
Appendix A. Survey Questionnaire*Block 1. Socio-demographic data*

Indicate your age

Indicate your gender

Region in which your HEI is located:

Your specialty/field of study (briefly):

Your role in the HEI:

-Student

-Teacher

-Administration/IT representative

Block 2. Level of awareness of innovative technologies

Please rate your level of awareness of each technology (1 = not at all aware, 5 = very well aware).

Technology

Edge/Fog computing

Augmented reality (AR)

Low-resource AI (light AI tutors)

Mobile offline platforms

Blockchain registries

Block 3. Experience of use

1. Have you used these technologies in learning or teaching before?

2. Rate how convenient it is to use these technologies (1 = not at all convenient, 5 = very convenient).

Technology

Edge/Fog computing

Augmented reality (AR)

Low-resource AI (light AI tutors)

Mobile offline platforms

Blockchain registries

Block 4. Attitude and readiness to implement

Please rate your level of readiness to implement these technologies in your own educational/professional environment (1 = not at all ready, 5 = completely ready).

Technology

Edge/Fog computing

Augmented reality (AR)

Low-resource AI (light AI tutors)

Mobile offline platforms

Blockchain registries

Block 5. Open questions

1. What are the advantages of innovative technologies in education during wartime?

2. What are the main barriers you see in their implementation

3. Which of the listed technologies do you consider the most promising for your higher education institution?

Appendix B. Sample interview

Key blocks:

Experience of using innovative technologies during wartime.

1. Main barriers to implementation:

- technical (lack of equipment, weak internet),
- organizational (lack of support from the administration),
- psychological (resistance to new things, distrust of AI).

2. Advantages and disadvantages of little-studied technologies (edge/fog, AI, blockchain).

3. Expectations from further development of technologies.

4. Recommendations for universities and the state on supporting innovations.

Appendix C. Frequency analysis of assessments of the prospects of technologies

Technology	1 (n, %)	2 (n, %)	3 (n, %)	4 (n, %)	5 (n, %)
Energy-efficient mobile platforms	4 (2%)	8 (4%)	22 (12%)	85 (45%)	70 (37%)
Low-resource AI tutors	6 (3%)	12 (6%)	27 (14%)	78 (41%)	66 (35%)
Edge/Fog computing	8 (4%)	18 (9%)	29 (15%)	82 (43%)	52 (28%)
AR (asynchronous learning)	12 (6%)	22 (12%)	45 (24%)	70 (37%)	40 (21%)
Blockchain ledgers	20 (11%)	36 (19%)	54 (29%)	52 (28%)	27 (14%)

Appendix D. Factor analysis (PCA, Varimax, n=189)

Technology	Factor 1 (practicality)	Factor 2 (innovation)
Energy-efficient platforms	0.78	0.22
Low- AI	0.74	0.25
Edge/Fog computing	0.66	0.31
AR	0.28	0.71
Blockchain ledgers	0.22	0.68

Eigenvalue: • Factor 1 = 2.64 • Factor 2 = 1.45

Total explained variance = 62.3%