



National  
Interdisciplinary  
Education  
Conference

22.01.2019 Utrecht

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# Welcome

Welcome to the third National Interdisciplinary Education (NIE) Conference, taking place at January 22 2019 at Utrecht University. During this conference, teachers, researchers and students come together to share experiences, practices, expertise, and ideas related to interdisciplinary higher education.

The theme of the third NIE conference is **integration**. Future workers and researchers are increasingly required to deal with complex problems that go beyond the borders of single domains, and they have to work in teams with people sharing different competencies and expertise. To prepare students for these new situations and related competencies, interdisciplinary education often focuses on connective thinking and integration. Integration, in the context of interdisciplinary education, can have multiple meanings. It can mean integrating insights from different disciplines, in order to create a more comprehensive understanding of a complex issue that constitutes of more than just the disciplinary parts. It can mean integrating people – students and staff; town and gown – to account for the diverse population of society and academia. It can mean integrating research into education and education into research, improving science and academia as well as teaching and learning. Aside from these three subjects, many more themes come to mind when thinking of integration with respect to interdisciplinary education, and we invite participants to share these matters at the 2019 NIE Conference.

The conference team,

dr. Rianne van Lambalgen and dr. Merel van Goch (Liberal Arts and Sciences, Utrecht University; conference chairs)

prof. dr. Iris van der Tuin (Liberal Arts and Sciences, Utrecht University)

dr. Karin Scager (Education Advice and Training, Utrecht University)

dr. Sabine Uijl (University College Utrecht)

## Program at a glance

9.00 – 10.00	<b>Registration</b>	<i>Dining Hall</i>
10.00 – 10.15	<b>Conference opening</b>	<i>Dining Hall</i>
10.15 – 11.15	<b>Keynote session</b>	<i>Dining Hall</i>
11.15 – 11.30	<b>Coffee break</b>	<i>Dining Hall</i>
11.30 – 12.30	<b>Parallel session 1</b>	
	Paper session 1A: Theory and methodology of interdisciplinary education	<i>Locke A</i>
	Workshop 1B: Guiding multidisciplinary graduate students towards interdisciplinarity	<i>Locke B</i>
	Workshop 1C: Playing for a Sustainable Future: The Case of We Energy Game as an Educational Practice	<i>Locke C</i>
	Workshop 1D: Creating societal value: an interdisciplinary approach to wicked challenges	<i>Locke E</i>
12.30 – 13.00	<b>Poster session</b>	<i>Dining Hall</i>
13.00 – 14.00	<b>Lunch</b>	<i>Dining Hall</i>
14.15 – 15.15	<b>Parallel session 2</b>	
	Paper session 2A: Interdisciplinary education at the curriculum level	<i>Locke A</i>
	Workshop 2B: Global Challenges Local Solutions: Integrating Classroom into Real Life through Living Lab Projects	<i>Locke B</i>
	Workshop 2C: An Interprofessional Game for Healthcare Students	<i>Locke C</i>
15.15 – 15.30	<b>Coffee break</b>	<i>Dining Hall</i>
15.30 – 16.30	<b>Parallel session 3</b>	
	Paper session 3A: Interdisciplinary education at the course level	<i>Locke A</i>
	Workshop 3B: Wicked Workshop	<i>Locke B</i>
	Workshop 3C: Connecting learning, doing, and being	<i>Locke C</i>
	Workshop 3D: Design Thinking & Placemaking	<i>Locke E</i>
16.30 – 17.15	<b>Plenary closing panel</b>	<i>Dining Hall</i>
17.15 – 18.30	<b>Drinks</b>	<i>Dining Hall</i>

# Map of University College Utrecht

All plenary sessions and breaks are programmed in the Dining Hall (17). All parallel sessions are programmed in Locke Hall (15).



# Keynote speakers



**Dr. Jacomine Nortier** is Associate Professor in the department of Linguistics and the undergraduate program Dutch Language and Culture at Utrecht University. She lectures on multilingualism, language contact, sociolinguistics, Dutch as a second language, and the relation between language and (ethnic) identity. She teaches courses and supervises theses and internships. Nortier has published on code switching between Dutch and Moroccan Arabic. Lately, her research and publications focus mainly on the relation between language, identity and ethnicity, especially of youth.



**Dr. Gerard van der Ree** teaches International Relations at University College Utrecht. Additionally, he is involved in several interdisciplinary honours programmes, among which the UU's Young Innovator's programme. In all of these, he is interested in the role of self-directed and reflexive learning, both inside and outside of the classroom. If teaching is, as Heidegger put it, 'letting learn', then the main question of teaching is how to set up, and sustain, spaces in which such learning can take place. In exploring these issues, he has been developing reflexive journaling as a tool for self-directed learning. Additionally, he is writing a book on the theme of 'wonder' and its relation to learning.



**Dr. Jeroen Vermeulen** is Associate Professor at the Utrecht University School of Governance. He is Director of Education of the Master's degree of the Utrecht School of Governance. He works on an education innovation project on community engagement together with colleagues of several faculties of Utrecht University. With his colleague Peter Linde, he won the Societal Impact Prize of the Faculty of Law, Economics and Governance in January 2019, for the initiative Learning Lab Overvecht, where students, residents and teachers work together on making the Utrecht neighborhood Overvecht nicer and better.

## Panelists closing debate



**Prof. dr. James Kennedy** is dean of Utrecht University College since October 2015. He is also Professor of Modern Dutch History at Utrecht University. His expertise is postwar history, in the first instance the Netherlands, but also with an eye to transnational and comparative perspectives. The general focus is on the intersection of political, social and cultural history of this period, with a particular interest in the ethical dimensions of policy and its relationship to society. He has published widely in this field, including books on the cultural revolution of the 1960s and Dutch euthanasia policy. His most recent publication is the book *A Concise History of the Netherlands* (2017). For eight years he was Professor of Dutch History from the Middle Ages at the University of Amsterdam. James Kennedy was born and raised in Orange City, Iowa, USA. He came to the Netherlands in 2003 as Professor of Modern History at the Vrije Universiteit Amsterdam.



