identify to what extent self-assessment of entrepreneurship competence is understood by bachelor students. Also, how the students see its value for setting personal developmental goals.

Method: The sample of this study is the international students N=52 participating the “Principles of entrepreneurship” course (3 credit points). The self-assessment instrument used is designed as a result of Nationwide Entrepreneurship Education program Edu & Tegu. Self-assessment data were gathered twice, at the beginning and the end of the course. The results of the first data-gathering round were introduced and discussed with the students during the second course meeting. After the course (second round of self-assessment) personal profiles together with feedback (feed-forward) for each student were designed and distributed. Students were asked to reflect on the results as well as on the self-assessment instrument. Finally, focus group interviews with selected students (n=14) were conducted.

Results and contribution: The results of this study highlight both, the usefulness of the self-assessment instrument, and the usefulness of the intervention as a learning method. Current study results contribute to the further development of the self-assessment instrument and the intervention method that enhances students' self-awareness and competence development during entrepreneurial learning.

Teacher's Perspective vs Learner's Perspective – How to Create Effective Communication?

Kadri Ugur
University of Tartu, Estonia

After defending my PhD in journalism in 2010, I have not been a student – just a teacher at the university and upper secondary school. So, I experienced the communication between the teacher and learner from a very limited perspective of the teacher. In autumn 2017, I started again as a master's student of semiotics and cultural theories. Even the first weeks in the role of a student were very illuminating in several senses.

From an intellectual point of view, it is really interesting to study the educational processes in the light of theories of semiotics (the theory of Umwelt, semiosis, different approaches of textual analysis and multimodality, etc.). However, the role of a formal student has been even more challenging in order to understand my own student's questions and problems. I would like to focus on the following aspects:

- Student's anxiety: The teacher has been working on the course's content and requirements for quite some time, s/he has a clear view even before the course starts. For students everything is new, and they do not necessarily understand the complexity of the course, until they have completed it.
- Communication channels between students and teachers may have an influence on the whole efficiency of course. Every teacher has their own preferences (official information system, Moodle, e-mail, social media), but this may not be the most convenient channel for students. In the situation where the student has to deal with several courses and several teachers, managing communication channels may become very challenging.
- Physical and temporal aspects of learning – space, furniture, pauses, time management – are usually not addressed enough by teachers. However, from a holistic approach to the learner's and teacher's role it helps to understand several elements that may affect the efficiency of learning.
- Formality vs creativity. For learners, it is often a struggle to understand the balance between formal demands and freedom of expression within the academic community.

In my workshop, I want to share my personal experience as a teacher and a learner, but also invite participants to do some practical exercises in order to see situations of educational communications from the perspective of learners. I will provide several models of thinking and acting that could minimize communication errors between teachers and learners.

References

- Dewey, John 1896. The Reflex Arc Concept in Psychology. In the Psychological Review, Vol III, No 4. Retrieved from <https://archive.org/details/DeweyReflexArc> in Oct 2017
- Field, Richard. John Dewey in The Internet Encyclopedia of Philosophy. Northwest Missouri State University. Retrieved from <http://www.iep.utm.edu/dewey/> Oct 2017
- Kull Kalevi 2001. Jakob von Uexküll: An introduction. Semiotica vol. 134: 1-59, 2001.
- Uexküll, Jakob von 1957. A Stroll Through the Worlds of Animals and Men: A Picture Book of Invisible Worlds, Instinctive Behavior: The Development of a Modern Concept, ed. and trans. Claire H. Schiller (New York: International Universities Press, Inc.)

Teaching Experience with MOOCs in Analytical Chemistry at the University of Tartu

Irja Helm, Leito, I.
University of Tartu, Estonia

The presentation gives an overview of and analyzes the teaching experience with MOOCs (massive open online course) in the group of analytical chemistry at the University of Tartu (UT).[1] There are two different MOOCs developed by our group: Estimation of measurement uncertainty in chemical analysis (<https://sisu.ut.ee/measurement/uncertainty>) and LC-MS method validation (https://sisu.ut.ee/lcms_method_validation/).

The presentation will outline different aspects: the contents and organization of the material in the courses, the different ways of using the on-line material (for independent learning, for self-testing, as an information source and as a basis for running as a MOOC) and some statistics about the previous MOOC editions, including students' feedback. Some part of the presentation will be devoted to analyzing the pros and cons of MOOCs as a way of teaching and in particular as a way of teaching analytical chemistry (or its subdisciplines).

Both courses are run using two different platforms simultaneously. The first platform (UT Moodle) is mainly for the registered participants of the MOOC, containing graded tests and forums. For taking the tests and participating in forum discussions, one has to be registered to the course. In Moodle there are given links that guide the participants to the content web page built on the second platform (UT Sisu). The content page contains the actual study materials: video lectures, written materials (text, tables, graphs), downloadable files and self-tests. The contents of the courses are freely available for all interested people 24/7, providing also a good on-line reference point for explanations of concepts and approaches. At the same time, it is possible to use the always available materials for supporting the classroom teaching in university.

The two courses have been running once a year since 2014 and 2016, respectively, having altogether 5 runs finished. The number of registered participants in one run has ranged from 271 to 760. Thereat completion and participation rates varied in the range 35...55% and 56...74%, respectively. Therefore, taking into account only participants, who actually started to study, the completion rates are 62...75%.

Although such a completion rate is already quite high for a MOOC, it is still low compared to conventional university courses. On the other hand, it is possible to reach hundreds or even thousands of people at the same time, making MOOC a really useful tool in the educational field.

Reference

- [1] Leito, I., Helm, I. & Jalukse, L. Anal Bioanal Chem (2015) 407: 1277. <https://doi.org/10.1007/s00216-014-8399-y>

What Do MOOC Video Watching Patterns Reveal about Student Learning?

Raili Marling, Miliste, M., Tammekänd, L., Piir, M., Krull, K.
University of Tartu, Estonia

Massive Open Online Courses with video content are an inevitable part of university teaching in the 21st century. Most research carried out in this field so far is math/science focused (Leito et al. 2015). The present paper studies a new MOOC in the humanities. The course "How to survive in a foreign culture?" (1 CP) launched in September 2017, lasted five weeks and had 234 registered participants.

The aim of the study is to map student learning. As videos are central to the student learning experience in the current generation and engagement has been considered a necessary prerequisite for learning (Guo et al. 2014: 41), we are interested in student engagement with MOOC videos. When and how does a learning session start? How long are students watching each video? How do videos support their learning? Which videos (lecture, interview, tutorial, etc.) lead to the best student learning outcomes?

To find answers for these questions, we took a mixed methods approach: we collected quantitative data using Google Analytics and supplemented our quantitative findings with qualitative insight from feedback from the participants. In the discussion we are planning to use Mentimeter.

Based on review of literature (Hew/ Cheung 2014, Guo et al. 2014, Hung et al. 2017) and the present study, we will start developing a set of recommendations to help instructors in the humanities take better advantage of the video format to support student learning.

References

- Guo, P. J., J. Kim and Rubin, R. (2014). How video production affects student engagement: an empirical study of MOOC videos. L@S' 14 Proceedings of the first ACM conference on Learning @ scale conference, pp. 41 – 50. <http://dx.doi.org/10.1145/2556325.2566239>
- Hew, K.F. and Cheung, W.S. (2014). Students' and instructors' use of massive open online courses (MOOCs): Motivations and challenges. *Educational Research Review*, Vol. 12, pp. 45-58. <http://dx.doi.org/10.1016/j.edurev.2014.05.001>
- Hung, I.-C., Kinshuk and Chen, N.-S. (2018). Embodied interactive video lectures for improving learning comprehension and retention. *Computers and Education*, Vol. 117, pp. 116-131. <https://doi.org/10.1016/j.compedu.2017.10.005>
- Leito, I., I. Helm and Jalukse, L. (2015). Using MOOCs for teaching analytical chemistry: experience at University of Tartu. *Analytical and Bioanalytical Chemistry*, Vol. 407, pp. 1277–1281. <http://link.springer.com/article/10.1007/s00216-014-8399-y>

The Significance of Self-Regulation in Digitalized On-line Courses

Veli-Pekka Pyrhönen
Tampere University of Technology, Finland

Many traditional classroom activities such as lectures and exercise classes are moving out of on-campus facilities as a result of digitalization. Most often they are replaced by video lectures and other online learning activities like automated quizzes and assignments. Digitalized activities improve spatial and temporal flexibility of learning because all digitalized material can be published at once, and they are accessible from any place at any time without the need for physical presence at a specific time. Hence, they also support self-paced study of a variety of learners having different backgrounds. For example, a learner can watch videos repeatedly or rewind back to a difficult topic that requires revision from the learner. Fast-paced students, on the other hand, can fast-forward easier parts or skip them entirely, which allow them to focus on more difficult content.

However, reality may not be so auspicious, especially when academic courses are digitalized by a large extent, which typically increases academic freedom of all learners. In such cases, the learner's self-regulation skills and specific use of personally selected processes like 1) willingness to set goals, 2) ability to select suitable learning strategies for attaining goals, 3) ability to monitor own learning progress, 4) effective time management skills, and 5) ability to reject distractions in own personal learning environment significantly affect the learner's potential to succeed in academic activities.

In this study, teaching and learning experiences from a highly digitalized course intended for Bachelors' level engineering students in three different course implementations are discussed. Specific focus is steered towards the five self-regulation skills and processes listed above as well as their connection to academic achievement. After the first implementation, dropouts and those who displayed poor academic performance also lacked self-regulation skills, especially, the five above-listed key factors were almost completely missing. Lack of self-regulation skills was identified by a questionnaire that focuses on the five key factors at a personal level. As a result, specific activities and monitoring processes were tailored for the next two implementations, which aimed to help learners to pay personal attention to key factors of self-regulation, and thereby enabled them to become more initiative in their own learning processes and regulation. Based on this study, it seems that digitalized courses launched at an early stage of academic studies may need additional support for self-regulatory processes in order to enable successful progression of studies and satisfactory grades.

Use of E-portfolio in Pharmacy Education – First Experiences from the Social Pharmacy Course at the University of Tartu

Daisy Volmer
University of Tartu, Estonia

Background: Portfolios are important tools for promoting reflective practice and self-education. In a portfolio, a student can document course assignments, patient cases, and other items that can be used as evidence of learning (1). The portfolio allows the student to build a database of theoretical or practical experiences, self-assess acquired knowledge and use that for further studies or future employment (2). The aim of this study was to evaluate how the e-portfolio could be used as a tool to promote and support independent and reflective learning in pharmacy education.

Methods: Social pharmacy and drug safety (SPDS) I is a 6 ETCS course taught for 4-th year pharmacy students, providing information about the operation of healthcare and pharmacy sector in Estonia and the EU. As a teaching method, the flipped classroom technique was used first to encourage independent learning by students. For experiential learning, practicing specialists were involved in the teaching process and students spent a part of the course outside the classroom. Students (n=22) filled in a structured e-portfolio every week during or after learning activities. They documented individual reflections, group discussions and other assignments on a special e-learning Mahara platform. Self-assessment of ability-based outcomes for handling of medicinal products and operation of healthcare and pharmacy sector was asked to be completed by every student at the end of the course. In addition, a questionnaire was applied to collect students' feedback towards the e-portfolio as a tool for documenting and assessing student-learning outcomes.

Results: Initial results demonstrated students' satisfaction with a structured e-portfolio and flipped classroom teaching method, providing them with a more flexible study environment. In addition to regular seminars, the students preferred to work independently with different assignments every week instead of having tests several times per course. The reflection assignments and group discussions on urgent daily topics guided them to a constructive and analytical evaluation of acquired theoretical knowledge. Building up an e-portfolio on the Mahara platform and its use was easy for most of the students.

Conclusions: The e-portfolio was an efficient tool to guide students in experiential learning and provided possibility for self-assessment by ability-based outcomes. Students appreciated increased independence and flexibility in the learning process and assignments supporting linking of theoretical and practical knowledge.

References

1. van Tartwijk J, Driessen EW. Portfolios for assessment and learning: AMEE Guide no. 45. *Medical Teacher* 2009, 31: 790–801.
2. Friedman Ben David M, Davis HM, Harden RM, Howie PW, Ker J, Pippard MJ. AMEE Medical Education Guide No. 24: Portfolios as a method of student assessment. *Medical Teacher* 2001, 23(6): 535-551.

Using Creative Design Methods in Curriculum Development

Merike Rehepapp
Estonian Academy of Arts, Estonia

The aim of this presentation is to introduce creative tools and techniques for designing and conducting study processes by using design methods. The presentation is part of a doctoral thesis study. Thesis theme: Involvement of design methods in creating and conducting curricula.

Description: Applying design methods in education has been increasingly implemented all over the world, but in Estonia it is still mainly recognized as a tool in the design education. Design mind-set is suitable for planning curricula. For this purpose, we need to understand the logic behind the design process: how to pose the right questions in the correct order. A number of questions arise in teaching/ curriculum design. How to start the new course with new students? How to get to know my students? How to know what their needs are? How to teach? How to give and get feedback? Although how is our favourite question, the right question we should start with is why? Why we do all those things? Then, to/for whom? And only then should we ask how?

The presentation introduces design tools and their usage - each small detail that arises is a method which can be used in the field of education. And if the details are connected to the subject we are teaching, it makes sense. Creative teaching leads to creative learning.

Mapping Student Learning in a Kinesiology Class, over the Three Stages of Performance of the Teaching for Understanding Framework

Jackie Lysaght
Harmony Holistics Kinesiology College, Ireland

This study followed a part-time, second-year kinesiology class with five students in a private college in 2016/2017. The aim of the study was to investigate what mapping student learning over three stages of performance tells us.

The Teaching for Understanding (TfU) framework outlines an approach that includes both the pedagogy and the discipline. It focuses on developing understanding through ongoing performances and assessment. It defines three stages of performance: initial, guided enquiry and culminating and four levels of understanding: naïve, novice, apprentice and master (Wiske 1998). This was an action research study which followed students over four months. I collected qualitative data of self, peer and teacher feedback over three stages of performance and a classroom assessment technique (CAT). The findings show how students built knowledge in one kinesiology treatment, Emotional Stress Release using Statements. It reveals that most students' understanding was at novice level in the initial performance, as they carried out the treatment mechanically, improving to apprentice level by the culminating performance, as they engaged fluidly with the treatment and the client. There was general agreement on the levels of understanding between self, peer and assessor. No students demonstrated understanding at master level which highlighted a teacher assumption that students would only achieve master level in clinical practice. Students identified the importance of consistent practice as a key driver to improving their understanding and most felt they benefited more from the peer assessment than their own self-assessment.

In future studies, master level should be defined in the context of kinesiology and included on the feedback form. As practice has been identified a key driver of understanding, data on the number of case studies students complete should also be collected. Differences in the levels of understanding assigned by self and peer could be further explored through reflection on action in facilitated whole class discussion. A limitation of the study is the small class size and a broader study including other colleges could be undertaken. The study concluded that mapping student learning over three stages of performance made visible the development of students' kinesiology understanding over time. It aided meaningful conversations between students, and between teacher and students which guided the way towards improving understanding.

Reference
Wiske, M.S. (1998). *Teaching for Understanding: Linking Research with Practice*. San Francisco: Jossey-Bass.

Course Design, Academic Procrastination and Students' Learning Experience

Age Värvi
University of Tartu, Estonia

Background: Self-management skills of students are of great importance in achieving deep learning approach. Deep learner focuses on main ideas and principles, exploring both the details and understanding the general picture, has a positive attitude and enjoys the process of learning (Biggs and Tang, 2008). In order to promote deep learning and create a significant learning experience, a teacher should engage students in various forms of active learning (Fink, 2013). This may fail if the students procrastinate. Academic procrastination is understood as a tendency to postpone academic tasks (Rothblum, Solomon and Murakami 1986) and is associated with different negative outcomes (Ferrari, 2001, Klassen, Krawchuk, & Rajani, 2008). It is found that course design which includes intermediate deadlines helps to reduce students' procrastination (Schraw, Olafson, Wadkins 2007). This action research focuses on the impact of course design and e-learning tools on law students' study habits and their learning experience.

Methods: The research was carried out in 2015, 2016, 2017 among the participants of the Law of Obligations course. In 2016, Moodle tests were added to the course as a form of voluntary self-assessment. In 2017, deadlines were introduced for tests, and tests were made part of final assessment. At the beginning of the course the students were given Procrastination Assessment Scale for Students (PASS, Rothblum and Solomon, 1984). At the end of the course, students filled out a detailed questionnaire on their study activities during the whole course and on their learning experience. Results

This research reveals that 1) academic procrastination is wide spread among law students, 2) voluntary Moodle tests do not help students to refrain from procrastinating with reading assignments, 3) students' assessment of their learning experience is not in connection with the final grade, 4) tests that have deadlines and are part of final assessment motivate students to prepare for classes every week, 5) deadlines-controlled division of students' workload during the course does not influence students' learning experience.

Conclusions: 1) By using intermediate deadlines and Moodle tests which are part of the final assessment, teachers can reduce students' procrastination.

2) Deadline-controlled spread of the workload does not have a negative effect on students' assessment of their learning experience.

How to Teach Values and Engage Students? Experience from Teaching Education for Sustainable Development

Kadri Kalle
Freelance educator, Estonia

My experience with education for sustainable development (ESD) has been mainly practical. I have been teaching it in non-formal and formal settings, most recently to future primary school and vocational teachers at the University of Tartu. In this presentation, I would like to share my experiences.

Teaching ESD is largely about teaching values connected to sustainability. Therefore, we cannot just give facts and figures, but must evoke a feeling and a connection to the topic. My approach has been that besides talking about environmental problems, we try to see nature and sustainability as a source of inspiration, wonder, opportunities and innovation. That also means having other kind of methods besides just text-based. I have given visual assignments like drawing a species and its importance to human kind, used graphic value cards to think about what values are needed in ESD, organised simple debates on environmental ethics topics, where students have to move around in the room, and some other, which I would share in my presentation.

Some of my conclusions are: it is difficult, but needed (and possible) to get students away from their computers. For example, when asked to make a drawing presentation by hand, many still turn to PowerPoint as a safer option. In order to make learning more engaging, we actually also need different kinds of classrooms, which allow more room or moving around and arrange different kind of seating than the classical lecture setting.

Based on students' feedback over the years, what seems to have been most important is teacher feedback to their work, and it is valued a lot as a learning point. For a teacher it can be quite time-consuming (if you have 60 essays or more to read), so one of the questions I would like to raise, is:

How can we improve university education that it is more of a communication, rather than one-way information flow? How can we improve feedback to students?

If time allows, I would also like to add a short exercise to the presentation, to illustrate the topic and also gather feedback from the listeners.

Open-Access Biodiversity Data in the Teaching Process – Some Possibilities and Lessons Learnt in Estonia

Silja Kana¹, Runnel, V.²
¹Estonian University of Life Sciences, Estonia
²University of Tartu Natural History Museum and Botanical Garden, Estonia

Learning means discovering the facts of life and organizing them into a framework of knowledge. Establishing the facts is often what scientists do, students just learn the condensed knowledge. Open-access data gives us endless possibilities to use research-grade information in the learning and teaching process. Moreover, when learning methods and applications are integrated with open-access systems, students themselves can publish information, which researchers or fellow students can then use.

Databases and applications for mobilizing open-access biodiversity data are useful for students who study nature-related subjects and for teachers either as a data source or as a tool for their own projects. Based on our personal ideas and experiences, we have come up with several options of using these systems and data in teaching. The examples are based on the Estonian nature observation database (loodus.keskkonnainfo.ee/lva) and mobile application, as well as the biodiversity information platform PlutoF (plutof.ut.ee) and its related data applications. Open-access biodiversity databases and applications allow working with students in the following ways: a) studying the methodology of data collection, b) collecting raw data, c) formulating a research question based on existing data and analysing the evidence, d) studying human behaviour in data collection and reporting, i.e. looking at spatial and temporal biases and also the biases based on the participants' motivation, knowledge and skills. Our experiences so far have confirmed that students enjoy performing tasks related to these databases and applications. In addition to gaining knowledge, students positively demonstrated their ability to analyse the databases and applications from user point of view.

Field-Specific Differences in Learning and Teaching

Student Teacher Ecological Self in the Context of Education for Sustainable Development - A Longitudinal Case Study

Rea Raus
University of Tampere, Finland

The belief and a holistic understanding of the world as connected where all living beings are valued forms one critical aspect of student teacher identity construction in the context of TE of ESD. Different authors, in their discussions on modern sustainability crisis, have brought into focus the need for the holistic, ecological view of the world where everything is seen as connected and all beings' intrinsic value is both known and felt (e.g. Sterling, 2001, Harding, 2013, Capra and Luisi, 2014). The mission, our calling in the world is connected to our higher motivation to live a meaningful life, to do good (Maslow, 1971/1993) and is also connected to our identity construction. The ethical considerations, our morality, values, empathy form an integral part of identity construction in that context.

A broader reflection on the construction of the teacher self is one alternative in that process of development. We can look at two selves of the human nature, where one self is our ego, our socialized sense of who we are involving roles like wife/husband etc. as well as our job identity, e.g. a teacher. Beyond this self, there is another self that can be called our soul. The soul senses a deeper connection to others and all life and is opens to us when we are deeply involved in our work or simply being present in nature (Miller, 2007, p.14).

