Understanding and improving the development of digital citizenship as a multifaceted human capacity from childhood to early adulthood

Qn 1: What is the normative developmental trajectory for digital citizenship?

Qn 2: Developing a game pedagogical theory for digital citizenship

Qn 3: How do personal, family and school factors contribute to the development of digital citizenship?

Using technology to study digital learning lives in addition to background surveys to students, teachers and principals...

• Affective/emotional state during different activities
• Social interactions—proximity, location & types of activity (inferred)

Assessments
- Formal Assessment:
  - Individual
  - Group
  - Serious Games

Digital Citizenship Capacities
- Core Capacities: Computer & information literacy, cyberwiseness, avoid internet addiction
- Computer-mediated Complex Performance in cyberspace
  - Critical thinking, communication, collaboration, creativity

Assessing DL and CPS Across Cohorts and Over Time

18 competences for DL assessment (based on DigComp 2.1)

Competition area 1: Information and data literacy
- 1.1.1. Browsing, searching, filtering data, information...
- 1.2.1. Evaluating data, information and digital content
- 1.3.1. Managing data, information and digital content

Competition area 2: Communication and collaboration
- 2.1.1. Sharing through digital technologies
- 2.3.1. Engaging in citizenship through digital technologies
- 2.4.1. Collaborating through digital technologies

Competition area 3: Problem solving
- 3.1.1. Solving technical problems
- 3.2.1. Identifying needs and technological responses
- 3.3.1. Creatively using digital technologies
- 3.4.1. Identifying digital competence gaps

Impact of technological advancement
- Communities, Networked Society, and Digital Literacy

Assessment framework for Collaborative Problem Solving

Social Skills
- Participation
- Perspective taking
- Social regulation
- Task regulation

Knowledge building
- Collaborative Problem Solving
- Cognitive Skills

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