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CLOUD HED

Continuity and accessibility in HE amid political instability and armed conflict: Institutional strategies and cloud-based innovations

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Verena Régent & Egor Burda

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HEIs in armed conflict (1)

- Growing geopolitical instability and increase in natural disasters underscores urgent **need for HEIs to build resilience**
- 2020-2021, HEIs experienced armed violence in **28 conflict-affected countries**, with Ukraine the sole European case (Russian aggression since 2014) (GCPEA, 2022)
- War and armed conflicts pose **challenges to the entire HE sector**:
  - Collateral damage
  - Targeted attacks (e.g. “scholasticide” in conflict zones in Syria or Gaza)
  - Ideological threats
- Multifaceted role of HEIs in conflict, peacebuilding and resistance was shifted into focus by Millican (2018*)

* Millican, J. (Ed., 2018), *Universities and conflict: The role of higher education in peacebuilding and resistance*. Routledge.

HEIs in armed conflict (2)

- **4 central challenges** for higher education in conflict-affected contexts (Milton & Barakat, 2016):
  - Destruction of infrastructure
  - Mass displacement of students and staff
  - Deteriorating educational conditions due to ongoing violence
  - Constrained institutional resilience
- Significant **underfunding of HE sectors in wartime** (Protsyk, 2025; Doronina et al., 2025)
  - E.g. Ukraine: formulaic funding cancelled, loss of tuition fees, increasing adaptation costs
  - Reduction of staff, increased work intensity next to social risks (mental health problems, reduced motivation, dissatisfaction, conflicts in the team, etc.)

HEIs in armed conflict (3)

- **Resilient (higher) education systems** “ensure safe, equitable access and preserves learning outcomes during crises” (Ritesh, 2019)

- Next to international cooperation and the protection of the well-being of staff and students (Protsyk, 2025), **remote learning and personalised study arrangements** are considered crucial for a holistic risk management (Kuzheliev et al., 2023).

CLOUD HED in brief

- Short for: “Disaster resilience in HE systems via a cloud university model”
- **An evidence-based, whole-university approach to the Cloud University Model as disaster-related response**
- „Cloud University“ = temporary shift of HEIs‘ operations to the cloud to maintain accessibility and continuity.
- Particular focus on teaching: It requires flexible learning pathways, modular course designs, certification through micro-credentials and appropriate forms of (online) assessment
- Individuals involved face physical threats, mental stress, have to flee or defend their region/country

Cloud University Model

A technology-driven paradigm shift in HE

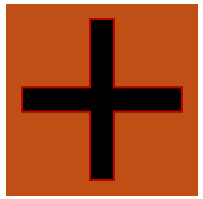
(1) Utilizes **cloud-based technologies** to create accessible, flexible, scalable, and cost-effective academic environments.

(2) Breaks down traditional geographical and infrastructural barriers.

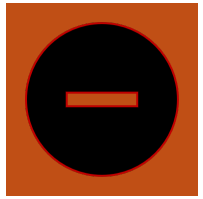
(3) Supports **various HEI services/missions:** Teaching, learning, research, and administration.

(4) Comprises **various functions:** Content Delivery, Learning Management, Resource Provision, Data Management, Collaborative Platforms, and Personalized Learning.

Advantages and disadvantages



- Courses and resources can be accessed from any location with internet connectivity
- Education accessible more flexibly and globally
- HEIs can scale their resources according to demand without major infrastructure investments ➔ reduced costs
- Seamless communication and collaboration between students, teachers and staff



- Digital divide and internet access – barrier for students in rural or low-income areas, or in case of black outs
- Data Privacy and security concerns (e.g. vulnerability to cyber-attacks)
- Loss of Campus experience and potential for lower engagement
- Dependence of Third-Party Providers
- Hidden Costs (data storage, scaling-up services, integration of different platforms)
- Standardisation challenges (how to meet the specific needs of every course or subject)

Progress and activities (10/24 – 06/25) (1)

WP2: Case study and needs analysis handbook of HE-sectors pre-, during and post-crisis

- Post WWII Polish and Austrian HE-system
  - 8 interviews
- Ex-Yugoslavian HE-system
  - 14 interviews
- Ukrainian and Israeli HE-systems during ongoing war/armed conflicts
  - 23 + 20 interviews
- Current Polish and Latvian HE-system at risk of crisis
  - 33 interviews

Progress and activities (10/24 – 06/25) (2)

WP2: Initial results (extract)

- Vast differences in historical context, geopolitical landscape, and available technology
- Development of crisis-driven governance models
  - Emergency task forces, decentralised authority, agility
- Rapid shift to remote teaching
  - Current conflicts: full digital transition, emphasised real-time adaptation over passive reaction
  - Former Yugoslavia: improvised, low-teach learning networks
- Mobilisation of informal/underground networks
  - (Semi-)clandestine material distribution (former Yugoslavia, WWII-Poland)
  - External support was vital
- Crisis as catalyst for transformation
  - Strengthened community engagement, informal practices integrated post-crisis, etc.

Progress and activities (10/24 – 06/25) (3)

- WP3: Conceptualisation of the shift to the cloud
  - Desk research of “good practices”: **other cloud universities** worldwide
  - Fine-tuning the definition of cloud universities
  - Field study of **SSU, BGU, Tel-Hai, RTA and UKSW** to analyse:
    - Management structures and their needs for transition to the cloud
    - Teaching conditions and practices, curricula & their readiness for the cloud
    - Technical and IT-conditions
  - **Pilot curricula adaptation to the cloud at SSU, BGU, Tel-Hai, RTA and UKSW** with a view to structure of modules, use of micro-credentials and appropriate forms of (online) assessment
  - Development of **guidelines** for SSU, BGU, RTA, Tel-Hai and UKSW and, more generally, for further interested HEIs

WP3 Examples institutions facilitating a cloud university model (selection)

- **University of Tokyo –** has developed its **own platform** (UTokyo Azure), offers highly **personalized and interactive models** with individual feedback, gamification, and case-based approaches, and is one of the universities with well-developed scholarship programs.
- **Arizona State University –** Integrates **mass content with personalized recommendations** and access to mentors, provides an extensive program portfolio, and offers online counseling, forums, and digital mentorship using diversified cloud platforms.
- **Kiron Open Higher Education** – An initiative focusing on online learning for refugees and migrants; provides specialized education tracks with a **focus on digital skills**, integrates mass content through AWS; offers free education related to IT; and delivers education through **partnerships with recognized universities**.
- **The Open University (UK) –** Provides an extensive program portfolio ranging from undergraduate degrees to microcredentials across all disciplines through Microsoft 365, offers flexible payment systems, and has the most **structured student support systems**.

Some question marks …

- **Positionality in the handbook** – we aim for neutrality regarding conflicts, but how can/should we uphold it in practice?
- **Good practices** – most cloud-based technologies originate from the US; how do we address this dependency?
- **AI as a cross-cutting theme in teaching & learning** – reinforces the broader question of how to approach AI in student assessment.

Thank you for your attention!!

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Verena.regent@wpz-research.com

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