**Katerina Kolozova, PhD** is a professor of gender studies at the University American College-Skopje and the director of the Institute in Social Sciences and Humanities-Skopje She is also visiting professor at several universities in Southeastern Europe where she teaches continental philosophy and gender studies. In 2009, Kolozova was a visiting scholar at the Department of Rhetoric (Program of Critical Theory) at the University of California-Berkeley. She is the author of *The Cut of the Real: Subjectivity in Poststructuralist Philosophy*, NY: Columbia University Press: 2014. Her forthcoming book is due to be published in February 2019 by Bloomsbury Academic – London (UK) with whom she has signed a contract under the monograph's working title *Form, Structure and Matter: Non-Philosophical Critique of the Automata of Capital and Patriarchy*. Her most recent articles include: "Subjectivity without physicality: machine, body and the signifying automaton," *Subjectivity* 43, Springer: Palgrave MacMillan Journals (October 2018), and "Philosophical and Speculative Economies of the Vanishing Body," *Frontiers Journals: Sociology* (September 2018). She has been the leader of several European projects in gender studies, epistemology and political studies. She is one of the founders and first co-chair of the Women's and Gender Studies Network of Southeast Europe.



**Dr. Sebastiaan Steenman** is director of the undergraduate school of the Utrecht University School of Governance and teaches courses in methods and statistics, philosophy of social science, political philosophy, constitutional and administrative law, public policy, and organisational sciences. He also supervises both bachelor and master theses. Sebastiaan is a member of the evaluation committee for the Basic University Teaching Qualification of the faculty of Law, Economics and Governance. He is interested in education policy and his research focuses on selective admission to higher education. He is project leader of the project Select-UU, which aims to further improve selective admissions practices of Utrecht University, and he is chair of the Centre for Expertise in Admission, which is part of the UU Centre for Academic Teaching.



**Iris Bouwhuis** is in her fourth and final year of the Liberal Arts and Sciences (LAS) program of Utrecht University. Besides majoring in Conflict Studies, she has spent her studies exploring History, Gender Studies and Development Studies, discovering the intersections between these deeply interrelated academic fields. During 2018 she was involved in the organisation of the third Liberal Education Student Conference, hosted in Utrecht. She enjoys playing an engaged role in the student body, participating in debates and discussions about our education and generally making the most of her time at LAS.



# **Abstracts parallel session 1**

## **Paper session 1A: Theory and methodology of interdisciplinary education [*Locke A*]**

### **Wicked Philosophy for Wicked Problems**

**Coyan Tromp**

**Institute for Interdisciplinary Studies, University of Amsterdam**

Complex problems such as climate change and energy, food and water issues are spread out over several disciplinary knowledge fields. In my book *Wicked Philosophy - Philosophy of science and vision development for complex problems* (Tromp, 2018) I aim to deal with these so-called 'wicked problems' by offering an approach that covers the whole range of disciplines that is needed to help us find viable solutions. Scientific approaches often fall prey to a one-sided understanding of human – environment relationships that obstructs the attempts to find solutions for our complex problems. On one side, we have the empiricist position, with its ontology of realism and its objectivist theory of knowledge. This position, traditionally representative of the natural sciences, focuses on the more or less stable structures in reality and the influence they exert on the behaviour of natural phenomena and human beings. On the other side of the scale, we find the interpretivist position, holding a constructivist view on reality and a relativistic, perspectivistic theory of knowledge. The latter position, usually mainly associated with the social sciences and the humanities, is particularly interested in the influence of human actions on the surrounding system.

In my presentation, I would like to explain how we can bring both perspectives together and come up with an integrated approach, including both system thinking and an action and design approach.

In an accompanying workshop, participants are challenged to try and think out-of-the-box and build some kind of bridge between the opposing positions (see proposal 'Wicked Workshop').

# **Students' boundary crossing awareness and experiences in an inter- and transdisciplinary MSc course**

**Cassandra Tho, Carla Oonk, Karen Fortuin, Judith Gulikers  
Wageningen University & Research**

To better prepare students to deal with the wicked issues of current society, like climate change or food security, higher education institutions are moving towards offering programs that are more integrated - inter- and transdisciplinary in nature, incorporating real world problems and interdisciplinary collaborations into the curriculum, in order to prepare students to be future (wicked) problem solvers.

Such interdisciplinary and transdisciplinary collaborations and approaches require students to be able to learn with and from 'the other'. However, applying such approaches towards integration, students involved will inevitably face 'boundaries' as well as have to cross these 'boundaries' (e.g. intercultural disciplinary, academia-society boundaries) in order to carry out their tasks. Studies on 'boundary crossing' have so far been on educating students to cross boundaries and how educators can stimulate students' boundary crossing learning. A missing preceding step is getting insight into students' awareness and experiences of boundaries. The Master course European Workshop (EUW) at Wageningen University & Research is one of such courses that incorporates an inter- and transdisciplinary approach to solve a real life problem for a real international client. Course coordinators have identified at least three boundaries that participants would encounter in the course (i.e. cultural, disciplinary and academia-society boundaries). This study investigates, using pre- and post-test questionnaires collecting quantitative and qualitative data, students' awareness of these boundaries and their perception of boundaries.

Results showed that students' awareness of boundaries increased during the EUW, but that they perceived different kinds of boundaries than those identified by the teachers. Students talk more about personal, physical and project boundaries. This knowledge of if and how students perceive boundaries is prerequisite for developing teaching and learning activities that stimulate boundary crossing learning and the results from this study helps inform the future design of such integrated courses.

## **The Pressure Cooker – An interdisciplinary education concept**

**Esther van Duin, Rutger Bults, Ger Post, Jacintha Scherder**

**Institute for Interdisciplinary Studies, University of Amsterdam**

## **A novel on love in economics for interdisciplinary education**

**Daan van Schalkwijk, Lans Bovenberg**

**Amsterdam University College, VU University, Universiteit Tilburg**

As part of the educational branch of the "Moral Markets" research project, we have written an educational novel about classical 'love types' in professional relationships and in economic thought.

The book tells the story of an ambitious student who decides to join a prestigious case-competition with a classmate. A helpful student-assistant picks them up and ends up joining the team. But when the competition starts the protagonist must learn that while money can facilitate relationships, aiming at money first can hurt them, before her team falls apart, and she loses both the prize and the opportunity to follow her dreams.

The book is meant to facilitate interdisciplinary discussion, especially between the fields of economics, business, literature, and philosophy. We are currently developing educational materials around the book for different audiences, in first instance economics, business, and liberal arts students. We are open to any and all input for that process.

## **Workshop 1B [*Locke B*]**

### **Guiding multidisciplinary graduate students towards interdisciplinarity**

**Rianne Bouwmeester, Gönül Dilaver, Shirrinka Goubitz, Mieke Lumens, Geert Ramakers, Karine Scager, Marca Wauben**

**University Medical Center Utrecht, Utrecht University**

The Utrecht Graduate School Life Sciences (GSLs) coordinates 17 two year research master programmes. In total about 400 new students enroll in these programmes every year. Students come from a variety of disciplinary background, e.g. biomedical sciences, psychology, biology, environmental studies, veterinary sciences.