Addressing the complex issue of student teacher identity construction in the context of ESD is a challenge not only because of different dimensions of identity but because of making a decision on studying particular dimensions of a particular identity construction. Searching for an ecological, holistic - terms used as synonyms by Sterling (2001) - worldviews, beliefs and understanding of the world as connected, identifying oneself with nature, the notions of personal and pedagogical mission are of interest. Worldviews are approached as interiors, i.e. ideas, assumptions, affects and perceptions, orientations and intentions (Hedlund-deWitt, 2013, p.18) deriving from the stories told by student teachers.

In the context of teacher education (TE) for sustainable development (SD), questions related to a teacher's values, worldview, identity present a particular interest and are of critical importance. In the presentation, student teachers' understanding of a teacher self and nature are focused on through discussions of personal and professional settings. Perceived curriculum i.e. reflections on a formal curriculum of a particular TE programme is discussed to investigate how the existing curriculum supports the development of an ecological, holistic self of a future teacher. The longitudinal study of 9 student teachers attempts to illuminate the process of the development of their ecological self during the first 4 years of studies in a particular initial teacher education programme. Although literature stresses the need to begin teacher education with investigating teacher identity, the results show that according to student teachers' opinions, the particular TE curriculum does not appropriately address the notion of teacher identity, especially in the context of ESD.

24 January, 2018

14:45-16:15 Parallel sessions

Workshop on European Principles for the Enhancement of Learning and Teaching

Reflections on Research Practice

Student Engagement

Learning Environment

Field-Specific Differences in Learning and Teaching

Innovations in Teaching

European Principles for the Enhancement of Learning and Teaching

Thérèse Zhang, Lewis Purser
European University Association, Belgium

In the past two decades, European higher education experienced significant changes, due to various institutional, national and international initiatives, among which were the Bologna Process and European Union actions and programmes. In order to strengthen learning and teaching processes in Europe, the EFFECT (European Forum for Enhanced Collaboration in Teaching) project, funded by the Erasmus+ programme of the European Commission aims to facilitate exchange and collaboration between different European higher education actors, while supporting universities to place teaching excellence at the core of their strategic mission. As part of this endeavour, the EFFECT Consortium proposes a set of ten Principles for the Enhancement of Learning and Teaching. Developed through several rounds of discussions with a broad range of European higher education institutions, networks and their representatives, the ten Principles aim at supporting institutional approaches to learning and teaching, and making the enhancement and development of the education mission a shared task for staff, students, institutional leadership and external stakeholders. This interactive session aims to discuss these Principles, while eliciting feedback from the participants on how they could relate some of the Principles to their own institutional context. The session will also explore the extent to which the Principles can enable meaningful conversations on learning and teaching across different higher education systems and institutional contexts.

Beginning University Teachers and Their Approaches to Teaching and Professional Self-Perception

Roman Švaříček, Vanderziel, J. A., Sucháček, P., Šedřová, K., Čejková, I.
Masaryk University, the Czech Republic

The aim of this presentation is to describe approaches to teaching taken by beginning teachers at Masaryk University. There are many possible answers to the question of the characteristics of quality teaching in higher education. Lowman (1995) presented a two-dimensional model of good teaching in a university environment: 1) intellectual stimulation (includes instructional clarity and the ability to stimulate focus and interest among students), 2) building interpersonal relationships with students (communicating with students in a way that increases their motivation to work and their enjoyment of learning). Hativa, Barak, and Simhi (2001) studied excellent university teachers and identified four key categories of quality teaching: clarity of instruction, lesson organization, stimulation of student interest, and a positive climate in the classroom. Despite the differences among all concepts of good teaching, several repeating characteristics can be traced. Primarily, all of the mentioned concepts include dealing with both content and interaction with students. Dealing with content can be associated with the intellectual dimension in Lowman (1995), the first two categories in Hativa et al. (2001), and the first two categories in Bain (2004).

The presentation stems from an analysis of 19 deep semi-structured interviews with beginning teachers from various faculties. We have identified beginning teachers with less than 5 years of teaching experience (Berliner, 1986) and have chosen those teachers whose teaching was evaluated in students' feedback reports as above-average.

Research questions: 1) What is the teachers' thinking of the beginning university teachers at Masaryk University? 2) What is the relationship between the concept of teaching of the teachers and their self-esteem?

We specified different approaches to teaching, transmission of knowledge and interaction with students were emphasized as the dominant approach established by the study. We specified different approaches to teaching while emphasizing transmission of knowledge and interaction with students, which the study established as the dominant approach. We further identified three types of self-perception among beginning teachers: they see themselves as research-oriented or teaching-oriented or else as universal teachers who manage both. The study's main contribution lies in its ability to connect the different types of approaches to the different types of self-perception. The presentation thus shows that researchers, teachers, and universal teachers approach their teaching differently: beginning researchers emphasize transmission of knowledge, beginning teachers emphasize that good teaching should include devoting time and energy to students, and universal teachers emphasize the practical nature of knowledge and motivate students to seek self-improvement.

Reflection on Formative Approach in the Academic Writing Course

Anžela Jurāne-Brēmane
Vidzeme University of Applied Sciences, Latvia

Formative assessment in higher education was conceptualised by Yorke (2003) and developed by Falchikov (2005), and Bloxham & Boyd (2007). Of course, the concept of formative assessment was arising in secondary education in the last century (Bloom et al., 1971, Black & Wiliam, 1998, Sedler, 1998) on a constructivist basis (Vygotsky, 1978) and is still being developed by Nicol, & Macfarlane-Dick (2006), Clark (2014) and many other researchers. However, formative approach has not become routine in our schools, in particular in higher education institutions. It is still important to analyse good examples of formative assessment practices to encourage lecturers to use formative approach.

The aim of the study is to analyse the benefits of formative assessment's development: the four years' experience of how the formative approach was developed in Academic writing course for first year students at Vidzeme University of Applied Sciences. Reflection of pedagogical experience and study of documents (questionnaires and student reflections) were selected as research methods. Analyzing the experience and developing the formative approach, summative assessment was reduced to a minimum - only in the exam and the final work. The results of the study are related to the importance of formative assessment in the way of self-assessment and peer-assessment. The re-submission of the works and the draft writing are very important. The main conclusion is about formative assessment as a three-sided process that develops the writing skills of the students. Creation of a positive learning environment and collaboration is essential for the development of formative approach.

References

- Black, P., Wiliam, D. (1998). Inside the Black Box: Raising Standards Through Classroom Assessment. Available: <https://weaeducation.typepad.co.uk/files/blackbox-1.pdf>.
- Bloom, B. S., Hasting J.T, Madaus, G.F. (1971). Handbook on Formative and Summative Evaluation of Student Learning. New York: McGraw-Hill Book Co.
- Bloxham, S., Boyd, P. (2007). Developing effective assessment in higher education: a practical guide. Maidenhead: Open University Press.
- Clark, I. (2015). Formative assessment: translating high-level curriculum principles into classroom practice. *The Curriculum Journal*, 26(1), 91-114.
- Falchikov, N. (2005). Improving Assessment Through Student Involvement. London, New York: RoutledgeFalmer.
- Nicol, D. J., Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
- Sadler, D. R. (1998). Formative assessment: Revisiting the territory. *Assessment in Education*, 5(1), 77-84.
- Vygotsky, L. (1978). Interaction between learning and development. In: Gauvain, M. and Cole, M. (Eds.) *Readings on the Development of Children* (pp. 29-36) (1997). New York: W.H. Freeman and Company.
- Yorke, M. (2003). Formative assessment in higher education: Moves towards theory and the enhancement of pedagogic practice. *Higher Education* 45(4), 477-501.

Two Sides of the Same Coin - University Teachers' Experiences with Applying and Receiving Scholarship of Teaching and Learning Grants (SoTL) for Studying Their Teaching

Marvi Remmik, Lepp, L.
University of Tartu, Estonia

During the past decades, scholarship of teaching and learning (SoTL) has become an important strategy in the instructional development of university teachers (Roxå, Olsson, & Mårtensson, 2008). Some institutions (e.g. Lund University) are implementing a reward-system that has been developed in order to increase the value of teaching and learning to improve the overall pedagogical competence within the faculty (Mårtensson, Roxå & Olsson, 2011). The University of Tartu began to give SoTL grants in 2015. During the past three years, 36 academics have received that grant.

The aim of this study was to observe the experiences and the proposals of the academics who applied for the SoTL grant in order to advance the process in the future. The presentation is based on semi-structured interviews with 14 academics who received the SoTL grant and 3 academics who applied for the SoTL grant but have not received it.

Participants of the study admitted being more aware of their teaching and taking their teaching more seriously since receiving the grant. SoTL directed them towards searching and reading theory on which the teaching practice relies. They also started to examine scientific journals, which deal with improving the field. In addition, they valued the SoTL community and possibility to understand better how colleagues teach and think about teaching and learning in different faculties. At the same time some of them admitted that they have experienced a lack of counselling with certain topics and felt that the project supervisor was not competent enough in that topic. The lack of feedback and the fact that it took too long to receive it was brought out. Interviewees who had not received the grant brought out the insufficiency of the feedback - when receiving a negative answer, the applicant was not given feedback from the evaluators and therefore the applicant did not understand what should be changed in order to be eligible for the grant. This lowered their motivation to apply for the grant in the future and the credibility of the transparency of the process. Previous receivers of the grant become evaluators after receiving the grant and therefore, many interviewees also shared their experiences as evaluators. It was admitted that when they first started to evaluate projects there was no evaluation system set in place and they started to develop evaluation criteria only after the projects were submitted.

Impact of the Digital Tools on the Learning and Teaching Processes: Both the Students' and the Teacher's Perspective

Natalja Lepik
University of Tartu, Estonia

Feedback is known to be a very important component of the educational process. The aim of this work is to study the impact of using digital tools (clickers, Moodle tests and some other online environments) on the students' learning skills and their motivations, but also the challenges for the teachers.

The study involves over 600 students of the first- and second-years from the University of Tartu, who participated in the basic course of probability and statistics in 2015 – 2017. The results are compared with the outcomes from the year 2014, when the course on probability and statistics was given for the first time and for a large audience (150 students). The background of students and their skills are quite different, therefore timely delivered feedback is especially important for students.

In 2015, weekly Moodle tests were implemented for the first time. Every test consists of 10 questions that are randomly chosen from the corresponding database. All questions are provided with the detailed answers or solutions and are given to the student after submitting their answers. The Moodle tests show positive impact on the learning process and students' motivation.

In 2016, the clickers were also taken into use during the lectures. Clickers are a good interactive tool that provides the teacher with immediate online feedback concerning students' needs and feelings about their skills. Also, clickers can be used for asking topic-related questions in order to correct the style of lecturing if needed.

From this fall semester another interactive tool was added to the course: practical programming labs in the online environment DataCamp. Labs are provided with automatically control and feedback like it is done in Moodle, but works with programming scripts. Labs are optional and give extra points to students. Over 60% of participants have taken them so far quite successfully. Results on that will be given during the presentation.

Reference

1. Kirsten Zimbardi, Kay Colthorpe, Andrew Dekker, Craig Engstrom, Andrea Bugarcic, Peter Worthy, Ruban Victor, Prasad Chunduri, Lesley Lluka & Phil Long (2017) Are they using my feedback? The extent of students' feedback use has a large impact on subsequent academic performance, *Assessment & Evaluation in Higher Education*, 42:4, 625-644, DOI:10.1080/02602938.2016.1174187

Measuring attention and attendance with the help of clickers

Iñaki R. Longarela
Stockholm University, Sweden

The use of clickers as a teaching tool has nowadays an extended use in lectures with the main objective of engaging students and promoting active learning. Platforms like Mentimeter, Kahoot and Socrative have facilitated their expansion. As it turns out, this tool can also help in measuring important elements of student behavior as attention and attendance in a systematic way. This paper presents a methodology to extract this information. In addition, using data gathered during six editions of a large-enrollment bachelor course, we measure the evolution of our proxies for attendance and attention over the life of a lecture and a course. In addition, the impact of a gamification attempt in the form of a contest in such important variables is examined.

Student Engagement

Teaching for Learning – Informal Education for Children at Universities: A Case Study at Tallinn University, Estonia

Liisa Puusepp
Tallinn University, Estonia

The current practice-oriented presentation is providing the reader with an overview of possibilities, impulses and impacts of after-school activities for children in the Nature Academy at Tallinn University, Estonia.

In recent years, informal education (nature schools, after-school STEM programs, etc.) focused on the education for sustainable development has received great attention in Estonia (Henno, 2015). However, its platform is still weak and there are not enough experiences and knowledge to use these ideas. In addition to this, the situation in our universities is worrying – the number of students studying natural sciences has decreased dramatically. The reasons are manifold, starting with the demographic situation and ending with teaching methods in formal and informal education systems. Taking into account all these issues, in the autumn of 2016 the Nature Academy was created at Tallinn University. It is a programme of informal education for children aged 8 – 12 and aims at providing nature studies and STEM education using the ideas of ESD, i.e. Education for Sustainable development (Tilbury & Wortman, 2004). It means that children take part in after-school activities at the university once a week. Each week there is a new supervisor (researchers, lecturers and PhD students) and a new topic that is linked with a wider theme (e.g., city environment, food, how the nature cares about us, etc.). All methods (games, outdoor activities, experiments, exercises, sharing, meditations, etc.) are tightly related with the aspects of sustainable development and the principles of Gaia Education (Gaia Education, 2012) – ecological, cultural, economic, social. The idea is to tie in difficult scientific theories with everyday questions and to study these heart and soul, so that science becomes enjoyable for children. For the supervisors, i.e. university lecturers, it could be challenging to participate in the work of the Academy, but it is definitely very useful and important as well. For example, it provides them with the input they can use later to teach future teachers. It gives them a window of opportunity for testing topics and methods in a controlled environment with a small group of children. Last but not least, it is worth pointing out that children are the most critical listeners and the best teachers for a university lecturer.

The presentation will give insight about the Nature Academy at Tallinn University, an overview about some topics and methods that have been developed and used, feedback of supervisors and also participants (children and parents).

Learning Environment

Examining the Unspeakable - a Critical Exploration of Learning Technologies

Leon Robinson
University of Glasgow, United Kingdom

Examining learning environments - from e-learning to the classroom and back to “real life” - A critical tool-kit. This session aims introduce and explore a number of critical techniques and vocabularies from philosophers who have been variously critical, sceptical, enthusiastic or cautious about developments in technology and society. The work draws upon Marshall McLuhan’s tetrads, Jacques Ellul’s “Reasonable Questions to ask about any technology”, Steiner’s philosophy of freedom and Kieran Egan’s Imaginative Education Research. Terms of reference will be drawn from economic, psychological, poetic and artistic traditions in order to explore and enrich the discourse around the opportunities, uses and abuses of technological developments in education and society.

Information Culture of Students in the Academic Environment – Finding One's Way through Studies

Krista Lepik, Kannukene, K.
University of Tartu, Estonia

Today, a university presents an information-rich environment which means challenges for both faculty members and students. This paper discusses the results of a recent qualitative study which aims to understand the students' values, norms and practices – that is, their information culture (Choo, 2002) when they are attempting to retrieve course-related information from their teachers and fellow students. The students we studied receive plenty of course-related information, and are expected to find balance between studies, work and family – thus, focusing on their information culture is needed to support their studies.

Our study involves 100 University of Tartu students who have learned at the information work related curriculums. The interviews were conducted from 2015 to 2016 in the framework of qualitative research methods courses – so both interviewers and interviewees were students at this course. We have analyzed the semi-structured interviews with students by applying principles of constructivist grounded theory (Charmaz, 2014) which means that we are aware of possible subjectivity of our research results and aim to reduce it by careful reflection of our work.

Little is known about students' information culture – therefore, our study is mostly of an exploratory nature. The analysis of values, norms, and practices has indicated that most clearly it is possible to tackle information culture of students through different kinds of interactions: to faculty members and other staff at the university on the one hand and in their relationships with fellow students, on the other. Our results indicate the need to focus on students' information culture related issues already in the beginning of studies by introducing context-dependent values, norms, and practices to the newcomers. Shared values and understandable norms related to student-faculty communication, information about support in urgent situations or earlier communication practices with faculty members are but a few examples of means that can aid students in the academic environment.

Thus, on the basis of our study we will propose practical recommendations and tools to our colleagues teaching courses about learning skills at universities, but also to other parties who may be interested in supporting the social well-being and information culture of students.

References

Charmaz, K. (2014). *Constructing Grounded Theory*. 2nd ed. SAGE, Los Angeles etc.
Choo, C. W. (2002). *Information Management for the Intelligent Organization: The Art of Scanning the Environment*. 3rd ed. Medford, NJ: Information Today.

Pedagogical Ecology

Mihkel Kangur, Arro, G.
Tallinn University, Estonia

One of the central goals of modern education could be to support the development of systemic thinking. This is particularly important in areas such as pedagogy because teaching is, in essence, supporting the development of psychic processes that can only be understood through systemic thinking. Also, for systematic understanding of learning it is important to understand how the learner relates to the surrounding environment, and that understanding of the development in isolation from the surrounding environment is not possible. Since education consistently seeks more efficient ways to support the structural-systemic worldview (Toomela, 2016) of learners, we propose to integrate two research fields: pedagogy (that is, enhancing learning) and ecology (association of organisms with the environment). The goal of this integration is twofold: first, to help learners to understand the adaptation processes in general, thus understanding better how the development occurs and how the behavioural environment ("Umwelt") of the learner is formed. Second, understanding and discussing the basic principles of ecology helps more closely to associate them with the laws of the human environment, which is expected to lead to a formation of a more systemic worldview. It is also necessary to understand the development of systemic thinking in order to support that process - e.g., how these concepts develop that allow us to understand complex systems (phenomena that are not sensory perceivable). As ecological principles are easier to understand for learners than psychic phenomena, they provide a possible model of thinking about learning, development and adaptation.

Over the last two years, we have discussed these topics with students during a course named Pedagogical Ecology. During the course, we have carried out pre- and post-testing to evaluate the change of systemic thinking. For this, at the beginning of the first lecture and at the end of the last lecture, students have to define different concepts and their relationships (ecology, learning). The preliminary results of the analysis of the answers given as free-text shows the more systemic conceptualising of given concepts at the end of the course. Also, we have witnessed the increase of students' interest in nature as indicated in their feedback given after every lecture, which may indicate that a more systemic understanding of the topic may increase the interest of the learner. In the presentation, we will give an overview of the overall structure and methodology of the course and discuss the initial results of student testing.

Writing a Master's Thesis - Why Is It So Difficult?

Ere Uibu
University of Tartu, Estonia

Background and aim: The University of Tartu is the only institution of higher education in Estonia which offers a postgraduate level curriculum in Nursing Science. The study form is open university part-time studies, because the student of nursing science is often a working nurse/midwife, a nurse manager or a teacher of a health care college, often married, with children or about to start a family. This background makes the students more likely to be at risk of poor commitment to studying, and even though the compulsory subjects will be passed, writing a master's thesis may turn out to be a "mission impossible". Also, earlier research has shown that writing a research based thesis and academic texts represents a real challenge for undergraduate and graduate students (Mullen 2006, Reynolds et al. 2011, Buzzi et al. 2012). Based on this prior knowledge, the main focus of this action research was to map students' advancements in their studies and in master's thesis writing, and to identify the support and the main obstacles they have been experienced during this process. On the basis of gained information, it is possible to plan the most suitable interventions for helping them to be more successful.

Methods: A Moodle-based anonymous questionnaire was used for data collection and the targeted population were all students, excluding the first-year students (N=51). The final sample comprised of 29 students.

Results: 14 students confirmed advancing as planned while 15 of the students had been advancing slower. Students reported that, during their studies, they received a large amount of help from teachers and tutors and from the curriculum. Nearly of equal importance were their internal motivation, willpower and persistence, and time planning abilities. Students claimed that for thesis writing they mainly received help from their supervisors, from relevant courses, from teachers and from peers. The main obstacles for advancing properly were high working loads, weak (time) planning skills, family problems and problems with conducting research. Students still need more supervising, including extra motivation, extra assistance and feedback in specific topics (philosophy, methodology, data collection, academic writing, etc.), some concrete additional materials (about research methods) and a time planning guidance.

Conclusions: The results indicate that extra assistance is needed mainly in specific topics, including critical thinking and writing skills development. The results may also refer to an uneven prior training and to insufficient self-supporting learning skills.

Didactics of National Defence - Combining Teaching and Learning between Different Levels of Education

Kalle Kölli, Karton, I., Ermus, A.
Estonian National Defence College, Estonia

National Defence has been taught as an optional course at Estonian secondary schools since the mid-1990s. Today, approximately 5,000 students from 146 schools complete the National Defence Course annually. Commonly, the teachers of the course are regular high school teachers, active service-members or retired officers from the Estonian Defence Forces or the Defence League. To be able to sustain the project, graduates of the Estonian National Defence College (ENDC) Land Forces Basic Officer Training Course (cadet course) are prepared as national defence course teachers for secondary schools. To support the cadets' development as secondary school teachers, the ENDC has used different practices and methods. Since 2013 the ENDC has been experimenting with creating the environment for a significant study experience by combining the practical part of the national defence course with the teaching and leadership studies of the cadets.

