

**FOURTH NATIONAL
CONFERENCE ON
INTERDISCIPLINARY EDUCATION**

Interdisciplinary Education as a Pathway to Global Citizenship

3 June 2022



Maastricht University

Conference Information

The **Fourth National Conference on Interdisciplinary Education (NIE)** is hosted by Maastricht University. During this conference, teachers, researchers and students come together in innovative formats (workshops, solution rooms, exhibitions and more) to share experiences, practices, expertise, and ideas related to interdisciplinarity in higher education. The theme of the fourth NIE conference is Interdisciplinary Education as a Pathway to Global Citizenship.

In an ever more complex and interconnected world, future generations will need to interact, work and live together with people from a wide variety of backgrounds and cultures. Moreover, in such a world, their actions and choices can have far-reaching consequences, affecting people all over the world for better or for worse. To successfully function in this context, one requires Global Citizenship skills. In recent years, more and more universities have made the fostering of skills like perspective taking, normative and change agent skills an explicit goal of the education they offer. Many have argued that interdisciplinary education is an excellent way of cultivating global citizenship.

The fourth National Interdisciplinary Education conference will bring together teachers, researchers and students to explore the relationship between interdisciplinary education and global citizenship. While the conference focuses on global citizenship skills, it will also feature contributions on other issues of interest to interdisciplinary educators, such as, for example, assessing interdisciplinarity, understanding the role of interdisciplinary education in reaching the sustainable development goals, or rethinking student – educator roles, and more.

2022 Conference Team

Prof. Dr. Teun Dekker (UM)

Drs. Herco Fonteijn

Prof. Dr. Valentina Mazzucato

Dr. Elissaveta Radulova

Venue: University College Maastricht, Zwingelput 4, 6211 KH, Maastricht

Programme

10:30-11:00	Registration and Coffee	<i>Common Room</i>
11:00-12:00	Plenary & Keynote <i>Cultivating Global Citizenship – by students of the BSc Global Studies</i>	<i>Common Room</i>
12:00-12:45	Lunch	<i>Common Room</i>
12:45-16:15	Presentations, Workshops, Solution Rooms, Exhibitions, etc.	<i>(see schedule, next page)</i>
16:15-16:45	Closing Panel Reflections on the day and the role of interdisciplinarity in civic education, featuring: <ul style="list-style-type: none">◆ Prof. Valentina Mazzucato (UM)◆ Sophia Longwe (UM)◆ Prof. Iris van der Tuin (UU)◆ Prof. Marjolein Zweekhorst (VU) Moderated by: Prof. Teun Dekker (UM)	<i>Lecture Hall</i>
16:45-18:00	Drinks	<i>Common Room/ Courtyard</i>

Schedule

	Room 1.024	Room 0.024	Room 0.026	Room 0.028	Room 1.026	Common Room
12:45 - 13:45	<p><u>Paper Presentations:</u></p> <p>Ingrid Hoofd (UU) <i>Developing Cosmopolitan Awareness through an Interdisciplinary 'Global Humanities' Module</i></p> <p>Job Heusschen & Manuela Heins (UM) <i>Scientific Literacy in the Liberal Arts</i></p>	<p><u>Workshop:</u></p> <p>Linda de Greef & Debby Gerritsen (UvA) <i>Meaningful assessment in interdisciplinary education</i></p>	<p><u>Solution Room:</u></p> <p>Roosmarijn van Woerden & Rianne van Lambalgen (UU) <i>Creating an interdisciplinary escape room for students' understanding of interdisciplinarity</i></p>	<p><u>Workshop:</u></p> <p>Maria van der Harst (UU) <i>Teaching global, transformative citizenship skills: Best practices, challenges and solutions for teachers designing new interdisciplinary education</i></p>	<p><u>Documentary Presentation:</u></p> <p>Laura Ogden (UM) <i>Teaching research skills through documentary filmmaking in LAS education</i></p>	<p><u>Exhibitions:</u></p> <p>Laura Ogden (UM) <i>Encouraging global citizenship through blogging</i></p> <p>Josien de Klerk (UL) <i>'Engaging The Hague': Practices of Global Citizenship Education at an Interdisciplinary University College, LUC The Hague</i></p>
14:00 - 15:00	<p><u>Paper Presentations:</u></p> <p>Merel van Goch (UU) <i>Scholarly learning of teacher-scholars in interdisciplinary education</i></p> <p>Emanuele Fantini (TUD) <i>A podcast pedagogy for active listening and reflexivity in water and sanitation education</i></p>	<p><u>Workshop:</u></p> <p>Inge Romgens (UM) <i>Writing with your RQ</i></p>	<p><u>Solution Room:</u></p> <p>Janneke de Ruiter, Gerard van der Ree & Anouk Talen (UU) <i>Who am I as an interdisciplinary educator? Parallels with honours education</i></p>	<p><u>Workshop:</u></p> <p>Debby Gerritsen (UvA) <i>From what if to what is</i></p>		<p>Sarah Doumen (Hasselt) <i>Designing an evidence-based interdisciplinary curriculum in science: the case of the new master in materiomics</i></p>
15:15 - 16:15	<p><u>Paper Presentations:</u></p> <p>Sarju Sing Rai, Jennie Weemhoff (UvA) & Marjolein ZweeThorst (VU) <i>Beyond Global Citizen Skills: Development of competencies through transdisciplinary research and education – A Thematic Review</i></p> <p>Vincent Tijms (UvA) & Ger Post (Melbourne) <i>The Art of Conversation: Interdisciplinary Education as a Model for Critical Citizenship</i></p>	<p><u>Workshop:</u></p> <p>Merel van Goch, Rianne van Lambalgen (UU), Katrine Lindvig (Copenhagen) & Bianca Vienni (ETH) <i>Untangling complex interdisciplinary practices in higher education</i></p>	<p><u>Solution Room:</u></p> <p>Titus Rombouts & Dylan Suijker (UvA) <i>Crossing boundaries between science, society and sustainability: Meet the Sustaina Student Lab</i></p>	<p><u>Workshop:</u></p> <p>Hanne Cuyckens (UL) <i>Global Citizenship Course: The past matters for future citizens</i></p>	<p><u>Workshop:</u></p> <p>Hero Fontein (UM) <i>Training Teachers for Global Citizenship</i></p>	