Last year the Expert Group Education in Life Sciences of the GSLs developed an elective course on interdisciplinary research for its master students. The two weeks course "Societal challenges for life sciences" focuses on what it means for life sciences professionals

to work in an interdisciplinary environment on societal problems. In this course, students from different master programmes learn to work together, across the boundaries of their own field of expertise, and practice how to use their skills and knowledge in a broader, societal context. The central theme for the course was Future Food. A topic that offers the opportunity to integrate research in a wide range of disciplines, integrate the theoretical research in academia with the practical application in companies, integrate the information needs of consumers and non-governmental organizations. In order to achieve this integration experts from academia and companies were involved in the course, students from different disciplinary backgrounds were challenged to work together on a research proposal that was relevant for society as a whole or specific groups of consumers. Both students and staff evaluated the course very positively.

We think the approach and design of this course is interesting and relevant for other graduate schools and programmes. Therefore in this workshop we want to exchange our experiences in developing an interdisciplinary course: where to start, whom to involve, what theme to work on, etc. Maybe together we can even start initiatives for more interdisciplinary courses!

## **Workshop 1C [*Locke C*]**

### **Playing for a Sustainable Future: The Case of We Energy Game as an Educational Practice**

**Frank Pierie, Tania Ouariachi, Mathieu Przybyła, Wim Elving**  
**Hanze University of Applied Sciences**

The urgency of climate change, and the complex energy transition process, make that we need to increase energy awareness and organize coalitions to create the desired public support to create a sustainable society. The energy transition is often mainly seen from an engineering or economic angle, but we believe that it should be a social issue above a technical challenge. Lack of public support for solar farms and large wind turbines could seriously damage the need to act. Although there are many available solutions an optimal balance considering the point of view from all parties involved is out of sight without a focus on social structures and a dialogue among all parties. Besides that, the sun does not always shine, wind can provide a lot of energy, but can also encounter protest by local residents; biomass could be a good solution, but its yields are lower and its environmental footprint is

greater. In search of innovative approaches, serious gaming is gaining attention among scholars and practitioners, as a tool to raise awareness on sustainability and energy transition. Games can foster skills and abilities, contribute to content development, and permit learning experiences that are not possible in real life. One such “serious” game is called “the We Energy Game”, which tries to create awareness on the challenges in the provision of affordable energy from renewable sources for an entire town or city, by aiming for the creation of an ideal sustainable energy mix. During the game, players negotiate, from their respective roles, which energy source they want to employ and on which location, with the goal to make a village or city energy neutral. The We-Energy game requires players to solve a complex problem, covering multiple domains, and different competencies and expertise. In the workshop we will present details about the game and also effects of the game on the players attitudes, convictions and beliefs, while also experiencing the game first hand.

## **Workshop 1D [*Locke E*]**

### **Creating societal value: an interdisciplinary approach to wicked challenges**

**Sander Leusenkamp, Lineke Stobbe**

**Windesheim Honours College**

# **Abstracts parallel session 2**

## **Paper session 2A: Interdisciplinary education at the curriculum level [*Locke A*]**

### **Overcoming Challenges to Integrative Learning: A Culture Shift Incubated in the Honors Laboratory**

**Sarah Jayne Hitt, Toni Lefton**

**Colorado School of Mines**

The momentum for interdisciplinary learning is building at our STEM university as we attempt to meaningfully integrate humanities and social sciences with engineering curricula and to teach students how to embrace ambiguity, flexibility, and creativity. Many of the most successful efforts at integration have occurred within the Honors programs, where pedagogical risk-taking and student and faculty collaboration is the norm. Honors education privileges the way one discipline gives insight into another: for example, literature can't be learned without history; environmental law is toothless without good environmental science. At our university, the Honors programs have a structural home outside disciplinary departments, allowing course offerings to be flexible and classes to achieve learning outcomes in innovative ways. Additionally, Honors is well-funded, and can compensate departments for co-teaching and for work that occurs outside regular teaching assignments. Thus, we find within Honors both the integrative mindset as well as the resources to support it. Indeed, these programs have fostered a cultural shift towards university-wide interdisciplinary education. Many structural changes have recently occurred at our university with the dissolution of colleges, some reorganization by programs rather than traditional disciplines, and the creation of unique "pathways of distinction." Yet, even in this positive atmosphere, there remain significant challenges. Administrators are reluctant to share their intellectual and creative currency, some faculty are unwilling to cross disciplinary lines, and students struggle to embrace learning in the context of collaboration and juxtaposition. Integration requires risk-taking and discovering a path where there is no map or chart, and this is antithetical to state and federal oversight of required learning outcomes for various courses and fields. Thus, it will take more than structural changes to overcome the challenges to

integration; to fulfill the promise of interdisciplinary education, a paradigm shift must be woven into the culture of learning.

## **Go interdisciplinary! An action research to improve interdisciplinarity in MSc research on water management and governance**

**Emanuele Fantini, Mireia Tutusaus, Margreet Zwarteveen**

**IHE Delft Institute for Water Education**

Since the adoption of the IWRM (Integrated Water Resources Management) approach, “integration” has become a recurrent (buzz)word in the water sector. We work at the “Integrated Water Systems and Governance” Department of IHE Delft, where we run a MSc program in Water Management and Governance. Most of our students are water professionals from Latin-American, African and South-East Asian countries, with different backgrounds (engineering, natural and social sciences). Both in the courses and research part of the MSc program, we teach and praise interdisciplinarity and we encourage the students to practice it. However we realised that among staff and students there are many different ways of understanding and practising interdisciplinarity. In order to clarify what do we mean by being interdisciplinary and to better work in that direction, we decided to embark in an action research with staff, as well as with current and former MSc students. We focus on the research phase of our MSc program, reflecting on how interdisciplinary is (or has been) i) planned in the selection of the thesis topic and in the development of the thesis proposal, ii) practiced during fieldwork and data collection, and iii) evaluated during the thesis defence and assessment.

The action research is ongoing and will be completed in April, when the current batch of students will defend their thesis. We are eager to contribute either with a paper presentation or in a workshop but sharing our methods and the preliminary results. We believe that NIE conference will offer a great opportunity to further advance our reflection and work, since our research aims at integrating different disciplines (social, technical and natural science focusing on water issues), people (students and their mentors/supervisors), as well as education and research.

