

Review of: "Digital Literacy Skills of Teachers: A Study on ICT Use and Purposes"

Fernando Bolaños¹

1 Universidad de Chile

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Dear authors,

First and foremost, I want to thank you for the opportunity to review this manuscript. I found it to be very interesting and well written. There are two observations I would like to make. I will offer literature suggestions for my comments. Before proceeding, I have to say that in this feedback I will use the term "digital abilities" to refer to those abilities that are argued to be needed when interacting with and through digital technologies. I understand that digital abilities are not the same as ICT competencies, digital competencies, digital literacy, and so on; and I use it here only as a placeholder term.

Observation 1

I would urge you to engaged with debates surrounding the fact that discourses surrounding digital information technology integration and digital ability development can be oversimplified. For example, within the discursive web that is concomitant to digital information technology integration and digital ability development, both of these (i.e., digital technologies and digital abilities) have been presented as a fix for multifaceted social problems that far surpass the scope of what they can feasibly address (cf., Bolaños & Pilerot, 2021, 2023; Cuban, 2001; Elstad, 2016; Selwyn et al., 2001). Additionally, there is often an economic reduction of what information society, and the role of digital technologies and digital ability, could signify (cf., Carlsson, 2022; Nivala, 2009). Accordingly, many argue that discourses surrounding the push for digital ability development and digital information technology inclusion have been backed by corporations who seek to create and participate in a multibillion-dollar market (cf., Hanell, 2018; Lindh & Nolin, 2016; Pilerot & Lindberg, 2011; Player-Koro et al., 2018, 2022; Williamson et al., 2019). In addition, digital information technology inclusion and digital ability development are often presented in a linear and deterministic manner, one underpinned by marketisation logics (cf., Avis, 2018; Bolaños & Pilerot, 2023). This has made some question if digital ability and digital information technology policies intend to solve economic, labor or educational problems (e.g. Hanell 2018). Discourses pervading digital abilities, therefore, can be instrumental (cf., Bolaños & Pilerot, 2021, 2023; Roberts-Mahoney et al., 2016). Accordingly, digital ability development and digital information technology inclusion are understood as instruments that can, irrespectively of empirical data that might suggest the opposite, by themselves lead to better educational attainment, economic development and an overall improvement within society (Cuban 2001; Hanell 2018; Nivala 2009). Finally, there



are also important consequences of taking digital information technology and digital ability development polices at face value. For example, the paradox of responsibility: succinctly, while it is important to develop practices to interact with information to address personal (but context-dependent) needs, it is also important to remember that responsibility for the quality of information is also a responsibility of those that develop algorithms and platforms (cf., Haider & Sundin, 2022).

Observation 2

I find your methodology wanting. First, you use self-reported instruments without addressing some key issues behind the use of such instruments. One can argue that the use of self-reports for evaluating competencies is questionable. For example, van Laar et al, (2017, p. 584) argues that "such indirect measures have been recognized as challenging as they only provide rough proxies for actual competences". Additionally, you state that you will explore experiences, but I perceive that you have under explored such a complex construct. One can explore experiences form a variety of viewpoints, including phenomenology (e.g., Husserl, 1962; Merleau-Ponty, 2002, 2004), phenomenography (e.g., Bowden & Green, 2005; Marton & Pong, 2005) or Foucault (e.g., Foucault, 2003, 2008, 2015). All of the provided examples are vastly different, but much richer (to my taste) than what you have provided. Again, you lean against self-reported instruments which are limited. Finally, your results are descriptive statistics; while they might be of interest to your community (or any community), they do not lend themselves for a wider and deeper discussion within the overarching field of study.

References:

Avis, J. (2018). Socio-technical imaginary of the fourth industrial revolution and its implications for vocational education and training: a literature review. *Journal of Vocational Education & Training*, 1–27. https://doi.org/10.1080/13636820.2018.1498907

Bolaños, F., & Pilerot, O. (2021). Digital abilities, between instrumentalization and empowerment: a discourse analysis of Chilean Secondary Technical and Vocational public policy documents. *Journal of Vocational Education & Training*, 1–20. https://doi.org/10.1080/13636820.2021.1973542

Bolaños, F., & Pilerot, O. (2023). Where are digital abilities within Chile's State technical formation centres? A discourse analysis of public policy. *Journal of Vocational Education & Training*, 1–21.

https://doi.org/10.1080/13636820.2022.2161407

Bowden, J., & Green, P. (2005). Doing Developmental Phenomenography. RMIT University Press Melbourne.