We started to design a new subject according to D.L Fink's (2003) significant learning concept based on situational factors and feedback analysis of solutions and methods used on previous courses. We created a common understanding about desired learning goals among secondary school teachers and our own lectures. Afterwards, we agreed on efficient feedback and assessment criteria followed by explaining teaching/learning activities in order to achieve the desired outcomes. Since we already had previous knowledge about evaluation context from previous practical exercises, we were able to use it. Therefore, we designed a completely new subject, which combines key aspects from different subjects and supports the achievement of the desired learning goal – Prepare our cadets to be able to teach the National Defence Course in a secondary school environment through planning and conducting practical exercises – in the best possible way.

In the development phase we followed the principles of the action research method. During the previous three years, we have systematically collected and analyzed feedback from the students and teachers from the participating secondary schools, our own cadets and lecturers from the ENDC. After every practical exercise, we have implemented our findings into the teaching and evaluation for the next course. The main methods of collecting information from the participating cadet course have been written self-reflection and a feedback form in the study information system. Lecturers and instructors were frequently interviewed while they were evaluating the cadets' performance. The information from students and secondary school teachers has been gathered through semi-structured interviews. The feedback results from all the involved groups show consistent improvement in the conducted practical exercise. The cadet's self-reflections of their performance have changed a lot during the last three years. They highlight and value the opportunity to make connections between different subjects and previous experience.

Our goal is to continuously improve this subject in order to guarantee the best possible feedback from all involved groups about their performance and overall satisfaction with the entire practical exercise.

Student's Education on the Use of Command Support Systems in Command Posts during the Military Decision Making Process

Bartosz Biernacik, Marczyk, M.
War Studies University, Poland

War Studies University is the highest military school that is responsible for educating officers with several years of experience in military units. Therefore, we (as a teachers) are obliged to use their knowledge and use it in the education process throughout their stay in the University.

To achieve the best results in the field units, we need to train the officers – commanders in appropriate way. To be able to provide the teaching process in the best way, we need to test the students' attitude. In order to diagnose the performance and functioning of the officers-students, the process of measuring the human resources staff is used. Students' evaluation is the process of comparing their performance, qualifications and personal qualities and attitudes and behaviours manifested by established criteria consistent with those used in the institution standards. The result of the assessment is to determine the "value" of each individual employee (the pros and cons), and an assessment of human potential of particular groups of workers, and finally, the entire staff of the institution". ([1], p. 257). The most common in organizations is to assess the current, as it is constantly made by the students' superiors. It can be done formally - the action shall be documented, or informally - to assess how the tasks represented the attitude and behaviour of individual officers are only individual assessment of superior. During the academic year, we need to teach students to use modern IT tools to carry out tasks resulting from the Military Decision Making Process (MDMP) ([3], p.127). We do that in a combined way – one way is to teach them about the IT solutions available in the military environment during the classes from the Command Support Systems (CSS) subject. Those classes are mixture of lectures, exercises and seminars. To make the involvement of the students stronger, we urge them to use the CSS systems later during the classes from other subjects, i.e. tactics, logistics, command.

To make the usage more understandable to students, we organize a cycle of military exercises with varying levels of difficulty and complexity. We start with episodic exercises involving the implementation of the selected fragments of MDMP or selected problem and we deal with it at all levels and military specialties (logistic, tactics, reconnaissance, artillery, signals and more). In the second phase, we conduct the exercises that carry out the whole MDMP with a small amount of substantive problems – they are focused on teaching students the specifics of working on the Command Post (CP).

The highest test for the students as well as for the personnel of the University is the last and the highest level of exercises – the field exercise conducted at least once during an academic year. This kind of exercise is a test for the students whether they understood and learned all the aspects of activity on the Command Post during conducting MDMP as well as CSS usage. This approach is the result of the researches done by the author as a doctoral thesis. The detailed scientific method and path of the tests are included in [2]. During the presentation we would like to present results of our researches for almost a decade in the implementation of CSS systems into the military environment.

References

- [1]. Armstrong M., Zarządzanie zasobami ludzkimi, Oficyna Ekonomiczna, Kraków 2001.
- [2]. Biernacik B. Wsparcie informatyczne procesów informacyjnych w podstawowej jednostce organizacyjnej uczelni wojskowej, AON, Warszawa, 2013.
- [3]. Kręćkij J., Analiza procesu decyzyjnego w organizacji zhierarchizowanej pod kątem jego algorytmizacji, Akademicka Oficyna Wydawnicza EXIT, Warszawa 2006.

Perceptions, Beliefs, and Attitudes of First Year Engineering Mathematics Students: An Empirical Study of Irish and Estonian Students

Ken Brown¹, Uukkivi, A.², Labanova, O.²
¹Letterkenny Institute of Technology, Ireland
²TTK University of Applied Sciences, Estonia

Undergraduate engineering students are expected to display sound mathematical skills (Schar et al, 2017, Nguyen, 1998) and knowledge in an ever increasingly internationalized arena. The contemporary skillset of the engineer includes a degree of sophistication in the application of ICT (Prensky, 2001) within their daily lives as well as within the higher education environment (Smirnov & Bogun, 2011, Heerwegh et al, 2016).

This study investigated whether issues of prior mathematics online-assessment experience, confidence, self-efficacy, expectancy, preparation, barriers, and perceptions, are common to students studying in different countries and their respective different higher education systems.

The purpose of the investigation was to determine what issues influence attitudes of students in the application of ICT for the online assessment of mathematics in the first year of undergraduate engineering programmes in an Irish Institute of Technology and an Estonian TTK University of Applied Sciences. The investigation was conducted online by means of a quantitative questionnaire, consisting of 16 survey items, using Google Forms to self-selecting students (n=122) across several engineering disciplines including electronic, mechanical, civil, and building services engineering. The survey was delivered in English to the Irish students and translated to Estonian for the Estonian students to enable each group to reply in their own native language. The questionnaire design utilized a 6-point Likert scale where students were asked to express their experiences and perceptions of mathematics and online assessment in their chosen programme of study. The data were exported to IBM SPSSv24 and regression analyses were conducted to ascertain possible associations and relationships between the two student groups in the case study.

The results of the investigation reveal statistically significant differences in students' prior experiences, preparation, self-efficacy, expectancy, barriers, and perceptions, relating to mathematics. Estonian students experience much more online assessment and barriers to online assessment prior to 3rd level than Irish students but they do not feel as well prepared for online assessment in 3rd level. Estonian students report that the amount of work they have to do in mathematics is very high and that the Estonian mathematics instructors are very aware of their students' high capabilities compared to Irish students.

The outcomes of the investigation will be utilized in the design of learner-centered assessments.

Innovations in Teaching

Do Simulation Exercises Provide Significant Learning Experiences?

Stella Polikarpus
Rescue College of the Estonian Academy of Security Sciences, Estonia; Tallinn University, Estonia

The objective of the presentation is to share the experience of using practical exercises and the XVR virtual simulation tool in chemical accidents response training in the higher education curriculum for rescue officers in the Rescue College of the Estonian Academy of Security Sciences. The significant learning taxonomy and planning guide by D. Fink (2003) was used while planning the subject Applied Chemistry (6 ECTS). It was taught in the spring of 2017 by the same teacher for two groups. Both groups had the same learning outcomes but a different number of students in the group (group A n=20, group B n=17), contact classes (group A 72 times 45 min and group B 48 times 45 min), practical classes (group A had 16 while B 8) and virtual simulation classes (group A had 16, B had 24). The students had different rescue-related work experience (group A none, group B some). Both groups used the e-learning environment Moodle to present their homework and get feedback from the teacher as well as Google Drive worksheets to reflect about their learning during six different simulation exercises.

A SWOT analysis was conducted about the strengths and weaknesses of using simulation-based training to create "rich learning experiences" (Fink, 2003) for the students. The students' behaviour in the simulation classes was analysed from the teacher's perspective, the data were collected from the students in the class and after the course in the SIS. The opportunities for using simulation to support students' learning in teams as well as the threats that might appear were listed based on the students' feedback and the teacher's observations.

In group B simulation-based training helped to create better "rich learning experiences" for students and achieve better results than in group A. The reasons for that might be work-related scenarios and better self-efficacy in group B compared to group A. Group B had also slightly better exam results compared to group A. The recommendations for improving the course planning and use of simulation were made. To enable the students to finish rescue work-related subjects first, the subject was moved from the fourth semester to the fifth one in the curriculum implementation plan. The reasons why the course became a significant learning experience for the lecturer but not equally for the students in both groups are discussed in the presentation.

Innovations in Teaching

Constructing Student Centered Learning Environments at the University of Eastern Finland – on the Way to Excellence

Tuula Heide, Haapaniemi, T.
University of Eastern Finland, Finland

The University of Eastern Finland has identified the development of its learning environments as one of the most important goals. The goal is set in the University's strategy 2015-2020: We want to be the best academic learning environment in Finland by 2020. The university's learning environment is built around innovative teaching methods, research-based education, diverse use of facilities, and transparency.

Manninen et al. (2007) define the learning environment as a place, space, community or practice that promote learning and present five viewpoints for learning environments, which may be alternative, complementary and overlapping: physical, social, technical, local and didactic (Manninen et al. 2007, 17). The basis for a constructive learning environment is the co-operation and negotiations between students and teachers in the knowledge construction. A constructive learning environment provides students with learning experiences from different perspectives and in real and meaningful contexts, encourages participation, incorporates social experiences in learning, encourages the use of different ways to communicate and to present information and inspires self-awareness in information building (Morrison & Collins 1996, 108, Honebein 1996, 12).

In the recent years, universities have started to focus increasingly on the learning environments as a tool to develop the quality of the learning and teaching (Nevgi 2017). The strategic development of the learning environment in the University of Eastern Finland started in 2014 under a comprehensive action program in which four corner stones for the development were identified: Learning and teaching, strengthening of the skills and expertise of the staff, Technical learning environment and Teaching facilities. In the action program, more than twenty University level development tasks were identified and the responsibilities were defined. Based on the program, several development projects started.

In 2017, a mid-term evaluation of the results was carried out and the results were reported internally. For the evaluation, all the responsible parties were asked to report the completed actions under the objectives of the development program. In addition, some recent research results related to ICT based learning and teaching at the UEF were included in the evaluation. In the fall 2017, the evaluation results were discussed and analyzed in multiple workshops in cooperation with university departments. Based on the workshops the needs were identified and objectives were set for the future development.

Innovations in Teaching

Feedback to the Students' Efforts - an Essential Tool for Improving Teaching and Learning

Gaabriel Tavits
University of Tartu, Estonia

It is obvious that feedback plays an important role for learning and teaching. Without any feedback, it is difficult for the students to understand what the demands are and what requirements they must fulfil. In addition, the teacher does not know whether the teaching process has been successful enough. The feedback systems can be different: the students themselves can give the feedback, the feedback can be given by the teachers. According to the systems applied in University of Tartu, the students can give assessment to the subject they have been taught and to the methods that have been used. The maximum score can be +2 the lowest on -2. The recent survey about the teaching in the School of Law has shown that the right and correct feedback is modest among the law teachers. The average score for giving feedback has been 1.25, which is lowest of all. The improvement of the feedback is important task for every teacher. Right and effective feedback is needed for the optimal process of learning.

What can be the ways of improving the feedback? In order to understand what is missing in the feedback it is necessary to ask from the students what they want to have as a feedback and what should the feedback be about at the beginning of a course. In the School of Law, the students mostly have responded that they need more understanding about the grade and why and what was missing in their responses to the exams' questions. During the course two questionnaires were filled in: between lectures and seminars and after the seminars. During the seminars, the cases were solved in groups and teacher gave feedback to the groups. The feedback was given about the methods of solving the cases and possible misunderstandings. The final questionnaire will be filled in at the end of the course. The study has not been completed yet (it will be completed by the end of March 2018), therefore at this stage the final evaluation cannot be given.

One aspect is to clarify what kind of feedback the students are waiting for, the other aspect concerns how we can and must construct the necessary feedback? There are different ways to do this, but the main question concern what is the most effective of those? In the presentation, different types of assessment for the law students will be analysed.

References

1. Kirsten Zimbardi, Kay Colthorpe, Andrew Dekker, Craig Engstrom, Andrea Bugarcic, Peter Worthy, Ruban Victor, Prasad Chunduri, Lesley Ljuka & Phil Long (2017) Are they using my feedback? The extent of students' feedback use has a large impact on subsequent academic performance, *Assessment & Evaluation in Higher Education*, 42:4, 625-644, DOI: 10.1080/02602938.2016.1174187
2. Ann Poulos & Mary Jane Mahony (2008) Effectiveness of feedback: the students' perspective, *Assessment & Evaluation in Higher Education*, 33:2, 143-154, DOI: 10.1080/02602930601127869
3. Edd Pitt & Lin Norton (2017) 'Now that's the feedback I want!' Students' reactions to feedback on graded work and what they do with it, *Assessment & Evaluation in Higher Education*, 42:4, 499-516, DOI: 10.1080/02602938.2016.1142500
4. Richard Higgins, Peter Hartley & Alan Skelton (2002) The Conscientious Consumer: Reconsidering the role of assessment feedback in student learning, *Studies in Higher Education*, 27:1, 53-64, DOI: 10.1080/03075070120099368

25 JANUARY, 2018

10:30-12:00 Parallel sessions

Workshop on Co-Teaching – One Mind in Two Bodies

Co-operation in Teaching and Learning

Self-Directed Learning

Student Engagement

Approaches to Teaching of Academic Staff

Co-Teaching – One Mind in Two Bodies

Marin Johnson, Halliki Põlda
Tallinn University, Estonia

The workshop is exploring the notion of co-teaching in higher education setting. We often might find ourselves in a situation where we are expected to teach a course together with a fellow academic, a colleague from abroad or an expert from the field of practice. Co-teaching is much more than sequential lecturing or the pairing of instructors, and careful preparation is needed to ensure the success of the approach.

Thus in the workshop, we are discussing the term 'co-teaching', the communication in the co-teaching process and focusing on what are the challenges that we are facing when co-teaching and what makes co-teaching different from the other ways of instructing. Furthermore, we will explore the possibilities and advantages of teaching a course in collaboration. Co-teaching allows instructors to share power with a co-teacher to pave the way for sharing control with learners; to observe firsthand what other professionals do in the classroom in order to contribute to modelling best practices; to gain insights while co-developing curriculum, planning assessment, and organizing material (Eisen & Tisdell, 2000; Laughlin, Nelson, Donaldson 2011).

The outcome of the workshop is a shared understanding of the possibilities of co-teaching in higher education. The workshop is interactive and models co-teaching (moderators are using different methods of co-teaching themselves). Also, invites participants to share their experiences and build a common model for co-teaching that is suitable for higher education.

References

Eisen, M, & Tisdell, E. J. (2000). Team teaching and learning in adult education. *New Directions for Adult and Continuing Education* (87). San Francisco, CA. Jossey-Bass.
Laughlin, K., Nelson, P., Donaldson, S. (2011). Successfully Applying Team Teaching with Adult Learners. *Journal of Adult Education* Volume 40 (1).

Campus Engage Ireland: Promoting Civic and Community Engagement in Higher Education

Rhonda Wynne
University College Dublin, Ireland

The Irish National Strategy for Higher Education 2030, endorses the renewal of the civic mission of higher education and stresses that 'higher education institutions need to become more firmly embedded in the social and economic contexts of the communities they live in and serve' (Department of Education and Skills Ireland, 2011, p. 77).

Campus Engage is an Irish Network promoting civic and community engagement in higher education. Similar networks exist around the world: Campus Compact (USA), National Co-ordinating Centre for Public Engagement (UK), Service Learning Network South America, and Engagement Australia. While there are variations in the focus and scope of these networks, they have a common interest in promoting collaboration between higher education institutions and their communities for mutual and reciprocal benefit.

The aim of this presentation is to explain the purpose and aspirations of Campus Engage and share the experiences of how this network collaborates. Following a short description of the evolution of Campus Engage, the presentation will outline how the seven universities of the Irish Republic, and Dublin Institute of Technology, come together to work on four main strands of activity: student volunteering, community based learning, engaged research, and measurement and evaluation. These four working groups have collaborated to consult with students, academics and communities, to share experiences and ideas, to develop training programmes, and to create materials and resources.

Working collaboratively with colleagues across the sector has helped build a community of practice, where academics, practitioners and community partners have the skills and expertise necessary to connect institutions and communities to address a variety of societal challenges. The consultative nature of this network has highlighted the policies and practices necessary to embed ideas of civic and social responsibility. There is also an emerging body of scholarly work examining the multiple facets of both the philosophy and practice of higher education community engagement. The significant successes of Campus Engage will be outlined, as will the ongoing challenge of how to position community and civic engagement as a core function of higher education rather than consider it an 'add-on' on the margins of university life.

Co-operation in Teaching and Learning

Changing Learning and Teaching Cultures at University

Katrin Karu, Aava, K.
Tallinn University, Estonia

According to Tallinn University's development plan 2016-2020, one aim is to implement the changing approach to teaching and learning practices. Identity development of university teachers, there are strengthening and constructing factors: contextual factors are direct work environment, wider context of higher education, contact with students and staff development activities and psychological processes underlying are a sense of appreciation, connectedness, competence, commitment and imagining a future career trajectory (van Lankveld, Schoonenboom, Volman, Croiset, Beishuizen, 2017).

Instruments for influencing learning and teaching in universities according to Euler (2010, 82) are awareness (programmatic messages, putting learning issues continuously on the agenda: committees, media, a commitment of the leadership), empowerment (offering faculty training, coaching, counselling, providing teaching materials, sharing of good practices, communities of practice), incentives (resources for innovative teaching projects, initiatives for excellence in teaching, highlighting and certifying outstanding courses), interactive leadership (assignment in new areas of teaching, teaching as an element of annual target agreements), structural frame (teaching points compensating for demanding requirements on teaching and assessment, a policy of quality development, teaching record as criteria for employment, promotion).

Our aim in design research (Cobb et al, 2003, Plomp, 2007, Nieven, 2007 etc.) is to find research-based and sustainable practices and to support the professional development of academics in Tallinn University. In the preliminary phase, we described the context, researched best practices in Estonian Universities and international experience, interviewed key persons. Based on Feixas and Zellweger (2010) changing learning cultures in higher education is connected with faculty development. The strategy documents state that in order to embed the changed approach to learning and teaching it is crucial to value the teaching staff and good teaching skills, this means offering comprehensive support to their professional development, incl. diverse learning opportunities. The paper is based on the results of research on the needs of 5 faculties and 2 colleges of the university.

What is the situation of supporting academics' professional development in the Institute?

What kind of support and cooperation do the institutes need from the university?

Which collaboration fields/domains do you see with other institutes?

According to the needs of the institutes, we are creating a model of supporting changing the learning culture in Tallinn University.

Co-operation in Teaching and Learning

Engaging Students and Faculty in Joint Learning Experiences

Heinz Bachmann
University of Teacher Education Zurich, Switzerland

Student-faculty partnership is an innovation that gains traction on campuses across the world. It fosters common thinking and problem solving and raises awareness for the challenges in the teaching and learning process amongst the involved parties – teachers and students alike (Cook-Sather, Bovill & Felten, 2014). Additionally, student-faculty engagement helps to redefine the role of students and teachers in a more learner-centred teaching approach (Bryson, 2014a/b, Jenert & Fust, 2012, Nagel 2008).

To better understand issues around the concept of co-learning and the resulting consequences on engaging students and teachers in partnerships, the Center for Teaching and Learning in Higher Education at the Zurich University of Teacher Education Zürich, has developed two different settings to facilitate joint learning experiences - a workshop on design thinking and another one on didactical reduction. The workshop on design thinking focused on the idea of learning together a new creativity method and solving a given problem in a joint effort. The workshop on didactical reduction emphasized a change of perspective.

A sample of students and teachers participating in the design thinking workshop has been interviewed about the joint learning experience. The presentation will give an insight with short video-clips containing statements of the involved parties to indicate the level of engagement and learning achieved after the common training.

On another occasion, teachers and students attended a workshop on didactical reduction in the run-up of a curriculum revision process. The joint activities during the day helped students and teachers to change perspective and to develop a better understanding of the different challenges for the involved stakeholders.

The design and lessons learned of these two pilot projects will be presented and time will be reserved for discussion.

References

- Bryson, C. (2014a). Clarifying the concept of student engagement. In C. Bryson (Ed.), *Understanding and developing student engagement* (pp. 1-22). Abingdon: Routledge.
- Bryson, C. (2014b). Reflections and considerations about the future of student engagement. In C. Bryson (Ed.), *Understanding and developing student engagement* (pp. 231-240). Abingdon: Routledge.
- Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging Students as Partners in Learning & Teaching: A Guide for Faculty*. San Francisco: Jossey-Bass.
- Nagel, D. (2008). The Future of Instruction: Teacher as 'Co-Learner'. *THE Journal*. Retrieved from: <https://thejournal.com/articles/2008/06/30/the-future-of-instruction-teacher-as-colearner.aspx>
- Jenert, T., Fust, A. (2012). Studierende als Kunden?! Zum Umgang mit einer herausfordernden Beziehung zwischen Lehrenden und Lernenden. In: Zimmermann, T., Zellweger, F. (Hrsg.) *Lernendenorientierung – Studierende im Fokus* (S. 63 - 86). Bern: hep.

