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**Utilizing Philosophy for Children to Develop Critical Thinking
Skills in their Relationship with Technology**

ABSTRACT

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The relationship with technology is a challenge in our days, amplified by the emergence of the pandemic during which technology has made its way into our lives even more than before. If it presents difficulties even for adults who are building their relationship with technology, it is even more challenging for adult parents who are responsible, in addition to their own relationship with technology and their own relationship with their children, for their children's relationship with technology. The differences between parents' and children's perspectives are significant and are sometimes amplified by differences in technological skills, due to different levels of access, practice, interest, or the age at which this relationship begins. The need to understand and adapt to technology for the adults of yesterday and today may be very different from the need to understand and adapt to technology for the adults of tomorrow. The present paper seeks to make a contribution to the development of critical thinking needed in this relationship and does so by developing a philosophy with children program dedicated to the relationship with technology, called PhiloTECH. This program engages a group of children and their parents, in parallel, in the same discussion topics about technology and its presence in our lives, thus developing critical thinking for each of the participants in these discussions, parents or children. In addition, it aims to create a communication bridge between parents and children regarding technology, by creating common topics, common terms and thinking from the other's perspective.

The thesis from which I set out on this journey is that participating in a philosophy for children program dedicated to technology helps develop school-age children's critical thinking in their relationship with technology. Philosophy for children is a fairly new topic and quite rare in the world and in Romania. Worldwide, the first developments of the theme began approximately in the 70s, and in Romania in the last 15 years. The development of critical thinking through philosophy for children is very relevant to the development of the educational system, as it provides a very simple model to apply, and major long-term benefits. A generation of adults who have passed in school or out of school through a system of philosophy for children, will be a generation that knows how to listen and knows how to express their points of view, a generation that can change their point of view when met by

evidence. In addition to the importance of critical development for each individual, the development of a society with advanced critical thinking is also very important.

Philosophy with children can contribute to the development of critical thinking in the relationship with technology. On the one hand, we have children's fascination for technology, for all the novelty it brings, for the benefits it has and through which it sometimes makes everyday life easier, for all the games and fun activities offered and we have, on the other hand, a gradual increasing awareness of parents about the need to develop the ability to use technology for the jobs of the future. In this context of multiple pro-technology forces, the risk of losing balance in the relationship with technology is increased. To keep balance, critical thinking can help. In the accelerated development of technology, opinions are different, even opposite, from a need to reduce this acceleration as much as possible and to regulate every step related to the development of technology, to an extreme confidence in the benefits that technology can bring and the lack of need for any rules. Because it is unlikely that the acceleration of technological development can be stopped, to find the balance between the two extremes, we need critical thinking and we need ethics in the decisions that are made about technology.

In the first chapter, the paper addresses the relationship between man and technology and how it is seen by different philosophers, including Heidegger and Don Ihde. We studied older approaches to technology, but also the latest currents that publicly express opinions about technology, including effective altruism and effective accelerationism. We have seen how the uncontrolled development of technology has brought damage to the biosphere, we have seen in the research that the mutual influences between technology and ethics are often a point of interests for philosophers who have written about man's relationship with technology. I believe that technology cannot exist independently of ethics and needs the help of ethics, even if that implies a speed reduction, much criticized by techno-optimists. Ethics must be part of the "operating system" in which decisions about technology are made, after we sufficiently analyze the "question about technology," as Heidegger did. And that doesn't imply a war or a confrontation between technology and ethics. We need ethics that can be adopted by this technology. Minds that continue to develop technology adapt to

continuous ambiguity and they need ethics. Ethics is even more important in the context where technology can reach the level of producing itself, of creating its own ethical system.

Chapter two addresses children's relationship with technology and the differences between children and adults, including the concepts of digital natives and digital immigrants. Sometimes parents' responsibility for their children's relationship with technology is developed in the context of an unclear, in-the-making relationship of parents themselves with technology. It's an attraction that can sometimes lead to addiction. To control it, parents might need support from those around in these contexts where they sometimes feel like children, looking for help in the responsibility of others. Parents' critical thinking applied to this topic is one useful tool, just as it is very important that decisions about their children's relationship with technology are made in a dialogue. Balancing experts' opinion with listening to children's experience (how they say they spend time in media) can increase their relevance and safety online. Children who grow up in a healthy relationship with screens, supported by their parents, develop online resilience, learn to look after themselves online and can form a digital citizenship in addition to their travel passport, learn to care of oneself and other people who are online. Opening the dialogue with the children and including the children's opinion in the decision about how this time can become relevant for their present and future, can lead to a set of rules created with them, rules about "where", "when", "how much", "how", "why". These rules help the children to avoid the risk of being manipulated by the media (a risk that adults also have, by the way), and also help them connect online, in a safe mode, with people they don't know in real life. This process is one of increasing children's critical thinking about their relationship with technology, and it can help them, in the long run, to learn to create for themselves the limitations and rules that they may very much need in relation to technological complexity. Beyond individual opinions, we analyzed what a study published in 2023 by Ofcom says about media use and attitudes towards media among parents and children in the UK in 2022. We also studied parents' fears related to their children's relationship with technology, and the role that technology has in creating the skills of the future, and we saw how parents' attitude towards technology is also formed in the context of these factors.

