

#### From acceptability of digital change to appropriation of technology: The 4A Model

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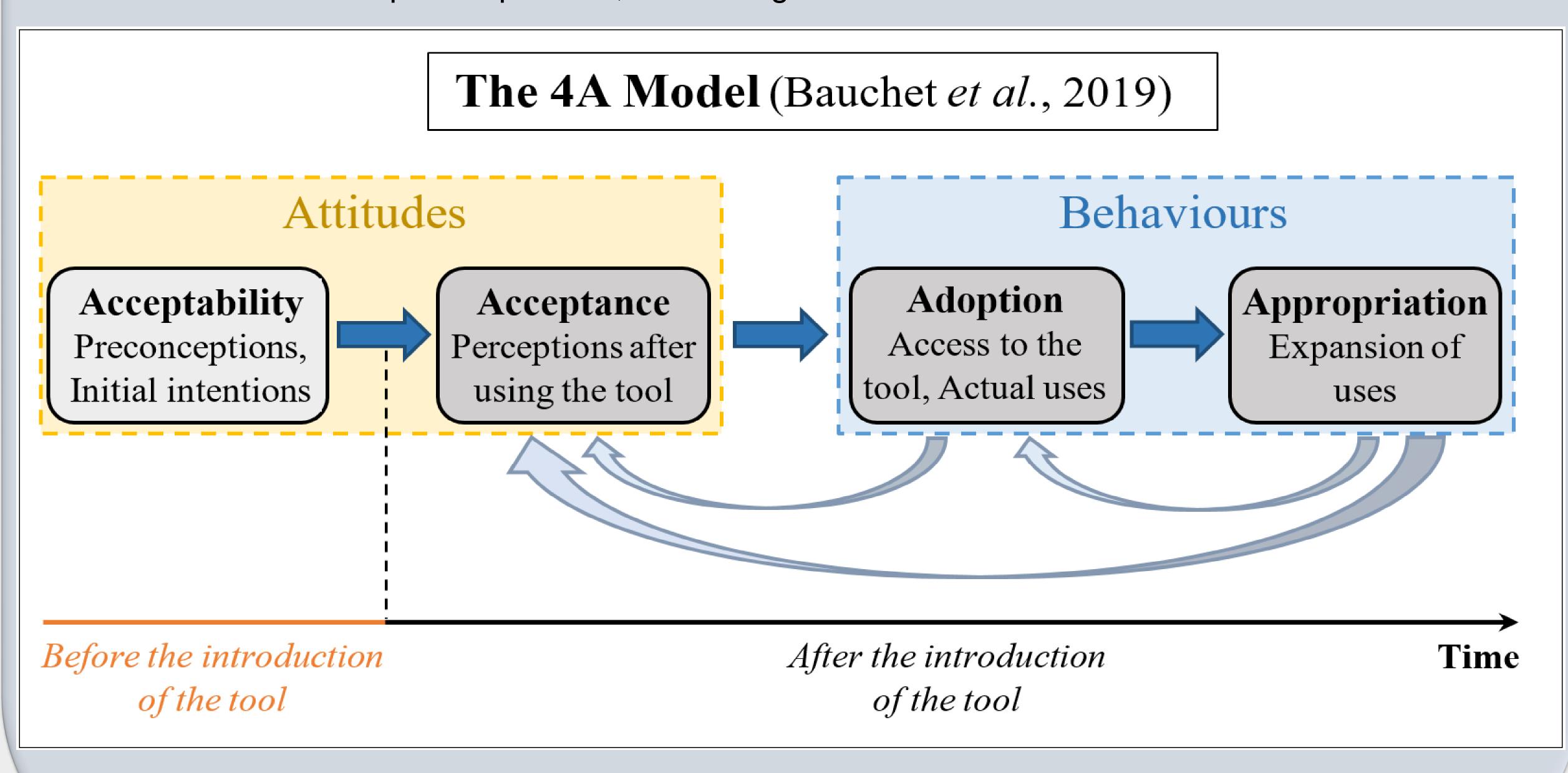
### INTRODUCTION

- □ Digital transformation is a real challenge of the 21st century. Sometimes referred to as a "revolution" (Serres, 2012, p. 35), it represents a powerful technological change in the lives of individuals, and particularly for adolescents. Indeed, for several years now, various policies for integrating digital tools into school systems have emerged in different parts of the world, for example, in Belgium (Courtois et al., 2014), in the United States (McNaughton et al., 2018), or in Turkey (Dündar & Akçayir, 2014).
- ☐ In France, the Grand-Est region has implemented a digital plan since 2017: the "Lycée 4.0". This project allows high school students to benefit from a set of digital tools that can be used both at school and at home, strengthening the place of the school system and the family as two micro-systems (Bronfenbrenner, 1994) fully involved in educational, social and developmental transformation.
- □ Evaluating the implications for adolescents of these digital devices is essential in order to understand changes in practices and representations.