How to Trick Students into Self-Directed Learning?

Marge Konsa
University of Tartu, Estonia

Probably every teacher would like to have students who enjoy learning, are curiosity-driven, independent and responsible. In a word, they are intrinsically motivated self-directed learners. However, the reality can be quite different. Studies indicate that Estonian undergraduates, in particular first year students, tend to have surface approach to learning and they are not familiar with self-directed learning (Pilli et al. 2013). It should also be borne in mind that intrinsic motivation will occur only for activities and subjects that hold intrinsic interest for students, but many educational activities are not like that (Ryan & Deci 2000).

Providing learners with autonomy is one of the key factors in supporting their motivation and self-direction (ibid., Boud 1988, Macaskill & Denovan 2013). It is clear that one cannot expect an immediate readiness for full independence from students who are dependent learners accustomed with teacher-centered learning (Grow 1991). What is then the proper dose of autonomy and how should it be served so that students would not lose their heads?

My action research is based on the recent changes that I made at the university course "Theory in archaeology". I gave students greater control over their learning process and freedom to choose their individual learning environment. For example, they could choose their own pace for the assignments, which topics and how thoroughly they learn, and whether they want to participate the seminars and teamwork or study individually online. I monitored the students' behaviour and studied their opinion with the help of questionnaires. In the paper the research design, preliminary results and student feedback will be presented.

References

- Boud, D. ed. 1988. *Developing Student Autonomy in Learning*. 2nd ed. London: Taylor & Francis. Grow, G. O. 1991. Teaching Learners to be Self-Directed. *Adult Education Quarterly*, 41, 3, 125–149.
- Macaskill, A. & Denovan, A. 2013. Developing autonomous learning in first year university students using perspectives from positive psychology. *Studies in Higher Education*, 38 (1), 124–142.
- Pilli, E., Sammul, M., Post, P., Aasjõe, Ü. & Kruusamäe, K. 2013. Eesti kõrgkoolide esmakursuslaste õpi- ja teadmuskäsitlus (Summary: Concepts of learning and knowledge among first year students in Estonia). *Eesti Haridusteaduste Ajakiri*, 1, 156–191.
- Ryan, R. M. & Deci, E. L. 2000. Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54–67.

Developing a Deeper Understanding of the Profession at the Beginning of the Studies: Based on the Example of the Estonian National Defence College

Juhan Aus, Kütt, K.
Estonian National Defence College, Estonia

The aim of the presentation is to describe a development activity for cadets as future leaders. 2017/2018 a pilot course was held with a focus on student centered approach, experimental learning cycle, handing over responsibility for their own learning to students and integrating subjects. The aim of the 10-day extra-curriculum activity course was to get the 1st year students to gain a deeper understanding of the task and role of the officer and to even up critical skills necessary to start the studies. Cadets were formed into two platoons and sent to the training ground where all the exercises were held in tactical situation. The cadets fulfilled all the positions and had full responsibility of the units. Second year cadets acted as coaches and were responsible for supporting cadet-leaders during the planning phase; acted as observers during exercises and held after-action reviews with subunits. The analysis of data showed that the concept of the course was good and it supported understanding about the future job, leader self-development and autonomous learning. The aim of the presentation is to describe the planning process, principles, methods, feedback of participants and gained experience. On a more general scale it is to be discussed how the results can be applied by all wishing to use a similar system to support someone's choice of career and professional development.

Students' Perceptions of the Enhancing and Hindering Elements of the Teaching-Learning Environment (TLE)

Kaire Uibolet
University of Tartu, Estonia

Background: In recent decades, teacher-centred TLEs have been replaced by student-centred ones (Tynjälä and Gijbels 2012), which revolves around the constructivist view of learning. This view perceives learners as active sense makers (Mayer 2004). Consequently, more student activating teaching-learning activities are employed. Previous research, on elements of TLE that enhance and hinder learning, has found that good teaching skills, authentic assessment tasks, interaction and feedback enhance students' learning. In contrast, high workloads and poor teaching practices hinder learning. Most of the previous studies have explored students' perceptions of enhancing and hindering elements of TLE at the curriculum level (e.g. Hailikari and Parpala 2014). This study aims to explore on how to enhance students' learning at the course level and what elements of TLE are crucial when designing an undergraduate course.

Research question: 1) What kind of enhancing and hindering elements of the TLE do students describe at the course level?

Methods: The data were collected through semi-structured interviews with undergraduate university students (N=33) from three compulsory courses. The intended learning outcomes and the length of the courses were similar, but there was some variation in teaching and assessment practices. The aim of the interviews was to elicit an account of the students' experiences of learning while participating in their course. The data were analysed using qualitative content analysis.

Results: The students' accounts showed that continuous and obligatory learning and assessment tasks enhance students' learning. By contrast, some students thought optional learning activities were a hindrance. In general, the students acknowledged that possibilities to interact with peers or the teacher did enhance learning. Moreover, the students' accounts revealed higher quality learning occurred in seminars when students were prepared for interaction. By contrast, students said poor preparation for interaction hindered their involvement in seminars and lectures. This study also showed that poor teaching is the main reason why students do not attend lectures and seminars. The students' accounts of course assignments revealed that the key aspects were 'authenticity' and 'challenge' and these in conjunction with constructive feedback and the possibility to improve the assignment did enhance learning. By contrast, the students said a lack of clear aims and ill-structured instructions for doing the assignment hindered the students' learning.

Conclusions: This study revealed that employing student activating teaching-learning activities when designing TLE is important, but it is also crucial to guide and direct students' learning by developing well-structured instructions for doing the assignments.

Development Seminar – Best Practice of Creating Real Transferrable Learning

Epp Adler, Bogdanova, O.
University of Tartu, Estonia

Supporting the studying process and the learner during the university studies is more and more important topic in the ever-changing and demanding globalized world. Tartu University Skytte Institute has reformed its programs and is now putting greater effort on supporting the learner's personal growth besides academic development. Active and reflective learning, active participation and challenges for self-improvement are the central focus of European Studies MA program, one of the reformed curriculum of the Skytte Institute. The program aims to develop the following future key competences:

- Information competence
- Team work competence
- Internationalization competence

This aim is reached with the Development Seminar, which occupies a central position of the curriculum. Development Seminar lasts the entire duration of the two-year study period under the guidance of one instructor, who works based on coaching principles and serves as the course mentor. Development seminar aims to support the learner from five aspects:

- Personal growth and self-awareness
- Social skills and team work ability
- Career awareness and development
- Academic competences and awareness
- Administrative support

Methods used in the seminar aim to support the learner from all these aspects, but puts great effort on making the learned skills interlinked and transferable to the personal and professional life of the students. Every course must implement a Course project that influences wider public. Besides the possibility to give real-life practice, develop various competencies and build the professional network and profile of the students, the Course project is also used as an example and bases for understanding project management, research planning, problem-solving, self-management and thesis writing processes. In practice the Development Seminar has proven to offer even more possibilities to serve as real support for students. Long duration and one-instructor approach enables time and space for sharing experiences of studies, expressing concerns, proposals and questions. The instructor can mediate the information between students, lecturers and the administration. This function has enabled early intervention to potential problems, thus including the students to immediate improvement of the quality of the program. According to the students the Development seminar helps them to survive in the demanding and challenging MA program. Among other things the development seminar was the place where the students got know each other, where they could express their thoughts, hear that others have the same issues, set goals and reflect on their experiences. We believe that the Development seminar is an efficient model that equally serves the needs of the students, universities and the real life.

Disciplinary Thinking in Cultural History: Student Engagement as a Structured Experience

Riina Oruaas
University of Tartu, Estonia

The traditional form of teaching and learning cultural history has been a narrative consisting of relevant facts and interpretations of the facts, documents and art works (e.g. literary and visual artefacts). The most widespread form of teaching has been an oral lecture held by a teacher. Both of the forms are linear and represent a linear and coherent structure of thinking, while theatre historiography has become more complex in its forms and ideas, including digital humanities (Oruaas 2017). In my paper, I will introduce the ways of searching for means of effective student engagement and enhancing disciplinary thinking in theatre history, which is looked upon here as a specific field of cultural history.

The key problem is how to build a balanced structure of a lecture (providing pre-structured information by the lecturer) and a seminar (students building their own structures of information according to acquired knowledge). To develop discussion skills and information structuring, I have made a model of theatrical event (Postlewait 2009) on the basis of the course. The model enables to analyse all periods since the antiquity based on the same principles.

According to the current data of my research, the key to effective learning is in study skills, mainly in searching for relevant information, academic writing, and discussion skills. Implementing the model of theatrical event in different historical situations forces the students to find, rethink and restructure the given facts, images, and play texts in order to create a new understanding. The field-specific model is a tool to learn disciplinary thinking and writing (Moore 2011, Shopkow 2017). Working in a non-narrative and non-linear structure is a challenging experience. For BA students, who are novices in the field, teaching and learning cultural history requires a strong structure, and student engagement.

For young people, the subject is challenging both intellectually and emotionally. The process is very personal, an encounter with distant cultures and value systems, and therefore, some flexibility in the course schedule is also necessary to guide the students in making their own connections and interpretations.

References
Moore, Tim John 2011. Critical thinking and disciplinary thinking: a continuing debate. *Higher Education Research & Development*, 30:3, pp. 261-274.
Postlewait, Thomas 2009. *The Cambridge Introduction to Theatre Historiography*. Cambridge: Cambridge University Press.
Oruaas, Riina 2017. Teatriajalood ristteedel: kriitiline vaatlus uurija töölaual. – *Teater. Muusika. Kino*, nr 9, lk22-32.
Shopkow, Leah 2017. How Many Sources Do I Need? – *The History Teacher*. Vol 50, No 2, pp. 169-192.

Fostering Students' Creativity in Engineering Graphics Courses

Peeter Kukk
Estonian National Defence College, University of Tartu, Estonia

Educating creative people should be a task of parents, teachers, trainees, managers and others who influence the way of thinking and behaviour of young children, students or colleagues. Creativity training should be part of all education levels and should also continue after the formal learning period. Teachers' task is to provide the environment that enhances learners' creativity. Corresponding teachers' main activities were pointed out and analysed by Cropley (1995), Dikici and Soh (2015). Three major and partially overlapping components of creativity are as follows: domain-relevant skills, creativity-relevant skills and intrinsic task motivation (Amabile 1989).

In this presentation two Engineering Graphics courses (3+3 ECTS) taught at the Faculty of Science and Technology of Tartu University will be analysed. During the courses, students have to learn a large amount of precise instructions how to use appropriate computer software and ISO standards for constructing 3D models and 2D drawings. A consistent application of standards ensures that a new idea formulated in 3D and 2D files is well understood and interpreted by other specialists. The proficiency of these standards as part of domain-relevant skills of engineers is one of the prerequisites to his/her creative work. Creativity-relevant skills can be trained with appropriate assignments and discussions during the course. Task motivation can be maintained and increased by selecting the sequence of independent assignments, their level of complexity and assessment. To foster students' creativity, the main attention was paid to the alignment of lecturers' activities to the findings of Cropley during the compilation and subsequent development of courses. In their feedback to these two courses students highlighted the diversity of assignments, possibility to demonstrate their imagination, two-step formative feedback, grading and seminars as positive aspects.

References
Cropley, A. J. (1995). Fostering creativity in the classroom: General principles. In M. Runco (Ed.), *The creativity research handbook*, Vol. 1 (pp.83-114). Cresskill, NJ: Hampton Press.
A. Dikici and K. Soh (2015) Indexing Creativity Fostering Teacher Behaviour: Replication and Modification. *Higher Education of Social Science*, Vol. 9, No. 3, pp. 1-10.
T.M. Amabile (1997) Motivating Creativity in Organizations. *California Management Review*, Vol.40, No.1, pp. 39-58.

Measuring the Impact of a Lecture in a First Year Undergraduate Course

Johann Langemets
University of Tartu, Estonia

Lecturing has been a traditional way of teaching new concepts to students. Typically, a lecturer would talk according to the notes of the subject and students would listen and take notes for their selves. Nowadays, when a lot of books and videos are freely available to the students, the question of the necessity of a lecture is automatically risen (see [1]). Especially this question is relevant, when one teaches mass courses. Here we present an investigation of the influence of a lecture on the final score of first year undergraduate students taking part in the course Transition to Advanced Mathematics. This course is compulsory for students learning mathematics, statistics, and computer science. For the last two years, the number of these students on this course has been approximately 270 students. All the materials needed for this course, e.g. notes and an exercise book with answers, is freely available to every student. We measure the attendance of lectures and compare them with the final score. Data collected from years 2016 and 2017 indicates that each lecture has a notable effect on the final score. Also, comparing the attendance of years 2016 and 2017, we investigate whether some new modifications during the lectures (see [2]) have had an impact on the attendance of the students. During the whole semester students can give feedback to the lectures, which is compared to the lecturers' own impressions, and put in perspective with the percentage of attendance.

References

1. S. Freeman, S. Eddy, M. McDonough, M. Smith, N. Okoroafor, H. Jordt, and M. Wenderoth, Active learning increases student performance in science, engineering, and mathematics, *Proc. Natl. Acad. Sci. USA* 111 (23), (2014), 8410–8415.
2. B. Braun, P. Bremser, A. Duval, E. Lockwood, and D. White, What Does Active Learning Mean for Mathematicians? *Notices of the AMS* 64 (2), (2017), 124–129.

Why Do We Need to Engage Practitioners and Real Organizations While Teaching Communication Management at the University?

Tiiu Taur
University of Tartu, Estonia

Background: University has to prepare students for their future career but it seems that there are not many among the staff who know the state of the field outside academia from the first-hand experience. Therefore, engaging practitioners in developing curricula, courses and the overall study outcomes is of vital importance. This case study concentrates on incorporating acknowledged communication managers and real organizations in the framework of a course called "Basics and Practices of Communication Management" that gives students background knowledge and practical skills needed to begin their career in the field of communication management. The communication managers who were invited to participate in conducting the course shared their knowledge and experience with the students, while organizations engaged benefited from cooperation with the groups of students throughout the semester during which the latter provided assistance needed in the field of communication management.

Methods: The qualitative data were collected conducting interviews (communication managers, organizations, lectures) and focus groups (students). Students' written feedback was also analysed.

Results: To begin with, from the point of view of students, both practitioners who shared their present-day knowledge and experience, and organizations that allowed to participate in their everyday activities were much appreciated. It was pointed out that this kind of combination of traditional studying and experimental learning during the course helped them gain better understanding of the profession and aspects they need to pay attention to in order to begin their career as communication managers.

Secondly, organizations that participated in the course were grateful for the insight students gave them and practical activities that students performed. Some of them were sure that the issues tackled during the course would not have been addressed by themselves without the help from students, and therefore, students' work helped enhance their businesses. Last but not least, the cooperation between the teaching staff and acknowledged practitioners resulted in a better understanding of the state of the field, which enables to enhance the overall quality of the teaching at the university.

Conclusions: It can be said that this case study shows that combining collaboration with practitioners and experimental learning has a significant outcome for all parties involved. The results also support Childers & Levenshus (2016) who stated that collaboration with practitioners enhances students' readiness for various workplace situations they face after academia, and Benecke & Bezuidenhout (2011) claiming that using experimental learning while teaching communication management prepares students for a better career in the world of work.

References

- Benecke, D. R., & Bezuidenhout, R.-M. (2011). Experiential learning in public relations education in South Africa. *Journal of Communication Management*, Vol. 15 Iss 1 pp. 55-69.
- Childers, C. C. & Levenshus, A. B. (2016). Bringing the digital world to students: partnering with the university communications office to provide social media experiential learning projects. *Communication Teacher*, 30:4, 190-194.

Approaches to Teaching of Academic Staff

University Teachers' Understandings about Teaching in the Context of a Pedagogical Course

Terhi Skaniakos¹, Karm, M.², Sarv, A.², Niilo, A.²

¹University of Tampere, Finland

²University of Tartu, Estonia

The teaching approach adopted by teachers has been shown to be related to their conceptions of teaching and also to their perceptions of their teaching context (Prosser and Trigwell 1999). Studies show that teaching conceptions are not stable and are changing during the teaching experience (Kugel 1993). Often teachers are not aware of their teaching conceptions (Eley 2006) but at the same time, the teaching conceptions influence the development and change of teaching practice (McAlpine & Weston 2000).

When examining the impact of training of university teachers on approaches to learning of their students, has been found that teaching conceptions of teachers who participated in longer teacher trainings, have changed towards a more student centered approach (Postareff et al. 2007, Gibbs & Coffey 2004).

In our study, we are interested what kind of impact does the participation in a longer university teachers basic course (10 ECTS) have on the teachers' teaching conceptions.

A qualitative study was carried out in 2 universities (Tartu, Estonia & Jyväskylä, Finland). Research material was collected from the participants of 2 training groups in Tartu (17 in total) and 2 training groups in Jyväskylä (13 in total) at the beginning and at the end of the course. The participants were asked to write texts, in which they described their ideas and practices of teaching before and after the course. The texts were analysed with qualitative content analysis and discourse analysis.

Preliminary results show that the descriptions of teaching of teachers are richer in details concerning their teaching and teaching methods they use in the end of the course than their descriptions in the beginning of the course. Teachers have started thinking more about their teaching than they did before.

Approaches to Teaching of Academic Staff

Self-Evaluation of Pedagogical Competencies of Academic Staff of Tallinn University of Technology in the Context of Career Management

Merle Lõhmus, Rütümann, T.

Tallinn University of Technology, Estonian Centre of Engineering Pedagogy, Estonia

The main emphasis of this paper lies on training needs analysis pilot survey, carried out by implementing Professional Competencies Self Evaluation Questionnaire for academic staff members in Tallinn University of Technology (TTU).

The Regulation of Academic Career Management states the competencies of academic staff as following: 1) research competency, 2) teaching competencies – pedagogical, didactic, subject related and evaluation management competencies, 3) English language proficiency, 4) educational technology competencies, and 5) other competencies – organizational, managerial, communicative and social skills. The purpose of the assessment of the work performance of an academic staff member is to assess the work results and eligibility of academic staff and to provide them feedback as well as to motivate academic staff members to improve the academic performance of the university. Work performance of academic staff is assessed and feedback is provided: 1) in the course of a development and career interview, and 2) upon attestation.

The attestation committee shall assess compliance of the employee's work performance according to following documents: 1) a review of the work performed in the previous evaluation period, 2) the results of the development and career interview, 3) the academic portfolio, 4) students' feedback on teaching and courses in the previous period, 5) other materials considered necessary by the employee or the attestation committee.

The Task Force under Personnel Office Staff Development and Mobility Centre has developed the model of Assessment of Academic Staff Work Performance and Feedback. The model links the main stages of the assessment process from collecting data for compiling a personal portfolio and analysing personal training needs, conducting the development and career interview and finalizing with attestation interview.

Pilot survey has been carried out by implementing Professional Competencies Self Evaluation Questionnaire for academic staff members at TTU in March 2017. The sample of 55 technical teachers evaluated their training needs in the pilot survey. The results of the analysis of the pilot survey will be presented. Survey outcomes indicate strong need for continuous education training in some didactical skills and evaluative competencies, developing didactical models when planning classes, applying interdisciplinary approach, practicing efficient and effective evaluation methods and guiding students in self-analysis. Strong orientation on self-development is evident. The analysis of the pilot survey has proved that the Professional Competencies Self Evaluation Questionnaire is functioning and may be used as the basis of the assessment of academic staff members' training needs.

25 JANUARY, 2018

12:45-14:00 Parallel sessions

Workshop on Collaboration in Project Work

Approaches to Teaching Academic Staff

E-learning

Student Engagement

Problem-Based Learning

Multicultural Classroom

Collaboration in Project Work

Erik de Graaff
Aalborg University, Denmark

Students need to learn collaboration skill before they can work effectively together in a project. This short workshop will allow teachers a taste of an exercise that can be used to train students in these skills.

Beliefs, Identity and Teaching Practice of Academics in the Context of Structural Reform and Changes at the University

Larissa Jõgi, Ümaril, M., Põlda, H., Saia, K., Toros, K., Oder, T., Kangur, M., Puusepp, L., Pata, K.
University of Tartu, Estonia

The developments and changes at universities require adopting innovative strategic approaches for supporting academics and their professional development, redesigning teaching and learning processes and approaches, bridging research and teaching practice, creating and developing innovations for supporting students' learning (Gibbs 2005).

An ambitious structural reform at Tallinn University, changes in the curricula structure and innovations by implementing new interdisciplinary approaches (e.g. Enhanced Learning Unlimited (ELU) projects) into the university study process call for systematic research supporting changes, new implementations and academic staff's teaching practice.

Teaching at the university is a multi-level endeavour on three inter-dependent levels: institution-wide, faculties and programme, and individual level, including initiatives that encourage academic staff to innovate and support improvements to student learning and adopt a learner oriented focus (Pilot & Keesen 2007).

The presentation is based on the results from the first stage of educational interdisciplinary design research (Akker, 2009) "Learning and Teaching at University. Experiences of Learning and Teaching Practices" that focused on the teaching experiences of academics. The research is based on institutional ethnography (Smith 2005, Devault & Mc Coy 2002) and social-cultural approach (James & Biesta 2007) and focuses on institutional discourse as "ruling relations" in institutional documents, on academics beliefs, identity and teaching practices in different study fields.