12:45-16:15

Exhibition *Common Room*

Laura Ogden (Maastricht University)

Encouraging global citizenship through blogging

This exhibition will showcase student work from a skills training on 'Writing for Online Audiences' (i.e., creating blogposts), from the interdisciplinary Bachelor of Global Studies at Maastricht University. In this module, students are encouraged to consider how writing for online audiences can be a productive arena for global citizenship by translating academic debates, knowledge and research to broader audiences and engaging in public discourse around important topics. In this module, students practice design, writing style, and argumentation skills by developing their own blogpost on a topic related to their course theme, helping them to think about their own ways of being global citizens and encouraging them to think about diverse and creative applications of their university education beyond the academy. This exhibition will showcase a selection of the most effective student blogposts and provide information on their educational context, purpose, and the delivery of the skills module.

12:45-16:15

Exhibition *Common Room*

Josien de Klerk (Leiden University)

'Engaging The Hague': Practices of Global Citizenship Education at an Interdisciplinary University College, LUC The Hague

At Leiden University College, located in The Hague, our liberal arts and sciences programme engages with the City of The Hague in a myriad of ways, fostering global citizenship skills. Our six majors, each organized around different focal areas such as international justice, development, global health, diversity, politics and sustainability engage with the City through different pedagogies. Within these interdisciplinary majors, the focal areas shape engagement narratives – be it around climate change, critically analysing the history of public spaces and art, or how to operate in the unequal field of power relations that makes up global health, development or international justice. LUC also offers a special Global Citizenship programme with courses that are open to students from all majors. Global Citizenship courses are semester-long courses that combine theory and practice and are based on several pedagogies; service-learning, place-based education, serious gaming, stakeholder analysis, and situated pedagogy. Together these courses have created a practice of Global Citizenship education at the college that is inspired by many different takes on global citizenship.

In this exhibition we present you with six end-products of our engagement-work in the city. We aim for this exhibition to start a dialogue on pedagogy, skills and forms of societal engagement and the role of interdisciplinary education herein. Each of the end-products is accompanied by a student-statement of what skills they acquired through the pedagogy. Examples of products include a game – manual, a children's novel outlining the journey of a pharmaceutical waste product from the City's landfill into the water and soil, a website listing sustainable initiatives in The Hague, and more. During the exhibition we will also show our new Engage The Hague website, a resource for international students to ground in place.

