OGSS 2025
ico Open Graduate Spring School

17 – 21 March 2025 –
De Duinse Polders – Blankenberge, Belgium

The workshops

Table of contents

Workshops stream A.

A1 – Artificial Intelligence

This workshop is a combination of three topics, all related to the use of Artificial Intelligence within your research. Together, they provide an overview of the policies surrounding the use of AI and the possibilities for its use.

A. AI workshop on UNESCO's "Guidance for generative AI in education and research

- Pantelis Papadopoulos University of Twente (p.m.papadopoulos@utwente.nl)

The workshop will familiarize participants with the content from the UNESCO publication "Guidance for generative AI in education and research" (https://lnkd.in/d4Y8h2in). This publication was launched during Digital Learning Week in September 2023. The Guidance is designed to provide concrete recommendations on setting up regulations on generative artificial intelligence (GenAI) as well as the formation of policies and capacity development programmes to ensure that GenAI becomes a tool that genuinely benefits and empowers teachers, learners and researchers.

The workshop is tailored to PhD students interested in ethical guidelines for using GenAI in their research activities.

Required reading:
Holmes, W., & Miao, F. (2023*). Guidance for generative AI in education and research*. UNESCO Publishing. https://lnkd.in/d4Y8h2in

Optional reading:
Thierfelder, B., Papadopoulos, P. M., Weinberger, A., Demetriadis, S., & Tegos, S. (2024). Adverse effects of intelligent support of CSCL—the ethics of conversational agents. In *Ethics in Online AI-based Systems* (pp. 3-23). Academic Press. (The pre-print: https://lnkd.in/dp_mRsDA)

B. Collaborative conversational agents
- Pantelis Papadopoulos University of Twente (p.m.papadopoulos@utwente.nl)

More information will follow in due time

C. AI for Non-Techs: Practical Uses of Large Language Models your Work
- Maartje Henderikx Open University maartje.henderikx@ou.nl

This non-technical workshop will introduce you to methods for leveraging Large Language Models (LLMs) like ChatGPT. The workshop will give you insight into some of their strengths and weaknesses and practical uses. Ultimately, you'll learn how to build intelligent and supportive chatbots for various uses. The session will feature hands-on activities where you'll design a chatbot tailored to your own needs, making it relevant to your work in various fields. By the end of this workshop, you will have the tools and confidence to apply AI in creative and practical ways, without needing any prior technical background. There is no preparation necessary but don't forget to bring your laptop!

A2 – Equal opportunities in students' school careers and the research methods that can be used to achieve this

- <u>Anne van Leest</u> Utrecht University (a.m.c.vanleest@uu.nl)
- <u>Pomme van de Weerd</u> Utrecht University (p.vandeweerd@uu.nl)

Inequalities in educational opportunities have received considerable attention in recent years. Success in school should not depend on a student's background, such as their parents' income or level of education, students' talents or their family situation. However, this is often the case, and the problem of unequal educational opportunities is not diminishing. On the contrary, several studies show that inequality of opportunity in (Dutch) education is increasing.

Equal opportunities in education, i.e. education in which all pupils feel at home and can make the most of themselves, is influenced by many factors. These factors are at the level of the educational system, the school, the classroom and the individual student. Parents, peers and teachers also have an important role to play in providing equal educational opportunities, as their skills and expectations have a major influence.

Different research methods can be used to study equal educational opportunities. For example, large quantitative data sets with data from many different schools can be used, but qualitative case studies at a single school can also reveal this phenomenon very well. In this workshop we will look at what research methods from different disciplines look like and where they can complement each other.

A3 – Mixed Methods

- <u>Prof.dr. Judith Schoonenboom</u> University of Vienna (<u>judith.schoonenboom@univie.ac.at</u>)
- <u>dr. Arjen de Vetten</u> Universiteit Leiden (<u>a.j.de.vetten@iclon.leidenuniv.nl</u>)

Introduction
During the workshop Mixed methods in educational research (MMR), participants work on a mixed methods design component which may in principle be used in their own PhD research. Based on scientific mixed methods literature, they identify points in the research process of their study where mixing methods may lead to a deeper understanding than would be possible using one method alone.

