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Distance education: A ruin of health

Educación a distancia: Una ruina de salud

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Abstract

This review essay addresses the problem of interaction between humans and technologies within the educational context. To what extent are the problems and consequences of the measures taken with regard to the introduction of distance learning realized today? The issue of integral combination of many elements of the educational environment is being investigated. On the basis of a variety of literature on educational, social, psychological, and brain sciences, using the methodology of reasoning, the conditions of quality life of the educational process are determined, including first of all the problems of formation of morality, responsibility and initiative of the student, as well as mental and physical health. The actual end result was the establishment of fact that it is fundamentally impossible to replace direct or personal education (upbringing) by its distant, irresponsible, remote form. Transformation of the educational environment through the separation of individuals from each other does not only lead to the exhaustion of opportunities to obtain quality knowledge, but also to chamber loneliness with disastrous consequences for moral, mental and physical health.

Keywords: distance education, personality, upbringing, care.

Introducción

Education and upbringing are often discussed in the context of student assessments, retention of control over the learning process, and satisfaction with the goals and outcomes achieved. Accordingly, there is sufficient evidence of inappropriate, confusing, or superficial

Resumen

Este ensayo de revisión aborda el problema de la interacción entre humanos y tecnologías dentro del contexto educativo. ¿En qué medida los problemas y las consecuencias de las medidas tomadas con respecto a la introducción de la educación a distancia se hacen realidad hoy? Se está investigando el tema de la combinación integral de muchos elementos del entorno educativo. Sobre la base de una variedad de literatura sobre ciencias educativas, sociales, psicológicas y del cerebro, utilizando la metodología del razonamiento, se determinan las condiciones de calidad de vida del proceso educativo, incluidos en primer lugar los problemas de formación de la moralidad, responsabilidad y iniciativa del alumno, así como la salud mental y física. El resultado final real fue el establecimiento del hecho de que es fundamentalmente imposible reemplazar la educación (educación) directa o personal por su forma distante, irresponsable y remota. La transformación del entorno educativo a través de la separación de los individuos entre sí, no solo conduce al agotamiento de las oportunidades de obtener conocimientos de calidad, sino también a la soledad recámara con nefastas consecuencias para la salud moral, mental y física.

Palabras clave: educación a distancia, personalidad, crianza, cuidado.

assessments of particular educational procedures, methods, and trends contained in the literature. For example, it often happens that solely the students' best academic performance leads to the conclusion that teaching technology is of high quality. Sometimes such significant

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characteristics of an educated person as personal value of knowledge, satisfaction with knowledge acquisition, charismatic roles of knowledge stimuli, knowledge leading to leadership, emotional enrichment, relaxation in understanding, increased sensitivity to new things, change in the influence of knowledge, knowledge affecting personality change, and distancing oneself from knowledge are overlooked. In addition, the phenomena of mood change, empathy, enthusiasm, apathy, insecurity, fears, growing misunderstanding are poorly studied. The world of educational texts, unfortunately, almost does not contain materials about teaching care, the role of moral guidance, responsibility for the act and the decision made. Education and science began to approach the current state of affairs long ago. Already in the 60s of the last centuries the question of mechanistic approach to a person occupied minds of psychologists, sociologists and teachers. For example, A. Maslow wrote about a fierce tendency to technologize human problems, to free them from values and to turn them into a matter of technology in the sphere of education, education, social service and other professions (Maslow, 1966).

The knowledge about an object is not completely defined and verified. It is always ambiguous, or better said - multi-faceted, diverse. This versatility is often located in the irrational area of possible knowledge (Wood & BackWell, 2012; García, 2008; Madsen, Riis, et al., 2008), indirect knowledge (Fershtman, & Gandal, 2011; Toivonen, Lenzini & Uusitalo, 2006; Eraut, 2000) and reflected (lost its own light) knowledge (Mortensen & Neeley, 2012), including knowledge related to the variability of behavior (Wright & Mischel, 1988). Acquiring knowledge and transferring it correctly is also a complex, multilayered task. Such a task - as a ball of threads - weaves together social, personal, methodological, technological, moral, and ethical links, each of which cannot be ignored when developing an educational solution. Otherwise, the result will be harmful, which can cause unexpected harm to mental, physical and moral health.

Education of the image. Involvement in knowledge by trust

Communications, including educational ones, which have received a powerful impulse of IT opportunities in the last decade, are looking for proofs of improving and raising the quality of human interaction and knowledge acquisition. Since human interaction is based on the

foundation of trust, one can observe how trust is under increasing pressure from remote communications researchers. Here is what they sometimes write: "the trust factors offer clues for how to better social media communication and improve platform functionalities. For example, convenience is found to be a salient factor with respect to group communication, through calculative considerations. Convenience suggests the tool is cheap, easy to use, and quick in action" (Cheng, & de Vreede, 2017). In other words, the cheapness, simplicity and speed of use of some IT functionality leads to convenience and trust. From the point of view of human activity, it causes serious doubts. But there are more and more such texts today, especially when only conditional satisfaction is a measure of interaction quality: "the lower satisfaction for members located at headquarters emanates from their frustrations in communicating with others at remote sites" (Henderson, Stackman & Lindekilde, 2016).