12:45-16:15

Exhibition *Common Room*

Sarah Doumen (Hasselt University)

Designing an evidence-based interdisciplinary curriculum in science: the case of the new master in materiomics

In 2022-2023, the Master of Materiomics starts at the Faculty of Sciences (Hasselt University, Belgium) aimed at students who want to develop sustainable and innovative materials at the intersection of chemistry and physics and using both theoretical/computational and experimental approaches. From the first design of the new master, it was clear that an interdisciplinary approach had to be the backbone to be able to address increasingly complex materials-related societal issues. Interdisciplinarity is the distinguishing factor and strength of the master, in which students are trained to build bridges between chemistry and physics, between experimental and theoretical/computational methods. Interdisciplinarity is hereby introduced gradually throughout the curriculum, building on the four learning mechanisms from boundary crossing theory (Kluijtmans, 2019, based on Akkerman & Bakker, 2011): identification, coordination, reflection and transformation. Students are gradually introduced to different perspectives and approaches, starting by making connections between different perspectives, then synthesizing them (e.g. through assignments, group work...), and finally applying all this to new, complex material problems (e.g. through a hands-on project, internship and the master's thesis). To maximize the implementation of the interdisciplinary learning line and the development of interdisciplinary competences in students, we work with a learning portfolio (discussed three times a year with a professor of the master). In addition, however, we want to fully commit to evidence-based support for faculty and students regarding interdisciplinarity and the associated competence development. In the development phase of the curriculum, this involved the development of a clear vision of interdisciplinarity and the description of the learning line throughout the curriculum. In addition, several professionalization sessions on interdisciplinary teaching and evaluation have already taken place for the professors involved.

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The next step, the implementation phase, includes:

- Supporting implementation through practice-based research (including a literature review) and feedback from students and teachers
- Teacher professionalization and exchange of good practices on the subject (within and outside the program)
- Facilitating interdisciplinary teacher teams, development of interdisciplinary courses and methodologies (e.g., applying design thinking (Melles, 2020) and the STEMOOV model, see <https://stemoov.weebly.com/>; workshops that support the four boundary crossing learning mechanisms; Oonk, Gulikers, den Brok, & Mulder, 2022), tools related to the evaluation of interdisciplinary competences (Gulikers & Oonk, 2019), ...

Once the new master has started, the effect of the above actions will be monitored. During the poster session an update/feedforward will be given.

12:45-13:45

Paper Presentations *Room 1.024*

Ingrid Hoofd (Utrecht University)

Developing Cosmopolitan Awareness through an Interdisciplinary 'Global Humanities' Module

This presentation will discuss several of the potentials and pitfalls around developing a truly interdisciplinary course on the 'global humanities' in order to facilitate the skills of 'cross-border and cosmopolitan thinking' for Utrecht University students hailing from various faculties. Nurturing such 'cross-border thinking' and cosmopolitan awareness is, the presentation will argue, crucial for providing future graduates with the necessary skill-set for venturing into their future careers in which they have to deal with complex problems that require multiple perspectives. It is just as much essential for helping them grow into well-rounded individuals who understand how their seemingly limited actions and thought may affect local and global society. The presentation will illustrate how, in our increasingly globalised society, universities in some sense already are the prime locations in which ideas of global citizenship are often passed on to students, yet in a merely tacit and limited fashion. The danger hence is that the privilege-enhancing and elitist aspects of cosmopolitanism, as well as the preference for a particular disciplinary perspective, will be unwittingly reproduced. The presentation will outline such dangers, and ponder by discussing the work of diverse authors such as Paulo Freire, Jacques Derrida and bell hooks, how teaching cosmopolitan awareness can be done in a more (self) reflexive, inclusive and holistic way in such a cross-faculty 'global humanities' module.

12:45-13:45

Paper Presentations *Room 1.024*

Job Heusschen & Manuela Heins (Maastricht University)

Scientific Literacy in the Liberal Arts

We would like to give a presentation on the rationale behind the recently developed core course for UCM; Science Reasoning and Human Progress. This course is built on the idea that scientific literacy is crucial for civil participation and a necessary requirement for most inter-/transdisciplinary research projects.

12:45-13:45

Workshop *Room 0.024*

Linda de Greef & Debby Gerritsen (University of Amsterdam)

Meaningful assessment in interdisciplinary education

Revitalizing the way we assess, is essential for the quality of interdisciplinary education within academia. Society today asks for a new generation of academics who can direct and reflect on their own learning process and development. This workshop gives you - a university teacher - a kick-start when you want to change your assessment practice by presenting building blocks for meaningful assessment: assessment with the right purpose in mind, powerful feedback, alignment with pedagogical beliefs, alignment with learning outcomes and authentic assessment tasks. We demonstrate inspiring assessment practices that cover some of the most important skills that foster interdisciplinary understanding such as integration, collaboration, critical thinking and reflection. In the second part of this workshop, we will do an exercise to find opportunities to assess interdisciplinarity in your own teaching practice. We will specifically focus on how to make your assessment practice more authentic, how to provide your students with powerful feedback and how to let students take the lead in their own learning process. This workshop will serve as a foothold to empower students to be independent self-assessors not just during their academic education but as long-life learners.