# **Knowledge integration in the master program Food quality management: Teaching strategies, learning challenges, and interdisciplinary outcomes**

**E.J.H. Spelt, G. Hagelaar, P.A. Luning  
Wageningen University and Research**

This contribution reports on the teaching and learning experiences in developing the capability of knowledge integration in the master program Food quality management at Wageningen University. In this presentation, we describe the rationale of the Food quality management program, the need for knowledge integration between the technological and managerial disciplines, the teaching strategies we use, the learning challenges of students, and the integrative learning outcomes.

In the program Food quality management, we teach the 'Techno-Managerial' (T-M) approach to students. The "Techno" refers to the technology-related disciplines such as microbiology, and the "Managerial" refers to the managerial-related disciplines such as management. The teaching of this T-M approach is to prepare students to solve complex food quality management problems once they work in the food industry. Complex food quality management problems are solving the incidental occurrence of high presence of microorganisms in food and innovating new products with a steady mouthfeel. For these kinds of problems, it is essential to integrate knowledge of disciplines and to collaborate with different departments and professionals in the food industry. Our aim is to develop broad interdisciplinary thinking among all master students, so that they are well equipped for their future job.

The presentation highlights three master courses exemplifying how we develop broad interdisciplinary thinking using interdisciplinary pedagogy. Additionally, the presentation highlights the scientific research conducted in one of these courses. The present focus is on the learning challenges students experience in developing the capability of connecting the disciplines and the focus is on the connections they eventually made. The results showed that the challenges cover the Illeris' learning dimensions and that the knowledge connections were typical for the field of food quality management. Further research is recommended to extent present research with observations, storytelling, and report analysis to better understand knowledge integration by students.



# **Creating conditions for integration: betas and personal development**

**Saskia Grooters**

**Rijksuniversiteit Groningen**

The Science, Business and Policy program (SBP, University of Groningen, Faculty of Science and Engineering) is an example in which integration can be found at various levels. It is a master variant, a chosen profile (alternative to research profile). It forms the last year of two-year masters and is accessible for many different studies. Here, Marine Biologists, Medical Pharmaceutical Scientists, Mathematicians, Environmentalists, Chemicals, Astronomers etc. all combine (integration: beta disciplines mixed). Together they learn new disciplines: business and policy (integration: building bridges between different disciplines) and apply this to projects for policy institutions, companies and NGOs (integration: science and society) where they integrate beta information with business or policy to give a solid advice on an actual problem.

In order to be able to operate in this field, interdisciplinary work is a requirement. To set this up for success, however, it is also good to look at the weak spots of your students and strengthen them. For the average beta, this is personal development and communication. Within SBP, a learning line has been set up for this in response to the wishes of the work field. The learning line consists of workshops about different personal development topics like: job application, personal preferences, stress management, leadership, project management, conflict management, reflection skills etc. The form is personalized learning. It forms a common thread through the various courses and during a 40 ECTS internship. Students, internship providers and teachers see a lot of development. Students indicate this as one of the most valuable lessons learned during their studies.

It seems that the discussion is shifting. That interdisciplinary work is a necessary foundation for innovative education is no longer a point of discussion. Creating conditions for students to optimize this is the next step. SBP can be seen as a prove of concept.

## **Workshop 2B [*Locke B*]**

### **Global Challenges Local Solutions: Integrating Classroom into Real Life through Living Lab Projects**

## **Selin Dilli, Berfu Unal, Indira van der Zande**

Today's global societal challenges call for complex solutions, as the causes of the problems are often multidimensional. For instance, climate change has both economic roots, as well as psychological and political ones. Nevertheless, integration between different disciplines alone is not enough to deal with the global challenges. As Ban Ki Moon highlights, there is need for global action in dealing with these challenges.<sup>1</sup> How do we train change agents that can identify the best solutions that will work in the world outside of academia? To be able to answer this question and identify these action points, there is need for integration between interdisciplinary academic knowledge on the one hand and practical real-life situations on the other. For this purpose, Living Labs can provide an ample room of opportunities.

The Living Labs (LL) entails the transdisciplinary integration of academic and experiential (non-academic) knowledge. Together with non-academic stakeholders from the private or public sector, students identify a problem relevant to their research interests. Students then translate this problem into a question suited for academic research and define the connecting discipline(s), use scientific theory, collect data, run experiments and answer hypotheses. Finally, they translate the theoretical findings into recommendations for the stakeholders. The LL projects are interdisciplinary by nature, where e.g. cooperation between natural and social scientists, engineers, and governance is necessary to address complex problems. In the LL projects, University College Fryslân engages with the Frisian community and the broader region through the elaboration, design, execution and valorisation of applied research. These LL projects create a win-win situation: students learn to apply their academic knowledge in actual, real-life contexts and develop related skills (communication, collaboration, problem-solving, research) whereas public and private stakeholders get to work with talented young people that are able to provide insight into questions important for the region.

In this workshop, the purpose will be to get familiar with the living lab concept, and discuss the applicability of the concept in different educational set-ups and its strengths and weaknesses. We will present different examples of LL projects at University College Fryslân. The workshop will also be used to bring different stakeholders together who are interested in integrating living lab projects into their own curriculum and exchanging ideas for collaborations.

## **Workshop 2C [Locke C]**

### **An Interprofessional Game for Healthcare Students**

**Lydia van der Meij, Noor Christoph**

**Amsterdam University Medical Center**

AMC-UvA and HvA work together in an interprofessional program, consisting of an annual course for all healthcare students. In Year 1-course students get to know their roles and responsibilities as a professional worker, regarding both the patient and the colleagues from multiple disciplines. In Year 2-course students work in a mixed team on a realistic patient-based case and learn how to set common goals and how to communicate amongst each other, while keeping the patients goals and wishes in mind.

For our Year 3-course we developed GRIP: a board Game for InterProfessional collaboration. A team of six healthcare students from different backgrounds works together, to improve the condition of the patient. Each player can choose from a range of evidence-based interventions. They could do this without much aligning, on an individual base, however the game is designed to find out that interventions will gain effectiveness when combined. Professional leadership, dealing with conflicts of interest and shared decision making are key in achieving an integrated plan for treatment and care, in order to get the patient home in a safe condition.

GRIP has been tested and played by various mixed groups and is set as the IPE Year 3-course since September 2018. 1000 students play GRIP each year, embedded in instructional activities. This will be followed up by Year 4: IPE in workplaces.

In our workshop you will play the role of a healthcare professional (no specific knowledge required) and experience the need for collaboration while trying to improve patient's conditions. The more integrated your collaborative plan for treatment and care gets, the sooner the patient can go home. Meanwhile you can pass through the pros and cons of a serious game as a tool for practicing interprofessional skills, which we will shortly reflect on afterwards.

