ForBilD

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Forschungsplattform "Bildung in der digitalen Welt" Quarterly Newsletter

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Welcome to the ForBilD Newsletter!
Digitized Education in Times of Conflict
By German Neubaum

It's not debatable that education should be a key part of the human response to international crises and conflicts. Technology, as we all might have experienced, can serve as a provider of that education. Human beings can use it to access education that they are not able to get elsewhere, fulfil information needs (what has happened? what is the reason? what will happen next? how will this affect me, my family, and my environment?), and create unprecedented learning environments for collaborative education. At the same time, this very same technology can hinder education when becoming a viral mediator of misinformation, distorted narratives, and manipulated content. Large-scale crises and conflicts around the world mostly mean diverging interests among various parties which are also reflected in streams of diverging information in digital media. In times of conflict, it is pivotal not only to ensure that every human being has access to education and can continue to learn[1], but also to make sure that the information that forms the basis for education is impartial, balanced, and accurate as well as that individuals have the skills to evaluate the information properly. According to a recent representative survey in Germany, believing in conspiracy theories related to the Russian invasion on Ukraine is positively related to an increased use of social media (especially Telegram)[2]. When studying "Education in a Digital World," thus, we need to ask a) when and why do people internalize inaccurate information and b) how can we equip them with the abilities to identify as well as internally and externally counterargue partial, unbalanced, and inaccurate information. Relying on this knowledge will help to develop innovative approaches of digitized education in times of conflict and reduce the (educational) damage of further large-scale conflicts and crises in the future.

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[1] https://news.un.org/en/story/2020/09/1071952

[2] https://cemas.io/publikationen/von-der-krise-zum-krieg-verschwoerungserzaehlungen-ueber-den-angriffskrieg-gegen-die-ukraine-in-der-gesellschaft/

EVENTS

Upcoming:

- **ForBilD 1st International Symposium** on "Education in the 2020's Digital World: Reimagining and redesigning digital learning and teaching in the post-pandemic world"

When: June 13th, 2022, Full day (10:00 am – 18:00 pm)
Where: Mercator Haus (on site), Lotharstraße 57, 47057 Duisburg, Germany

Website: https://www.uni-due.de/izfb/forbild-events

The Covid 19-pandemic and related social distancing measures across the globe have not only revealed the importance of digitized education but also the often-unfulfilled demands for better education systems, well-trained educators, user-centered technologies, and highly skilled learners. Throughout the pandemic, learners and teachers had to quickly adjust to a new situation in which formal learning processes were guided through digital systems. What are our lessons learned out of this? Did Covid-19 serve as an accelerator for digital learning? Or do we need to rethink digital learning based on the experiences made in educational settings during the pandemic? This event requires registration (deadline: May, 30th 2022).

Keynote speakers:

Prof. Dr. Shirley Ho (Nanyang Technological University, Singapore): Informal Learning in a Digital World: Misinformation about Science & the Responsibilities of the Scientific Community

Dr. Ioana Jivet (Educational Technologies, Leibniz Institute for Research and Information in Education, Germany): Supporting Student Agency with Learning Analytics

Prof. Dr. Jennifer K. Olsen (University of San Diego, USA): Supporting Flexibility in Post-Pandemic Higher Education

VR for pupils?

Immersive technologies such as virtual reality (VR) are currently considered to have a great potential as educational technologies and learning media over all areas of education, although many questions regarding learning effectiveness, pedagogical and didactic design, and medical as well as ethical risks of use cannot yet be answered sufficiently. An interdisciplinary working group with Jun. Prof. *David Wiesche* and colleagues from the fields of computer science, pedagogy, didactics and medicine wants to discuss these questions and invites all interested stakeholders to participate in the discussion during a workshop in summer. The aim is to expand on the concerns, risks and recommendations for use that have been compiled. Interested parties are invited to join the mailing list "Virtual Reality for School Children" at the Deutsches Forschungs Netzwerk (DFN), which will provide information on the further process.
To join the mailing list `vrschule@listserv.dfn.de`, an e-mail with the subject "subscribe vrschule" (without inverted commas) must be sent to `sympa@listserv.dfn.de` from the e-mail address to be registered. A reply from the mail server will follow with a request to confirm the subscription. The further steps for registration are described in the reply.