Set up

1. Interactive welcome: what would you like to change in your assessment practice?
2. Short presentation: what makes assessment meaningful?
3. Examples of assessment methods that foster interdisciplinary understanding

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4. Discussion (max 5 persons)

Step 1: Collect examples of assessment formats that assess interdisciplinary teamwork in your own teaching practice

Step 2: Pick one idea and elaborate on how to make this example more meaningful?

Step 3: Collect the outcomes of the discussion

Step 4: Each group will pitch their outcomes

5. Discussion and take-aways

Take aways

Participants will learn about the building blocks of meaningful assessment and discuss in groups how to apply these building blocks in their own teaching practice. We will conclude the workshop by collecting the takeaways of each group on how to make assessment of interdisciplinary skills more meaningful. In this way we can make maximum use of the experience and expertise of all participants to arrive at innovative assessment formats that are also directly applicable in a variety of interdisciplinary courses.

12:45-13:45

Workshop Room 0.028

Maria van der Harst (Utrecht University)

Teaching global, transformative citizenship skills; Best practices, challenges and solutions for teachers designing new interdisciplinary education

Today's complex global challenges demand significant transformations to promote a sustainable, peaceful, equitable future. This places a significant new demand on the scientific community and higher education: to be more immediately impactful, more effective in making a difference to real-world problems by contributing transformative solutions to a series of interconnected challenges. Preparing students to fulfil this role and to empower them to assume active roles both locally and globally, can be done in various ways. At the Utrecht University Centre for Global Challenges we focus on facilitating the development of transformative competencies through international Community Engaged Learning (CEL) initiatives.

Transformative competencies are the types of knowledge, skills, attitudes and values students need to transform society and shape the future for better lives. CEL offers important interdisciplinary education opportunities through which students can gain global citizenship skills. Especially international CEL.

Because:

Cognitive – understanding complex challenges (from different perspectives)

Socio-emotional – values, attitudes and social skills (working with societal stakeholders, pro-actively working on solutions in dynamic environment,..)

Behavioural – practical application, engagement

The question that is central in this workshop is: "How can teachers best teach global, transformative citizenship skills?" (or what teaching practices/teacher's role best empowers students to assume this active role and acquire global citizenship skills?)

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The first part of the session we will discuss this question based on insights from teachers gained in the process of designing a new interdisciplinary course around Global Health and Sustainability, and the development of a tool for teachers on transformative competencies. The course that is presented as case study will start next year and is open for students from Eindhoven University of Technology, Wageningen University, Utrecht University and University Medical Centre Utrecht. It will focus on the intersection of health care systems, health equity & justice and climate resilience. An international Community Engaged Learning (CEL) approach is used to foster students' transformative competencies. We like to share our positive experiences but also challenges with translating these competencies into educational practices.

In the second part of the workshop, we invite participants to join more in-depth discussions on this topic. What aspects helps teachers facilitate global, transformative citizenship skills, and what are the challenges and potential solutions? Each participant is given time to think of examples of success factors and challenges they are facing with teaching global/ transformative citizenship skills, and a few ideas are selected to further brainstorm in smaller groups.

12:45-13:45

Solution Room *Room 0.026*

Roosmarijn van Woerden & Rianne van Lambalgen (Utrecht University)

Creating an interdisciplinary escape room for students' understanding of interdisciplinarity

Teaching and learning about interdisciplinarity is often a challenge because the theory of interdisciplinary research and collaboration is highly abstract. For example, in our experience as educators, the integration techniques presented in Repko & Szostak (2020) are often difficult to grasp for students, and they cannot apply them easily after theoretical explanation of the techniques. Only when they start to use the techniques, they start to understand what they are and how they can be applied.

We have designed a prototype of an interdisciplinary escape room, as another way of transferring (basic) knowledge about interdisciplinarity, grounded in experiential learning and game-based learning. The idea is that this escape room can function as a first interactive introduction to interdisciplinarity in which students gain understanding of interdisciplinarity in a playful manner. In the escape room we aim to incorporate the different aspects of interdisciplinary research and collaboration such as dealing with diverging perspectives and different disciplinary cultures, the interdependency of interdisciplinary work, and possible ways and techniques to integrate different insights. The escape room is transportable and can be set up in any class room.

