

Fields of application

The OER provide impulses for discussion and reflection in STEM-related research, teaching and gender equality work. They raise awareness of the importance of gender in the STEM disciplines, convey gender knowledge into the STEM disciplines and motivate to reflect on gender issues in one's own natural or technical science discipline.

Co-operation partners

Sub-project II develops and tests its OER in co-operation with the departments of didactics for the different natural and technical sciences, gender equality work professionals and experts from STEM disciplines.

Humboldt-Universität of Berlin

- Biology Education (Prof. Dr. Annette Upmeier zu Belzen)
- Computer Science Education (Prof. Dr. Nils Pinkwart)
- Chemistry Education (Prof. Dr. Rüdiger Tiemann)
- Physics Education (Prof. Dr. Burkhard Priemer)
- Women in Natural Science Adlershof (Dr. Petra Metz)
- Programme Coordinator Gender Studies (Dr. Ilona Pache)

University of Hamburg

- Biology Education (Britta Lübke, Dörthe Ohlhoff)

Technical University Darmstadt

- Chemistry Education (Prof. Dr. Markus Precht)
- Institute for General and Vocational Pedagogy (Florian C. Klenk)

Freie Universität Berlin

- NatLab (Prof. Dr. Petra Skiebe-Corrette)
- Biology Education (Dr. Sarah Huch)
- Physics Department (Prof. Dr. Martina Erlemann)

University of Hildesheim

- Institute for Mathematics and Applied Informatics (Dr. Bernadette Spieler)

Technische Universität Braunschweig/ Ostfalia University of Applied Science/ Braunschweig University of Art

- Institute of Flight Guidance (Prof. Dr.-Ing. Corinna Bath)
- Coordination Centre of Gender und Diversity Studies (Juliette Wedl)

Johannes Kepler University Linz

- Institute of Sociology (Dr. Bianca Prietl)

Accessing the OER

The OER are available Open Access on a long-term basis: <https://www2.hu-berlin.de/genderingmintdigital/>

The Team

Göde Both

is a computer scientist and a Feminist Technology Studies researcher with a PhD in Social Science. As a member of the project, he develops and tests learning units and the use of e-tools in informatics.

Smilla Ebeling

is a biologist and a Feminist Science Studies scholar with a PhD in History of Science. As research assistant she develops and tests digital learning units for use in the life science didactics as well as in workshops for gender equality work in STEM.

Sigrid Schmitz

is a biologist with post-doctoral habilitation and a Feminist Science & Technology Studies researcher. She is head of sub-project II and develops and tests learning units for STEM disciplines.

Undergraduate assistants

Felicitas Günther, Simon Herchenbach and Anna Kraher help with the production of the tutorial videos and learning units, the embedding of e-tools and their integration into the media repository.

Contact

Center for Transdisciplinary Gender Studies

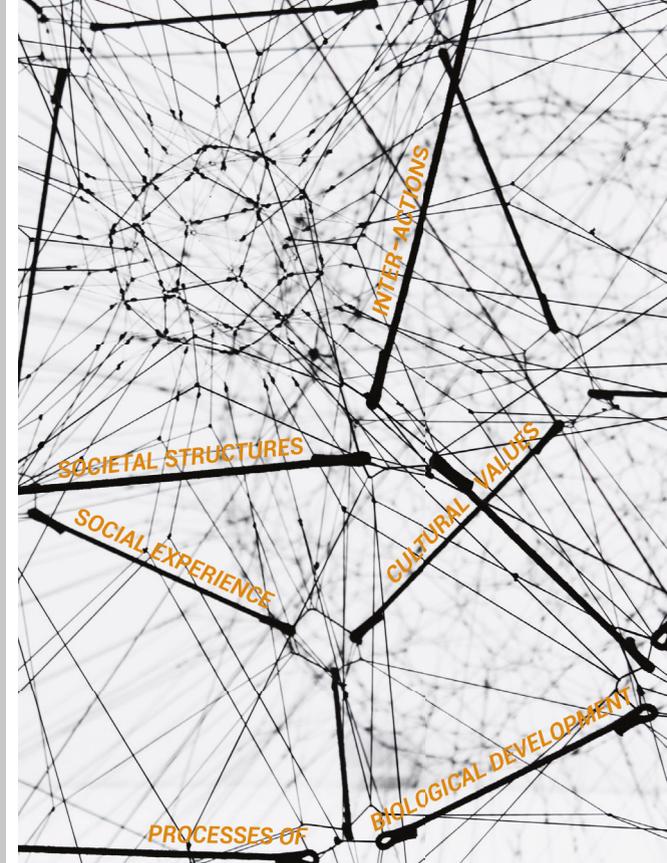
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Legal Information

Responsibility for the contents of this flyer lies with the editors: Göde Both, Smilla Ebeling, Sigrid Schmitz.

Gendering MINT digital thanks Ruth Schmitz for translating this flyer.

