





Bundeswehr Education and Training Convention Conference and exhibition 12.-14. September 2023 Helmut-Schmidt-Universität / University of the Federal Armed Forces Hamburg

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Call for Papers

"A watershed era" - How to overcome the challenges?

"We are living through a watershed era.

And that means that the world afterwards will no longer be the same as the world before."¹

As Olaf Scholz, the Chancellor of the Federal Republic of Germany chose the terminology of "watershed era" in his policy statement on the 27th of February 2022 in response to the Russian invasion of Ukraine.² The confrontation of this urgent crisis is not only affecting politics and the economy, but also nearly all personal and public dimensions of life. Yet, this state of emergency is not an isolated case, but is similarly applicable for other current crises that are happening in parallel and challenge the people and institutions. Among them the COVID-19 pandemic, climate change, attacks on political systems and institutions, IT and supply chains as well as changes in the geopolitical landscape of security architectures and global flows of migration.

With all these examples it can be stated that "the world will no longer be the same as the world before", and that those experiences of change seem irreversible. Almost all of those changes occurred without people, systems and institutions or processes having been adequately prepared for them organizationally, technically or mentally. Furthermore, the experience of the (potential) loss or noticeable restriction of society, the economy or states and security, more so than before, is an exceptional challenge for the people and all of the previously mentioned dimensions of everyday life. Therefore, resiliency must be improved, technologically, socially and individually.

After the onset of the COVID-19 pandemic, both the EU as well as the government of the Federal Republic of Germany have quickly begun to develop solution concepts.³ Deficits and vulnerabilities in central aspects of politics, the economy and the society were identified and the goal of the developed measures was the decrease of the disruptive effects of the above-mentioned changes and to stabilize the situation, thus the term resiliency is of great importance. In this context the topic of digital education or digitalized education is of similarly high importance. As early as June 2020, the coalition committee of the Federal Government of Germany has set the goal of reaching the

¹ https://www.bundesregierung.de/breg-en/search/policy-statement-by-olaf-scholz-chancellor-of-the-federalrepublic-of-germany-and-member-of-the-german-bundestag-27-february-2022-in-berlin-2008378 – accessed on 03.03. 2023

² https://www.bundesregierung.de/breg-en/search/policy-statement-by-olaf-scholz-chancellor-of-the-federalrepublic-of-germany-and-member-of-the-german-bundestag-27-february-2022-in-berlin-2008378 - accessed on 03.03.2023

³ https://www.consilium.europa.eu/en/policies/eu-crisis-response-resilience/ - accessed on 28.02.2023

so-called digital sovereignty in cyber and information technology.⁴ Thus, the dtec.bw - Digitalization and Technology Research Center of the Bundeswehr was established in order, "to improve the national availability of digital and technological innovation for public and private areas and to enable innovative and interdisciplinary research in a safe environment".⁵⁶

The Helmut Schmidt University/University of the Federal Armed Forces Hamburg (HSU/UniBw H) focuses its dtec.bw research activities along an expanded and integrating perspective of a human security approach in contrast to state-based security approaches.⁷ This opens up perspectives ranging from health care politics as state-based provision of a safe and healthy life to education and training in a digitalized world and the development of security technology in a wide field of use. One of these projects is the research project "Competencies for the digital world of work (KoDiA) - Empowerment for digitization". The Bundeswehr Education and Training Convention is an integral part of this project.

The potential for digitalization of politics and the economy was widely recognized as of 2019, but the COVID-19 pandemic forced quick changes and the immediate adoption of tangible measures as early as 2020.⁸ Thus, the digital "watershed era" can be categorized disruptive. Many aspects of individual, social, professional and educational processes, including military training, have been forced to immediately transfer into virtual worlds during the times of lockdown. Not just in the year of 2023, can we recognize and inspect tangible differences of the "world afterwards".

The task now is to identify and discuss resilience in context of current experiences, consequences and options of digitization, particularly in the field of education, in order to develop and/or strengthen resilience and forge ways for a stable future, including improved competencies of individuals to cope with the transformations of digitalization and remain an active part of the civil and liberal democratic discourse. Thus, Bundeswehr Education and Training Convention 2023, which will be held as a hybrid event again in 2023, has chosen the previously mentioned necessity for change and the "watershed era" as the framework for the conference. You are invited to analyze the current multifaceted crises on a theoretical or praxeological level and highlight strategies and measures of education and training for dealing with these crises for the subsequent rounds of discussion. Current risks of AI and cyber technology development up to threats of "postmodern" digital conflicts reflect the broad spectrum of topics for this year's conference. For the training of military and other

⁴ Andrea Neusius/Manuel Schulz: Kompetenzen für die digitale Arbeitswelt – Ertüchtigung zur Digitalisierung: Kontextualisierte Forschung als Öffentliche Wissenschaft, in: Andrea Neusius (Hrsg.): (Aus)Bildungskongress der Bundeswehr 2022 – Kongresskatalog. Bonn 2022, S. 17-26, hier: S. 17 – only available in German