We ask you to help us improve our prototype interdisciplinary escape room, in which students gain knowledge and understanding of what interdisciplinarity entails based on their own experience in the game, which may prove to be more effective than theoretical knowledge transfer. In the solution room we will first ask the participants to participate in the escape room after which we will evaluate the learning potential for students together, and look for improvements that can be made.

12:45-15:00

Documentary Presentation Room 1.026

Laura Ogden (Maastricht University)

Teaching research skills through documentary filmmaking in LAS education

Audiovisual communication – including documentary filmmaking – is increasingly saturating all aspects of our lives, and images and sound now constitute a large part of the information and entertainment we seek out and consume in daily life. In academia, too, audiovisual methods are increasingly part of the research toolkit. Audiovisual media, like documentaries, can broaden the topics we research, add new dimensions to the knowledge we create, and make scientific findings accessible to diverse audiences.

This exhibition will include undergraduate films by recent students of the course 'Documentary: Doing Visual Ethnographic Research' at University College Maastricht. The course teaches students from diverse curricular and disciplinary backgrounds basic filmmaking skills and visual research methods, which they then use to design and carry out their own independent research project in groups. The result is short ethnographic films, through which students answer a research question.

The exhibition will present current practice at UCM in teaching documentary filmmaking (following the visual ethnographic tradition) as a research method in Liberal Arts and Sciences programs that helps students consolidate their curricular knowledge, reach across disciplinary boundaries (in theoretical and methodological ways), gain practical skills, and share their knowledge in accessible ways with broad audiences.

14:00-15:00

Paper Presentations *Room 1.024*

Merel van Goch (Utrecht University)

Scholarly learning of teacher-scholars in interdisciplinary education

A lot has been written about students in interdisciplinary education: their interdisciplinary education prepares them for the future and makes them attractive for employers, and they excel in knowledge, skills and attitudes such as critical thinking, metacognitive reflection, and problem-solving and analysis. But what about the people who teach them? Why and how did these academics become involved in interdisciplinary education? And what does interdisciplinary education bring them, academically and personally? This study explores what it means to teach in interdisciplinary education. It integrates the experiences of several “disciplined interdisciplinarians”, explored through interviews, and contextualized by the works of Klein (1996) and Repko & Szostak’s (2020) model on disciplinary perspectives and disciplinary self-reflection, Boyer’s (1990; 1996) model of scholarship, Neumann’s (2009) work on scholarly learning, and Lyall’s (2019) work on interdisciplinary careers. Interviewees were asked, amongst others, about the nature of their disciplinary and interdisciplinary work, and about what their experience in interdisciplinary education has taught them about their discipline, education, academia and themselves. Outcomes include the feeling that interdisciplinary work costs more time and energy than disciplinary work, while it is rewarded to a lesser extent. Other concepts that will be discussed in this paper involve scholarly identity, metacognition, designing for serendipity, and learning and unlearning.

14:00-15:00

Paper Presentations *Room 1.024*

Emanuele Fantini (Technical University Delft)

A podcast pedagogy for active listening and reflexivity in water and sanitation education

I would like to share my experience and experiments in using podcasts as education tools in two Master courses on sanitation and water governance.

Asking the students to make a podcast as assignment can be an effective instrument to teach them and have them practicing leadership, collaboration and communication skills like active listening, structuring a message, conflict management, as well as giving and receiving feedback.

I will present some elements of a podcast pedagogy to educate collaborative and reflective water and sanitation professionals, capable of listening. I will focus in particular on three practices of listening: listening to your interlocutor, or active listening; editing, or listening to yourself as host and author; sharing, or listening to your audience and their feedback.

14:00-15:00

Workshops *Room 0.024*

Inge Romgens (Maastricht University)

Writing with your RQ

In my teaching practice at UCM I notice many students are struggling with formulating and using a research question. Daunted by the difficulty and the perceived pressure of needing to come up with 'a good' question, the research question tends to be more of a hindrance than a helpful component in their research. In the research for my PhD I experienced something similar. Formulating a clear and precise (set of) question(s) from what you want to know is challenging, as is sticking to this (set of) question(s) throughout the entire project.

This is why I started to think about ways to make my research question less daunting and abstract and more of a tangible guidance throughout my research project. Inspired by creative writing practices from the theater artists I collaborate with in my PhD project, I have been developing an approach where my research question is a functional fiction, a character called RQ with an active voice, who comments and interferes with my project. This year, I have started to share this approach with students in my course Research Studio at UCM to see if and how it changes their perspective on their RQ and their research.