Research questions: What is the current practice of teaching at the university perceived from the academic staff's point of view and reflected in university's regulations? How does the continuously changing university context and suggested teaching practices (incl ELU projects) affect academic staff's beliefs and identity? The empirical data was collected using document analysis, open-ended and non-structural interviews with academic staff from different study fields. The empirical data was analysed using discourse and qualitative thematic analysis. The results from the analyses of theoretical and empirical data indicated that on the institutional level the entrepreneurial cultures are more visible than collegial cultures. On the individual level there are slow, but meaningful changes in the academic staff's teaching practices, as well as beliefs and identities.

Acknowledgements

The research was funded by Tallinn University Research Fund 25.11.2016 No 9/16, the research project titled "Learning and Teaching at University. Experiences of Learning and Teaching Practices".

References

- Akker, J.(2009). Curriculum design research. In Tj. Plomp & N. Nieveen (Eds.), An introduction to educational design research (pp. 37-51). Enschede: SLO.
- James, G. & Biesta, D. (2007). Improving Learning Cultures in Further Education. Routledge.
- Gibbs, G. (2005). Being strategic about improving teaching and learning in research-intensive environments. Higher Education Research and Development Society of Australasia Annual Conference keynote, Sydney, July 2005.
- Devault, M. and L. McCoy. (2002). Institutional ethnography: Using interviews to investigate ruling relations. Gubrium, J. F. and J. A. Holstein (eds). In Handbook of Interviewing: Context and Method. Thousand Oaks, Calif.: Sage Publications.
- Pilot, A. & Keesen, F. (2006). The teacher as a crucial factor in curriculum innovation: the case of Utrecht University. International Consortium for Educational development in Higher Education, Sheffield.

Expectations to Academic Staff (Academics and University Teachers)

Kristi Mets-Alunurm¹, Karm, M.²

¹Tallinn University, Estonia

²University of Tartu, Estonia

Managing the profound change from elite to mass education at the university level has posed significant challenges to teachers and educational institutions because of the diverse needs, aspirations, expectations, and preferences of students in the teaching and learning process (Smith & Wertlieb, 2005, Alauddin, Ashman, Nghiem, & Lovell, 2017). Students' expectations to and perceptions of service quality in higher education change over time (Boulding et al., 1993, Sander, Stevenson, King, & Coates, 2000).

For students, the first transition year is crucial, moreover freshmen are often ill-prepared for the change from one educational level to the other (Brinkworth, McCann, Matthews, & Nordström, 2009). So, students' expectations and preferences were considered to be the quality assurance, while students' expectations of higher education depend on culture, gender, age, university type, and mode of study (Sander, Stevenson, King, & Coates, 2000).

The primary goal of this paper is to gain a deeper understanding of first-year students' expectations for academic staff, the secondary aim is to identify differences between part-time vs full-time and school leavers vs matured age first-year students.

This study used survey data from the compulsory course "Studying at University", where 170 first-year students of Tallinn University were asked to reflect on their understandings about the status of a student and to express the meaning of university studies, they also described their attitudes about learning strategies and learning barriers. The survey included a concrete question about first-year students' expectations towards academic staff, freshmen were asked to comment on their expectations to academics and university teachers.

A convenience sample consisted of first-year students at the start of their study at the School of Educational Sciences. To identify the meaningful units emerging from the data, content analysis was used.

Overall, in terms of an academic perspective, first-year students expect from academic staff profound professional knowledge from the expert areas with interesting inspirational lectures and collaborative learning methods, mostly active participation and engagement. From a social perspective, expectations are more interpersonal so students expect reasonable and rational understanding and considerate attitudes. From an academic perspective, the part-time and full-time first-year students share similar expectations: subject-based theoretical and practical knowledge, the lecturer should be inspired by the subject area and transmit the passion for it. Students are waiting for interesting and inspiring lectures. Full-time students mentioned the importance of interesting and inclusive tasks. But there is remarkable distinction between the social expectations of part-time and full-time students. Full-time students expect from academic staff collaboration, understanding and considerate attitudes, part-time students expect more collaboration on an equal basis, because the learning should be interactive.

Keywords: first-year students, expectations and preferences of students, expectations for academic staff

Characteristics and Behaviours of Excellent Teaching: Perceptions of Military Educators

Triinu Soomere¹, Mansour, E.², Groccia, J. E.³

¹Baltic Defence College, Estonia

²University of South Florida, United States

³Auburn University, United States

Prior learning experience plays a crucial role in shaping learners' perceptions of learning, thus creating a more or less favourable view on continuing their learning. It has also been shown that teacher attitudes and approaches to teaching have a major influence on students' learning experiences (Sogunro, 2014). There has been little research on perceptions of teaching and learning in the context of professional military education in the Baltic region. Some research has been conducted on student perceptions of learning and teaching in Estonia, but to date no substantive research has been done to examine teachers' perceptions of excellent teaching. Therefore, the aim of this study was to investigate the Baltic Defence College faculty perceptions of characteristics and behaviours of excellent teachers, compare these two previous studies and examine how participation in a short workshop on teaching shaped perceptions of excellent teaching four months later. Having an overview of faculty perceptions of excellent teaching may provide a basis for professional development process. This study identifies perceptions of the Baltic Defence College faculty on what constitutes excellence in teaching using the Teacher Behaviour Checklist (Buskist et al., 2002). Faculty were asked to rank the top 10 of 28 teacher qualities of excellent teaching. The faculty sample consisted of 32 participants. Results showed that faculty agreed on ten qualities as the most important for excellent teaching. 'Promotes Critical Thinking/Intellectually Stimulating' (75% responses) and 'Knowledgeable About Subject Matter' (63% responses) were ranked the highest qualities. This study provides a significant contribution to the literature on perceived qualities of excellent teaching of faculty in the context of a professional military education, as well as important information for higher and continuing education administrators responsible for military educational development in the Baltic States.

E-learning

Teaching Academic and Work Life Communication Skills Online: Student and Teacher Perspectives

Susan Gamache, Alanen, K., Männikkö, T.
University of Tampere, Finland

Communicating online is an essential part of university students' working life skills as knowledge and expertise are increasingly created and disseminated in virtual teams. This change also shows in teachers' work as teaching 21st century working life skills requires new digital pedagogical knowledge.

In our presentation, we examine teaching communication skills online from the point of view of the student, the teacher and working life needs. For the student perspective, our data consist of student views collected from fully online courses (including both written and oral academic and work life communication) in a language centre context. In the teacher perspective, we analyse both recent national surveys on digitalization at universities carried out in Finland and university strategies. For the working life aspect, we look at national and international reports and policies on the effect of digitalization on working life communication. Our results show that student and teacher expectations for the online course do not always meet and skills such as flexibility are defined differently. University strategies encourage flexible modes of delivery and flexibility is one of the main reasons why students choose an online course in the first place. However, as a 21st century working life skill, flexibility does not only refer to being independent of time and place but also refers for example to adaptability to different tools and modes of communication.

Our results further show that another essential 21st century working life skill and a skill also needed in online courses, self-management, requires practice. Although the national surveys show that some teachers are sceptical about whether oral communication can be taught and learned online, our results indicate that the skills learned during the online course are equal to those learned in face-to-face courses. In addition to these, on an online course, students learn adaptability and valuable technology-related communication skills that cannot be authentically practised on a face-to-face course.

References

Davies, A., Fidler, D., & Marina Gorbis, M. (2011). Future Work Skills. Institute for the Future for the University of Phoenix Research Institute. Retrieved from http://www.iftf.org/uploads/media/SR-1382A_UPRI_future_work_skills_sm.pdf
Foresight 2030. Retrieved from <http://tulevaisuus.2030.fi/en/Nelson, Mike: Digital Literacy in the Language Center Classroom. Kielikeskus tutkii vol. 3, pp. 115-132. Turun yliopisto, Turku.>
Niinivaara, Janne: Oppimisympäristöt opettajien ja opiskelijoiden silmin. Kielikeskuspäivät 30.5.2017, Kuopio, Finland.
The future of jobs report. World Economic Forum. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf

E-learning

The Impact of E-teaching on the Components of Learning: Comparing In-Class and Online Study Groups

Anna Beitane, Braghiroli, S.
University of Tartu, Estonia

Online learning and digital teaching have emerged as increasingly relevant components of contemporary educational process, regardless of field and focus. However, while extensive research has been conducted on the online students' characteristics (Barrett & Larry, 1999, Arbaugh, 2000, Lim, 2001), learning styles (Emerson & Taylor, 2004, Rodgers, 2008) as well as the general features of the online learning environment and tools (Bell & Kozlowski, 2008, Allen & Seaman, 2013), their specific impact on the learning dynamics and the students' performance and attitudes appears to be still understudied.

In this respect, the aim of the proposed study is to contribute to fill the existing gap with a focus on performance and attitudes by comparing the impact of presence or absence of digital teaching in two similar samples of online and in-class learning groups within the framework of the course (SHRG.02.025) taught at the Johan Skytte Institute of Political Studies - "Measuring the Impact of e-Government: Economic, Political and Social Outcomes".

In order to achieve this goal, the paper adopts a quali-quantitative approach that combines the advantages of empirical quantitative analysis with the multifaceted perspective provided by qualitative introspection. To assess the impact of online learning on students' performance attendance sheets, overall performance from the Study Information System and its differentiated components in assessment of the course are utilized. To estimate the effect on students' attitudes, the post-course feedback survey conducted in the Moodle and Google forms environments are used.

The data used have been collected during two rounds of course opening (Spring 2016 and 2017). The survey data conform to standard ethical measures and anonymity is granted in survey analysis.

After evaluating the data collected, the overall results of the study will contribute to reveal the complexity and inner mechanisms of the digital teaching on the learning process and to delineate a framework for predicting the emergence of potential distinctive patterns on the impact of online learning.

While the findings of this study will not provide an ultimate answer to the question of assessing the impact online learning, they contribute both methodologically and conceptually to the definition of a systematic and replicable study approach. In the light of substantial internal and external validity of the analysis and of the results, this study could display a high level of applicability to other courses and disciplines and therefore provides the ground for further generalization of the findings.

E-learning

Student Engagement

Domain-Specific Digital Competences for Providing High-Quality Professional Training in Higher Education

Linda Helene Sillat, Tammets, K., Laanpere, M.
Tallinn University, Estonia

In the recent years, there has been a growing popularity in giving the argument on the needs of evaluating and assessing digital competences. Providing the fast increase of different digital competency frameworks which focus mainly on the citizens' digital competences (DigComp, 2016) and on the teachers' digital competences (ISTE, 2017, DigCompEDU, 2017) we come across the question whether digital competences should reach beyond that and be cross-cutting and specific to all different domains of education and thus, professions. Furthermore, research done on future labour markets, employment trends and the skills needed, state that amongst half of the working population today do not have the necessary ICT skills to fulfil the simplest tasks in hand and emphasize that majority of the future work will profoundly be shifted towards the use of ICT in all occupations (OECD, 2016).

In order to provide high-quality professional development in higher education we are forced to take into account the domain-specific digital competences and how we can support the development of such competences cross-curricula implementing the competences into teaching strategies. Furthermore, to support the assessment process of domain-specific digital competences which consequently requires the understanding of such competences. This paper addresses the need of identifying domain-specific digital competencies and the formation process of the competencies based on the competency model DigComp. The empirical part of the research introduces the participatory design process in designing domain-specific digital competencies which includes higher education academic staff, students and also the representatives of the labour market to take into account the perspectives of different stakeholders.

Keywords: Domain-specific digital competences, higher education, professional training, participatory design

How to Nurture Learning and Feed Understanding in a Flexible Learning Environment. An Example from Food and Nutrition Education at Umeå University

Åse Tieva, Malmros, B.
Umeå University, Sweden

This presentation intends to address the issue of the interface between learning spaces and conceptual changes in teaching and learning in a Swedish context. We will present results from a 3-year study conducted at the Department of Food and Nutrition, Umeå University.

The intention of our project was to utilize the advantages provided by a flexible learning environment in order to develop a conscious pedagogical approach in order to promote students' understanding of a teaching content. The pedagogical methods were inspired by the Teaching for Understanding framework (Ritchart & Perkins 2008). This pedagogical design supports an approach where learning is made visible, facilitating interaction and understanding and promoting student activity and collaborative learning. Making students' understanding visible to themselves and to the teachers constituted a pedagogical cornerstone. The flexible learning space used for the study afforded the students to carry out a variety of actions or performances to show their understanding on the topic and at the same time advance it.

Data collection: individual and focus group interviews, surveys, structured observations and student individual examination results.

Results: We found that student-active teaching that challenge the students to visualize their understanding fosters a culture of learning and creates a learning environment where both students and teachers could engage in presentations, communication and use of digital resources. This pedagogical approach improved examination results and seem to have the potential to promote understanding.

Supporting Meaningful Discussions and Interaction in the Classroom

Mari Karm, Sarv, A., Voolaid, E., Miliste, M., Niilo, A.
University of Tartu, Estonia

In constructivist learning theories the main notion is that knowledge is constructed by students through active engagement in the learning process. Research has shown that when teachers use certain interactional strategies (e.g. discussions, group work, pair discussions, asking questions) more often, students' engagement in learning and their educational outcomes are likely to improve. Classroom discussions support deeper understanding of the content domain and develop independent thinking skills. In a skilfully directed discussion, different opinions of students become apparent and the students learn to appreciate and accept those differences (Brookfield & Preskill, 2005). However, university teachers may be hesitant in using discussions and group work in the classroom, as it might seem an ineffective teaching method (time consuming, more preparation, less control) (Cashin, 2011).

If we want to improve students' engagement and learning outcomes, the role of interaction and talk in classrooms needs to be better understood (Mercer & Howe, 2012). University teachers use various activities to guide discussions and interaction in the classroom; however, it is unclear which activities really engage students in learning and help to achieve the expected learning outcomes. The aim of this research was to find out what kind of methods university teachers use to activate discussions and interaction in the classroom. The research question raised was the following: Which kind of learning activities do university teachers use to support discussions and interaction in the classroom?

The study is based on twelve video-recorded seminars of four university teachers from the fields of humanities and social sciences, as Kane, Sandretto and Heath (2002) stress the need to observe the actual teaching practices of teachers in order to give sense to teaching and learning at the university. Video recordings are analysed through discourse analysis, paying special attention to the tasks used in the seminars and the student-teacher interaction. The aim of the presentation is to introduce the findings of this study and opportunities for implementing these findings in teaching. The analysis of video recordings has revealed the importance of well-designed and authentic tasks in encouraging active discussions and interaction in the classroom. The structure of seminars and agreements with students also play an important role in supporting students' active participation.

References

- Brookfield, S.D., Preskill, S. (2005). *Discussion as a way of teaching: tools and techniques for university teachers*. San Francisco: Jossey-Bass.
- Cashin, W.E (2011). *Effective Classroom Discussions*. IDEA Paper No. 49. Manhattan, KS: The IDEA Center, 1-5. http://ideaedu.org/sites/default/files/IDEA_Paper_49.pdf.
- Mercer, N., Howe, C. (2012). Explaining the dialogic processes of teaching and learning: The value and potential of sociocultural theory. *Learning, Culture and Social Interaction*, 1, 12–21.
- Kane, R., Sandretto, S., Heath, C. (2002). Telling half the story: A critical review of research on the teaching beliefs and practices of university academics. *Review of educational research*, 72, (2), 177–228.

Flip or Not?

Siiri Velling
University of Tartu, Estonia

Teaching of natural sciences faces me, as lecturer of environmental chemistry, the question how deeply the students understand the material, as well how clearly they are able to explain their self in the frames of the topic, solve problems and do the calculation exercises. Of course, the suggestions and general guidelines for the implementation of various teaching and learning methods are available, but the real expertise of combination of lecturer's preferences, teaching style and topics is most frequently collected from experience and feedback.

The classical and flipped classroom methods are applied during lectures to study process of learning, the deepness of acquired knowledge, the students' perceptions of the learning process and study results. Named teaching and learning experience is investigated among a group of bachelor's degree students who have participated in the two courses conducted by me using different teaching methods. Interview with students in pairs, that is main research method currently, is applied to investigate the preferable teaching methods and perception of the learning process by students. What kind of teaching method did students like the most and why, which teaching method was most effective in the meaning of gaining knowledge and does it coincide with the favourable one? Also, which teaching methods were more easily trackable and enabled smooth learning process, which topics were taught in a very motivate way and what kind of approach diminished the desire to study, is there a contradiction or a comfortable match between a favourable teaching method and the acquired knowledge? During the interviews, students are encouraged to give feedback, on topic-wise or generally and also express their suggestions for the improvement.

The further goal of the small study is to map and correlate the learning and teaching styles using the course feedback and interview notes, on topic-wise as much as possible, to give and acquire deep and profound professional knowledge.

Implementing Research Based Teaching in an LLM program

Werner Schäfke, Kristiansen, B., Kim, K., Elgaard, E.
University of Copenhagen, Denmark

Research-based teaching is high on the agenda of university education development in many disciplines. In legal education, this approach can address some of the challenges that lawyers increasingly experience in the Danish labour market (Madsen 2008, Hammerslev 2010, Hammerslev 2011), but are comparable to challenges faced by lawyers in other countries (Dezalay & Garth 2004) and by graduates of other disciplines.

These changes challenge traditional legal education, and law school curricula are in close competition with business law and political sciences programs. This need for adjustment of legal education is also voiced by employer organizations. They express their wish for graduates with thorough academic competences, better innovation skills, the ability to think and work interdisciplinarily, and a better understanding of how the law is used to solve complex, "real life" problems (Det Juridiske Fakultets Aftagerpanel 2013, jf. Det Juridiske Fakultets Aftagerpanel 2016, 2017). In short, employers follow a sentiment already formulated in 1950 by the American legal philosopher Lon Fuller (1950, p 36): "[w]hatever it is we want the student to get, it is something more durable, more versatile and muscular, than a mere knowledge of rules of law." In order to address these challenges and demands, the course design follows a problem oriented, research based approach. By this we mean that students learn to research by conducting their own research projects under the supervision of researchers (Healey & Jenkins 2009, p 8), and the researched problems being complex problems lawyers are dealing with in practice.

The paper presents the course design and its pedagogical underpinnings that address these issues. The course in question, which is held for the first time during fall semester 2017, is an inquiry based LLM course connected to an e-journal at the University of Copenhagen. The course implements several didactic features considered beneficial for student learning regarding academic writing, research skills as well as innovative and entrepreneurial competences. As students choose their own research problems, they retain ownership over their learning. Through extensive formative peer-feedback and supervisor-feedback (Nicol & Macfarlane-Dick 2006) aided by rubrics (Andrade 2005, Andrade & Reddy 2010, Andrade & Warner 2012), students are guided through their research process, while retaining autonomy over their research process. After receiving a thorough review of their exam papers, students can then voluntarily revise and submit their articles to the newly established peer reviewed UCPH Fiscal Relations Law Journal. The course was developed by the Research Group on Law Teaching and Learning (University of Copenhagen), and the Research Group for Fiscal Relations (University of Copenhagen).

Teaching Linear Algebra through Problem Based Learning

Helle Hallik
Tartu College of the Tallinn University of Technology, Estonia

The aim of the current presentation is to sum up the experience of integrating problem based learning (PBL) to the teaching of linear algebra (5 ETCS). Presented materials contain observations of lecturer and also students feedback. In 2016/2017 academic year at Tartu College of Tallinn Technical University the elements of problem based learning were implemented in the teaching-learning process.

PBL is useful tool to be used for group based learning process to fully exploit students' potential (1, 2). Linear Algebra is a basic subject in the following curricula: Civil and Building Engineering, Cyber-Physical Systems Engineering and Management of Environment. The first-year students (n = 90) formed 22 groups (four to five students per group) according to their speciality.

The course takes place twice a week within a semester: 2 academic hours for a lecture and 2 academic hours of exercising. The lectures provided the theoretical background in order to solve the PBL tasks during the exercising lessons. In the end of the course students had to pass a written exam that was graded (A-E, 100%-51% accordingly). The aim of using PBL in teaching process was to connect mathematics with real life. In addition, in this way the students work continuously on their exercises every week. The feedback given by the students in Study Information System showed that most of them liked the PBL method. The most problematic point for the first-year students is the lack of experience in learning in groups. In order to use the same study method and to continue with PBL in groups there is the need to teach first the principles of group work.

References

- (1) Karm, M. Õppemeetodid kõrgkoolis. SA Archimedes 2013
- (2) Rüttnann, T. Inseneripedagoogika. TTÜ 2016

Problem-Based Learning Case Study in Biology

Maris Hindrikson, Voolaid, E., Õpik, M., Mägi, M., Sõõrd, L., Leppik, M., Kurg, A., Mänd, R., Sellin, A., Virro, T., Helm, A., Saarma, U.
University of Tartu, Estonia

Problem-based learning (PBL) is active learning focusing on problem solving and investigation of real-world problems (Barret & Cashman, 2010). The PBL methodology was used in a process of designing a new course for biology students to facilitate their decision of specialty in the curricula through a variety of curriculum-related research problems coming from existing units and chairs of the university (Mikk & Asser, 2000, Pilli, 2010). The time-frame of the design and conduction of the course (dividing students into groups, choice of problems for the course, the cycle of PBL in case of every problem, emerging challenges during the course etc.) will be discussed and best practices gained during the course are brought out.