Trust is still essential as a channel not so much for knowledge transfer as for close ethical, personal communication: "It concludes that a community of inquiry shifts the ethical learning relation in significantly different ways because for educational growth, it values ethical trust more highly than a strategic trust in logical principle, duty, Truth, or cost/benefit analysis" (Haynes, 2018).

The next step towards the educational goal through trust and learning is awareness, which makes knowledge effective, alive and responsible, especially in an uncertain environment (Sacha, Senaratne, et al., 2015). Knowledge is like vision, which sees the world as holistic and beautiful, rather than fragmented and fragile. Knowledge is considered the "dominant concern" (Endsley, 1995). And we return to the context of awareness and trust in that context. The understanding of the goals and intentions of those around us depends on the content of the learning context. Some researchers point out that incoming understanding is based on modeling the behavior of others in our own nervous system, pointing to the theory of embodied knowledge, that is, body knowledge and how it interacts with the world (Grafton, 2009; Shapiro, 2019). The activity is directly related to thought and bodily incarnate knowledge (Koziol, Budding & Chidekel, 2012). In (Kirsh, 2013) it is stated that "we think with our body, not only with our brain" and "we know more by doing than by seeing". The actions of bodies in the classroom and our thoughts associated with them fill the context and fertilize

the trust of learning. The valuable thought that we think with our bodies and know more - doing rather than seeing - speaks to the diverse richness of context. Consequently, educational methods and tools cannot be approached by simplification and other reductionist policies. This inevitably entails the cost of quality knowledge. But we talk about trust, and this is much more than just the quality of students' knowledge. It is about cultivating an image, forming and nurturing a versatile personality.

It can be argued that trust in the teacher attracts knowledge, creating a special environment, an atmosphere of thirst for knowledge and vital interests. Trust is required at all levels and in all aspects of student interaction with the teacher and among themselves, which means that it is necessary to have access to the details and nuances of the educational process, not only to see the naked, plucked result. This is even more important if we consider the introduction of a performative approach based on quantitative lifeless effectiveness into the educational process. S. Ball (2003) wrote: «the ethics of competition and performance are very different from the older ethics of professional judgement and co-operation». In other words, replacing care and trust with efficiency and productivity can change the very essence of education by creating "measurable" relationships, assuming that they are more manageable and, accordingly, less alive. S. Ball goes on to exclaim: «effectivity rather than honesty is most valued in a performative regime!» (2003). This mode looks very attractive because of its measurable controllability: the fewer incalculable elements in the education management system, the easier it is to make "effective" decisions and draw up winning reports.

Quantitative efficiency, calculation, numerical report - blind antagonists of trust, ethics and care. Does this mean that relying on efficiency and calculation should be avoided in every possible way. Yes! If it directly opposes trust and filling the context of interaction with embodied knowledge.

Another aspect of trust is the manifestation of emotions and their effectiveness, especially since emotion is closely related to the context of activity, which is consistent with the theory of embodied cognition (Winkielman, Coulson & Niedenthal, 2018). Emotion, as a manifestation of empathy, empathy, and a lively response resulting from the collaborative actions of teachers and students, can be seen as the trust base of a holistic educational context.

Some researchers point out interaction risks directly related to trust: the problem of knowledge sharing; problems of coordination of common activities; communication personal barriers (Nicolás, & De Gea, 2018). However, a positive correlation between trust and the success of cooperation, between trust and knowledge transfer is definitely in place (Humayun, & Jhanjhi, 2019; Levin, & Cross, 2004; Li, 2005).

There is also the problem of authenticity of trust associated with selective attention and rationality of choice. The paper (Lindenberg, 2000) states that "people can be trusted if they do not think about doing something that violates trust. In addition, the authors point out that the costs of complying with the rules will be ignored by behavioral reasoning, that is, by common sense. Focusing on knowledge transfer and perception, researchers forget about changing behavior that is not only consistent with common sense, but also due to irrational reasons.

The conceptual apparatus and results developed in the individual and general contexts of training, as well as well-established and tested strategies and tactics of specific behavior in a situation dictates that we need to observe the thought of the person being brought up also in the context of psychological processes and problems. First of all, we point out the theory of cognitive load (Sweller, van Merriënboer, & Paas, 2019; Sweller, van Merriënboer & Paas, 1998), as well as its expansion into the surrounding community of collaborative learning (Kirschner, Sweller, et al., 2018).