During this conference, I would like to share and reflect on my practice. Therefore, I propose to organize a workshop, loosely based on the class in Research Studio, where I would like to reflect with the participants on what approaching your research question as a functional fiction might do to your research. I would like to ask participants to bring a research question to the workshop and will provide some exercises aimed at getting to know their RQs better. Afterwards there will be room for reflection based on questions such as (how) does this approach help to gain a more in-depth understanding of the role of a research question? And (how) does it help to take different perspectives on the topic of research?

14:00-15:00

Workshops Room 0.028

Debby Gerritsen (University of Amsterdam)

From what if to what is

In the Honours module [‘The Next Great/Small Transformation’](#), we aim to educate change-agents who can cope with societal transition challenges - such as climate change, increasing inequality and digitalisation. Interdisciplinary student teams identify a transition challenge of choice and develop a strategy to address it. By initiating, monitoring and assessing a small intervention related to a major societal transition challenge, students will experience how a relatively small change can have an impact.

The process will be articulated in four iterative stages:

- **Imagining:** identifying a transition challenge, and a vision that could address it
- **Connecting:** developing a systemic understanding of the challenge
- **Acting:** conceiving and implementing a simple, real-life intervention towards realisation of the vision
- **Assessing:** monitoring and evaluating the impact of the intervention

In order to make a change it is important for the students to know where they stand and have awareness of their potential influence. During our session we will focus on the ‘imagine’ phase. Imagining is important in the process of dealing with complex transition issues. It will help imagining solutions and futures that we don’t know yet. In a creative exercise we make a start with ‘imagining’ by formulating a ‘what if’ question. This question will refer to a possible future participants have in mind and their position and dreams about it. Thereafter they will reflect on their experiences and future imaginations for themselves and the world. This exercise gives participants a starting point from which they can start analysing and contribute to transition(s).

14:00-15:00

Solution Room *Room 0.026*

Janneke de Ruiter, Gerard van der Ree, & Anouk Talen (Utrecht University)

Who am I as an interdisciplinary educator? Parallels with honours education

As interdisciplinary educators a core aspect of what we do is learning students to bridge disciplines. This has parallels with honours education, which can be seen as an interdisciplinary laboratory in which innovative pedagogies can be prototyped and deepened. One of the focus points of the honours community of Utrecht University is to educate global citizens that are capable to navigate the complex and interconnected world. Accordingly, our interdisciplinary focus does not only entail bridging different disciplines, but also on bridging the gap between academia and society, head and heart, and student and teacher. In honours education students are invited to shape and co-create their own education based on their interests and learning goals (ten Berge, Kool, Kragten, & Ruepert, 2018). This way the student engages in a more holistic learning process in which they have ownership over their own learning. In this learning process, the role of teachers changes. It moves from 'sage on the stage' to 'guide on the side', accompanying students in their learning journey. Many educators do not feel prepared or equipped for this role (LaFever, 2008). In this solution room session, we as educators associated with the interdisciplinary Honours College of Utrecht University, will invite you to reflect on your role as an interdisciplinary educator. Drawing from the work of Biesta (Inside Education Podcast 365, and "world centred education" (2022)) we want to use four rather existential questions as starting point of our session:

- i) who am I as an educator?
- ii) why do I teach?
- iii) towards what do I teach?

15:15-16:15

Paper Presentation Room 1.024

Marjolein Zweekhorst (Vrije University Amsterdam), **Sarju Sing Rai** & **Jennie Weemhoff** (University of Amsterdam)

Beyond Global Citizenship Skills: Development of competencies through trans-disciplinary research and education - A Thematic Review

In order to prepare students to address complex global/societal challenges of the 21st century, more and more higher education institutions are offering transdisciplinary education (TDE) that provide students the opportunity to learn from, collaborate, and co-create with both academic (diverse disciplines) and non-academic (societal/global) actors. TDE is thus an overarching pedagogy that includes both interdisciplinary collaboration (interdisciplinarity) and societal engagement, and requires crossing of boundaries between not only academic disciplines but also between academia and society. Through TDE that includes global/international collaboration, students get to understand and experiences nuances of cross-cultural collaboration and garner global citizenship skills. Further they can also develop other varied competencies that prepare them for the society and labor market of the future. Different universities across the world have amassed valuable experience in such transdisciplinary practices where stakeholders pertaining to science (academicians, students) and society (industry, community actors) collaborate for knowledge exchange and production. However, competencies garnered by students through such transdisciplinary practices in research and education, as well as insights on how such competencies are trained have not yet been well documented.