# "Lycée 4.0", what is it? It's a project which consists of replacing school books with digital books. Oh, I see! Each high school student is then equipped with a computer and has access to digital resources. That's it. At the start of the 2019 school year, "Lycée 4.0" concerns 289 schools (out of 353) across the academic region, including 125 (out of 136) for the Nancy-Metz Academy.

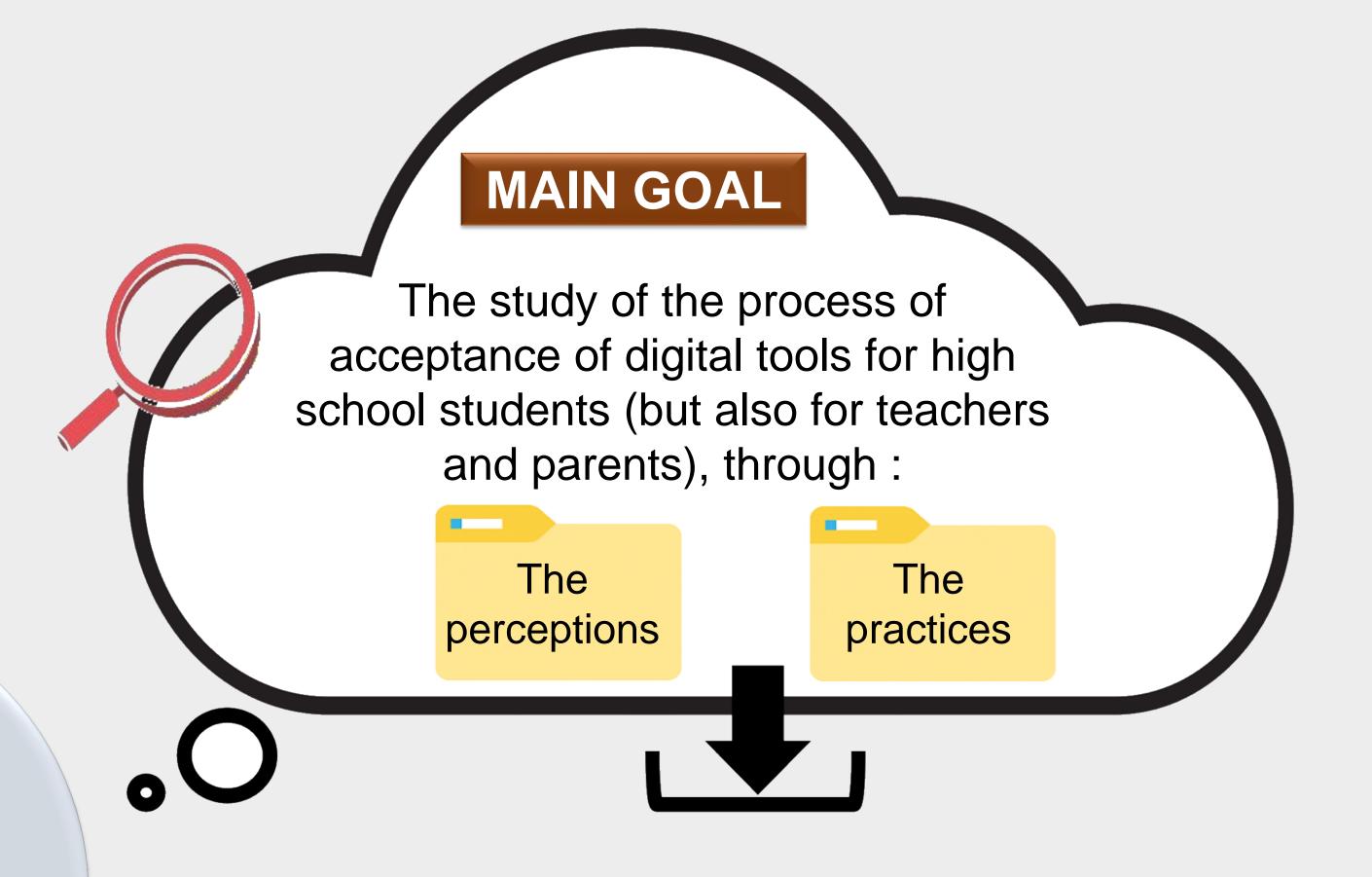
### TOWARD A THEORICAL PROPOSITION

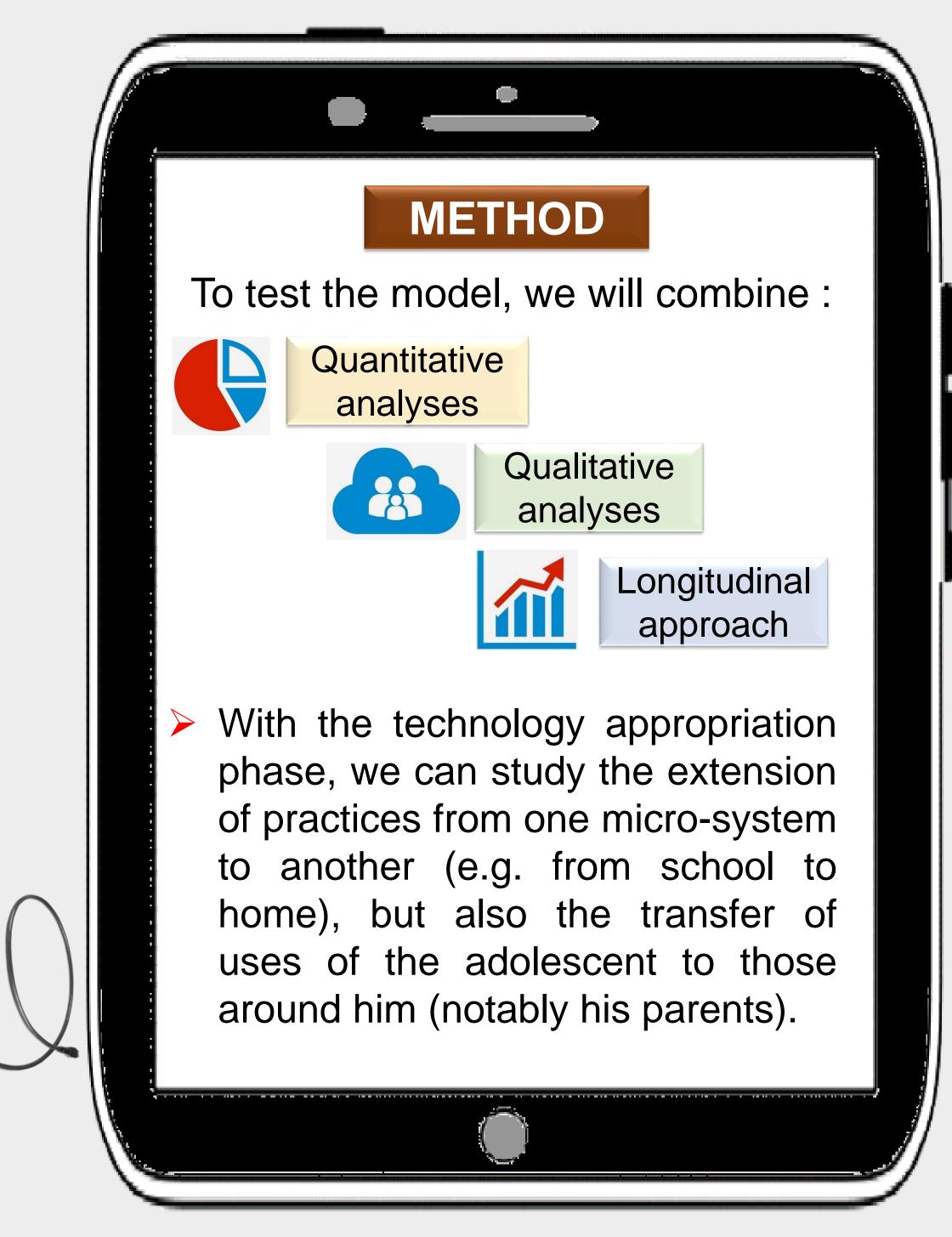
To assess this digital change and the integration of the "Lycée 4.0" plan, we created the "4A Model" (Bauchet, Hubert, & Dinet, 2019). It proposes a four-step comprehensive acceptance process, measuring both attitudes and behaviours.



The 4A Model is based on a dynamic approach, as shown by the feedback loops that may exist between the different phases of the process.

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### CONCLUSION

This kind of research involves both scientific and societal issues. They highlight the need to consider all of the interconnected systems in which adolescent development takes place (school, family, peers, etc.).

To go further, in the school context, the evaluation of the acceptance of a technological tool can even help us to study the implications for these micro-systems, such as, for example, to understand the place of digital for school-family links.