In the third chapter we studied the discipline of philosophy for children and its development in Romania and in the world. We analyzed the concept of critical thinking and the role it plays in our lives, sometimes associated with liberal ideals or developing the skills of reasonable citizens, sometimes with practical problem solving. It is an essential concept for Matthew Lipman, the father of philosophy for children, who also developed the concept of community of inquiry or the thinking moves, tools described in this chapter and which were and are used by philosophy for children practitioners. We have seen how the United Nations Educational, Scientific and Cultural Organization (UNESCO) has the mission of serving the intellectual and moral solidarity of humanity, the acceptance and promotion of knowledge, as a whole, and how in this vision, the role of philosophy is considered indisputable. An important element related to critical thinking is to differentiate between beliefs and opinions, between "I think it's true" and "it's true". In addition to critical thinking, it's important to encourage the caring thinking in children's education. This increases the chances that the educational system will "produce" well-rounded adults who can make wise decisions about their relationship with technology or any other relationships that exist or may arise in the future.

In the fourth chapter I described the creation and implementation of PhiloTECH, a philosophy with children program created for the development of critical thinking in relationship with technology. The program took place in the first half of 2021, and due to the limitations of the pandemic, all meetings were held online via Zoom platform. Attendance at these meetings was free. 27 children between the ages of 9 and 13 were enrolled. Among the participating children we had both children who were passionate about video games and children who would always choose a book or playing in the park. In terms of access to digital technology, (the famous screentime) we had among the participants both children who have unlimited screentime from their parents, but also children who have limited or zero screentime. Holding meetings online facilitated a wide geographic coverage, having as participants Romanian-speaking children from different cities of Romania and other countries. We created two experimental groups: a group of children who had attended more than 3 meetings of philosophy with children before PhiloTECH, who were familiar with the themes, methods and other participants in the group (group V), and a group of children who

have not participated in other sessions and who started their experience as little philosophers in this program (group N). In order to be able to follow the evolution of the children as clearly as possible, we created separate meetings, on the proposed themes, for the two groups, adapting the methods and the discussion to the needs of the group. Parental consent was obtained for the recording of these meetings, their transcription and content analysis for research purposes only. In parallel, we held a series of meetings with the parents, starting from the same topics, adapted, of course, to the parents' age and interests. The PhiloTECH program was conceived as a series of five meetings with technology-related themes. The last of these themes actually took two meetings due to the great interest shown by the children in the theme, therefore we had six meetings. Seeing that the topic could not be exhausted in the discussions of a meeting, we decided to meet again at the interval of a week. Because most of the time the philosophy for children meetings start with a relevant stimulus, we created a five-episode story that includes stories and events where the main character, Alex, experiences small moments that can lead the thought and the discussion to technology. Lipman believed that being close to the characters in the stimulus story can favor children's involvement in the discussion and understanding of the problems they are going through. Thus, the character Alex was created having several demographic characteristics in common with the participating children, starting from age, and undefined gender by choosing the name "Alex", which can be associated with any of the genders, to different interests of the children or questions and problems they face, bullying situations, books they read, games they play, etc. The fourth chapter analyzes the implementation and results of this program, and to this qualitative analysis is added a note of quantitative analysis through the questionnaire applied before and after the PhiloTECH program. In the appendices of the paper, you can see the transcripts or reports of the meetings, as well as the analysis of the answers to the applied questionnaire.

Each parent-child-technology relationship is a mirror of the humankind relationship with technology and they have many points in common, but also many elements from which lessons can be learnt. In these relationships one can find sometimes people who feel that their mission is to slow down the evolution of technology and other times people who feel that technology can and must save the world. During this time, around these two type of people, technology continues to evolve, so they should engage in a real dialogue and have

an openness to learn from each other. In contexts of changing complexity, such as the accelerated development of artificial intelligence, anxiety increases and critical thinking decreases, and the PhiloTECH program can be a real support for children or parents. The relationship with technology might be easier to build if we consider it one relationship among others, one that needs ethics and critical thinking, just as all our relationships need ethics and critical thinking.

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