What is digital competence (DC)?

Digital Competence is the individual’s ability to use ICTs, and ICT-enabled devices and media, to pursue personal and professional goals, in contexts where ICTs are used, to contribute to social and economic development and to participate in society.

The study objectives, method, and participants

Objectives
- To assess students’ perceived levels of digital competence.
- To investigate the relationship between digital competence and student achievement.
- To examine the impact of digital competence on student satisfaction with the learning environment.

Method
- Questionnaire survey was conducted among students in the target schools.
- Participants were selected using a random sampling method.

Participants
- All junior high school students from the target schools.
- Sample size: 100 students.

Questionnaire before tasks

1. Information
   - Task 1: Search the internet for information on the topic.
   - Task 2: Read an article on the topic.

2. Communication
   - Task 1: Discuss the topic with classmates.
   - Task 2: Prepare a presentation on the topic.

3. Content creation
   - Task 1: Create a video on the topic.
   - Task 2: Write an essay on the topic.

4. Security
   - Task 1: Identify potential security risks.
   - Task 2: Implement security measures.

Questionnaire after tasks

1. Information
   - Task 1: Search the internet for information on the topic.
   - Task 2: Read an article on the topic.

2. Communication
   - Task 1: Discuss the topic with classmates.
   - Task 2: Prepare a presentation on the topic.

3. Content creation
   - Task 1: Create a video on the topic.
   - Task 2: Write an essay on the topic.

4. Security
   - Task 1: Identify potential security risks.
   - Task 2: Implement security measures.

Conclusions and discussion

Students consider themselves competent regarding their DC in tasks related to information, communication, and problem-solving.

They also believe that a significant improvement in the use of tasks facilitates the use of ICTs, which highlights the importance of training on the use of ICTs and digital competence and the need to enhance ICT use in the classroom environment.

For this specific experience, it was perceived as having positive DC improvement.