

Acceptability of technology involving artificial intelligence among future teachers

Salomé Cojean, Nicolas Martin

▶ To cite this version:

Salomé Cojean, Nicolas Martin. Acceptability of technology involving artificial intelligence among future teachers. Cogsci 2022 - Cognitive Science Society, Jul 2022, Toronto, Canada. 44, 2022, Proceedings of the Annual Meeting of the Cognitive Science Society. hal-03712893v1

HAL Id: hal-03712893 https://hal.science/hal-03712893v1

Submitted on 4 Jul 2022 (v1), last revised 18 Aug 2022 (v2)

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Acceptability of technology involving artificial intelligence among future teachers

Salomé Cojean (LaRAC (EA602), Univ. Grenoble Alpes, France) - Nicolas Martin (LIG, CNRS, Grenoble INP, Univ. Grenoble Alpes, France)

Use of digital technologies by French teachers (PROFETIC, 2018, 2019)

> 90% Solve Solve

To create content In class Use involving manipulation from learners

Study

UTAUT questionnaire

Al-technology use in education

• From 0 to 10

- Social influence (SI)
- Performance expectancy (PE) Facilitating conditions (FC)
- Effort expectancy (EE)
- Intention to use (IU)

List of pedagogical tasks

Participants had to indicate how much they think AI could be useful in these cases (from 0 to 10).

Participants

406 French future teachers (master degree)

- 282 women, 122 men, 2 responded « other »
- Mean age = 25.63, SD = 6.91
- 213 in elementary school formation
- 193 in middle-school formation
- Control variable: prior experience with new technology

Results and Discussion

Elementary school teachers:

Performance expectancy
Generating course content
Help in assisting students
Help for detecting learning
difficulties

- Elementary school teachers seem more willing to accept the help from AI for tasks implying no interaction with students.
- Maybe elementary school teachers consider their job as more focused on teacher-students interaction (guidance and support) than middle-school teachers (cf. Midgley et al., 1995).
- Al may represent a bigger threat (job disappearance in favor of Al) for elementary school teachers (cf. Mirbabaie et al., 2021).