The aim of this review was to explore what competencies/skills students develop through transdisciplinary research and education at Universities and how those competencies are trained. A thematic literature review was conducted in accordance to the PRISMA guidelines and relevant articles related to competencies development through transdisciplinary research and education were selected from two databases – EBSCO and Web of Science. A total of 28 articles were selected for analysis and synthesis.

[continued]

This study identified three main categories of competencies that students develop through TDE:

- (1) changes in mindset
- (2) academic/normative skills
- (3) interpersonal competences

Furthermore, several combinations of didactic methods were found to be used in addressing TDE at universities, which were found to range on a spectrum of transdisciplinarity. However, the direct links between gained competences and the use of particular TDE method(s) was not found to be clear and conclusive. As a wide range of competences and didactic methods were identified and no definite connections could be made, it is recommended to investigate this interplay further in order to confirm such linkage. Further, this study recommends the development of a predefined framework for addressing transdisciplinarity in higher education that the universities can adopt.

15:15-16:15

Paper Presentation Room 1.024

Vincent Tijms (University of Amsterdam) & **Ger Post** (University of Melbourne)

The Art of Conversation: Interdisciplinary Education as a Model for Critical Citizenship

One of the cornerstones of interdisciplinary education is to prepare students to remain both critical and open-minded when evaluating results and insights from within and outside their own domain of expertise. In this paper we suggest that such a critical and open mindset can be trained and assessed using structured conversational reasoning, an approach that synthesizes insights from cognitive sciences, argument mapping and critical thinking education.

Education in critical thinking has traditionally attempted to improve solitary reasoning. Effective approaches have focused on creating good 'habits of thought', either by repeated practice of argumentative analysis (i.e. argument mapping) or by teaching the standards of argumentation and practicing those in debate or writing. These approaches improve academic performance and are therefore a useful component of any curriculum.

Interdisciplinary curricula, however, require not only the capacity for solitary reasoning, but also the ability to critically engage with others - even those who may have wholly different expertise. In this context, reasoning in dialogue is a key skill.

Interestingly enough, this form of reasoning might come more naturally than the solitary form. Findings from cognitive science have led to the formulation of the so-called interactionist theory of reasoning, which claims that humans have a natural disposition to give justifications and reasons to others. This framework is used to explain why the mere addition of a single dialogue partner can improve argumentative quality in reasoning tasks, or why groups tend to make better decisions or offer more accurate forecasts than individuals do, especially if the groups are given the opportunity to deliberate.

[continued]

However, much like solitary reasoners can improve through good habits of mind, we suggest that group reasoners can benefit from good habits of conversation. On the basis of classroom experience and existing standards of argumentation, we introduced a lesson plan detailing a structured conversation for interdisciplinary exchange in which dyads converse on a statement in three consecutive, clearly delineated rounds. These rounds focus on precision (What?), argumentative support and causal reasons (How?) and explicit consideration of alternatives (Really?), respectively.

This lesson plan, we argue, can train and assess the critical yet open mindset that is required by interdisciplinary education. In addition, we will argue that this key interdisciplinary skill can be generalized to professional settings and (deliberative) democratic practices, suggesting that interdisciplinary education can support democratic citizenship.

15:15-16:15

Workshop Room 0.024

Merel van Goch, Rianne van Lambalgen (Utrecht University), **Katrine Lindvig** (University of Copenhagen), & **Bianca Vienni** (ETH Zurich)
Untangling complex interdisciplinary practices in higher education

We propose a hands-on session (this could be in the shape of a workshop or a solution room) in which participants – the teachers, researchers and students of interdisciplinary education – discuss cases of complex issues in order to establish common ground and a more comprehensive understanding of said issues, and ultimately to work towards solutions or ideas for the broader field of interdisciplinary education. Examples of such cases include: how to ensure that your course is interdisciplinary and not just multidisciplinary, or how to cope with epistemological and methodological differences in setting up an interdisciplinary research master's programme. In the session, the diverse perspectives of the participants will help to detangle the concepts at stake in authentic problems, and carefully integrate different perspectives to show the complexity of everyday academic work.

We aim to highlight the complexity of interdisciplinarity education. We will work with the messiness of everyday practice, and build on it to show different means to design and implement interdisciplinary activities. We seek to provide a creative approach to relevant questions in the field, providing pathways to daily messiness and allowing for new insights to be created, and by doing this we hope to empower participants in their scholarship. Participants gain insight in multiple ways to tackle realistic challenges and will be able to reflect on which strategies may be applicable to each context.

