## Appendix

**Table 1**Studies Included in the Research

Author & year	Aims	Participants	Sample	Instruments	DD&R Indicators
Abraham & Chengalur-Smith (2019)	To examine the effects of student control on effectiveness of information security training (ISec).	University students	<i>n</i> =206; GE:115; GC:91	Questionnaire	Right to digital education
Amo Filvâ et al. (2020)	To explore the importance of personal data protection and security in education through the emerging promises of stakeholders interested in using Blockchain technology.	Theoretical	-	-	Digital security or cybersecurity and other rights
Ashman et al. (2014)	To expose the ethical and social implications of personalising elearning.	Theoretical	-	-	Protection of privacy rights in online environments
Bongiovanni (2019)	To examine articles on security breaches experienced by higher education institution in recent years.	Theoretical	-	-	Right to digital security or cybersecurity; Protection of privacy rights in online environments
Braunack-Mayer et al. (2020)	To identify articles that describe the views and perspectives of staff and students in the university sector on use of student-generated data through data analytics, including LA.	Theoretical	-	-	Protection of privacy rights in online environments and others.
Brinkman (2013)	To focus specifically on plagiarism detection services that make permanent archives of student work, and security and digital rights issues related to use of these tools.	Theoretical	-	-	Authorship rights; Protection of privacy rights in online environments; Responsibility
Brown & Klein (2020)	To understand how data privacy policies conceptualise and represent data, privacy, student agency and institutional power	Theoretical	151	-	Protection of privacy rights in online environments; Responsibility
Chen & Wen (2019)	1) To understand college students' reasons for smartphone use; 2) To delineate their habitual smartphone use and reaction to social media's targeted advertising; 3) To analyse their privacy management in response to privacy concern over targeting advertising; 4) To identify suitable pedagogies to improve their privacy awareness and management.	University students	810	Questionnaire	Right to digital education

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Daskal (2018)	To determine the strategies that organisations advocating for digital rights employ to involve the public in their cause.	Theoretical	-	-	Right to digital education
Deane et al. (2015)	To address development of an e- supervision application to overcome these limitations and to examine issues inherent in such development.	Theoretical	-	-	Right to digital security or cybersecurity
Dennen & Burner Quemador (2017)	To examine university students' attitudes toward Facebook use, focusing specifically on how they feel about using a social network that encourages performance of personal and social identity to support learning and interaction among classmates and instructors.	University students	406	Questionnaires	Digital identity rights; Right to digital security or cybersecurity
Farahmand et al. (2013)	To examine how educators perceive risks and uncertainties in virtual worlds; to investigate how educators' level of use of virtual worlds influences their risk perception level.	Educators	77	Questionnaire	Protection of privacy rights in online environments
Gallego-Arrufat et al. (2019)	1) To identify preservice teachers' level of digital competence in safety; 2) To describe the competence profile of preservice teachers in different areas of safety (interaction through technologies, sharing of digital information and contents, protection of personal data, protection of health, netiquette, digital identity and cyberbullying on social networks and Internet); 3) To explore differences by sex, gender and age at which one begins using social networks in each of the different areas in order to determine training needs to improve preservice teachers' digital competence in safety; 4) To provide pedagogical activities in safety appropriate to preservice teachers' strengths and weaknesses.	Pre-service teachers	317	Questionnaire	Right to digital security or cybersecurity; Right to digital education
Gudiño Paredes et al. (2021)	To understand the extent to which remote proctored exams impacted online graduate students' learning process and academic integrity (ethics), as well as the technological factor involved.	University students	106	Questionnaire; interviews	Right to digital security or cybersecurity; Responsibility