# **Abstracts parallel session 3**

## **Paper session 3A: Interdisciplinary education at the course level [*Locke A*]**

### **The UU Sustainability Game: Developing an integrated learning tool using an interdisciplinary process**

**Astrid Mangnus, Karin Rebel, Margien Bootsma**

**Copernicus Institute of Sustainable Development, Utrecht University**

The sustainability challenges of our time are complex and interlinked, which makes integrated, systemic approaches crucial for tackling them. Utrecht University aims to educate future leaders, who across all disciplines will have to face these sustainability challenges. Our aim was to develop an applied, UU-wide sustainability game that would let students engage actively with sustainability themes. Serious or applied gaming is the use of gaming technology to teach participants about certain topics. Games designed to engage with sustainability concerns can lead to increased understanding of systems and of the roles of societal stakeholders.

To create such an integrated game, we designed an interdisciplinary development process. Honours BSc students from all seven UU faculties teamed up with HKU games and interaction students to develop prototypes of the game, including its content, design, music, and programming. They did this in a course consisting of a game jam (a week-long rapid game prototyping process), followed by just under 2 months of further game development by the student teams. The resulting prototypes were handed over to a professional game design studio, to turn the set of successful ideas into one integrated game for a large audience. The game development and learning process was recorded in surveys and focus groups.

The game jam and subsequent applied game course resulted in 18 game prototypes, the majority of which successfully integrated game mechanics and sustainability content. The questionnaires and the focus groups informed us that during the game jam and the applied game course, the learning curves were consistently quite high. Especially the game jam stimulated and challenged students on various levels. However, the line between growing

pains in interdisciplinary education and unproductive chaos or frustration is thin. We learned that careful design and consideration of all groups involved is crucial in processes like this.

## **Inter-professional student-led medication review program**

**M. Reumerman, J. Tichelaar, P. Domela Nieuwenhuis, H. Daelmans, H. Springer, M. Muller, M. Richir, M.A. van Agtmael**  
**Amsterdam University Medical Center, VUmc**

Rational prescribing and evaluating medication safety is a fundamental skill for every prescribing healthcare professional since most visits end with a prescription. Unfortunately, most graduated healthcare professionals make frequent prescribing errors and fail to review medication adequately. Inter-professional collaboration between physician and (specialist) nurses or pharmacists could aid medication evaluation and improve medication safety. To prepare students for their role in medication evaluation it is important to teach students to learn and work together during their curriculum, especially concerning the assessment of polypharmacy in geriatric patients.

We aim to assess the clinical, educational and inter-professional outcomes of our inter-professional student-led medication review program (ISP). The ISP was integrated as part of the memory clinic within the center for geriatric medicine Amsterdam. Every week a variable team of bachelor and master medical students, pharmacy students, physician assistants or nurse practitioners students evaluated the medication of patients who visited this outpatient clinic. After taking the medication history, a medication review was performed, medication was assessed and the student team formed their medication advice. After a short meeting with a clinical pharmacologist, students pitched their medication advice in a multidisciplinary meeting and updated the electronic patient system. After the ISP pilot, the program was evaluated using a digital survey and all medication advices were analyzed. Results During the pilot 31 students participated in project. Most students had never participated in an inter-professional setting, had never taken a medication history or had conducted a medication review in a real patient. During the 24 visits the students reviewed 155 medications and formed 62 medication advices. In total 51 advices (82%) were directly applied in clinical practice. Students valued the ISP-pilot with a 7.7 (1-10 min/max), found it educational 4.5 (1-5 min/max), and thought it would contribute to their future inter-professional relationships. Additionally most students found getting insight into the different perspectives and qualities of their inter-professional colleagues most interesting.

The ISP is an innovative healthcare improvement for (academic) hospitals. Most formulated advices were directly incorporated in daily practice and could prevent future medication related harm. The ISP also offers students a first opportunity to work in an inter-professional manner and get insight into the perspectives and qualities of their future colleagues. An intervention study to analyze the clinical effects and inter-professional benefits will follow.

## **Research Clinic: Food Citizenship as a Form of Urban Resilience**

**Minjung Cho, Jyothi Thrivikraman, Annie Trevenen -Jones, Daniela Vicherat Mattar, Francesca Bruni, Anna Llluna Aguilar, Sophie van der Steen, Max van Deursen, Roos Wortelboer, Sofie van den Berg**

**Leiden University College The Hague**

This presentation is based on the experience of a research and teaching project on food waste in The Hague. Together with TU Delft and the CompostBakkers, an interdisciplinary team led by Leiden University College The Hague (LUC) was awarded a grant through the Gemeente Den Haag's Central Innovation District to study household food waste. The study explores food waste perceptions and practices amongst the diverse community of the Bezuidenhout neighbourhood. People's perception and management of food waste is as much about food as it is about how people define themselves, pursue their prosperity, and express citizen responsibilities. Adopting a multi- and inter- disciplinary approach to food waste researchers and students aim to inform the city's vision of The Hague as a smart, sustainable, resilient, and inclusive city. We have adopted a mixed method research design, comprising a survey and qualitative methods. The qualitative component has 3 parts, (i) photographing of home food waste story; (ii) semi-structured individual interviews; and (iii) focus groups. Students are members of a research clinic where they experience research firsthand in the field - amongst communities - and in doing so learn to think 'interdisciplinary' about food waste and become skilled in mixed research methods design.

The research clinic serves to train students to the mixed paradigms and mix-methods in this study. The clinic provides a space for students to practice interview skills and ask questions prior to engaging with the wider community. In parallel, they are engaging in a literature survey in complex topics related to food security, food citizenship, environmental sustainability and policies around disposal of waste. Our presentation will highlight the practical realities of working across disciplines and with the community from the faculty and

student perspective. Student reflections, videos and evaluations of the research process will inform the education of research skills.

## **iRISK, an integrative serious game on sustainability**

**Jorien Zevenberg**

**University of Groningen**

The minor Future Planet Innovation (FPI) of the Faculty Science & Engineering of the University of Groningen is an university broad minor of half a year about sustainability. The minor FPI is open to all students of the University of Groningen and beyond. Therefore the 50 students who participate in the minor FPI form a diverse group, ranging from biologist to business students and from chemistry students to historians.

Because of the diverse background of the students, one of the major characteristics of the minor FPI is interdisciplinarity. The students are forced to work together and share their knowledge. During the first course of the minor FPI all students get a kind of crash course in sustainability (Global Challenges) in which every week a different aspect of sustainability (e.g. energy & climate, sustainable health, nature & biodiversity) is taken into account.