Learning outcomes
After finishing the workshop, the participant:
understands
- the aim of mixed methods and multimethod research (MMR): to bring together diverse perspectives to obtain a deeper and more inclusive understanding of a phenomenon (and, in the end, to make a better informed decision) than would be possible using one method alone;
- that MMR is about integration in the sense of one research strand building on the other.
- MMR can have different purposes
- the important role of subgroup analysis in mixed methods research
- some important principles for reporting MMR
- has developed
- initial MMR questions for their own study
- a MMR design for their own study
- a mixed data analysis to an example of mixed methods research
- an idea of the relevance of subgroup analysis for their own study
- a structure for reporting MMR results in their own study

Requirements/entry level
- Upon starting the preparations for the workshop, the participant is acquainted with the following concepts and techniques, and the different roles these play in qualitative and quantitative research:
- (statistic) model[a,b];
- case study research[d];
- the difference between variance theory and process theory[c] (or a case-oriented and variable-oriented approach);
- unit of analysis[a,d];
- sampling[a,b,c,d];
- validity and common threats to validity[a,c,d];
- coding and its role in qualitative research[a,c];
- nesting, the existence of multiple levels (multi-level), and its consequences for design and analysis[b];
- regression and analysis of variance[b];
- mediation and moderation[b];

Sources:
- [a]Babbie, E. (2016). *The practice of social research* (14th ed.). Boston, MA: Cengage Learning. ISBN 9781305104945
- [b]Field, A. (2018). *Discovering statistics using IBM SPSS Statistics* (5th ed.). London, UK: Sage. ISBN 9781526419521.

- [c]Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage. ISBN 9781412981194
- [d]Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage. ISBN 978-1506336169

Workshop programme

The workshop has three parts: MMR purposes and design, MMR analysis and MMR reporting. Students will work in small groups on developing their own MMR purposes and, based on those purposes, their own MMR design (Part 1), on conducting a mixed analysis on an existing data set and exploring the relevance of subgroup analysis for their study (Part 2), and on a structure for reporting MMR results in their own study. In each part, small group work is preceded by short introductions and followed by plenary discussion.

A4 – Designing training for complex skills according to the four component instructional design model

- <u>Liesbeth Kester</u> Maastricht University (<u>Liesbeth.kester@maastrichtuniversity.nl</u>)
- <u>Jimmy Frerejean</u> Maastricht University (<u>j.frerejean@maastrichtuniversity.nl</u>)

Do you want to learn how to design a course or curriculum for a complex skill? Or do you want to know more about a competency-based or task-centered educational approach? Then this workshop teaches you how to use the Four-Component Instructional Design model (4C/ID) to design effective, efficient, and enjoyable courses and curricula!

In this two-day face-to-face workshop, 4C/ID experts will take you step-by-step through the design of the four components. You work together with fellow participants in fun and challenging exercises that help you understand the relevant considerations when designing instruction for complex learning.

Workshop objectives:
- You learn how to design the backbone of the programme: a series of learning tasks based on real-life tasks.
- You learn how to design supportive and procedural information and connect them to the backbone of learning tasks.
- You learn how to design part-task practice for repeated practice of aspects of the complex skill that must be automated.
- You learn about common pitfalls surrounding the implementation of a 4C/ID-based curriculum and potential solutions.

Requirements/entry level:
We ask you watch our <u>free video course</u> on 4C/ID before participating in this workshop.

Also, we ask you to study the following articles:
- Frerejean, J., van Merriënboer, J. J., Kirschner, P. A., Roex, A., Aertgeerts, B., & Marcellis, M. (2019). Designing instruction for complex learning: 4C/ID in higher education. *European Journal of Education, 54*(4), 513-524.

- Kester, L. & Van Merriënboer, J. J. G. (2021). Implications of the four component instructional design model for multimedia learning. In R. E. Mayer and L. Fiorella (Eds.), *Cambridge Handbook of Multimedia Learning*, 3rd edition (pp. 222-262). Cambridge: University Press.

Workshop programme
On day one, you will receive an introduction to 4C/ID. You study an example of a 4C/ID blueprint and then practice in groups with applying the design guidelines to learning tasks. You do this under guidance of the 4C/ID experts.

Day two continues with group work focusing on the design of supportive information, procedural information, and part-task practice. Again, you work on the exercises while being coached by the experts.

B1 – (curing) The Writer's Block

- <u>Tim Mainhard</u> Leiden University (m.t.mainhard@fsw.leidenuniv.nl)
- <u>Max Kusters</u> Leiden University (m.c.j.kusters@iclon.leidenuniv.nl)

Workshop description

During this block you will write on your current paper or dissertation chapter. At the start we will form groups based on your specific writing goals. We will have intensive 'On/Off' writing blocks and, if there is interest, sessions on abstract writing, introductions, method sections etc. The workshop leaders will offer guidance as we go along.

B2 – Staying on Track: Best Practices for Participant Recruitment and Data Collection–

- <u>Jonne Bloem</u> Utrecht University (<u>j.bloem@uu.nl</u>)
- <u>Christine van Nooijen</u> Erasmus University (<u>vannooijen@essb.eur.nl</u>)
- <u>Samantha Vos</u> Open University (<u>samantha.vos@ou.nl</u>)

Workshop description

It can be quite a challenge to recruit participants for a (large scale) data collection, whether it's an online survey, an in-person experiment, or policy focus groups. Recruitment is not just about effectively selling your research, but also about project and data management skills, especially when working with others. As senior PhDs, we have compiled a list of tips and tricks on efficiently and effectively managing your participants and your data.