⁵ For instance, the report of the German Institute for Economic Research (DIW) of the German Recovery and Resilience Plan (DARP) under 3.1., which is about digitalization and education, is put high value on, alongside mid and long-term consequences on the economy and potential for job growth and real GDP growth – https://diw-econ.de/publikationen/quantitative-und-qualitative-wirkungsanalyse-der-massnahmen-des-deutschen-aufbau-und-resilienzplans-darp/ - accessed on 28.02.2023, partly available in English:

https://www.bundesfinanzministerium.de/Content/EN/Pressemitteilungen/2021/2021-04-27-german-recovery-and-resilience-plan-adopted.html - press release, accessed on 03.03.2023

⁶ Corona-Folgen bekämpfen, Wohlstand sichern, Zukunftsfähigkeit stärken. Ergebnis Koalitionsausschuss 3. Juni 2020, S. 12, lfd. Nr. 49 – only available in German

⁷ See Human Development Report des United Nations Development Programme, (UNDP) 1994; (mentioning the seven dimensions of human security, economic, nutritional, political etc.) Human security is a multi-sectoral approach to security that gives primacy to people and includes topics like combatting trafficking in human beings; protection of children in armed conflict; preventing and responding to conflict-related sexual violence; protection of civilians; and cultural property protection" (Abstract), Looking at: www.nato.int/cps/en/natohq/topics_181779.htm; and https://www.un.org/humansecurity/what-is-human-security/) as well as, therefore, human security includes perspectives on climate security, poverty and infrastructure protection, Sudha Menon: Human security: Concept and practice (PDF, researchgate.net – accessed on 03.03.2023

⁸ Vgl. Helmrich, R.; Tiemann, M.: Auf dem Weg zu einer KI-Welt von morgen. Soziale, ökonomische und technologische Entwicklungen. In: BWP 48 (2019) 3, S. 19-22. URL: <u>https://www.bwp-zeitschrift.de/dienst/publikationen/de/10029</u> – only available in German

action and emergency forces the mantra of "train as you operate" is seemingly shifting towards "train while you operate".

For this occasion, we are inviting experts from the education, training and vocational training sector, other respective fields of research, educational politics, industry and business as well as military and civil action and emergency organizations to hand in their contributions for discussion. Additionally, an exhibition will support with showcases of projects, products and latest technology.

The guiding questions to structure our program are:

"Resiliency now!" – What is the contribution of education for a digitalized private and professional life?

The pressure to digitalize all aspects of the private and public dimensions of everyday life is increasing constantly. Exterior influences and crises prevent, that individuals have the opportunity to steadily get accustomed to the transformative of digital and virtual technology and processes. The pace of transformative changes of our world and technological advancements requires assistance for citizens in order to handle these changes. Further, to be able to handle coming shifts and changes, that impact so many different aspects of everyday life, it is required to decrease the fear and threat that is coming along with so many changes. Resistances and potential uncooperative behavior towards changes needs to be overcome. Additionally, digital processes have the tendency to make decisions more abstract, opague and less tangible. Having this in mind, education and training are essential tools for assisting in creating more tangible digital changes and build resiliency against the aforementioned resistances and potentials for uncooperative behavior or mental overload. Only the one, who has digital and IT competencies, understands what a "chatbot" does or is generally open towards change, is able to build resiliency towards these transformative processes. However, when and how are adolescent, but also working adults, are the target of which educational processes to build competencies and resiliency? What are the dimensions of policies and educational tools? Are conceptual overhauls of our understanding of competencies or other definitions necessary? Which technological, organizational and human "stress factors" are influencing teaching and learning behaviour? What aspects of resiliency are relevant for the digitalized world of today and tomorrow? What is the contribution of education and training towards a resilient workforce, able to cope with shifts of digitalization? How can we identify goals in digital teaching and learning environments and to improve integration and the ability of participation, impacts social discrimination or threats of manipulation? How can accessibility be simplified and improved for digital and virtual educational opportunities? What are potential platforms, points of access and procedures and for which target groups? How are they recommended or nor recommendable? What experiences are available regarding efficiency and effectiveness of digital and virtual educational teaching and learning environments? Are new approaches necessary or do didactic and methodological existina ones require reconceptualization, especially regarding recent findings of digital and virtual impact in the field of educational science? How many digital transformations are "digital natives" able to handle regarding digital educational opportunities and transfer of knowledge competencies? What is the impact of family and other social environments on the acceptance of digital change and virtual spaces? What is the role of digitalized educational software and virtual spaces for the training of educational professionals, such as teaching personnel, tutors and vocational trainers? What insights and findings exist for the ability to participate and actively shape individual opinions and decisions or processes to assist these abilities? What resistances are observable and how can these be decreased or overcome?

