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Education and Technologies: Between New Emergencies and New Opportunities

Edukacja i technologie – między nowymi zagrożeniami a nowymi możliwościami

ABSTRACT

The web represents a unique opportunity for all of us in terms of knowledge, but this sharing process of culture and knowledge must not become an instrument of spreading disinformation or critical behaviors that could become deviances. Social media are the place of democratization of the private, self-presentation, self-narration, and mass self-communication, where the projection that each one wants to give of himself to others is realized, and also the place par excellence where others through their satisfaction redefine us. It is a sort of mass display that can lead to dangerous deviations, an example of all the challenges. The latest evidence collected during the online survey: "My life in the time of Covid-19", conducted on a sample of 1,858 Italian adolescents in the period from April to May 2020, broadly confirm the above thesis. The time of use of technologies now occupies an important part of their daily life, over 5 hours for 49% of respondents, even at the expense of other activities such as sports. Young people tend to isolate themselves from the family environment. Over 60% of them said that they experience moments of fear and miss their friends very much. It has also been noted that fake profiles are proliferating even among adolescents, demonstrating how in the liquid-modern era deception has become central in the processes of understanding reality, and the distinction between true and false is no longer perceived.

Keywords: social network; media education; adolescents; digital citizenship; disinformation

THE ROLE OF TECHNOLOGY

"Electricity has reduced the globe to little more than a village and, bringing together all social and political functions with a sudden implosion, has dramatically increased awareness of human responsibility" (McLuhan, 1964, p. 11). I think it would be interesting to propose McLuhan's vision of a nascent global village as a starting point for this article. McLuhan observed the technological and social revolution in its early stages, proposing some concepts to reflect on, such as the global village, the implosion of social and political functions, and the level of awareness of human responsibility.

The dimension of the global village traced by McLuhan is so relevant not only because he defined the impact of technology and electricity on human activities for the first time, but also taking into account the historical background, i.a. the globe was traversed by great conflicts and geopolitical and physical blocks. Precisely in relation to the historical situation, he shows how the extensive use of technology and its evolution, due to the very function that "electric" media had in society as a whole, led to the implosion of political and social functions as they were been defined in the previous century. From all this derives the growing individual responsibility in the modification of social and cultural processes.

In this sense, McLuhan designed how the role of the individual in society generated an increasing impact, and at the same time how the changes induced by technology acted on the individuals. This is a line of sociological investigation which will be extensively explored, and he sees Zygmunt Bauman among its greatest interpreters.

So technologies play an important role in social evolution, but we also know that the process of social construction occurs through the way individuals relate to each other, communicate and therefore also use technological tools (Pira, 2011). Considering the relational dynamics and environments, it should be pointed out that – as Castells (2002) states – giving life to the network society, the transformation has led to the emergence of a global structure that confronts the human experience, which still has a local character, both in territorial and cultural terms.

This introduction brings us to the central question: What role does technology play? I propose two definitions to frame the discussion in which we aim to highlight the most critical aspects.

First, technology becomes "nurturing", as Turkle (2019) explains, because the time we allow it transforms the very dimension of time. In this sense, individuals believe that there can be a fair exchange between what technology acquires and what we get in return. Following Turkle's thesis, we can make some further considerations.

How much are we willing to concede of our identity to be transformed into bits and data? Each time we use an app, we first digit on a keyboard and we share

more or less significant fragments of our lives and personality. We are convicted to drive the process, but too often the reality is that we are gently submitted to the sweet power of the algorithm.

Second, Morozov proposes a severe and critical analysis of the impact of technology on society, introducing the concept of survival technology.

> The error of the "world-Internet": I will not say anything that Heidegger has not already affirmed: technological systems, when they work, tend to disappear, "not to exist". If you try to make this political philosophy, you reach the conclusion that the errors that emerge show the system you take for granted, revealing its embedded norms. The Internet world instead uses a cybernetic model, to reach a stable homeostatic goal, through feedback, using predictive functions so that problems do not occur (!). But that's not how you grow. This science of insipid instability, and in real time, tries to eliminate problems before they happen. It eliminates those "spaces of conflict" which serve instead to raise political questions useful to understand what is wrong with the current system and, perhaps, produce another more compliant one. The system in which we operate is only apparently a progressive technological and friendly one, in reality, is a conservative system, created specifically to block and eliminate all intellectual problems that could lead to friction. (Morozov, 2011, p. 281)

And it is quite clear that the pandemic has upset our lives and the balance we thought was stable. The globalized world, so far overwhelmed by technology, has not been able to find any other solution than to resort to solutionism as defined by Morozov.

In this sense, there are some keywords that better than others allow us to understand what direction we have taken. The three concepts outlined below are based on what we define as the digital society.