References

Barrett, T., Cashman, D. (ed.) (2010). A Practitioner's Guide to Enquiry and Problem-Based Learning: Case Studies from University College Dublin. <http://www.ucd.ie/t4cms/UCDTL10041.pdf>
Pilli, E. (2010). Probleemipõhine õpe kõrgkoolis. <https://sisu.ut.ee/pbl/avaleht>
Mikk, J., Asser, H. (2000). Probleemõpe kõrgkoolis. Maastrichti kogemus. <http://raud.ut.ee/~jaanm/probleemope.htm>

Contribution of Communication Theory to Understanding University Teaching: Cultural Discourse Analysis of Latvian - American Undergraduate Interaction

Liene Ločmele¹, Burke, B. R.²

¹Vidzeme University of Applied Sciences, Latvia

²University of Minnesota-Morris, United States

Through their discourse about assigned content, and about communication practices and processes, members of a classroom create and enact their culture(s). By taking the perspective of the theory of Ethnography of Communication (Hymes, 1962, 1974) as well as the theoretical and methodological approach of Cultural Discourse Analysis (Carbaugh 1996, 2007), this study explores the communication during pre-designed learning activities shared by communication and media undergraduates of Vidzeme University of Applied Sciences in Latvia and of the University of Minnesota-Morris in United States. In the scope of this qualitative data analysis, from the interactions produced in relation to several joint learning assignments (online real-time discussions, learning journals, feedback sessions, and ethnographic field notes) during a course on media theory, we answer the following research questions: (1) What kinds of identities are brought into being by this culturally diverse group of students during the technology-mediated learning experience? (2) How can identities be productively used to understand university classroom dynamics, when studying about media (or something else)? While the studied interaction is technology-mediated, we focus analysis on the communicative content that the use of technology enabled us to create. Preliminary results show a strong presence of a variety of professional/institutional student identities, informed by cultural premises associated with institutional demands and preferences for new media professionals in respective localities. When teaching and learning about media theory, these ensure participation in culturally-rich discourses on media content, role, and functions, and, by the very fact of their enactment, contribute to the expansion of knowledge beyond the linear model of communication, which, as Carey (1989/2009) critically notes, typically treats the audience as a passive and homogeneous entity. Furthermore, joining the recent debate within the discipline of communication on whether globalization allows for scholarly cultures and ideas to meet, or, in fact, perpetuates the pre-existing power dynamics stemming from national intellectual politics and US-based thematic interests (Waisbord, 2016), we offer a partial response. While acknowledging the presence of the elements belonging to the latter (e.g. the choice of textbooks and language dynamics since the language of instruction corresponds with the native tongue of one of the groups, English), we argue for the former and suggest working towards such meeting points. Although the identities were illuminated by texts and talks about media content, our findings have consequences not only for teaching media theory, but also for broadening the intercultural repertoire of class participants.

CLIL Teacher Training at the Narva College of the University of Tartu: First Outcomes and Future Perspectives of the International CLIL Programme

Nina Raud, Orekhova, O.
Narva College of the University of Tartu, Estonia

Content and Language Integrated Learning (CLIL) is a “dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language” (Coyle, Hood & Marsh, 2010: 1). The European Framework for CLIL Teacher Education (2010) is a competence-based model of CLIL teacher training curriculum development, which consolidates European experience and expertise in CLIL education. The core modules for CLIL teacher development outlined by this document (Approaching CLIL, Practicing CLIL, Consolidating CLIL) are used in Narva College teacher education programmes (e.g. “Teacher of Humanities in Multilingual School”, “Primary School Teacher in Multilingual School”) and in its International CLIL semester programme.

The International CLIL semester programme, launched in 2017 by Narva College of the University of Tartu, is the first programme in Estonia to train student teachers of foreign languages from abroad and Estonia to become CLIL teachers. The focus of the programme is on both theory and practice with a follow-up consolidation internship in language immersion and CLIL kindergartens and schools. The results of teaching the first international group of students are considered by the authors to reveal strong and weak aspects of the International CLIL programme on the basis of CLIL programme graduates’ feedback and learning outcomes. Examples of CLIL materials and teaching units developed by the students enrolled in the programme demonstrate students’ readiness to apply CLIL methodology in practice. The conducted analysis of the programme completion allows to propose some measures for further development of the International CLIL programme in line with the teacher education curricula of Narva College of the University of Tartu.

Cultural and Lingual Diversity Challenges Finnish Teacher Education

Minna Kyttälä¹, Sinkkonen, H.-M.²
¹University of Turku, Finland
²University of Tampere, Finland

Compared with many European countries, Finland has a shorter history of immigration. During the last 20 years, Finland has become a more multicultural society. This new cultural and lingual diversity has also created challenges for teachers and teacher education, making it necessary for teachers to have sufficient knowledge of how to encounter and work with diversity. As Gay (2002) argues, to be effective and fair, teaching and assessment in a multicultural context should be based on students’ ethnic identities, cultural orientations and background experiences (e.g. Gay 2002, Richards, Brown, and Forde 2007). However, even though opportunities for cultivating multicultural education – learning about other cultures, languages, religions and socio-economic diversity (e.g. UNESCO 2006) and encouraging acceptance – have been available for decades, in Finland, the basic problem throughout society, including education, is that multiculturalism is still seen as concerning ‘the others’ (Holm and Londen 2010). Because of the difficulty in respecting all diversities, multicultural pedagogy has often become a sort of pedagogy of assimilation of minorities (Portera 2008). In Finland, teachers are required to have a master’s degree. Higher education institutions decide independently on the contents of teacher education. Today, most of them include multicultural, and Finnish as a second language issues in their study programs, but the number of courses/course credits is often quite small. We present here the results of two different studies: One that concentrated on teachers’ experiences on good practices in working with cultural and lingual diversity, and the other that investigated school experiences of immigrant students. Based on these two, we suggest new contents to Finnish teacher education. Our results suggest, for example, that even though the teachers are aware of many good practices, most of the good practices that teachers mentioned were associated with transplanting the Finnish language and culture onto the ‘others’. Scrutinising the thoughts and attitudes behind these good practices would help to create even better, more multicultural ways of arranging education for cultural diversity, which is inclusive of native Finnish students.

P1

Design Thinking - A Way to Increase Students' Cognitive Flexibility in Engineering Education

Kirsten From
Danish Technical University, Denmark

According to the report *The Future of Jobs* (<http://bit.ly/1qyDkb6>) Cognitive Flexibility is expected to be a sought after skill in 2020. It can be argued that students doing Design Thinking projects exercise their Cognitive Flexibility. A study is underway aiming to find ways of documenting this and improving their learning.

Design Thinking is a Human-Centered Innovation approach which is taught in The Hasso Plattner Institute of Design (D:School) at Stanford University (<http://dschool.stanford.edu>). The Design Thinking process involves number of activities which require participants to shift quickly between different modes of thinking and doing. It can be argued that it requires a certain level of Cognitive Flexibility to do this successfully because these modes are very different in character and entails everything from empathetic listening to analysis, synthesis and creative ideation. The question is whether the process also increases student's flexibility. A study (Goldman et al, 2012) suggests that students who successfully learn and understand Design Thinking, experience 'Mindshifts' described as a "re-synthesis and reorientation of their worldviews". This seems to qualify as a 'diversifying experience' which should increase Cognitive Flexibility, according to the study (Ritter et al. p 961). Thus, it would seem that if the students in this study experience Mindshifts, it follows that their Cognitive Flexibility has increased as a result of the Design Thinking process. The problem is to verify that – and show what causes it.

The first step is to investigate whether it is even possible to determine if students - in this case students in an undergraduate engineering programme - have experienced a Mindshift from the written reports they hand in during the semester, in order to eliminate the need for additional tests or assessments. Their reports will be analysed looking for indications that they had transformative learning experiences and/or 'aha-moments'. Identifying ways of optimizing the learning process is also a goal.

The results of the analysis of the student reports are expected by the middle of January 2018.

References

Ritter, Simone M. and Damian, Rodica Ioana, et al: Diversifying experiences enhance cognitive flexibility, *Journal of Experimental Social Psychology* 48 (2012) 961-964
Goldman, Shelley and Carroll, Maureen P., et al: Assessing d.learning: Capturing the Journey of Becoming a Design Thinker Plattner et al. (eds.), *Design Thinking Research, Understanding Innovation*. Springer-Verlag Berlin Heidelberg 2012
The Future of Jobs - Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution World Economic Forum, 2016 http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf
The Hasso Plattner Institute of Design (D:School) at Stanford University: <http://dschool.stanford.edu>

P2

Gamified Assessment as Student Motivator

Teemu Hynninen, Paturi, P.
University of Turku, Finland

Exams are the most widely used method for assessing student performance. Exams are easy to administer and control, but they often hinder actual learning. Exams are an artificial situation, they are a considerable source of stress for students, and they encourage students focus on exam performance instead of deep learning and skill development. Assessment is often a necessity, but an ideal assessment method should support student learning and motivate the students while also providing a measure of student performance.

Gamification presents one modern solution to the assessment problem. Gamification does not mean the application of games or learning software. Instead, it refers to an external motivator model where large tasks are split to smaller subtasks and performance on each subtask is immediately rewarded, as if the task itself was a game. This approach builds a clear roadmap for completing a challenge and provides constant external motivation for tasks that are not intrinsically rewarding. In this work we present a gamification-based continuous assessment of student performance on a series of first year physics courses.

The courses in question are built on the flipped classroom paradigm, where students receive new information by studying given material independently whereas class time is mostly devoted to active learning in small study groups. The amount of work the students do during the course is higher than on a comparable exam-only course and the tasks the students are faced with are more varied. Some tasks are scored based on displayed activity while others are scored based on correctness, and grades are calculated according to the combined performance on all tasks. The scores are tallied in the online study platform Ville (ville.utu.fi) developed at the University of Turku. Students see their accumulated scores graphically, and can also boost their scores by completing automatically assessed problem sets.

The courses have been taught and evaluated in the current form for two years, in 2015-2017. As a result, the number of students completing the first-year studies has increased and students report higher satisfaction and sense of accomplishment.

P3**Too Much Freedom?**

Aet Kiisla
Narva College of the University of Tartu, Estonia

The goal of this study is to identify the possibilities for developing students' skills of self-directed learning (Grow 1991), considering cultural differences (Parrish & Linder-VanBerschot 2010) and their preferred learning styles. This action research is conducted based on a subject where self-directed learning is already very widely practiced - Informatics. In Informatics it would be irresponsible to teach specific skills that will expire in couple years. In this study I describe the changes made in my subject area during the last five years - their reasons and consequences for learners. To construct my argument, I will draw on the Study Information System as an objective tool for evaluating official feedback given from students to lecturers.

Throughout the years the biggest challenge for the students has been confusion as a result of too much freedom". Intuitively the problem is more acute for the students who graduated gymnasium with Russian as a language of instruction and the students who do not yet have work experience. Every year I add some supporting strategies and learning tricks, without lessening the freedom or individual responsibility. I have tried to take into account students' varying preferred learning styles - some prefer reading, some study-groups, some oral explanations. None of these support mechanisms are compulsory, students can opt in as they wish. Students with a higher capability for self-directed learning know clearly how to approach compulsory tasks and seek help when they need it. For students who are less confident self-regulated learners the support mechanisms help to gradually develop these skills. For these students, too much freedom at once can be shocking and paralysing. The biggest challenge for me is helping the group of hard-to-reach students who do not recognise their need to access any of the support mechanisms offered and do not succeed. These students are the least satisfied with the course.

In this action research I describe different means of support and detail which support mechanisms are most frequently used by students and why.

P4**How to Support Collaboration as a Study Skill Among Students Participating in an Online Course?**

Ingrid Koni
University of Tartu, Estonia

Study skills play an essential role in academic learning, regardless of studying in high school or higher education. Authors have categorized study skills in various ways but one aspect, common to all these definitions, are skills that relate to studying with others. These skills are put into practice in social contexts where student collaborate for example through team working, peer feedback, and supporting others (Cottrell, 2013). These social skills can be supported by integrating active learning methods in teaching a course on a particular subject. Prior research has emphasized that integration of active learning methods in teaching improves student engagement (Bowen et al., 2012).

This study was actuated by preliminary results of high school student feedback to taking an online course on study skills necessary for learning in higher education (in fall 2016). More precisely, the participants brought forth that the online course minimally supported their collaboration skills. This study is an attempt to overcome this issue when teaching the course in the fall of 2017 by supplementing assignments that could support participants' collaboration skills. Therefore, the aim of this study is to create opportunities to support student collaboration as a study skill among students taking an online course on study skills. To achieve the aim, action research will be conducted among 76 (of 11th and 12th grade) high school student taking an online course on study skills. The data will be collected via questionnaires of student feedback about learning on the course. The online course is running at the present moment and will end in November, the data from students learning will be analysed after completion of the course. However, the data processing will involve quantitative and qualitative content analysis. The results are expected to support, on the one hand, the improvement of teaching the online course, and overall, the engagement of student in higher education studies, and on the other hand, the development of student collaboration as a study skill on the particular course.

References

Bowen, G., Burton, C., Cooper, C., Cruz, L., McFadden, A., Reich, C., & Wargo, M. (2011). Focus on Teaching and Learning: Listening to the Voices of Today's Undergraduates. *Journal of the Scholarship of Teaching and Learning*, 11(3), 21-33.
Cottrell, S. (2013). *The study skills handbook* (4th ed). New York: Palgrave.

P5

The Impact of Implementing Scenario Planning as a Teaching Method on the Students' Learning Process

Tatjana Koor
Pärnu College of the University of Tartu, Estonia

Scenario planning helps to identify trends, reduce future uncertainties, investigate the possibilities and create a development strategy considered economic, social, cultural and environmental factors. This is a long-term planning (10-30 years ahead) that is used by public and private sector (Wade, 2012, Balarezo, & Nilsen, 2017). Additionally, research has revealed the skills necessary for future professionals, e.g. analytical, problem solving, long-term planning and communication skills (UNESCO, 2015, Cottrell, 2017). Therefore, the scenario planning can be used as a development tool and as a teaching method.

The aim of the study is to explore implementing the scenario planning in the course "Tourist destination development and management" and provide guidance for developing scenario planning as a teaching method based on teacher observation and learners' feedback. Therefore, the current study is looking for the answer to the research question on how do learners perceive implementing scenario planning in destination development studies?

The course was designed based on theoretical principles of scenario and tourist destination development planning. The main assignment for the course was designed in cooperation with Koonga Parish for whom students prepare destination development strategy based on the results of evaluation and scenario planning. The learning process was observed and the learners' perceptions was investigated. The preliminary findings show that just some of the students had had previous experience with destination development strategy. However, none of the participating students was familiar with the scenario planning method. The study revealed that based on students' perceptions scenario planning supports students' learning process, improves planning, analytic and information finding skills and gives students the opportunity to prepare development activities based on different future scenarios. In order to increase learners' responsibility, the learning process has to be elaborated and constantly evaluated. It also needs to be supported by the instructor using different assignments to lead students to explore (tourism) trends and influencing the factors that are important inputs for the scenario planning on time.

References

Balarezo, J., & Nilsen, B. B. (2017). Scenario planning as an organizational intervention: An integrative framework and future research direction. *Review of International Business and Strategy*, 27, 2-52. Cottrell, J. R. (2017). Research of competency needs for future competitive tourism development in Estonia. Retrieved from http://www.projectboosted.eu/wp-content/uploads/2016/12/TTUKC_Tourism_skills_Estonia_country_report_research.pdf. UNESCO. (2015). Education 2030: Towards inclusive and equitable quality education and lifelong learning for all. Retrieved from <http://www.unesco.se/wp-content/uploads/2015/12/Framework-for-Action-2030.pdf>. Wade, W. (2012). *Scenario Planning: A Field Guide to the Future*. New Jersey: John Wiley & Sons, Incorporated.

P6

The Importance of Motivation Increasing Techniques in Achieving Better Learning Outcomes

Katrin Koorits
University of Tartu, Estonia

The purpose of this poster is to introduce my research on how to increase the students' motivation by applying various motivation increasing techniques in the everyday classroom. The project is funded by the Good Teaching Grant I received in summer 2017.

For already a couple of years it is possible to enter the German language and literature undergraduate program without actually knowing any German. In their first year, the undergraduate students have to take an intensive (8 hours per week) language course after which they have to have acquired a minimum of B1 language level so that they could participate in the upcoming seminars held entirely in German. My experience so far has shown, however, that the given time of 2 semesters is too little to achieve such goals. Nevertheless, by increasing the students' motivation and applying techniques that support the learning process it could be possible to reach or almost reach the required level of language within the given timeframe. In order to increase the students' motivation, for the duration of the course they are asked to completely lose their old identities and take on brand new German identities. According to Georgi Lozanov, the change to a foreign identity allows the student to become more creative in voicing their opinions on various topics. The technique also reduces the fear of making a mistake in language class and also promotes the language acquisition.

The goal of my poster is to introduce the identity change technique and other methods of improving language acquisition and their effectiveness in German language and literature undergraduate programs.

Reference

Lozanov, Georgi.(2006) *Suggestology and Suggestopedy*.

P7

“Oh, Please God, not an Oral Presentation”. Effectiveness of Feedback on Oral Presentations in Foreign Language Teaching: The Students’ Perspective

Antonina Kostina
University of Tartu, Estonia

Oral presentations, both in the academic world and in the broader sense, are part of our everyday life. We, as teachers, often assume that speaking in public is something that everyone can do and we often give students the opportunity to present different academic topics individually or in groups. We evaluate the content of these presentations and we usually also give some feedback, but we rarely address the work that is done before the presentation is held.

Oral presentations and preparation for them (Penne & Herzberg 2015), feedback effectiveness (Poulos & Mahony 2008, West & Turner 2016), feedback differences when provided by the teacher, peers or peers guided by tutors (van Ginkel, Gulikers, Biemans & Mulder 2017) and peer feedback have been studied in various fields (Topping 1998, Falchikov 2001, Liu & Carless 2006, Xiongyi Liu & Steckelberg 2010). However, not as much attention has been paid to the actual use of feedback provided to students. This is the blind spot which this research attempts to shed light on.

The purpose of this study is to investigate students’ experiences with oral feedback in foreign language learning: what kind of feedback is usually reviewed by the students and what kind of feedback has been most helpful in preparing for the next oral presentations. Since oral presentations have been a challenge for Norwegian philologists, both regarding to the use of the foreign language, content and preparation, a one-year-long systematic oral presentation training is attempted. Students will be presented with background knowledge on a good presentation, they will be asked to hold several presentations both in groups and individually and they will practice the role of active listeners. In addition, the feedback from both students and the lecturer will be provided.

The project is expected to help the teacher understand where the biggest stumbling blocks are for students and what kind of support or feedback they need to manage with them. It is believed that such practice will improve the quality of students’ oral presentations and reduce their anxiety over the presentations.

References

- Falchikov, Nancy (2001) Learning together, peer tutoring in higher education. London, Routledge Falmer
Liu, Ngar-Fun & Carless, David (2006) Peer feedback: the learning element of peer assessment Teaching in Higher Education 13 Routledge Vol. 11, No. 3, July, 279–290
Penne, Sylvi & Hertzberg, Frøydis (2015) Muntlige tekster i klasserommet. Oslo, Universitetsforlaget
Poulos, Ann & Mahony, Mary Jane (2008) Effectiveness of feedback: the students’ perspective, Assessment & Evaluation in Higher Education, 33:2, 143-154, DOI:10.1080/02602930601127869
Topping, Keith (1998) Peer assessment between students in colleges and universities. Review of Educational Research, 68, 3, 249–276
van Ginkel, Stan, Gulikers, Judith, Biemans, Harm & Mulder, Martin (2017) Fostering oral presentation performance: does the quality of feedback differ when provided by the teacher, peers or peers guided by tutor?, Assessment & Evaluation in Higher Education, 42:6, 953-966, DOI: 10.1080/02602938.2016.1212984
West, John & Turner, Will (2016) Enhancing the assessment experience: improving student perceptions, engagement and understanding using online video feedback, Innovations in Education and Teaching International, 53:4, 400-410, DOI:10.1080/14703297.2014.1003954
Xiongyi Liu, Lan Li & Steckelberg, Allen L. (2010) Assessor or assessee: How student learning improves by giving and receiving peer feedback British Journal of Educational Technology Vol 41 No 3, 525–536

P8

How to Evaluate the Influence of the Course that Helps to Go Over the Main Points of Basic Mathematics

Tiina Kraav
University of Tartu, Estonia

The aim of this presentation is to investigate the influence of the course whose purpose is to help students with the lack of mathematical knowledge. The investigation concerns the course “MTMM.00.242 Elementary Mathematics” that supports the courses “Calculus I” and “Calculus II”, but also other courses where basic mathematical knowledge is needed. First year university students were asked to take a math test to see how well they are suited for studying in the Faculty of Science and Technology. Students who performed poorly in the math test were recommended a participation in “Elementary Mathematics”, as the course is optional and therefore needs to be chosen voluntarily. Results of the course “Calculus I” were analysed and they showed that the students who participated in “Elementary Mathematics” course achieved better marks. Students’ advancements in different subjects of mathematics were analysed separately and will be discussed within the presentation. Studying methods that provide results in half a semester that twelve years of mathematical studies failed to provide will be observed and discussed as well. Finally, the most common as well as unusual mistakes will be introduced under separate topics.