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Author & year	Aims	Participants	Sample	Instruments	DD&R Indicators
Gudmundsdottir et al. (2020)	To explore how learners' perceptions of trust influence their perceptions of a virtual human's persona and their learning outcomes across three different voice conditions.	Pre-service teachers	1244	Questionnaire	Right to digital education; Responsibility
Gursoy et al. (2016)	To employ and evaluate methods on learning analytics by approaching the problem from two perspectives: (1) data are anonymised and then shared with a learning analytics expert, and (2) the learning analytics expert is given a privacy-preserving interface that governs her access to the data.	Theoretical	-	-	Right to digital security or cybersecurity; Protection of privacy rights in online environments
Hakimi et al. (2021)	Identify and analyse all relevant conceptual and empirical work in the field, with a view to identifying the key ethical issues and their social implications, any responses to such ethical issues (including guidance and frameworks), and areas for further research and policy development.	Theoretical	-	-	Responsibility
Hayes et al. (2021)	To explore parents', teachers' and children's perceptions of the risks and benefits of SNS use and how adults mediate this use.	Parents, teachers and students	parents, 14 teachers and 15 students	Interviews	Right to digital education
Hope (2015)	To explore how e-safety policy documents serve to constrain the conceptual environment by seeking to determine and limit individuals' thoughts on this matter.	Theoretical	-	-	Right to digital security or cybersecurity
Ifenthaler & Schumacher (2016)	To examine student perceptions of privacy principles related to learning analytics.	University students	330	Questionnaires	Protection of privacy rights in online environments
Jones (2019a)	To provide a conceptual model that demonstrates how learning analytics highlights existing privacy issues and presents new ones related to students' inability to control how institutions use data and information about them.	Theoretical	-	-	Protection of privacy rights in online environments
Jones (2019b) 2020	To provide a platform for advisors to speak about their experiences and concerns related to eAdvising tools	Professional student advisors	14	Interviews	Right to digital security or cybersecurity

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Author & year	Aims	Participants	Sample	Instruments	DD&R Indicators
	with informational and analytic affordances				
Jones, Asher et al. (2020)	To explore student perceptions of the capture and use of demographic data, physical and online behavior trails, and other non-academic data.	University students	120	Interviews	Protection of privacy rights in online environments
Jones & Regner (2016)	To describe and analyse the MOOC phenomenon and the privacy laws and policies that guide and regulate current educational institutions.	Theoretical	-	-	Protection of privacy rights in online environments and others
Jones, Rubel et al. (2020)	To understand when it is justifiable to collect, analyse, and use student data in the context of higher education.	Theoretical	-	-	Protection of privacy rights in online environments
Jones & VansCoy (2019)	To disclose how instructors discuss student data and information privacy in their curricula.	Theoretical	-	-	Protection of privacy rights in online environments
Kim (2021)	To determine whether the security and privacy concerns are the main issues restricting student participation.	University students	296	Questionnaire	Protection of privacy rights in online environments
Kitto & Knight (2019)	To draw attention to some assumptions that underlie previous work in ethics for LA, framed as three tensions.	Theoretical	-	-	Protection of privacy rights in online environments; Responsibility
Kumar et al. (2020)	To analyse children's perspectives on password management in three contexts: family, friendship and education; and to develop a new approach to privacy education based on Nissenbaum's contextual integrity framework.	Families	70	Interviews	Right to digital education; Protection of privacy rights in online environments
Lauricella et al. (2020)	To document how teaching of digital citizenship skills in primary school varies according to factors such as student demographics and amount of educator experience.	Pre-school and primary school teachers	1208	Questionnaire	Right to digital education
Lawson et al. (2016)	To expose the ethical dilemmas of using a participation system at CQUniversity (Australia) called Early Alert Student Indicators (EASI) that calculates students' estimated success.		More than 30,000	-	Protection of privacy rights in online environments

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Author & year	Aims	Participants	Sample	Instruments	DD&R Indicators
Livingstone & Third (2017)	To learn about digital rights and behaviours of children and young people in virtual environments from a theoretical perspective.	Theoretical	-	-	Right to universal access; Right to digital education
Lupton (2021)	To understand ways in which digital technologies are used for pedagogical purposes.	Teachers	5	Interviews	Responsibility
Lupton & Williamson (2017)	To provide an overview of the different forms of datafication and dataveillance of children in the countries of the Global North by presenting theoretical perspectives on the broader implications.	Theoretical	-	-	Right to digital security or cybersecurity; Responsibility
Maineri et al. (2021)	To investigate whether and why education affects e-privacy management, and whether education gaps vary according to a country's degree of digitisation.	Internet	21,177	Questionnaire	Right to digital education
Marachi & Quill (2020)	To analyse development of Canvas LMS, according to 1) "frictionless" data transitions that bridge K12, higher education and workforce data, 2) integration of third-party applications and interoperability or data-sharing across platforms, 3) privacy and security vulnerabilities and 4) predictive analytics and dataveillance.	Theoretical	-	-	Protection of privacy rights in online environments; Right to digital security or cybersecurity
Marín et al. (2020)	To address a gap in the literature on preservice teachers' perceptions and beliefs about data privacy regulations and policies when considering use of social media for educational purposes.		148	Mixed instruments	Right to digital education; GDPR right.
Marshall (2014)	To explore the ethical issues around use of MOOCs in education.	Theoretical	-	-	Protection of privacy rights in online environments; Responsibility
Okada, Noguera et al. (2019)	To understand teachers' views on use of e-authentication tools and how they impact confidence in e-assessment.	Teachers	108	Questionnaire pre-post; focus group	Digital identity rights; Protection of privacy rights in online environments
Okada, Whitelock et al. (2019) 2018	To shed light on this area by examining the attitudes and experiences of 328 students who	University students	328	Questionnaire (pre-post)	Digital identity rights; Responsibility