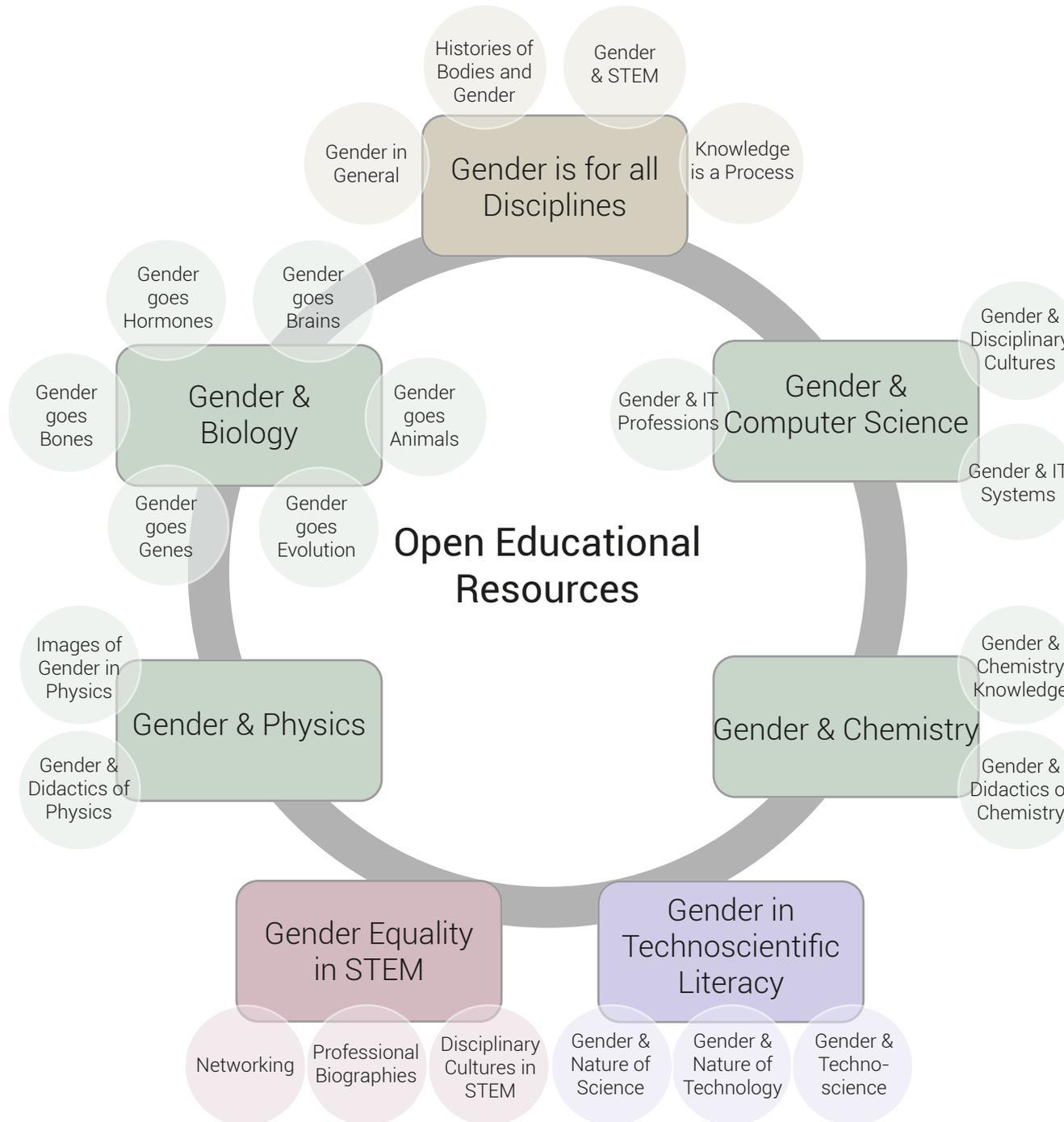


Gendering
MINT
digital

ACTIVELY DESIGNING OPEN SCIENCE

SUB-PROJECT II

RAISE AWARENESS - MOTIVATE
CONVEY KNOWLEDGE - REFLECT



Gender & STEM

Raise awareness, motivate, convey knowledge, reflect

Sub-project II develops didactical approaches and interactive digital e-tools to support the teaching of gender research focussed on the natural and technical science disciplines. These e-tools

- provide a cross-disciplinary introduction into the fundamentals of Gender & STEM and into techno-scientific literacy for science education,
- convey Gender & STEM-related knowledge into the teaching of biology, chemistry, computer science and physics,
- connect gender equality work with Gender & STEM.

Open Educational Resources

The e-tools are accessible as OER. They consist in a modular set of tutorial videos and digital learning courses. In total, there are **seven learning units**:

- The cross-disciplinary learning unit “Gender is for all disciplines” gives a presentation of the research and teaching area “Gender & STEM”, explaining its fundamentals and central concepts in four chapters.
- Four subject-related learning units further develop Gender & STEM-related knowledge for the teaching of biology, chemistry, computer science and physics, using practical examples.
- One cross-disciplinary learning unit deals with Gender & STEM for gender equality work in these disciplines.
- The cross-disciplinary learning unit “Gender in Technoscientific Literacy” deals with gender-related topics in teacher training for the natural and technical science disciplines.

The learning units can be used independently of time and place in no given order and according to individual interests or previous knowledge. Based on the principle of the “inverted classroom” they can first be tried out single-handedly in a non-judgemental environment outside the university. Validation of results is ensured through integrated quizzes and reflective tasks. The modules can then be further discussed in classroom teaching. Professionals in other disciplines with an interest in Gender & STEM may also find these OER useful.