We will use this session to test the process of and collect input for our forthcoming book on interdisciplinary practices in higher education. We have selected cases and examples of multifaceted real-world problems of interdisciplinary education that represent several European contexts (such as The Netherlands, Switzerland and Denmark). Through working with these cases we will jointly discuss pathways to multiple solutions and methods.

15:15-16:15

Workshops Room 0.028

Hanne Cuyckens (Leiden University)

Global Citizenship Course: The past matters for future

I am currently developing a global citizenship course “The past matters for future citizens”, together with one of my colleagues, Daniela Vicherat Mattar, who is a sociologist. I myself am an international law specialist, with a focus on the law of armed conflict and human rights. She will unfortunately not be able to be present at the conference, but we would like to have the opportunity to get some input on our project. The idea behind our course is to develop an interdisciplinary and learning-by-experiencing approach to the teaching of global citizenship through the concrete exploration of World Wars memorial sites in Belgium, France and the Netherlands. The interdisciplinary is contained in the very nature of global citizenship education since it takes “a multifaceted approach, employing concepts and methodologies already applied in other areas, including human rights education, peace education, education for sustainable development and education for international understanding” (UNESCO, Education Strategy 2014- 2021, 2014, 46). We furthermore believe history takes a special place in this process given that “[t]he past is the fabric that throws citizenship into relief: it is the springboard from which citizens learn to think and act” (Arthur et al, Citizenship through Secondary History. Routledge, 2001, 161). In addition the course is being designed as an experiential learning course, which is “a process through which a learner constructs knowledge, skills, and value from direct experiences” (Jacobs, Experiential education: The main dish, not just the side course, Boulder, 1999, 51). Ultimately, we would like this course to serve as a pilot for other programmes because the aim transcends any particular program or discipline.

15:15-16:15

Workshops *Room 1.026*

Herco Fonteijn (Maastricht University)

Training Teachers for Global Citizenship

Global citizenship education (GCED) can make teachers feel uncomfortable, as it may seem vague, or contested, or changing fast, or no more than a branding exercise, or a policy makers ideal. Teachers may feel their values do not match the lofty ideals of GCED, or feel challenged by its social constructivist, transformational pedagogy. This workshop will focus on how teacher training might help staff to develop capacity to infuse GCED in their courses.

15:15-16:15

Solution Room *Room 0.028*

Titus Rombouts & Dylan Suijker (University of Amsterdam)

Crossing boundaries between science, society and sustainability: Meet the Sustaina Student Lab

Sustainability is gaining attention within science and society; however, they are fueled by different motives. Whilst society depends on the whole interplay of different communities, science can remain within a certain perspective on what is important in our ongoing sustainable transition. To keep science and society connected - and therefore have the former work with relevant sustainable research questions from the latter - various initiatives have arisen. From these so-called 'loket functies' in the 80s to 'Labs' and 'Hubs' in the present time.

The Sustaina Student Lab (SSL) – part of the foundation Amsterdam Green Campus - is such a transdisciplinary Lab where science (researchers, lecturers, and students) and society (companies, and public institutions) meet and work together. Societal partners can share their societal sustainable issues which the SSL transforms to research questions for students. One such example is the need local government expresses to know the effect of nature inclusive building on the well-being of their citizens. We have transformed the need into several components which students of different disciplines and levels of education have worked on for the past 2 years. And many more such needs have been fulfilled in both the private and public sector.

In this solution room, we would like to share our challenges and lessons learned while working in the SSL. Furthermore, we would like to propose three uncertainties that we have come across and discuss innovative solutions and incentives for crossing the boundaries between science and society:

1. What didactical format is most effective for tackling sustainable societal problems? Should SSL focus on module/course level or at internship/thesis level?
2. Finally, how should we engage within the field of (non) governmental organizations in comparison to corporate partners? Should we work with a fee-based system calculating numbers of students or depending on the profit of the partner by the students end result?

[continued]

3. How do we create a viable SSL for students in the future? Should we become an institutionalized part of the University or remain an independent foundation working with memberships for the participating institutions?

General outline of the session

After an introduction, we will start discussing the three questions from the point of view of our main stakeholders mixed in three groups per question: (1) students, (2) academic staff and (3) societal partners (either (non)governmental or corporate). After rotating the three questions per mixed group, we will plenary discuss innovative solutions and incentives for the future of SSL, define more general applicable take aways and discuss how the participants of the roundtable might engage in the same direction.

Contact Us

We welcome feedback and informal expressions of interest for hosting a future conference (please contact us at onderwijslab-iis@uva.nl).

Want to stay up to date on the latest discussions regarding interdisciplinary education? Please join the LinkedIn Group [‘Interdisciplinary Education’](#).