"What are we able to take-away?" - Implications for the future of education and training

The potential for change and the need for change of the digitalization and transformation is supposed to be explained and discussed for the field of education and training in light of short-. mid- and long-term perspectives. Contributions of this section are describing requirements and processes, reflecting and deriving consequences for the design for future policy and education. What is the importance of the consequences for teaching and learning in formal educational institutions and beyond? What demands can we derive for the requirement of lifelong learning processes? What educational policies and tangible set-up is required in light of recent events of digitalization are to be recommended? Are current educational institutions, certificates and degrees adapted to the current and future changes of the professional world of work for 2035 or 2045? What are denotes the willingness and ability for education of "digital natives"? What are the consequences of this factor for education, training and recruitment of professionals? Which educational programs, which current occupations are "future proof" regarding the framework of future digitalization, which are not and what are possible new fields of work or demands for professionals? How can educational and training facilities adapt? What are the consequences for infrastructure changes and what are the demands for future IT infrastructure, regarding capacities and development? Are we prepared for unforeseen changes? Unforeseen changes require flexibility and agility. How are we able to draw in more people, utilizing digital educational practices, for the field of STEM, without which we cannot reach goals of digital sovereignty? What is the role of educational processes regarding social resilience - are there visible differences between traditional and virtual teaching and learning? What are the interdependencies between key factors of education, participation and security? Which new target groups are obtainable, including for academic research and teaching? What are the possibilities and boundaries that we are can conclude from these findings for education? Last but not least, the potential question of and how is it possible to increase the return of investment (ROI) for digital transformations, especially for publicly funded education?

The principle of "train as you operate" seems to be shifting towards "train while you operate" due to the processes of digitalization or the training of military and other action and emergency forces. In this case, the discussion of potential future influences on planning, development and execution of education and training for soldiers and other action and emergency forces is to be emphasized.

"Is it (still) possible?" - Transformations of institutions of education and training

The digitization of the world of work and professions and the resulting demands on education, training and continuing education also open up urgent requirements for the relevant educational institutions and organizations. The experiences of the past three years have painfully shown that educational institutions and organizations have defined the digital transformation as a goal, but did not actively shape these processes, especially inside the respective institution. For instance, this is highlighted by the lack of preparation for mobile teaching and learning during the COVID-19 pandemic. The teaching personnel, their tools and didactive methods were either ill-prepared or did not receive appropriate technological instruction to properly take part in the digital transformation. After the tangible urgency of COVID-19 measures were taken, looms the threat of the digital transformation falling behind other current day-to-day activities in all spheres of public and business administration. But educational institutions and organizations must ask and systematically enable processes for digital transformation by putting it front and center for teaching and learning. How can we shape this transformation? How can we better prepare staff for the challenges ahead? What technological tools are appropriate? How do didactive and other tools

need to b developed? A thorough analysis of all participating pieces is necessary, since digital change is omnipresent in all spheres of education.

Best Practice: Examples from everyday life of educational praxis for overcoming or coping with the changes of digitalization

Are you already working successfully with technology-supported applications as part of projects or practical education and training, or have you developed didactic concepts and models of how digital learning processes can be designed and already tested them? Do you have specific ideas for presenting your concepts and models and want to share them? Do you have experience with tasks and questions of education and training and the role of people in the processes of digitalization or how it changes? You can report on the opportunities and limitations of digitization from your personal experience in everyday professional life and would like to work with others on new approaches to solutions? You provide infrastructures and services (data centers, competence centers) and would like to network further in this area? Then you are invited to present your experiences and best practice examples in the form of a paper.

Since 2004 the Bundeswehr Education and Training Convention is dealing with current forms and ways of education and training and is equally taking in perspectives of the scientific community and working professionals of the field. In order to stimulate a discursive and interdisciplinary exchange, we invite contributions for the panels SCIENCE and PRACTICE. After the convention we are also planning to publish a book of conference proceedings.⁹ Therefore, we are looking forward to contributions especially from fields of education and social sciences, humanities, engineering and technical sciences as well as economics.

Welcome are theoretical and practical contributions, that reflect one or more of the abovementioned guiding questions and fields, reflectively, retrospectively and prospectively for a critical discussion. In addition, contributions from practical educational work that deal with the topic of digital education, training, and continuing education (including the German armed forces) are also attractive. This also includes contributions from institutions participating in the specialist exhibition. Please observe the formal submission criteria and use the template provided on the <u>website</u> for your submission. If you have any questions, please do not hesitate to contact us using the contact details provided.

Please observe the formal submission criteria and use the template provided on the website (www.ausbildungskongress.org) for your submission. If you have any questions, please do not hesitate to contact us using the contact details provided.

⁹ Schulz, M., Griebenow, B., Neusius, A., Vogeler, C. & Papenberg, K.: Fernausbildung schärft Perspektiven...: Technologiegestützte Bildung als Motor für Innovationsprozesse. Augsburg 2016 – only available in German

Deadline Deadline for handing in your contribution 03rd of April 2023 via E-Mail to: ausbildungkongress@hsu-hh.de Bundeswehr Education and Training Convention Conference and exhibition September, 12 th - 14 th 2023	Contact Prof. Dr. Manuel Schulz Head of The Center for Technology Based Education and Training (ZtB) Helmut Schmidt University/University of the Federal Armed Forces Hamburg Holstenhofweg 85 22043 Hamburg Tel.: +49 40 6541 3000 E-Mail: ausbildungskongress@hsu-hh.de
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