During this course, we also play the self-developed serious game inverse RISK (iRISK) with the students. In this game we want the students to save the world instead of concur the world. The game forms a bridge between the different week themes in which the themes are taught in debt and the broader sustainability perspective. The motto of the game is: Think global, act local. To establish this, the students are divided into different continents and each week every continent has to pitch a plan to tackle the sustainability aspect of that week in their continent. After several weeks there is a grand finale of the game during a full congress day.

In this presentation I would like to explain the iRISK game and highlight how this game integrates different sustainability aspects on a worldwide level as well as different disciplinary backgrounds in an innovative educational setting.

## **Workshop 3B [Locke B]**

### **Wicked Workshop**

**Coyan Tromp**

**Institute for Interdisciplinary Studies, University of Amsterdam**

In this workshop, participants are challenged to try and think out-of-the-box and find a way out of existing opposing positions and approaches in the natural sciences on the one hand and the social sciences and the humanities on the other. In the natural sciences, the focus is mostly on the more or less stable structures in reality and the influence these exert on the behaviour of natural phenomena and human beings. Over and against that, the social sciences and the humanities are usually particularly interested in the influence of human actions on the surrounding system.

Working with an example from organisation theory, the participants of the workshop are asked to present definitions from diverging perspectives. Next they are challenged to try and build some kind of bridge between the various definitions and come up with a meta position that transcends the apparent dichotomy between the diverging stances.

## **Workshop 3C [Locke C]**

### **Connecting learning, doing, and being**

**Gerard van der Ree, Corey Wright**  
**University College Utrecht**

This workshop seeks to develop tools for integrating what students learn in a classroom with who they are developing into, and what that means for their every 'doing'. In many ways, classroom experiences encapsulate a lot for students: how they make sense of things, what matters to them and what doesn't, and what the directionality of their learning is. Often, however, a lot of that knowledge remains unrevealed to the student. Using reflexive journaling as a starting point, this workshop aims to unwrap the possibilities for university teaching to help students discover more of who they are (or are developing into) and what that implies for their everyday activities.

## **Workshop 3D [Locke D]**

### **Design Thinking & Placemaking**

**Elias den Otter, Katusha Sol**  
**Institute for Interdisciplinary Studies, University of Amsterdam**



Design Thinking is a user-oriented, iterative method for designing solutions for complex societal issues. In various phases of the process, we switch between diverging (thinking in multiple directions without any predetermined limitations) and convergence (gaining focus by making choices). Throughout this process, the end user remains the centre of attention. What is their context? What are their needs? Because Design Thinking makes use of real-life interventions, any preconceived notions and hypotheses are tested with the target group, while working on the proposed design solutions.

Design Thinking is a method we use in our course 'Placemaking: Estafette for Citymakers' (an ongoing project regarding urban development in Amsterdam). Bachelor students from different backgrounds work in interdisciplinary groups on a case for an external stakeholder (local foundations and initiatives, municipality, etc.) to improve Science Park area in Amsterdam on a local scale. The method of Design Thinking helps them to work interdisciplinary, apply knowledge from their own field, and improve their creative and professional skills. Moreover Design Thinking is an interesting method for students to gain experience with both analyses and implementation.

During the NIE workshop, we provide an overview of the steps in the Design Thinking methodology and let you experience it for yourself. We can do this with one of our own cases, but we can also work with one proposed by the participants of the workshop.

# **Abstracts poster session**

## **Reflections on the Liberal Education Student Conference 2018**

**Iris Bouwhuis, Lars Heuver, Siebren Teule**

**Liberal Arts and Sciences, Utrecht University**

In May 2018, the third Liberal Education Student Conference took place in Utrecht. It was organized by and for Liberal Education students in Europe. It built on the two previous editions. The first, at Leuphana University, focused on what Liberal Education is and what it could be. The second, at University College Freiburg, focused on the potentials and limits of Liberal Education in approaching contemporary challenges. For this edition, dozens of students from Liberal Education institutions from all over Europe came together to discuss similarities and differences in their educations, share ideas and exchange best practices. By centering the question: "What does our changing society need from Liberal Education, and to what extent is your Liberal Education programme providing this?". During the conference, the participants discussed five contemporary challenges through this lens: climate, privacy, migration, food and the EU. The idea was to start by identifying skills and knowledges needed to tackle these challenges, reflect on the ways that Liberal Education currently engages with these challenges and then identify best practices and possible improvements to be made in this regard.

The culmination of the conference was the Open Space, where the insights the participants had gained during the course of the three prior days came together. The separate lists created during the different track sessions were integrated into a final product. The result was the creation of two masterlists; one containing the current best practices in European-wide Liberal Education and one containing possible improvements. At NIE 2019, a delegation from the organization of LESC 2018 would like to present the outcomes of LESC in the format of a poster presentation. This presentation would focus on the two aforementioned lists, the process of integrating them and the lessons learned. Additionally, the presenters will show some of the papers written by participants.

# **FINTERDIS - Advancing Junior Scholars' Opportunities for Integrative Thought**

**Kirsi Cheas**

**University of Turku, Finland**

FINTERDIS – The Finnish Interdisciplinary Society – is a new network established in Finland on October 4, 2018, meant to facilitate communication and integration between different fields of education and research within Finland and internationally. FINTERDIS particularly aims to support junior scholars in their efforts to explore new and even unexpected connections between different fields and approaches. The FINTERDIS initiative was launched by Finnish early-career scholars and graduate students whose lived experiences echo claims of researchers such as Pfirman and Martin (2017): junior scholars with interdisciplinary interests are in especially vulnerable positions in terms of their career prospects in the current structures. Supervisors and project leaders are often reluctant to look beyond their comfort zones and meet new people in order to understand the junior scholar’s ideas in a holistic way. Besides demanding courage and open-mindedness, interdisciplinary efforts require time and resources – both increasingly limited in the Finnish public academic system. Operating as an autonomous organization that collaborates with different universities, FINTERDIS aims to respond to current challenges by organizing interdisciplinary workshops around the country to provide peer support and opportunities for junior scholars and their advisors. FINTERDIS will also conduct research on the experiences of junior scholars in regard to interdisciplinarity, in an effort to inform university administrators and policy makers about the persisting challenges in our system and how they could be overcome.

FINTERDIS has received significant support from the Institute for Interdisciplinary Studies at the University of Amsterdam and the Association for Interdisciplinary Studies. We are eager to expand connections and learn more from Dutch experiences while eagerly sharing our ideas originating in the Finnish context. We believe that international collaboration can help us in our joint efforts to promote integration of ideas across different fields and generations in order to respond to the complex challenges of the future.