[DigiReady+]: Workshops on Digital Readiness Assessment for Higher Education Institutions (HEIs)

The research group "Computational Methods in Modeling and Analysis of Learning Processes" (colaps, https://www.uni-due.de/colaps) will organize two, online workshops - on Friday May 6th and Wednesday May 25th - for stakeholders (administration, HEI government, staff, faculty, instructors, researchers) of the University of Duisburg-Essen. The goal for these workshops is to document the challenges and needs that HEIs face regarding the successful integration of digital technologies and to explore the good practices that HEIs have set in place to address these challenges.

Both workshops will be carried out online, using Zoom. If you would like to participate in these workshops, please indicate your interest using this form: https://forms.gle/YbeVYjB7VmQY4ni78

EVENTS (upcoming)

- **#meetdigilog**
  As part of the Digilog@bw research alliance, in which *Eva Gredel* is involved as an associated researcher, the wikilog@bw sub-project investigates gender justice in Wikipedia. On 19 May 2022 between 6 and 6.30 p.m., Eva Gredel will be a guest at the digital event series of the ZKM Karlsruhe with the title #meetdigilog: Via Instagram Live, she and her colleagues Prof. Dr. Angelika Storrer (University of Mannheim) and Dr. Maja Linthe (University of Mannheim) will discuss gender bias and gender gap in Wikipedia with the interested public. All dates of the Digilog@bw research alliance can be found here: https://digilog-bw.de/termine

RESEARCH

- How can technology support political participation? A recent theoretical paper by German Neubaum (ForBilD member) and Brian Weeks (University of Michigan) offers a framework on social media affordances that could be useful in the field of technology-enabled political education. Read more (https://www.tandfonline.com/doi/abs/10.1080/19331681.2022.2028694)
- Irene-Angelica Chounta and Alexander Nolte (University of Tartu) attended the ACM CHI Conference on Human Factors in Computing Systems (the premier international conference of Human-Computer Interaction, HCI) to present their full paper on Casual Affective Triggers. The idea behind this work was that if survey invitations were accompanied by an object to trigger participants' affect (in this case, with a picture of a cat), people would be more inclined to answer the survey! The authors coined the term Casual Affective Triggers (CATs - pun intended) to refer to such objects that can be included in survey participation invitations and trigger participants' affect. The results suggest that indeed, CATs can improve survey participation rates while we found no indication that people who don't like cats or would rather prefer dogs are negatively affected by the cat picture. A short video presentation can be found in the following link: https://www.youtube.com/watch?v=JSTPpP4CT4c

Publications (1/2)

- o Gredel, Eva (2022). Coronavirus „in a Nutshell": Analysis of Digital Discourse Fragments in the Context of Explanation Videos on the Covid 19 Pandemic on Youtube. Linguistica, 61(1), 23–36. https://doi.org/10.4312/linguistica.61.1.23-36

- o Gredel, Eva/ Bröcher, Leonie/ Storrer, Angelika (2022): Wikilog@bw: Linguistische Analysen zum Gender Bias in der Online-Enzyklopädie Wikipedia. In Heidrun Kämper & Albrecht Plewnia (Hrsg.): Sprache in Politik und Gesellschaft: Perspektiven und Zugänge. Jahrbuch des Leibniz-Instituts für Deutsche Sprache Mannheim 2021 (pp. 319-322). Berlin, Boston: De Gruyter. https://doi.org/10.1515/9783110774306-020

- o Zender, Raphael, Josef Buchner, Caterina Schäfer, David Wiesche, Kathrin Kelly, und Ludger Tüshaus. 2022. «Virtual Reality für Schüler:innen. Ein «Beipackzettel» für die Durchführung immersiver Lernszenarien im schulischen Kontext». MedienPädagogik 47 (AR/VR - Part 1): 26–52. https://doi.org /10.21240/mpaed/47/2022.04.02.X.

- o Chounta, I. A., & Nolte, A. (2022). The CAT Effect: Exploring the Impact of Casual Affective Triggers on Online Surveys' Response Rates. In CHI Conference on Human Factors in Computing Systems (pp. 1-13).