P9

Practical Teaching in the Context of University - a Young Teacher View

Eleri Lõhmus
University of Tartu, Estonia

Teaching audio-visual production in higher education is not a new thing. It has been done since the technology exists. Although, the main aim for teaching audio-visual production is to educate professionals (photographers, cameramen, film directors etc.). My teaching and research approach is different: it focuses on audio-visual production as general literacy or transferable skill. In this case the students can be in whatever age and learn on whatever curricula.

Our (media) world turns more and more visual and that is the reason why audio-visual production skills are becoming life skills. When teaching professionals, one usually has three, four or more years to teach everything that professional needs to know. In teaching basics of audio-visual production as general literacy skill in the context of other curricula, the courses need to be short but intense, where students learn and train their basic knowledge and skills for their own audio-visual production. For a teacher, it means to give up classical lecture-seminar- practical lesson teaching model. In my production-based courses, the main form of teaching is practical lesson. In the beginning of the lesson there is a very short lecture part and usually it is more the guideline for a practical task, which follows immediately. Practical tasks are designed to train specific part of audio-visual production skills and they concentrate less on creating a complete story. My experience so far proves that concentrating on a specific skill, not on a complete story, helps students to concentrate more on that specific skill and acquire it well enough to be transferable to next productions.

In the context of university, and in formal education in general, the production-based teaching has quite a few challenges, especially for a young teacher such as myself. In my presentation, I will point out some aspects that encourage to plan and use production based teaching and on the other hand I will refer to some problems that are crucial to take into account when planning production-based learning. My method so far is mostly my own experience as a university teacher and preliminary poll results from participants from my production based courses.

P10

Building Educational Improvement in Kinesiology Using the SoTL 4M Framework

Jackie Lysaght
Harmony Holistics Kinesiology College, Ireland

ABSTRACT: The Scholarship of Teaching & Learning (SoTL) 4M framework has been identified as a useful tool for advocacy, reflection and strategic planning (Friberg 2016, Miller-Young 2016, Friberg 2017). The aim of this ongoing study is to examine how using the SoTL 4M framework can help to improve teaching and learning in kinesiology.

Kinesiology is taught by registered instructors in private colleges using the syllabus of the International Kinesiology College (IKC). The 4M framework describes SoTL at four levels: micro - own classroom, meso - department, macro - institution, mega - beyond one institution (Wuetherick and Yu 2016, Friberg 2016). I re-defined the levels for kinesiology with meso referring to IKC national level and macro IKC international level.

This poster summarises my studies from 2015 to 2017 - three micro level, one meso and one macro level initiative. Using the 4M framework I marked each study on a level and indicated the research method, data collection instruments used and framework level(s) each study impacted. An action research methodology using qualitative data was employed in each case. The instruments used varied according to the 4M level: micro - assessment feedback forms, questionnaires and semi structured interviews which provided good triangulation, meso - Search Conference (O'Brien 2001) and macro - adapted World Café and investigator reflections.

Micro level projects resulted in valuable classroom improvements while the meso project was postponed due to lack of participation. In the macro initiative, international IKC conference presentation participants identified the benefits, examples and challenges of using SoTL in kinesiology which gave us a clear way forward. This led to new projects: two micro level pilot studies in external centres mapping students' levels of understanding, a closed group social media SoTL conversation with instructors and an invitation to present at the International Edu-Kinestetik conference next year. The initial conclusions are that the 4M framework is a useful tool which provides a solid structure to map studies. It clarifies the current position and highlights gaps for future directions. Using 4M raises new questions - what research instruments are most appropriate at each level of 4M? SoTL at the macro level in this kinesiology initiative demonstrated a greater impact than the micro level studies by reaching a larger number of people and the impact on student learning will be investigated in the next phase of the study.

References

- Friberg, J. (2016). Might the 4M Framework Support SoTL Advocacy? [Web blog post]. Retrieved from <https://illinoisstateuniversitysotl.wordpress.com/2016/07/11/might-the-4m-framework-support-sotl-advocacy/>
- Friberg, J. (2017). Sometimes there is more than the road ... [Web blog post]. Retrieved from <https://illinoisstateuniversitysotl.wordpress.com/2017/03/06/sometimes-there-is-more-than-the-road/>
- Miller-Young, J. (2016). Using the Micro-Meso-Macro-Mega (4M) framework for annual reporting and strategic planning. [Web blog post] Retrieved from <https://sotlcanada.sthe.ca/2016/07/25/using-the-micro-meso-macro-mega-4m-framework-for-annual-reporting-and-strategic-planning/>
- O'Brien, R. (2001) Um exame da abordagem metodológica da pesquisa ação [An Overview of the Methodological Approach of Action Research]. In Roberto Richardson (Ed.), Teoria e Prática da Pesquisa Ação [Theory and Practice of Action Research]. João Pessoa, Brazil: Universidade Federal da Paraíba. <http://www.web.ca/~robrien/papers/arf.html> (Accessed 12/09/15)
- Wuetherick, B. and Yu, S. (2016). The Canadian Teaching Commons: The Scholarship of Teaching and Learning in Canadian Higher Education. *New Directions for Teaching and Learning*, 146: 23-30. doi: 10.1002/tl.20183

P11

Forcefully Engaging into Creativity Learning, Revisited

Tõnu Oja
University of Tartu, Estonia

Background: The research to be reported in this presentation is dedicated to question how to better facilitate student learning in the subject Applied Programming in Geoinformatics.

The aim of the course is not to teach programming in general but rather to help students to combine knowledge about programming and skills in different GIS software use, and to encourage them towards the ability to create individualized GIS solutions. This skill is highly valued on the labour market. For better learning in this subject, students need support to work on their own, try things out and this can be developed by better engagement of students into specification and realization of the learning process. Jang et al. (2016) have found that students tend toward a semester-long trajectory of rising engagement when they perceive their teachers to be autonomy supportive. The experiment design is also based on experience of a similar study carried out in the fall of 2016 in the course Modelling of Geosystems.

Goals of the experiment are to raise study motivation and satisfaction with the obtained skills by improvement of communication with students, combining individual work, e-learning in Moodle and classroom face-to-face exercises still supporting their autonomy (creativity). More frequent feedback, division of tasks into clear smaller subtasks could improve the results.

It has been shown that the combined e-study and face-to-face learning in classroom somewhat have positive impact on results. Maybe also self-confidence rises and brings the feeling that something useful has happened.

The object of research is modifications in the way of teaching (facilitating learning) and the impact of those to the advancement of students and satisfaction with the results.

The course will take place in the weeks 11-16 in the fall of 2017. The process will be logged in Moodle and feedbacks as well as in practical solutions offered by students. During the course I will make notes for myself (mind maps) and keep a diary for my reactions, decisions and impression about what is going on.

The course will have a questionnaire about expectations at the beginning and at the end of the course there will be another questionnaire that can be analysed qualitatively. Expected number of participants does not allow statistical analysis. The questions will be primarily about satisfaction with some useful and new knowledge obtained, fulfilment of expectations and suggestions to improve the course. Log by Moodle allows to evaluate how systematic was participation of students.

P12

Encouraging Learning-Oriented Approach Through Continuing Education of Academics. Case Study of Riga Stradiņš University, Centre for Educational Growth

Nora Jansone-Ratinika, Zariņa, I.
Riga Stradiņš University, Latvia

Enhancement of teaching and learning quality and promotion of pedagogical innovation in the European Higher Education Area (EHEA) were among the top priorities of the 2015 EHEA Yerevan Ministerial Conference (Yerevan Communiqué, 2015). The modernisation of higher education study process and the changing role of academics leads to organizational transformations – 62% of the respondents in the EUA Trends 2015 Survey have indicated that “Institutional change related to learning and teaching has been highly important” in their institutions (EUA, 2015) what is also supported by the outcomes of the EUA research on quality culture which shows that the engagement of universities in the enhancement of quality culture commonly results in the creation of a separate unit for pedagogical development (EUA, 2010).

The case study deals with the operating model of the Centre for Educational Growth – its current achievements assessment and future development directions. Riga Stradiņš University (RSU) Centre for Educational Growth (henceforth – the Centre) was established comparatively recently – in September 2014. The role of the Centre is to implement measures targeted at the improvement of study quality through study process analysis and implementation of professional development activities for academics. Each semester the Centre runs over 10 various thematic training activities organized as thematic sessions, lectures, workshops and other interactive forms of learning sub-divided in four fields of curricula – education management, high school didactics, IT and general skills. The attendance of such activities is gratuitous and voluntary and the academics may opt to attend several learning activities over the semester. This framework is a fundamental support, as the continuing education of academics has been defined to be a desired and compulsory target activity both at RSU and at national level. The number of academic hours devoted by each academic to professional upskilling is accordingly fixed and following completion of the training session, certificates of attendance are awarded. This systemic tool allows purposeful implementation of the education quality priorities defined in RSU strategy – student centeredness, self-guided learning, interdisciplinarity and internationalization. To encourage the academics to incorporate the acquired knowledge and skills into their teaching practice, for the study materials to be current and innovative, a project for supporting various initiatives has been launched. As for today 53 academics have received grants under the project, resulting in 149 new lectures and 624 workshops. Regular quality assessment is a fundamental prerequisite for the development of the Centre. A satisfaction survey and focus group discussions were among the most recent data sources for identification of necessary improvements and areas to be revised.

Keywords: educational growth, continuing education of academics, teaching & learning, scholarships, higher education.

P13

Content and Language Integrated Learning (CLIL) in The College of Justice: New Approach and Possible Path of Development

Anna Rubtsova, Kitsing, I., Jamnes, A.
Estonian Academy of Security Sciences, Estonia

CLIL is definitely one of the most suggested and highly appreciated ways of teaching nowadays as it gives students a great chance of learning a subject through the medium of a foreign language. In the College of Justice of the Estonian Academy of Security Sciences this method of teaching has been used already for many years. Nevertheless, there is always room for development and innovation. At the beginning of the last year, by the initiative of subject teachers it was decided that the main subject for the prison guard curriculum – “Surveillance Activities” would be merged with the language subject “Russian Language Concerning Surveillance”. Now, during 52 academic hours future prison guards simultaneously train their professional and language skills under the supervision of two (sometimes three) subject teachers in the authentic environment (real prison cells adapted to the needs of studying). Already now it is evidenced by the students’ tests’ and exams’ results and their feedback that this type of teaching and learning provides us with the desired outcome: faster acquisition of professional language skills, better stress management and improved team-working skills.

Our practical part of the research (innovation) is mainly based on a long-term experience of the students of the College, their feedback and studying results (before-after), teachers’ and management’s expectations. The theoretical part of this research and the innovation itself is definitely based on CLIL theory and its methodological framework. It is important to us to respect 4C rules of CLIL: Content, Communication, Cognition, Culture. Not to make unfounded statement, we will present some videos made during our trainings in order to demonstrate our work in practice and maybe to engage the audience into a “live” classroom. We truly believe that our way of learning and teaching is a little more than an ordinary CLIL method, as it is based on a long-term teamwork between teachers as well as a systematic professional and individual attitude towards students and a great effort being made to integrate theoretical language learning into a professional practice of a prison guard specialty.

We find the main goal of our teaching innovation achieved – the level of professional multitasking educational skills has being increased. We are ready to talk about our experience and outcomes, share our knowledge and we are looking forward to receiving some professional feedback and suggestions.

P14

Integrating Problem-Based Learning Elements in Teaching Ecology and Nature Protection

Merrit Shanskiy, Erik, U., Sihver, Ü.
Estonian University of Life Sciences, Estonia

The purpose of the study was to examine the influence of integrating problem based learning (PBL) elements into teaching ecology and nature protection for big groups. The material was gathered during two academic years (2015/2016 n=150, 2016/2017 n=160). The theoretical sources we are basing our investigation on are studies by L. Dee Fink et al. (2004, 2013) on creating significant learning experiences, and P. Hrynchak, H. Batty (2012) on educational theory basis of team-based learning.

The data for the study is from student feedback 2015/2016 as given in the Study Information System ÖIS, and 2016/2017 as given in the questionnaire carried out by the lecturer. For both academic years the students gave feedback for three aspects of the study process: learner’s view of the learning process, learner’s view of the lecturer, and learner’s self-evaluation in the subject. The analysis of the 2015/2016 feedback in ÖIS indicated that the learners need more practical involvement and fewer lectures. Therefore, the elements of PBL were added in 2016/2017. The PBL learners’ background in each group (5-7 members) was heterogenic: specialities, years of study, levels of the language of learning and gender. In 2016/2017 the feedback and learning outcomes were positive. PBL was successful, as the students acquired the required knowledge and skills. The groups formed within the large number of participants were effective and fulfilled the objectives of the subject. Working in groups developed the social skills of the students: first-year students were guided by advanced group members. The process of organizing PBL groupwork with large numbers of participants is hard, also time and energy consuming, but when the groups start working, they function independently, motivate the members, and the need for monitoring by the lecturer will be considerably reduced. In PBL groupwork the students become self-directed learners. Therefore, we continue practicing PBL elements for teaching ecology and environmental protection at university.

P15

Encouraging Students to Review Complex Topics in Science

Aile Tamm
University of Tartu, Estonia

Almost all teachers in universities have noticed that the students' writing skills have changed. The students like writing without verbs, sometimes a „sentence“ consists of only few words and contains smileys. With such a modern writing style considered, it is quite hard to lead the students to proper academic writing on complex topics in Science, such as Quantum Mechanics. As a lecturer on practical quantum mechanics, I have encouraged students to describe the nanoscale phenomena around us, without fear of words, quantum mechanics and bra-ket's. For this purpose, the course included obligatory professional writing attempts in the form of essays as expressions of gained knowledge.

I have taken advantage of the widespread desire of today's students to present themselves orally and 'look good' in front of their friends. This generally meant an independent work done under the supervision of the teacher supporting the students when and where necessary. The lecturer evaluated the students' works afterwards, and the works ended with oral presentations. The students focused on their presentations and giving answers to their fellow students' questions instead of essays. At the same time and in this way, they were prepared to critical self-evaluation which they did voluntarily and with passion! Professional knowledge and experience complementarily gained during presentations and writing essays, thus developing the self-expression skills, will promote the growth of students' self-esteem, self-confidence, and, eventually, improve their competitiveness in labour market (Rutiku, 2014). Therewith writing essays about quite complicated topics in science appeared to be a good starting point.

In this presentation, I will bring the examples of the articles what were selected for the students' reviews and show how the contents were reflected in the essays. The course in practical quantum mechanics has been held during the last 5 years, will last this year, and altogether 50 students, approximately, have completed the course to date. I will share my pleasant surprise on how good were our young material science students who actually could write about emerging topics in frontier nanophysics science.

Reference
Siret Rutiku, Ülekantavate pädevuste arendamine kõrghariduses. Juhendmaterjal (2014), Sihtasutus Archimedes, ISBN 978-9949-481-61-3 (pdf)

P16

Specialty Dependent Differences in the Development of Transferable Skills in the Higher Education Curricula of the Estonian Entrepreneurship University of Applied Sciences

Tauno Õunapuu, Einpaul, P.
Estonian Entrepreneurship University of Applied Sciences, Estonia

Technological innovation and structural changes in economy are influencing the nature of work and changing the skills needed in the labour markets. In order to deal with these changes, people have to be equipped with a variety of transferable skills. It means that the importance and the volume of transferable skills in university curricula must also increase. As the amount of credit points in curricula is fixed, higher educational institutions have to decide which transferable skills in which amount and how should be taught.

Transferable skills are more focused on EUAS's curricula, although there is no research based information about students' expectations, preparation and specialty specificity.

The authors' aim is according to the students' self-evaluation to identify the importance of transferable skills in their working life and their existing skills level by specialty. The authors make suggestions for EUAS curriculum development, study organization and teachers training system.

The questionnaire bases on the list and descriptions of 19 transferable skills, which is formed according to seven different transferable skills frameworks.

The sample of the study includes 238 students studying in two curriculum groups ('Business and Administration' and 'Arts') and in 13 different specialties at EUAS (the average age of 29 years). The electronic survey via Learning Management System was conducted from October 19th 2017 until November 10th 2017. Current research, is a part of longitudinal study, which will be conducted over 4 years.

Descriptive analysis, factor analysis (primary components method), correlation analysis and internal-consistency reliability evaluation were conducted.

The main results say that the students' expectations to study transferable skills in higher education are high, but depend remarkably on the specialty. In case of particular transferable skills (e.g. Mathematical skills, Leadership, initiation and involvement, Research and analytical skills) expectations are highly specialty based. It is possible to divide EUAS students into specialty based larger groups with similar expectations and preparation level in transferable skills for basic and research methods study modules.

The results can be used for curriculum development and faculty training in methodological skills development. In the future it is possible to understand how such expectations change during the scope of the studies and what are the reasons for such a change.

Keywords: transferable skills, basic skills, curriculum development

P17

Syllabus Update – Estonian for Academic Purposes

Sirli Zupping, Norvik, M., Vija, M.
University of Tartu, Estonia

Estonian Orthography and Creative Composition (3 ETCS) has been a compulsory course for bachelor students of all fields (exc. medicine) more than 10 years. The syllabus has included topics from sound orthography to formal letters and academic presentations, though with the emphasis on orthography. Although teaching orthography is an essential part of the subject, already for some time, there had been signs that the subject needs to be reformed. For instance, students' feedback revealed that they perceive the subject as a repetition of school program, several studies stressed the need to set the focus on text rather than on word (e.g. Ehala et al. 2015), furthermore, the teachers themselves also felt that there is time for changes.

The preparations for renewing the subject started in 2014. As a result of four years of work, we put together a new syllabus called Estonian for Academic Purposes (3 ETCS). The subject enables the teacher to take a field-specific approach, cover various means of writing and reading of academic texts, e.g. process writing (Gardner & Johnson 1997) - and follow a need-based approach for teaching orthography and the usage of internet resources.

In our presentation, we aim to give an overview of developing the subject throughout the four years (2014–2017). We approach the topic from the perspective of university teachers by discussing the following: (i) what and how did we change, (ii) how do we evaluate the results, and (iii) how do we plan to proceed.

As for method for developing the subject, we analysed student feedback from the Study System of the University of Tartu given 2014–2017 and we also distributed short questionnaires to gather information on students' expectations. In the course of the whole process, we filled in lecturers' reflection journals to facilitate self-analysis (see e.g. Kember 2000) and had regular meetings to give and get feedback based on constant observations of each other's courses.

In our presentation, we conclude that the new subject Estonian for Academic Purposes needs constant revision to remain up-to-date. In order to retain field-specific approach, it is of great importance to cooperate with university lecturers from corresponding fields. The larger aim is to support students' self-expression in written and speech communication.

References

Ehala, Martin, Krista Kerge, Kersti Lepajõe, Kadri Sõrmus (2015). Kõrgkoolide üliõpilaste eesti keele oskuse tase. Uuringu kokkuvõte. Tartu: Tartu Ülikool.
Gardner, Ann, & Debra Johnson (1997). Teaching personal experience narrative in the elementary and beyond. Flagstaff, AZ: Northern Arizona Writing Project Press.
Kember, David (2000). Action learning and action research. London: Kogan Page.