## **Diversity and inclusion: a biomedical approach**

**Ouafa Dahri**

**University Medical Center Utrecht**

The Dutch society has been changing over the years. In particular, the population is getting more diverse. Diversity itself is a complex phenomenon. Though many studies have shown that having diversity in the workforce will lead to positive outcome, it is not always perceived as valuable. Therefore, we propose a way to create awareness among biomedical students by focusing on their field of interest. We are developing a course that will teach students the biomedical mechanisms behind implicit bias such as those of a neurological and physiological nature. Additionally, case studies will be proposed to the students that highlight diversity within science such as; gender diversity and racial diversity. These aspects of diversity have been shown to be overseen when proposing new research focus. Lastly, “experts” will be invited to talk about their experience with (the lack of) diversity in their daily work. In conclusion, by look to diversity through a biomedical lens we expect students to become more aware of the value of diversity.

## **Value Creators: an interdisciplinary approach to wicked challenges**

**Maria Garcia Alvarez, Sander Leusenkamp**  
**Windesheim Honours College**

Global manifestations such as urbanization, climate change, ageing populations and poverty increasingly affect us all at local levels. We need to train students to understand the complexity and dimension of the new global challenges.

Macro challenges impact on micro level and professionals and policy makers are more and more confronted with wicked challenges that not only grow in scale but also occur at different integrated levels. Examples are health care service delivery, housing, clean water, food safety and logistics.

These wicked challenges surpass past solutions of linear thinking defined in terms of cause & effect. Students need to master new skills that go beyond discipline linked knowledge. They need the cocktail Wicked Thinking: Critical thinking, creative thinking, design thinking and systems thinking. Meta-competences such as creativity, leadership, resilience, ethics, social awareness and adaptability will make them explores and survivors in the world of uncertainty.

## **Innovation in Education: Intersecting Sciences and Humanities**

**Katerina Kolozova, Zane Putnina, Iris van der Tuin**

**University American College-Skopje, Sofia University St. Kliment Ohridski, Utrecht University**

The aim of the two-year Erasmus+ project *Innovation in Education: Intersecting Sciences and Humanities* (2018-20) is to offer innovative approaches to higher education through thematic and integrative interdisciplinarity in the development of curricula in Southeast Europe. This represents an innovation which will improve the quality of Higher Education in the region, and/as it will contribute to opening up and innovating in the education process. *InnEd* will produce four thematic curricula intersecting philosophy, linguistics, liberal arts, cognitive sciences and technology by focusing on research subjects such as post-humanism, gender, environmental studies. The project will also promote the value and perspectives of the integrative interdisciplinary methodology. The introduction of interdisciplinary curricula and methods will strengthen the overall quality and relevance of students' knowledge, creativity, and competencies towards a more holistic education, and will enhance their transversal skills and therefore their employability. Enhancing innovative research skills increases employability of graduates in the humanities enabling them to engage in the dynamically changing European economy based on research and innovation, in particular at the intersecting realms of STEM and humanities.

The project will be carried out by the Institute in Social Sciences and Humanities, Skopje; Sofia University St. Kliment Ohridski, Sofia, Bulgaria; and—at Utrecht University, the Netherlands—the research group Transmission in Motion and the BA programme Liberal Arts and Sciences (LAS).

Our poster will present the four forthcoming curricula as well as the collaborative process of the Erasmus+ project itself.

## **Integrating different disciplines of Civil Engineering in a Dutch-Chilean educational innovation with social impacts**

**Mauricio Pradena, Lambert Houben**

**Delft University of Technology, University of Concepción (Chile)**

The civil engineering curriculum has more and more developed towards different disciplines, i.e. structural, hydraulic, geotechnical, transportation engineering, etc. However, as real problems do not necessarily distinguish between these academic separations, engineering education must provide opportunities of integration. This is already happening in the

Netherlands (for instance at TU Delft) but also in Chile at the Civil Engineering Department of the University of Concepción (UdeC) and with the participation of Dutch MSc students of TU Delft. The first experience of that course was presented at the 2nd National Conference on Interdisciplinary Education at TU/e. The present contribution deals with the second experience that, besides the integration of the different disciplines of Civil Engineering, introduces other elements of integration. For instance, the second version of the course integrates in a better way the academic calendars of both hemispheres, due to the incorporation of flipped classroom and TICs, allowing students in the Netherlands or Chile to study the theoretical aspects of the course before they are physically together in Chile. Furthermore, the second version integrates engineering with social impacts because the focus of the course is the design of the infrastructure for a fishermen port with social needs. The project was developed in cooperation with the Ports Departments of Chile, and the integration of the project in the course was made by means of the innovative methodology "Project-Led Education" (following the model applied by U Twente). Finally, the Dutch students needed to integrate with their Chilean peers in a different context, technical standards and new challenges as earthquakes and tsunamis. In conclusion, the second experience introduced more elements of integration than the first one. These elements certainly contributed to the success of the integration of different disciplines of civil engineering in a real project with social impacts.

## **Co-challenge: solving a community-based problem together**

**Heleen van Ravenswaaij**

**University Medical Center Utrecht**

Within the co-challenge course, students have the space to develop their soft skills by combining community service learning with interdisciplinary collaboration. Third year bachelor students, master students, and recently graduated alumni of Utrecht University work together on a societal problem posed by the City of Utrecht and think of a solution in two weeks. During the course they attend content related seminars, skill related workshops, and receive team and individual coaching when needed. The final solution of each team is presented before the City of Utrecht and others (i.e., university professor and social work professional), where one or more initiatives are chosen to develop further if possible.

The poster will provide a description of the course, but will also describe students' experiences with interdisciplinary education and the skills they developed during the course.

Lessons learned regarding the collaboration between the university and municipality, as well as the development of a challenge like this will be discussed as well.

## **Framing diversity: from problem to opportunity**

**Isabella Spaans**

**Utrecht University, University Medical Center Utrecht**

Framing is a form of strategic communication that influences how people understand and interpret information. The words, examples and metaphors we choose to 'frame' our message trigger different associations in different listeners. As a result, people don't automatically read our message the way we intended it. Or as framing expert Frank Luntz puts it: it's not what you say, it's what people hear.

So which frames do we (subconsciously) use when we talk about diversity, and how is this affecting the way people think about diversity? Can we influence attitudes towards this important subject by altering the stories we tell? Seeing as diversity is a plain prerequisite for interdisciplinary education and research, more insight would be useful. How can we use framing to our advantage and facilitate a more diverse university?