- o Wiesche, David et al (2022): Extended Embodied Education: Learning with VR and AR. In: Schütte, Ulrike et al. (eds.) (2022): Digitalisierungsbezogene Kompetenzen fördern:Herausforderungen, Ansätze und Entwicklungsfelderim Kontext von Schule und Hochschule. P. 199-206. (DOI:10.18842/hibsu-s-2).

Publications(2/2)

o Cargnino, M., & Neubaum, G., (2022). Is it better to strike a balance? How exposure to congruent and incongruent opinion climates on social networking sites impacts users' processing and selection of information. New Media & Society. doi:10.1177/14614448221083914

o Röchert, D., Neubaum, G., Ross, B., & Stieglitz, S. (2022). Caught in a networked collusion? Homogeneity in conspiracy-related discussion networks on YouTube. Information Systems, 102, 101866. https://doi.org/10.1016/j.is.2021.101866

PROJECTS

Research project **„VR in PE" approved**: The research project " Virtual Reality im Sportunterricht – Design Based Research unter Berücksichtigung der Basismodelltheorie zur Entwicklung von fachspezifischen und digitalisierungsbezogenen Kompetenzen developed by Jun. Prof. David Wiesche and Prof. Dr. Michael Pfitzner, has been approved and can start in August. As part of the project, a teacher will be delegated to the University of Duisburg-Essen with the aim of developing, implementing and evaluating experience-based teaching arrangements in physical education.

The Center for Advanced Internet Studies (CAIS NRW) has approved the application of Michael Beißwenger and Eva Gredel for a working group entitled "**Linguistic corpora as digital educational technologies**". In 2022 and 2023, the working group, which consists of a total of 12 international researchers, will systematise approaches for the use of corpora for data-supported language analyses in schools and universities. The working group also aims to develop didactic scenarios for language teaching that increase the data literacy of learners.

TEACHING

- **Intelligent Learning Environments (master course) [SoSe 2022]:** Computers and 'machine-intelligence' are frequently discussed as the means for addressing today's critical educational challenges: learning remotely, learning at one's own pace, learning according to one's needs and background, providing quality education to all and for all. In this course, we welcome all master-level students with technical or non-technical backgrounds. Through the semester, we will cover topics on the intersection of Artificial Intelligence in Education, Educational Technologies, and Human-Computer Interaction and we will carry out hands-on exercises to deepen our understanding of intelligent learning technologies. Instructor: Irene-Angelica Chounta

- **Praxisproject: How did participants like my hackathon? A benchmarking tool [SoSe 2022]:** The aim of this Praxisproject is to develop a web-based application for hackathon organizers to (1) run a survey for their event, (2) provide basic statistics and (3) compare their hackathon to similar events. For this, you will utilize existing survey scales and an existing database of survey responses. The application itself will be built on common survey tools such as GoogleForms, Qualtrics or Limesurvey and will be embedded into an existing website for hackathon organizers. Instructor: Irene-Angelica Chounta

- **Designing and testing virtual environments to foster self-efficacy and compare desired and achieved experiences** In Micha Gittinger's (AG Digital teaching and learning in the school context) master course "AR, VR und XR: Grundlagen und pädagogische Anwendungsmöglichkeiten" students create their own AR- and VR- setting, review the results and discuss their observations. In cooperation with the Augmented Learning-project (Mirco Zick), this course aims at providing M. Ed. students with the means to professionalize their use of digital media.

ON OTHER NEWS

Visiting Scholars: As part of the colloquium "Linguistics and Language Didactics" at the University of Duisburg-Essen, which is moderated by Eva Gredel in the summer semester, there will be two lectures on topics of digital communication. Daniel Pfurtscheller (University of Innsbruck) will give a guest lecture on the topic "Whatsapp and Twitter on TV. Cross-media citation of social media interactions in audiovisual news formats". The guest lecture will take place on 17.05.2022 from 16:15 to 17:45 via Zoom. Florence Oloff (University of Oulu/ Leibniz Institute for the German Language) will give a guest lecture on the topic of "Acquiring digital literacy in social interaction (using the example of smartphone courses for adults)". This guest lecture will take place on 21.06.2022 from 16:15 to 17:45 via Zoom. If you are interested, please contact Eva Gredel (eva.gredel@uni-due.de).