Abstracts to NiSE webinar on January 30 2024

Eye-Tracking in Science Education and novel ways to use it
By Axel Langner, Graduate research assistant, Institute of Chemistry, Justus-Liebig-University Giessen

Research incognitive psychology has shown that individuals' eye movements and cognition are interlinked. Therefore, in the context of education, researchers can use learners' eye movements to gain insights into learning processes. Thus, science education research has utilized eye-tracking technology to investigate aspects such as learners' use of representations or their problem-solving processes. In the webinar, we will provide an introduction to eye-tracking in science education research. We will address questions such as: How does an eye-tracker work? What are the limitations of this technology? What research has been conducted so far in science education? Afterwards, we will discuss novel ways in which eye-tracking technology could be applied in education.

Generative AI in education
By Maiken Westen Holm Svendsen, ph.d. student, Centre for Research in Science Education and Communication, FNUG, University of Southern Denmark

How should we integrate generative AI and ChatGPT into our educational frameworks? This presentation aims to demystify the underlying technology of generative AI, offering a comprehensive overview that is both accessible and informative. We will delve into the multifaceted capabilities of ChatGPT, examining its potential as a transformative tool in educational settings with a focus on the practical applications: Furthermore, the presentation will address the necessity of preparing students for a future increasingly shaped by artificial intelligence. As AI becomes more embedded in various sectors, it's crucial that our educational programs equip students with the knowledge and skills to navigate and contribute to an AI-influenced world.