By uncovering and testing the diversity frames in higher education, we're hoping to understand more about the effect that framing has on how we perceive the value of diversity.

## **Integration of valorization and education by supporting student entrepreneurial & intrapreneurial activities**

**T.G.J. Selten, I.M.M.J. Reymen, M.M.A.H. Cloudt**

**Eindhoven University of Technology**

Universities can play a significant role in valorizing academic knowledge into a meaningful societal context (Etzkowitz et al., 2000; Etzkowitz, 2003; Mulgan & Abdo, 2010). Previous research has mainly focused on knowledge transfer by university staff members. However, valorization activity integration in education is also an option but not studied well (Fayolle & Linan, 2014). By focusing on students, we tend to extend literature on knowledge valorization which has primarily focused on faculty or university employees.

The main research question for this study is the following: How could a university improve the academic knowledge valorization strategy by leveraging student entrepreneurship and intrapreneurial (SE&I) activities? By combining an extensive literature

review with performing an in-depth qualitative study in a single case at the University of Technology Eindhoven (Baxter & Jack, 2008; Yin, 2008), we aim to find a concept framework of university-related support (URS) mechanisms, focusing on the different stages of SE&I, namely intent, activity & continuation (Gollwitzer & Brandstatter, 1997).

The aimed established framework of URS mechanisms for SE&I activities tends to close the gap as identified by Wright et al. (2017) and Fayolle & Linan, (2014). The analysis on how these mechanisms influences the student entrepreneurial intent, the SE&I action and continuation provides strong managerial implications for the analyzed university, and possibly also other universities. The research has yielded an new identification tool of SE&I activities, an overview of 46 URS mechanisms which a University could use to improve academic knowledge valorization and an assessment methodology of measuring the performance of both the SE&I activity and URS mechanisms. We thereby contribute to a student perspective on academic knowledge valorization.

## **Impact of higher education students' experience acquired in the additional activities for their employment after graduation**

**Ilona Tandzegolskiene, Inga Vasiliauskaite**  
**Vytautas Magnus University, Lithuania**

Key words: graduates, integration into labor market, additional activities during studies, graduates integration predestine factors, as upcoming specialist's evaluation, career perspectives realization after graduation, experiences gained during studies, experience's impact for graduates integration in to labor market. The problem of the research: noticed that graduates continue to be depended on their siblings financially because they cannot find a work according theirs education or they work lower qualification work than they are gained at university. According to this, young adults who graduate from universities lack confidence in themselves as specialists. Main reason for this is the competences they have after graduation do not match employers expectations since one of the biggest requirements is work experience. One of the reasons why graduates do not gain job experience while they are students is the wrong view to the extra activities where they can get experience even during their studies. One of the major mistakes students make is that they usually put more attention into input rather than personal development like gaining work experience or doing



extra activities. The question of the research: what is the outcome of chosen extracurricular activities of students for an integration into the labor market?

## **Student-centered learning in interdisciplinary honours education: motivation, participation, and the value of mistakes**

**Roosmarijn van Woerden, Merel van Goch**

**Liberal Arts and Sciences, Utrecht University**

Student centered learning is a challenge for teachers. To truly leave the responsibility for the learning activity to the student is a switch in mindset. It means a switch from delivering knowledge to creating fruitful conditions for learning. This poster will present the outcomes of interviews with students of two honours courses: Labyrint (UvA) and Big History (UU). In these courses students were encouraged to take the lead in their own learning by giving them full responsibility for certain lectures and assignments, by encouraging peer review and independent group work. To create conditions for optimal risk taking and learning without fear of mistakes, experiments with alternative grading were conducted. Students report that these conditions freed them of the formal and often restricting ties of the academic learning they are used to, and inspired them to go beyond the normal learning boundaries. They also report higher levels of motivation and the desire to engage in this type of learning more often.

# Conference team



**Dr. Rianne van Lambalgen** works as a lecturer at the bachelor's programme Liberal Arts and Sciences at Utrecht University. Here, she teaches in the core curriculum of LAS, where students learn to do interdisciplinary research. In addition, she is involved in educational projects for the bachelor's programme Artificial Intelligence, amongst others related to selection of new students and bachelor thesis supervision. Rianne obtained her PhD in Artificial Intelligence in 2012 and obtained an additional master in Higher and Professional Education in 2018. Her research interests involve selection of new students, thesis supervision and learning analytics.



**Dr. Merel van Goch** is Assistant Professor at Liberal Arts and Sciences, Utrecht University, The Netherlands. She teaches throughout the Liberal Arts and Sciences program, and she is the Humanities Honours Programme Coordinator of the School Liberal Arts. Her research integrates cognitive psychology and educational sciences and is centered around the question whether interdisciplinary programs attract or create critical, creative problem-solvers. Particularly relevant in answering this question are metacognition (thinking about thinking, knowing about knowing) and adaptive expertise (the ability to effectively deal with novel situations). She uses quantitative and qualitative methods to study interdisciplinary and monodisciplinary students' development throughout their undergraduate education.



**Prof. dr. Iris van der Tuin** is professor in Theory of Cultural Inquiry at Utrecht University (Department of Philosophy and Religious Studies). She is also director of the School of Liberal Arts and program director of the interdisciplinary bachelor's programme Liberal Arts and Sciences. Her research is part of the group Transmission in Motion of the Institute of Cultural Inquiry. As the chair of COST Action IS1307 *New Materialism: Networking European Scholarship on 'How Matter Comes to Matter'* (2014-18) Van der Tuin has developed a network of over 150 European scholars and colleagues from Australia and South Africa, all of them sharing an interest in bridging the humanities and the natural sciences for global challenges today.



**Dr. Karin Scager** is working as a senior educational consultant and a teacher trainer at Utrecht University in the Netherlands. Her activities include curriculum design and – development projects, training of teachers in didactical skills and teaching methods, accreditation, and quality care strategies. Her research interest focuses on teaching methods that are challenging and promote students’ intrinsic motivation. In recent years most of Karin’s projects encompass the development of interdisciplinary programs and courses.



**Dr. Sabine Uijl** is Director of Education at University College Utrecht, a small-scaled Liberal Arts and Sciences honors college of Utrecht University, offering multidisciplinary undergraduate education. Her recent research is mainly directed at educational innovation, aiming at online, blended and face-to-face education with a central role for the students. As Comenius Senior Fellow, Sabine leads an innovation project, called Student ownership @UCU and is an active member of the national Comenius community, the body where teachers from the Netherlands are organized and can enter the political debate. Previously, Sabine has dedicated her educational leadership qualities to master’s and professional education in the medical sciences; the field in which she also obtained her PhD.