

Chapter 22

Perspective for a Digital Teaching Method: A Case Study About Secondary Schools During the COVID-19 Era in the Algarve Region

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ABSTRACT

Currently, the use of information and communication technologies (ICT) in the various sectors of the economy faces the challenge of improving specialization and competitiveness; it also promotes the ability to deal with decision-making processes in education and the possibility of “trying out” new ways of being with others in school. The aim of the chapter is to investigate how teachers deal with the new forms of teaching methodology based on online teaching during the era of COVID-19 in secondary schools in the Algarve region, based on the following research question: What are teachers’ perceptions regarding the impact of the use of digital technologies and platforms on students? To test the research question, an electronic questionnaire was sent to teachers in randomly selected schools in the Algarve region between July 1 and July 15, 2020. The results show that, according to teachers’ perceptions, some students were willing to use new digital methods to allow more networking, and on the other hand, other students had difficulties in learning and applying knowledge.

INTRODUCTION

The pandemic COVID -19 triggered a sweeping, sudden and dramatic digital transformation in society. The pandemic forced us to make an extraordinary digital leap in our daily lives and practices, including our children and their education (Iivari, 2020, p. 4). The new economy is facing new social changes based on information and communication technologies (ICT) and a global information society (Cabugueira,

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2001, p. 313). The technological evolution evidenced in the last decades has enabled a convergence of people, organizations and working methods, which has resulted from the increase of communication and the optimization of technological means in organizations (Pego, 2014). Page & Matos (2017, p. 41) define the use of ICT and information systems (IS) with digital knowledge and innovation and information as a crucial factor in organizational development. The evaluation of the use of ICT is the consequence of optimizing the resources available to users in organizations and promotes the benefits of proximity through communication. This relationship of proximity allows the study of the phenomenon of digital education and the consequences for the educational system. The aim is to identify a collaborative learning system in which the transmission of knowledge is built socially with technologies (Rodrigues & Costa, 2019), that is, to identify questions that allow answering the challenges for institutions and teachers caused by technological changes (Arends, 2008, p. 499). Digital education and the implications for learning are similar to the intelligent

Management capacity of an organization. This means that this close relationship between teachers and digital systems can produce positive externalities associated with the ability to acquire crucial knowledge and skills for users. The use of IS in secondary schools has become an important issue due to the need to use distance learning solutions in the COVID - 19 post-March 2020 era. The education system based on intelligent knowledge has also been a challenge for secondary schools. Teachers have been faced with new opportunities to work virtually and in some cases regularly with students. However, it is important to analyze the impact of digital adaptation on learning and the teaching process itself. The purpose of this research is to describe the remote digital solutions used by secondary schools in the Algarve region between March 2020 and July 2020, and to present the positive and negative aspects from the teachers' point of view in relation to the students. The article is divided into six parts. The first part is an introduction to the research article. The second part presents digital education; the third part presents the case of Portugal from the educational perspective after March 2020; the fourth part presents the methodology; the fifth part presents the results and the sixth part presents the conclusions and further developments.

BACKGROUND

The aim of this study is to analyse digital literacy and the Portuguese case study on first look education. Two main points are presented, digital education in Europe and civic education in Portugal.

The Digital Education

His morning session is just the beginning of a long day of virtual lessons. Every few hours he cheques back in from home or his university office. Long after he's gone to sleep, students will continue to post messages on the course discussion board and send him e-mails dropping off assignments, asking about their grades or just saying hello. Mr. Greci has been teaching here for nearly 20 years, but this is his first semester teaching online. He quickly discovered what has become conventional wisdom at many universities: it takes more time to teach in a virtual classroom than in a regular one (Reeves, 2003:5).

The unprecedented digital transformation of the global economy and society is likely to increase both the complexity of the modern world and the speed of change, largely due to increased connectivity and better educated people worldwide. These two elements - complexity and speed of change - mean that linking education to the trends shaping the world we live in has never been more urgent (OCDE,

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