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Author & year	Aims	Participants	Sample	Instruments	DD&R Indicators
	used an authentication system known as adaptive trust-based e-assessment system for learning (TeSLA). Evidence from mixed-method analysis suggests broadly positive acceptance of these e-authentication technologies by distance education students.				
Pangrazio & Selwyn (2019)	To outline a range of salient sociotechnical understandings of personal data generation and processing.	Theoretical	-	-	Right to digital security or cybersecurity
Park (2013)	To examine the impact of three dimensions of digital literacy on privacy-related online behaviours: (a) familiarity with technical aspects of the Internet, (b) knowledge of common institutional practices and (c) understanding of current privacy policy.	Adult Internet users	419	Questionnaire	Protection of privacy rights in online environments
Rajab & Eydgahi (2019)	To assess the explanatory power of theoretical frameworks on higher education employees' intention to comply with information security policies in higher education.	University staff	206	Questionnaire	Right to digital security or cybersecurity
Regan & Jesse (2019)	To examine the effects of Big Data in K12 education, considering the vulnerability of student privacy.	Theoretical	-	-	Protection of privacy rights in online environments
Rennie et al. (2019)	To identify the most frequently used applications in 148 Australian primary schools and classify them by their stated treatment of identifiable information.	Theoretical	37	Search processes; Interviews	Right to digital education; Responsibility
Selwin (2015)	To examine the importance that digital data are acquiring in education, considering the risks that purist implementation may have on learning, inequalities in access, privacy, data surveillance, etc.	Theoretical	-	-	Right to universal access; Protection of privacy rights in online environments
Slade et al. (2013)	To provide a socio-critical perspective on LA use, considering ethical issues that should be included to preserve students' safety.	Theoretical	-	-	Protection of privacy rights in online environments
Tamjidyamcholo et al. (2014)	To deepen understanding of how to influence an individual's tendency to engage in knowledge sharing behaviour in virtual information security communities and to identify	LinkedIn groups	142	Questionnaire (pre-post)	Right to digital security or cybersecurity; Protection of privacy rights in

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Author & year	Aims	Participants	Sample	Instruments	DD&R Indicators
	the quantitative relationship between knowledge sharing and the expectation of security risk reduction.				online environments
Vanacker (2011)	To identify ethical issues associated with university instructors' use of plagiarism detection software (PDS), specifically the Turnitin programme.	Theoretical	-	-	Digital identity rights; Copyright; Responsibility
Walton et al. (2015)	To examine the online presence of a Canadian medical school graduating class by scanning students' public profiles on the social networking site Facebook, incorporate this information into an educational activity that addresses professionalism and social networking, and assess the impact of this activity on student behaviour.	University students	121	Content analysis in Facebook	Digital identity rights; Right to digital security or cybersecurity
West et al. (2020)	To explore the LA literature to determine how student perspectives are positioned as dashboards and visualisations are developed.	Theoretical	-	-	Protection of privacy rights in online environments
Whitelock- Wainwright et al. (2019)	To develop and validate a descriptive questionnaire that offers a robust, methodologically sound solution to measuring student expectations of LA services.	Students	210	Questionnaire	Protection of privacy rights in online environments
Williams et al. (2019)	To develop the first privacy game for (Android) Wear OS watches to encourage changes in privacy behaviour.	Students	10	Questionnaire; Interviews	Protection of privacy rights in online environments; Responsibility
Zaman (2020)	To discuss how youth-centred design efforts risk falling into three traps of privacy by design, related to: 1) the different degrees of decision power within and between child-centred design guidelines and participatory design with young people; 2) the involvement of young people in design as citizens versus consumers; and 3) the conditions under which their participation in design is empowerment rather than mere decoration.	Theoretical	-	-	Right to participate; Responsibility