During this workshop, we will tackle various topics related to participant recruitment and data collection, including time and document management, communication with participants, merging data over multiple waves, and participant compliance. This workshop is designed for PhDs in the beginning phases of either a small- or large-scale data collection research.

B3 – Feedback processes between PhD and supervisors – Desirée Joosten-ten Brinke

- Desirée Joosten-ten Brinke Maastricht University (desiree.joosten-tenbrinke@maastrichtuniversity.nl)

Workshop description
This workshop focuses on feedback processes, specifically addressing the feedback process between a PhD and supervisors. Giving feedback to a supervisor is called upward feedback. In this workshop, we will discuss characteristics of upward feedback and what this means for giving and receiving feedback in PhD supervision processes.

Workshop objectives
- You have broadened your perspective on what assessment and feedback can be and entail.
- You have developed the capability to ask better feedback questions and provide better feedback to your supervisor(s) that empower you during your Phd trajectory
- You can reflect on the why, what and how of assessment and feedback in various situations

Requirements/entry level:
Participants are PhD students. No entry level towards assessment or feedback is needed.

Workshop programme:
The workshop starts with an interactive lecture to get a shared understanding of the concept of upward feedback. Participants share their positive and negative experiences with feedback processes in their PhD trajectory and are invited to share their specific questions related to the topic.
After the introduction, participants will discuss in small groups (with a round robin method) what is needed to improve feedback processes. This is structured by a literature framework on upward feedback.
The small group discussions are plenary evaluated and common points are derived from the discussion.
After that, each participant writes down some ideas for their personal use and have the opportunity to discuss these with the tutor or with other PhD-students and practice on how to provide feedback.
The workshop ends with further scientific insights in feedback processes and tips for further developments.

Homework assignment:
1) Read
- Van de Walle-Van de Geijn, B. F. H., Joosten-ten Brinke, D., Klaassen, T. P. F. M., Van Tuijl, A. C., & Fluit, C. R. M. G. (2020). Upward feedback in nursing education: a matter of giving, taking and asking. Nurse education in practice, 45, 102792. https://doi.org/10.1016/j.nepr.2020.102792
- Wisener K, Hart K, Driessen E, Cuncic C, Veerapen K, Eva K. Upward Feedback: Exploring Learner Perspectives on Giving Feedback to their Teachers. Perspectives on Medical Education. 2023; 12(1): 99–108. https://doi.org/10.5334/pme.818

2) Reflect on the feedback processes in your own PhD trajectory.

Part 1	
10 minutes	Welcome/opening
30 minutes	Icebreaker: an activity to get to know each other a little bit better.
40 minutes	Interactive lecture
30 minutes	Q&A homework literature
10 minutes	Introduction Round robin
Part 2	
50 minutes	Small group discussions (round robin workshop): Round Robin: 50 min, (there are 4 tables, on every table the discussion takes place from another perspective: feedback receiver, feedback provider, relationship and context). Participants change table after 10 minutes.
40 minutes	Plenary discussion (40 minutes)
Part 3	
20 minutes	Individual task
30 minutes	Tutor feedback and peer feedback
30 minutes	Role play: how to provide feedback
20 minutes	Interactive lecture in which the practical point of this workshop are discussed in the light of scientific literature
20 minutes	Closing of the session, with take home messages of the participants (20 minutes)

B4 – Teacher professional development throughout the career; Implications for HR policies

- Melissa Tuytens, Gent University (Melissa.Tuytens@UGent.be)
- Piety Runhaar Wageningen University (piety.runhaar@wur.nl)

Workshop idea

Attracting, developing and retaining highly qualified and motivated teachers and other educational professionals has never been as challenging as nowadays. Personnel shortages – in education and other sectors - as well as the need for teachers to keep up with all social, political, and economic issues which end up in the classroom, are only a few examples which stress the need for rethinking how to staff schools. The complexity urges to (re)design HR policies and practices wherein the differential needs of the various types of educational professionals (e.g. starting- and second career teachers, teaching assistants, school leaders etc.) are addressed.

The workshop first will discuss the state-of-the art in research on how to best guide and enculturate newcomers (teachers and other educational professionals), on how to shape their ongoing professional growth and ensure their wellbeing and how these practices can be embedded in HR policies. Using an ecological systems perspective – an approach which is increasingly used to get a deeper understanding of complex ('wicked') issues - participants will be encouraged to develop ideas about how to bring their and each other's research a step further.