### BIBLIOGRAPHY

- Bauchet, C., Hubert, B., & Dinet, J. (2019, décembre). Le numérique chez les lycéens: entre acceptation, usages et implications. Communication presented during the « Rencontres de la recherche en psychologie », Nancy, France.
- Bronfenbrenner, U. (1994). Ecological models of human development. In M. Gauvain & M. Cole (eds.), Readings on the development of children, 2nd ed. (pp. 37-43). New York: Freeman.
- Courtois, C., Montrieux, H., De Grove, F., Raes, A., De Marez, L., & Schellens, T. (2014). Student acceptance of tablet devices in secondary education: A three-wave longitudinal cross-lagged case study. Computers in Human Behavior, 35, 278-286. Doi: 10.1016/j.chb.2014.03.017
- Dündar, H., & Akçayir, M. (2014). Implementing tablet PCs in schools: Students' attitudes and opinions. Computers in Human Behavior, 32, 40-46. Doi: 10.1016/j.chb.2013.11.020
- McNaughton, S., Rosedale, N., Jesson, R.N., Hoda, R., & Teng L.S. (2018). How digital environments in schools might be used to boost social skills: Developing a conditional augmentation hypothesis. Computers & Education, 126, 311-323. Doi: 10.1016/j.compedu.2018.07.018
- Serres, M. (2012). Petite Poucette. Paris: Le Pommier.