Vetrinization. The image of oneself becomes an object – other than oneself. Exhibiting oneself online means conducting one's existence to the construction of a hyper-fluid self. We are witnessing the taking root of models of social networks based on a system of anxious relationships that are no longer relationships between individuals, but the relationship between individuals and their public.

Hyper-connection. Our days move in a 24-hour flow of interactions through our technological tools, but less and less we build relationships.

Polarization. Crossed by fears, driven to consumerism, we move almost exclusively according to confirmation bias, we choose those who think like us, and we only trust those who confirm our previous beliefs.

In this climate of cultural disorientation, in which the impact of the digital society seems to be a fertile ground for the proliferation of increasingly extreme behaviors, the investigation of the relationship between preteens, adolescents, and technology represents a crucial field of research in consideration of the perspective impacts. The contingency of the Covid-19 pandemic, the quarantine, and the sudden need to use technology to give continuity to work, educational and cultural activities, has opened a reflection that involved researchers from multiple sectors (Pira, 2020, p. 61).

METHODS

The research is the result of a multidisciplinary discussion with a team of researchers of pediatrics and psychology at the University of Messina, who collected data on how boys and girls, patients of the Diabetes Unit, were coping with months of confinement, which led to the development of a questionnaire, the administration of which took place online from April 23 to May 3, 2020.

The research was divided into two sections. The first section of the questionnaire was specifically dedicated to the 204 children and adolescents (aged 5–18) – patients of the Pediatric Diabetes Center in Messina. The questionnaire included 14 questions focusing on patients' demographic and clinical characteristics (e.g. age, gender, duration of diabetes, insulin regimen, type of glucose monitoring), lifestyle changes during the quarantine period, and the impact of lockdown on diabetes management.

The second section was designed to investigate sociological aspects and consisted of 17 questions. It was defined precisely to analyze the relationship with technologies, computers and smartphones, and the use of social media. Boys and girls from junior and senior high schools were involved through teachers who provided them with the link to the online questionnaire.

The survey was conducted using an online questionnaire. The participants were teenagers aged 12–18, attending lower secondary schools and upper secondary schools. A link to the questionnaire was sent to the headteachers of 15 Sicilian schools, in southern Italy, who invited all their students to participate in the survey. Written informed consent to participate in the study was obtained from all participants via an online form. Scientific research was conducted in accordance with the Declaration of Helsinki. The questionnaire included 17 questions focusing on demographic characteristics (e.g. age, gender, type of school attended), lifestyle changes during the quarantine period (variations of eating habits, acquisition of new skills, changes in the sleep-weak rhythm, time spent on indoor physical activities, the use of technological devices such as personal computers, smartphones, tablets). Participants were asked if they experienced feelings of fear, discouragement, and anxiety during the lockdown, and to mention who or what they mostly lack. Finally, they were invited to quantify the psychological impact of self-isolation and social distancing according to three response levels: no impact, poor impact, and extreme impact (Salzano et al., 2021, p. 40).

RESULTS

The first aspect which was investigated was the one that referred to the respondents' own vision of the day-life. During the quarantine period, 34% of

them indicated that doing nothing was their main activity. This opening question was conceived to frame the behavior of young people under a broader profile. It seems that for this generation of pre-adolescents and adolescents, there is no other activity or use of time than being immersed in a technological context. The impact of technology was strong.

The time of using modern technologies now occupies an important part of the respondents' daily life (more than 5 hours for 49% of them), even at the expense of other activities, such as physical activity and sports. These data appear worrying if we consider that almost 15.6% of respondents did not carry out any physical activity, and 36% devoted between 1 and 3 hours a week to it.

The pandemic and physical isolation seem to have exacerbated insecurity and fragility, feelings of fear and discouragement nourished by dependence on the acceptance and approval by a peer group that is only developed within social dynamics.

Emotions play a key role in adolescents' lives, and participation in social media is perceived as highly social. In fact, one of the aspects of greatest interest is that relating to the tendency to isolate oneself from the family environment. Respondents indicated that they experienced moments of fear and missed friends a lot. In spite of a continuous state of connection, it generated the paradox of a strong feeling of isolation, fear, and discouragement (60.4% of respondents). Smartphones were their window to the external world – 99.5% own one. Always connected: 43% all day, 30% day and night. Their being flows through technology in a continuous flow 24 hours a day.

Teenagers have an app for everything: they are looked after and in survival gear, where Instagram and WhatsApp prevail. They use WhatsApp intensively. More the 60% of respondents send over 100 messages per day. These data show that there is a dependence on social media and peer group that generates a further consequence.

In social networks, we tend to assume predetermined identity models while believing to express our individuality, implementing a sort of camouflage, with which we try to resemble to these online environments and, in doing so, we give up on ourselves. Here we give life to a performative self that expresses the purpose of obtaining the approval of our audience. Performative self: 93.6% of respondents use Instagram, 90.5% WhatsApp, 53.4% YouTube, and 42% TikTok. Here, the use of various social media takes place according to the communication objectives and the audience to which they are addressed. More profiles. More public. Moreover, the survey revealed a further critical element. We asked respondents to declare if they have a fake social profile. Of the 544 respondents who agreed to answer the question, 69% affirmed they have it. This reveals a strong connection with the disinformation processes.