Participant list

First name:	Last name:	Organisation:	Country:
Ülle	Aasjõe	TTK University of Applied Sciences	Estonia
Anette	Aav	University of Tartu	Estonia
Katrin	Aava	Tallinn University	Estonia
Angela	Ader	University of Tartu	Estonia
Epp	Adler	University of Tartu	Estonia
Anneli	Ahven	University of Tartu	Estonia
Kaisa	Alanen	University of Tampere	Finland
Krista	Andreson	University of Tartu	Estonia
Aivar	Annamaa	University of Tartu	Estonia
Maris	Annamaa	Estonian University of Life Sciences	Estonia
Helen	Arov	Estonian Academy of Arts	Estonia
Kert	Astel	Tartu Health Care College	Estonia
Piret	Aus	Viljandi Culture Academy of the University of Tartu	Estonia
Kati	Aus	Tallinn University	Estonia
Juhan	Aus	Estonian National Defence College	Estonia
Heinz	Bachmann	University of Teacher Education Zurich	Switzerland
Sanita	Baranova	University of Latvia	Latvia
Anna	Beitane	University of Tartu	Estonia
Bartosz	Biernacik	War Studies University	Poland
Olga	Bogdanova	University of Tartu	Estonia
Maia	Boltovsky	Estonian National Defence College	Estonia
Stefano	Braghiroli	University of Tartu	Estonia
Ken	Brown	Letterkenny Institute of Technology	Ireland
Toomas	Danneberg	Estonian Business School	Estonia
Agnese	Davidson	Vidzeme University of Applied Sciences	Latvia
Eric	de Graaff	Aalborg University	Denmark
Piret	Einpaul	Estonian Entrepreneurship University of Applied Sciences	Estonia
Piret	Eit	Viljandi Culture Academy of the University of Tartu	Estonia
Maarin	Ektermann	Estonian Academy of Arts	Estonia
Anne-Ly	Elhi	University of Tartu	Estonia
Aarne	Ermusa	Estonian National Defence College	Estonia
Eli-Eelika	Esvald	Tallinn University of Technology	Estonia
Peter	Felten	Elon University	United States
Krista	Fischer	University of Tartu	Estonia
Kirsten	From	Danish Technical University	Denmark
Susan	Gamache	University of Tampere	Finland
Svetlana	Ganina	University of Tartu	Estonia
Olga	Gerassimenko	University of Tartu	Estonia
Joachim M.	Gerhold	University of Tartu	Estonia
Agda	Grahv	Viljandi Culture Academy of the University of Tartu	Estonia
Tiia	Grellier	University of Tartu	Estonia

James	Groccia	University of Tartu	Estonia	Kadri	Kask	Estonian University of Life Sciences	Estonia
Vijai Kumar	Gupta	Tallinn University of Technology	Estonia	Heili	Kasuk	University of Tartu	Estonia
Hanna	Haavapuu	Tallinn University of Technology	Estonia	Karin	Keernik	University of Tartu	Estonia
Helle	Hallik	Tartu College of the Tallinn University of Technology	Estonia	Ülle	Kesli	University of Tartu	Estonia
Aave	Hannus	University of Tartu	Estonia	Triin	Kibar	Estonian Academy of Security Sciences	Estonia
Aida	Hatšaturjan	Estonian Academy of Security Sciences	Estonia	Heli	Kiiman	Estonian University of Life Sciences	Estonia
Tiia	Haud	Tartu Art College	Estonia	Helen	Kiis	TTK University of Applied Sciences	Estonia
Tuula	Heide	University of Eastern Finland	Finland	Aet	Kiisla	Narva College of the University of Tartu	Estonia
Helle	Hein	University of Tartu	Estonia	Tiina	Kikerpill	University of Tartu	Estonia
Karin	Hellat	University of Tartu	Estonia	Eneli	Kindsiko	University of Tartu	Estonia
Irja	Helm	University of Tartu	Estonia	Ivo	Kitsing	Estonian Academy of Security Sciences	Estonia
Hilkka	Hiiop	Estonian Academy of Arts	Estonia	Jana	Kivastik	University of Tartu	Estonia
Maris	Hindrikson	University of Tartu	Estonia	Kairi	Kivirand	University of Tartu	Estonia
Saima	Hinno	Tartu Health Care College	Estonia	Siret	Kivistik	Tartu Health Care College	Estonia
Sille	Holm	University of Tartu	Estonia	Jane	Klavan	University of Tartu	Estonia
Ave	Hussar	University of Tartu	Estonia	Merit	Kompus	Estonian National Defence College	Estonia
Piret	Hussar	University of Tartu	Estonia	Ingrid	Koni	University of Tartu	Estonia
Pille	Häidkind	University of Tartu	Estonia	Marge	Konsa	University of Tartu	Estonia
Teemu	Hynninen	University of Turku	Finland	Tatjana	Koor	Pärnu College of the University of Tartu	Estonia
Oksana	Ivask	University of Tartu	Estonia	Katrin	Koorits	University of Tartu	Estonia
Olga	Jagintseva	Tartu Health Care College	Estonia	Kairi	Koort	Tallinn University	Estonia
Triin	Jagomagi	University of Tartu	Estonia	Marika	Kose	Estonian University of Life Sciences	Estonia
Sirje	Jakobson	Lääne-Viru College	Estonia	Antonina	Kostina	University of Tartu	Estonia
Aare	Jamnes	Estonian Academy of Security Sciences	Estonia	Tiina	Kraav	University of Tartu	Estonia
Nora	Jansone-Ratinika	Rīga Stradiņš University	Latvia	Kristiina	Krabi-Klanberg	Estonian Academy of Arts	Estonia
Marin	Johnson	Tallinn University	Estonia	Tiia	Krass	University of Tartu	Estonia
Helen	Joost	Tallinn University	Estonia	Marina	Kritševskaja	Tallinn University of Technology	Estonia
Anžela	Jurāne-Brēmane	Vidzeme University of Applied Sciences	Latvia	Kaspar	Kruup	SA Domus Dorpatensis	Estonia
Kadri	Just	Estonian University of Life Sciences	Estonia	Peeter	Kukk	Estonian National Defence College	Estonia
Raili	Juurikas	TTK University of Applied Sciences	Estonia	Anne	Kull	University of Tartu	Estonia
Andres	Jõesaar	Tallinn University	Estonia	Irene	Kull	University of Tartu	Estonia
Larissa	Jõgi	Tallinn University	Estonia	Kristi	Kuningas	University of Tartu	Estonia
Katrin	Jänese	University of Tartu	Estonia	Tiia	Kurvits	Estonian University of Life Sciences	Estonia
Evelin	Jürgenson	Estonian University of Life Sciences	Estonia	Jüri	Kurvits	Tallinn University, Tallinn University of Technology	Estonia
Tõnu	Jürjen	University of Tartu	Estonia	Marina	Kurvits	Tallinn University	Estonia
Karmen	Kalk	University of Tartu	Estonia	Kersti	Kõiv	University of Tartu	Estonia
Kadri	Kalle	Freelance educator	Estonia	Kalle	Kõlli	Estonian National Defence College	Estonia
Silja	Kana	Estonian University of Life Sciences	Estonia	Allan	Kährik	University of Tartu	Estonia
Hanna	Kanep	Universities Estonia	Estonia	Vivika	Kängsepp	Estonian University of Life Sciences	Estonia
Mihkel	Kangur	Tallinn University	Estonia	Katrin	Kütt	Estonian National Defence College	Estonia
Heili	Kangust	Tartu College of the Tallinn University of Technology	Estonia	Minna	Kyttälä	University of Turku	Finland
Jelena	Kapura	Estonian Academy of Security Sciences	Estonia	Elen	Laanemaa	Estonian Academy of Security Sciences	Estonia
Mari	Karm	University of Tartu	Estonia	Made	Laanpere	University of Tartu	Estonia
Inga	Karton	Estonian National Defence College	Estonia	Karin	Laansoo	Estonian Quality Agency for Higher and Vocational Education	Estonia
Katrin	Karu	Tallinn University	Estonia	Oksana	Labanova	TTK University of Applied Sciences	Estonia
Tiina	Karu	Estonian Academy of Security Sciences	Estonia	Silvia	Landra	Estonian Academy of Music and Theatre	Estonia

Johann	Langemets	University of Tartu	Estonia	Van Thai	Nguyen	University of Tartu	Estonia
Marina	Latõnina	TTK University of Applied Sciences	Estonia	Airi	Niilo	University of Tartu	Estonia
Mario	Laul	Estonian Academy of Arts	Estonia	Martin	Noorkõiv	Domus Dorpatensis Foundation	Estonia
Marju	Laurits	Estonian National Defence College	Estonia	Miina	Norvik	University of Tartu	Estonia
Kärt	Lehis	Domus Dorpatensis Foundation	Estonia	Janeli	Nõlvand	University of Tartu	Estonia
Malle	Leht	Estonian University of Life Sciences	Estonia	Tuuli	Oder	Tallinn University	Estonia
Kersti	Lepajõe	University of Tartu	Estonia	Mare	Oja	Tallinn University	Estonia
Natalja	Lepik	University of Tartu	Estonia	Tõnu	Oja	University of Tartu	Estonia
Krista	Lepik	University of Tartu	Estonia	Marje	Oona	University of Tartu	Estonia
Ann	Leppiman	Tallinn University	Estonia	Heili	Orav	University of Tartu	Estonia
Triin	Liin	University of Tartu	Estonia	Olga	Orehhova	Narva College of the University of Tartu	Estonia
Lii	Lilleoja	Tallinn University	Estonia	Andrus	Org	University of Tartu	Estonia
Merlin	Linde	Tallinn University	Estonia	Ehte	Orlova	University of Tartu	Estonia
Liina	Lindström	University of Tartu	Estonia	Mall	Orru	Tallinn University of Technology	Estonia
Liene	Ločmele	Vidzeme University of Applied Sciences	Latvia	Riina	Oruaas	University of Tartu	Estonia
Terje	Loogus	University of Tartu	Estonia	Allan	Padar	Estonian Ministry of Education and Research	Estonia
Aili	Lopman	Tartu Health Care College	Estonia	Reili	Pae	Tallinn University	Estonia
Anneli	Lorenz	University of Tartu	Estonia	Kalju	Paju	University of Tartu	Estonia
Katre	Luhamaa	University of Tartu	Estonia	Annegrete	Palu	University of Tartu	Estonia
Merle	Lõhmus	Tallinn University of Technology	Estonia	Kersti	Papson	Tallinn University	Estonia
Eleri	Lõhmus	University of Tartu	Estonia	Kai	Part	University of Tartu	Estonia
Diana	Lõvi	University of Tartu	Estonia	Tiia	Pedastsaar	Viljandi Culture Academy of the University of Tartu	Estonia
Jackie	Lysaght	Harmony Holistics Kinesiology College	Ireland	Janar	Pekarev	Estonian National Defence College	Estonia
Marge	Mahla	Tartu Health Care College	Estonia	Kathryn	Penaluna	University of Wales Trinity Saint David; Welsh Government	United Kingdom
Elina	Malleus	Tallinn University	Estonia	Andy	Penaluna	University of Wales Trinity Saint David	United Kingdom
Bengt	Malmros	Umeå University	Sweden	Igor	Penkov	Tallinn University of Technology	Estonia
Lela	Mamaladze	Tbilisi State University	Georgia	Gyla	Pesur	Tallinn University of Technology	Estonia
Maciej	Marczyk	War Studies University	Poland	Ene	Peterson	Virumaa College of the Tallinn University of Technology	Estonia
Anna	Markina	University of Tartu	Estonia	Britt	Petjärv	TTK University of Applied Sciences	Estonia
Jennifer	Mason	Auburn University	United States	Meredith	Piatt	Elon University	United States
Heli	Mattisen	Estonian Quality Agency for Higher and Vocational Education	Estonia	Marju	Piir	University of Tartu	Estonia
Tiina	Meos	Estonian Academy of Security Sciences	Estonia	Aigi	Piirimees	Estonian National Defence College	Estonia
Kristi	Mets-Alunurm	Tallinn University	Estonia	Anne	Pikkov	Estonian Academy of Arts	Estonia
Villu	Mikita	Estonian University of Life Sciences	Estonia	Kadri	Pill	Tartu Health Care College	Estonia
Annika	Mikkel	University of Tartu	Estonia	Lehti	Pilt	University of Tartu	Estonia
Kristel	Mikkor	University of Tartu	Estonia	Kristi	Ploom	Estonian Ministry of Education and Research	Estonia
Merje	Miliste	University of Tartu	Estonia	Inga	Ploomipuu	Tartu Health Care College/University of Tartu	Estonia
Eri	Miyano	University of Tartu	Estonia	Stella	Polikarpus	Estonian Academy of Security Sciences	Estonia
Maarja	Motus	Estonian Academy of Arts	Estonia	Age	Poom	University of Tartu	Estonia
Kristina	Mullamaa	University of Tartu	Estonia	Piia	Post	University of Tartu	Estonia
Karin	Muoni	Tallinn University of Technology	Estonia	Silver	Pramann	Rakvere College of Tallinn University	Estonia
Moorits Mihkel	Muru	University of Tartu	Estonia	Janne	Pukk	Estonian Ministry of Education and Research	Estonia
Marju	Mäger	Viljandi Culture Academy of the University of Tartu	Estonia	Lewis	Purser	Irish Universities Association	Ireland
Ivar	Männamaa	University of Tartu	Estonia	Valdek	Putkema	Estonian Academy of Security Sciences	Estonia
Tiina	Männikkö	University of Tampere	Finland	Liisa	Puusepp	Tallinn University	Estonia
Simone	Neads	Tallinn University	Estonia	Halliki	Põlda	Tallinn University	Estonia

Janne	Pühvel	University of Tartu	Estonia	Anu	Sarv	University of Tartu	Estonia
Lea	Püss	TTK University of Applied Sciences	Estonia	Phil	Scannell	Cork University Dental School and Hospital	Ireland
Veli-Pekka	Pyrhonen	Tampere University of Technology	Finland	Werner	Schäfke	University of Copenhagen	Denmark
Jane	Raamets	Tallinn University of Technology	Estonia	Merle	Seera	University of Tartu	Estonia
Raivo	Raid	University of Tartu	Estonia	Jaana	Sepp	Tallinn Health Care College	Estonia
Elle	Rajandu	Tallinn University	Estonia	Merrit	Shanskiy	Estonian University of Life Sciences	Estonia
Nele	Rand	Estonian National Defence College	Estonia	Ülle	Sihver	Estonian University of Life Sciences	Estonia
Anneli	Randla	Estonian Academy of Arts	Estonia	Martin	Sillaots	Tallinn University	Estonia
Meeli	Rannastu	University of Tartu	Estonia	Linda Helene	Sillat	Tallinn University	Estonia
Nina	Raud	Rakvere College of Tallinn University	Estonia	Hanna-Maija	Sinkkonen	University of Tampere	Finland
Liis	Raudvere	Estonian National Defence College	Estonia	Katri	Sirkel	Estonian National Defence College	Estonia
Rea	Raus	University of Tampere	Finland	Terhi	Skaniakos	University of Tampere	Finland
Merike	Rehepapp	Estonian Academy of Arts	Estonia	Pille	Slabina	Tallinn University	Estonia
Kirsi	Reiman	Tampere University of Technology	Finland	Jelena	Sokk	University of Tartu	Estonia
Eva	Rein	University of Tartu	Estonia	Triinu	Soomere	Baltic Defence College	Estonia
Riina	Reinsalu	University of Tartu	Estonia	Elin	Soomets	University of Tartu	Estonia
Vaike	Reisner	Estonian University of Life Sciences	Estonia	Ants	Soon	Tartu College of the Tallinn University of Technology	Estonia
Fernando Manuel Remião		University of Porto	Portugal	Hanna Britt	Soots	University of Tartu	Estonia
Marvi	Remmik	University of Tartu	Estonia	Petr	Sucháček	Masaryk University	Czech Republic
Ulvi	Renser	Tallinn University of Technology	Estonia	Hettel	Sõrmus	Tallinn University	Estonia
Vitali	Retšnoi	TTK University of Applied Sciences	Estonia	Ly	Sõörd	University of Tartu	Estonia
Jekaterina	Reut	Tallinn University of Technology	Estonia	Roman	Švaříček	Masaryk University	Czech Republic
Merike	Ristikivi	University of Tartu	Estonia	Reet	Taimsoo	Archimedes Foundation	Estonia
Tiia	Ristolainen	University of Tartu	Estonia	Reet	Talpsepp	University of Tartu	Estonia
Leon	Robinson	University of Glasgow	United Kingdom	Kristina	Tamm	Tartu Art College	Estonia
Iñaki	Rodríguez Longarela	Stockholm University	Sweden	Aile	Tamm	University of Tartu	Estonia
Mare	Roes	Tallinn University of Technology	Estonia	Anna-Liisa	Tamm	Tartu Health Care College	Estonia
Ülle	Roomets	Viljandi Culture Academy of the University of Tartu	Estonia	Merle	Tammela	Estonian Academy of Security Sciences	Estonia
Liana	Roos	University of Tartu	Estonia	Tiiu	Tammemäe	Tallinn University	Estonia
Heidy	Roosimägi	Ernst & Young Baltic AS	Estonia	Ruth	Tammeorg	University of Tartu Library	Estonia
Anna	Rubtsova	Estonian Academy of Security Sciences	Estonia	Kairit	Tammets	Tallinn University	Estonia
Anneli	Rumm	Estonian Entrepreneurship University of Applied Sciences	Estonia	Dorel	Tamm-Klaos	University of Tartu	Estonia
Kärt	Rummel	Tallinn University of Technology	Estonia	Piia	Taremaa	University of Tartu	Estonia
Mait	Rungi	Tallinn University of Technology	Estonia	Tiiu	Taur	University of Tartu	Estonia
Riina	Runnel	University of Tartu	Estonia	Gaabriel	Tavits	University of Tartu	Estonia
Karin	Ruul	Estonian Ministry of Education and Research	Estonia	Kersti	Teder	University of Tartu	Estonia
Kristel	Ruutmets	University of Tartu	Estonia	Heli	Temper	Haapsalu College of Tallinn University	Estonia
Tiia	Rüütmann	Tallinn University of Technology	Estonia	Pire	Teras	University of Tartu	Estonia
Hele	Saar	Tallinn University of Technology	Estonia	Åse	Tieva	Umeå University	Sweden
Reelika	Saar	University of Tartu	Estonia	Mari	Tikerpuu	Estonian Ministry of Education and Research	Estonia
Küllü	Saarniit	Estonian National Defence College	Estonia	Annika	Timpka	Estonian National Defence College	Estonia
Elena	Safiulina	TTK University of Applied Sciences	Estonia	Alan	Tkaczyk	University of Tartu	Estonia
Katrin	Saks	Pärnu College of the University of Tartu	Estonia	Monika	Tomingas	Tallinn University	Estonia
Katrin	Saks	Tallinn University	Estonia	Meeli	Tonka	Estonian National Defence College	Estonia
Marek	Sammul	University of Tartu	Estonia	Sigrid	Tooming	Estonian University of Life Sciences	Estonia
Anneli	Saro	University of Tartu	Estonia	Kai	Truusalu	University of Tartu	Estonia

Amy	Tserenkova	Estonian National Defence College	Estonia
Jürgen	Tuvikene	Tallinn University of Technology	Estonia
Marge	Täks	University of Tartu	Estonia
Alo	Tänavots	Estonian University of Life Sciences	Estonia
Maiki	Udam	Estonian Quality Agency for Higher and Vocational Education	Estonia
Kadri	Ugur	University of Tartu	Estonia
Oivi	Uibo	University of Tartu	Estonia
Raivo	Uibo	University of Tartu	Estonia
Kaire	Uiboleht	University of Tartu	Estonia
Ere	Uibu	University of Tartu	Estonia
Anne	Urbla	Tallinn University of Technology	Estonia
Anne	Uukkivi	TTK University of Applied Sciences	Estonia
Liis	Uusaed	Estonian University of Life Sciences	Estonia
Mari	Uusküla	Tallinn University	Estonia
Sirje	Vaask	Tallinn University	Estonia
Taavi	Vaasma	University of Tartu	Estonia
Marge	Vaikjärv	University of Tartu	Estonia
Jeffrey	Vanderziel	Masaryk University	Czech Republic
Kimmo	Vehkalahti	University of Helsinki	Finland
Ann	Veismann	University of Tartu	Estonia
Tuuli	Vellama	Tallinn University	Estonia
Siiri	Velling	University of Tartu	Estonia
Varmo	Vene	University of Tartu	Estonia
Urve	Venesaar	Tallinn University of Technology	Estonia
Kaire	Viil	Tallinn University of Technology	Estonia
Haldja	Viinalass	Estonian University of Life Sciences	Estonia
Liina	Viiret	Haapsalu College of Tallinn University	Estonia
Maigi	Vija	University of Tartu	Estonia
Birgit	Vilgats	Tallinn University	Estonia
Inga	Villa	University of Tartu	Estonia
Uku	Visnapuu	University of Tartu	Estonia
Daisy	Volmer	University of Tartu	Estonia
Ülle	Voog-Oras	University of Tartu	Estonia
Ene	Voolaid	University of Tartu	Estonia
Maria	Väinsar	University of Tartu Museum	Estonia
Age	Värv	University of Tartu	Estonia
Tauno	Õunapuu	Estonian Entrepreneurship University of Applied Sciences	Estonia
Meril	Ümarik	Tallinn University	Estonia
Rhonda	Wynne	University College Dublin	Ireland
Natalja	Zagura	University of Tartu	Estonia
Inguna	Zariņa	Rīga Stradiņš University	Latvia
Ivar	Zekker	University of Tartu	Estonia
Maris	Zernand	Tallinn University of Technology	Estonia
Therese	Zhang Kai-Ying	European University Association	Estonia
Indrek	Zolk	University of Tartu	Estonia
Sirli	Zupping	University of Tartu	Estonia

PRACTICALITIES

Venue

The conference takes place in the Dorpat Convention Centre (Turu 2, Tartu), which is located on the 4th floor of the adjacent Tasku Shopping Centre. The lunches and coffee breaks take place in the lobby of the conference centre.

Free public Wi-Fi is available at the venue and also in most public places in Tartu.

To see a map of the venue in Google Maps, please use the address <https://goo.gl/ZAZtb7>

Parking

For parking information, please visit the website <http://tasku.ee/parking/>

Gala Dinner

The Gala Dinner takes place at the University of Tartu Museum, White Hall (Lossi 25, Tartu) at 19:30. It is situated on Toome Hill in the city centre.

It takes about 15 minutes to walk there from the conference venue through the picturesque Town Hall Square, public transportation is not available on this route. If you plan more time for the walk, you can take a small detour to also see the main building of the University of Tartu.

Please note that the Gala Dinner is subject to a fee (45 EUR), pre-registration is required. You can enquire about available dinner places from the registration desk.

Excursion

Before the dinner, starting at 19:00, you can take an excursion in the museum and explore the building. Pre-registration for the excursion is necessary at the registration desk during the conference. The excursion fee is included in the Gala Dinner fee.





Tartu 2018