

Chapter 3

Educational Practices Resulting From Digital Intelligence

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ABSTRACT

This chapter highlights the place that digital intelligence is gaining in all sectors of our society, especially in education. Digital intelligence influences individual and collective life and it is necessary to develop critical thinking about its use. Training learners and teachers in digital intelligence also means, in a way, working to prevent potential abuses that could occur in the near future. For digital intelligence to contribute to the academic success of all learners, the role of teachers has never been more important. This chapter analyzes the emerging practices resulting from pedagogical innovation, with digital intelligence in platforms Moodle, Duolingo, and Classcraft.

INTRODUCTION

Humanity, according to Aristotle (1993), is naturally able to live in society. It is difficult to imagine the human being who lives totally isolated from his equal. Therefore, at least one concept here seems relevant to us: collectivity. It seems to be paramount in human survival. In this collectivity, the need for the other is evident. It seems unlikely that a human being can live exclusively alone; dependence on the other tends to be a characteristic of all human societies.

Hobbes (1979), on the other hand, does not deny collectivity or social life, but tends to believe that the other is a storm for us. According to this author, the presence of another human causes us fear, because our relations tend to violence and the extermination of both, and in that sense only a legitimate political power could save us. One thing that calls our attention to authors so distinct and separated by centuries of difference is not necessarily divergence, but a point that in terms of interpretation brings them together: the human being is bound to the presence of the other.

If this is true, we wonder if a human could be able to live in the world totally isolated from a human group? How would he guarantee his survival? Our goal, however, is not to understand how the human

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being survived or determined itself collectively. Living with the other in recent years seems to have expanded the possibilities--could the other be a machine? Could a machine be understood as an agent of interlocution? Could an intelligent machine educate a human? If not educating, could it provide data to expand educational possibilities? Where would the teacher's role be in this situation? Do hierarchies change? Reconfigure? Do they obliterate?

Relevant issues, but our focus in this chapter is to reflect on the following question: in the contemporary world of Education, wherein Digital Intelligence (DI) seems to gain several dimensions of performance, is it possible to think about minimizing the human presence in the teaching-learning processes? In educational strategies? In more depth, we seek to understand how DI directs ideas and proposals on the reconfiguration of teaching. We problematize DI and its dimension as a possible answer to the reconfiguration of teaching work and practices.

BACKGROUND

Defining Digital Intelligence: No Small Task!

Defining DI is not a simple thing because the definition has evolved since 1960 (Buchanan, 2005). At the time, some algorithms could enter into a rather vague definition of DI, whereas today they are taught as part of classic problem-solving strategies and not as instances of DI (Rich, 1988).

DI is very far from replacing human intelligence today, and it is difficult to estimate the extent of DI development in the future. Projections range from a limited application of DI in the coming decades to achieving a technological singularity in the relatively near horizon. This singularity would be a point of no return where DI could develop itself exponentially, jeopardizing any human control over it.

However, it is not necessary to consider extreme scenarios for advances in DI, even from a conservative perspective, to deserve the attention of education stakeholders (Karsenti, 2018}). DI is creating new needs for a specialized workforce as well as a need for citizens to have a good grasp of the issues surrounding digital tools. Actors in the education community can react to or prepare for change.

In its simplest form, Digital Intelligence can be defined as a field of study aimed at the artificial reproduction of the cognitive faculties of human intelligence in order to create software or machines (robots, platforms, etc.).

Digital Intelligence is therefore also computer programs - or machines like robots - able to learn and apply the knowledge acquired to solve problems. DI is therefore able to solve problems by learning from data, patterns, and models. Digital Intelligence is found in several fields and applications in education (Sanchez & Lama, 2008). The point of DI is to relieve humans of certain, sometimes more complex, tasks by automating them.

SOME KEY CONCEPTS

It seems necessary to present some key concepts of this current field (Najafabadi *at all*, 2015).

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