CONCLUSIONS

It is evident that in the liquid-modern era, deception has become a central element of the processes of understanding reality, and the distinction between true and false is no longer perceived. A significant number of young people with fake profiles on social media have confirmed one of the growing problems that is going on across society: the proliferation of disinformation. This increasing flux has allowed the emergence of deviated forms of the exercise of individual freedom that move in the opacity of anonymity. The proliferation of these dynamics opens up the topic of violence and the proliferation of phenomena such as cyber bullying and others. Inherent in the DNA of a fake profile is the internalization of a distorted view of the principle of protecting one's privacy. It is a cultural issue, as Castells (1996, p. 544) called it, purely cultural. In the evolutionary phase of humanity, the fundamental ingredient is information because "the flows of messages and images between the networks constitute the plot and the leitmotif of our social structure".

Castells claimed that we should have to deal with historical reality. However, there is a risk that historical reality will be misunderstood if systematic falsification deprives us of the tools to understand and therefore to acquire knowledge. If these flows are polluted by disinformation, then what kind of social structure are we weaving? There is no longer a reality because it has been defeated by the flows between the networks that speak only to their own audiences.

Moreover, the theme of the relationship between new generations and technology sets a double question:
1. How communication tools can contribute to the growth and training path of new generations?
2. What consequences derive from their so pervasive penetration into young's lives and the possible risks and harm from improper use or abuse?

Jenkins tries to answer. He observed that young people had the moments they needed on the path of changing the way they learn and build knowledge. A path that can no longer be postponed, as Jenkins also claims in a recent interview with a South Korean journalist and partially published on his blog. The title is particularly evocative: *Covid-19, Participatory Culture, and the Challenges of Misinformation and Disinformation* (Jenkins, 2020). The reflections he proposes start back from his work presented 15 years ago to make the state of art of the cultural challenges that the Covid-19 pandemic has forced us to face in order to overcome misinformation and disinformation. If they would take over, they would prevent us from building knowledge processes, definitively polluting the minds of the new generations. Jenkins refers in particular to the need to develop judgment skills in young people.

Now, as never before, it is evident that the difficulties the education system is facing are unfortunately the result of the no acceptance of the proposals to

identify new educational paths, able to integrate technology and digitalization in educational programs.

In this sense, I consider it important to recall two aspects in my conclusions. The first concerns the urgent need to overcome the traditional dimension of the media education as education to the media. Rather, it must become the instrument of a new strategic approach to education. Technologies should support interpreting the evolving reality within a disciplinary training course that supports the processes of experimentation and deployment of the skills learned. A second axis should concern the integration of the relational approach of social connotation as a moment of collaborative definition of relational dynamics and the construction of those capabilities to accept different opinions, so as to overcome together the perverse dynamics arising from the distorted use of confirmation bias and hyper-
-generation of polarizing effects.

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ABSTRAKT

Sieć stanowi dla wszystkich wyjątkową szansę pod względem zdobywania wiedzy, ale proces dzielenia się kulturą i wiedzą nie może stać się narzędziem szerzenia dezinformacji lub przejawiania krytycznych zachowań, które mogłyby stać się dewiacjami. Media społecznościowe są miejscem demokratyzacji tego, co prywatne, autoprezentacji, autonarracji, masowej autokomunikacji, gdzie realizowana jest projekcja, którą każdy chce przekazać innym. Są również miejscem *par excellence*, w którym inni poprzez swoją satysfakcję nas redefiniują. Stanowią rodzaj masowej ekspozycji, która

może prowadzić do wielu niebezpieczeństw, a także są przykładem mnogości wyzwań. Najnowsze doniesienia, zebrane podczas badań realizowanych ankietą internetową „Moje życie w czasach Covid-19", przeprowadzonych na próbie 1858 włoskich nastolatków w okresie od kwietnia do maja 2020 r., szeroko potwierdzają powyższą tezę. Czas korzystania z technologii zajmuje obecnie istotną część ich codziennego życia (ponad 5 godzin w przypadku 49% respondentów), nawet kosztem innych aktywności, takich jak sport. Młodzi ludzie wykazują tendencję do izolowania się od środowiska rodzinnego. Ponad 60% badanych stwierdziło, że przeżywają chwile lęku i bardzo tęsknią za przyjaciółmi. Zauważono też, że fałszywe profile mnożą się nawet wśród nastolatków, co pokazuje, jak w epoce płynnej nowoczesności oszustwo stało się centralnym elementem procesów rozumienia rzeczywistości, a rozróżnienie między prawdą a fałszem przestało być dostrzegane.