Carlsson, H. (2022). Bridging the gap between policy and practice: Unpacking the commercial rhetoric of *Google for Education*. European Educational Research Journal, 21(4), 680–701. https://doi.org/10.1177/1474904121997213

Cuban, L. (2001). Oversold and underused: Computers in the classroom Harvard University Press.



Elstad, E. (2016). Educational technology; expectations and experiences: An introductory overview. In E. Elstad (Ed.), *Digital expectations and experiences in education*(pp. 3–28). Sense Publishers.

Foucault, M. (2003). Historia de la Sexualidad Volumen 2, El Uso de los Placeres Siglo XII Editores Argentina, S.A.

Foucault, M. (2008). Tecnologías del yo y otros textos afines. Ediciones Paidós Ibérica, S.A.

Foucault, M. (2015). Vigilar y Castigar: El Nacimiento de la Prisión Grupo Editorial Siglo Veintiuno .

Haider, J., & Sundin, O. (2022). Paradoxes of Media and Information Literacy. The Crisis of Information.. Routledge.

Hanell, F. (2018). What is the 'problem' that digital competencein Swedish teacher education is meant to solve? *Nordic Journal of Digital Literacy*, *13*(3), 137–151. https://doi.org/10.18261/issn.1891-943x-2018-03-02

Husserl, E. (1962). Ideas: General Introduction to Pure Phenomenology. Collier Books.

Lindh, M., & Nolin, J. (2016). Information We Collect: Surveillance and Privacy in the Implementation of Google Apps for Education. *European Educational Research Journal*, *15*(6), 644–663. https://doi.org/10.1177/1474904116654917

Marton, F., & Pong, W. Y. (2005). On the unit of description in phenomenography. *Higher Education Research & Development*, 24(4), 335–348. https://doi.org/10.1080/07294360500284706

Merleau-Ponty, M. (2002). Phenomenology of Perception (2nd ed.). Routledge Classics.

Merleau-Ponty, M. (2004). The World of Perception. Routledge Taylor & Francis.

Nivala, M. (2009). Simple answers for complex problems: education and ICT in Finnish information society strategies. *Media, Culture & Society, 31*(3), 433–448. https://doi.org/10.1177/0163443709102715

Pilerot, O., & Lindberg, J. (2011). The Concept of Information Literacy in Policy-Making Texts: An Imperialistic Project? Library Trends, 60(2), 338–360. https://doi.org/10.1353/lib.2011.0040

Player-Koro, C., Bergviken Rensfeldt, A., & Selwyn, N. (2018). Selling tech to teachers: education trade shows as policy events. *Journal of Education Policy*, *33*(5), 682–703. https://doi.org/10.1080/02680939.2017.1380232

Player-Koro, C., Jobér, A., & Bergviken Rensfeldt, A. (2022). De-politicised effects with networked governance? An event ethnography study on education trade fairs. *Ethnography and Education*, *17*(1), 1–16. https://doi.org/10.1080/17457823.2021.1976661

Roberts-Mahoney, H., Means, A. J., & Garrison, M. J. (2016). Netflixing human capital development: personalized learning technology and the corporatization of K-12 education. *Journal of Education Policy*, *31*(4), 405–420. https://doi.org/10.1080/02680939.2015.1132774

Selwyn, N., Gorard, S., & Williams, S. (2001). The role of the 'technical fix' in UK lifelong education policy *International Journal of Lifelong Education*, *20*(4), 255–271. https://doi.org/10.1080/02601370117679



van Laar, E., van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior*, *72*, 577–588. https://doi.org/10.1016/j.chb.2017.03.010

Williamson, B., Bergviken Rensfeldt, A., Player-Koro, C., & Selwyn, N. (2019). Education recoded: policy mobilities in the international 'learning to code' agenda. *Journal of Education Policy*, *34*(5), 705–725. https://doi.org/10.1080/02680939.2018.1476735