Today, perhaps, the only thing left to dream about is the creativity of the teacher, who builds a holistic image of the student. However, some researchers still insist on the central role of creativity in education and upbringing (Chappell & Craft, 2011). And group creative activity is certainly connected with support for each other. Creativity and finding people shoulder to shoulder provides the connecting threads of invisible interaction between students and teachers. This fusion of creativity, emotions, empathy, doubts and mutual interests establishes a unique (but not universal) environment of cognitive, interactive, sympathetic actions and responses that will predetermine the fabric of a unique personality.

Details, components, structure of the educational environment are well studied and known. Assuming their fragmentation, we will add to them for completeness some additional elements, which, in our opinion, can not be left out of

attention, otherwise the picture of the educational context will be distorted. It should also be understood that the educational context itself is dynamic and changeable. It is appropriate to compare it with a passing life, in which there are both controlled components and vague, implicit, woven by life itself. The dynamics of the educational context also relate to the perception and experience of the individual as a response to life's variability. But, of course, the dynamics of the context can also be influenced from the outside by introducing technological (e.g., clickers) and human (e.g., games) means of interaction and participation in a single learning process.

There is a concept of general emotion that enhances the perception of the material. The authors of the work (Metiu & Rothbard, 2013) base their conclusion on the R. Collins' theory of interaction ritual (2014): "We define how the mutual focus of attention develops through the presence of a volume of tasks that focuses attention, creating barriers to outsiders and effectively using artifacts related to solutions. A shared emotion is the result of mutual focus and enhances it. They also define the mutual focus that students develop and maintain, which is necessary to achieve collective progress in solving a problem. Work (Krueger, 2013) argues that this enhancer effect of shared emotion is based on natural interactions between children from an early age, and positive emotions are based on shared experiences. In the context of shared emotions, there is talk of group emotions of joy and group effectiveness (Rhee, 2006), as well as predictability of behavior (Salmela & Nagatsu, 2017). Thus, mutual focus, shared emotions and shared experiences form a collective amplifying impulse of knowledge. And the emerging group emotion of joy seems to confirm a positive educational effect.

The emerging emotion is inextricably linked to the sphere of feelings and personality behavior. Predictability of behavior makes it possible to get a stable feedback and, as a result, to increase the manageability of the educational process. There is a significant body of texts exploring positive organizational behavior, which, F. Luthans (2002) states, will reveal unique psychological abilities that can be reliably measured, and are open to the development and management of personal effectiveness. By understanding organizational behaviors as joint, shared activities dedicated to achieving a common goal, we discover positive group cognitive effects.

In work (Rogoff, Paradise, et al. 2003) we met a wonderful term - "to listen to current activities". It means perfect integration not only within a certain group with limited (educational) tasks. Such cultural integration allows us to develop participation in mature social activities (Rogoff, Paradise, et al., 2003), which represents one of the highest values of education. Moreover, researchers insist that "learning happens when people participate in common efforts with others" (Rogoff, 1994). It is no longer just a matter of common space, common thinking, common emotion, but a common effort. In other words, the context of learning needs to become a single, holistic living organism in which the power of reflection and the power of knowledge are linked. They have to act organically, and the destruction of such an organism is not safe. The result of such a cultural organic context is an enterprising person (Paradise, Mejía-Arauz, et al., 2014) who creates an active space around him or herself, capable of solving any task assigned to him or her.

We have already briefly mentioned the existing theory of embodied bodily knowledge (Koziol, Budding & Chidekel, 2012; Kirsh, 2013), which affirms the positive participation of the body in the processes of cognition. As far as the acquisition of a bodily manifestation is concerned, it is easily imaginable, since it can be a training or a joint music-making (Walton, Washburn, et al., 2018). However, in today's science, integral phenomena, such as the links between the body, mind and society, are increasingly being investigated (Brugger & Lengenhager, 2014). Such research can give a serious impetus to the emergence of new progressive methods in education, based primarily on collected social, psychological, neurotic and even extreme psychiatric data about the human brain, thought, body and society.

Transforming contexts, relationships and health

Any change in the established educational context, especially outwardly obsessive and categorical, entails a transformation not only of the process of acquiring skills and knowledge, but also changes the deepest structure of relationships between people, their social saturation, creative activity and purposefulness. Satisfaction decreases, and with it the perception, understanding and assimilation of the information presented.

Let's assume that by inviting the reader to a constructive presentation, we will be able to

depict the details in such a way as to make evident the transformation costs of the learning contexts. We will describe several imaginary situations in which relevant features can be separated from those that are unimportant for the subject in question.

The first transformation will be spatial. Let's imagine such a picture: the pupils are gathered in an audience that suddenly loses its walls. They find themselves on the bank of a narrow but rapid and deep river. The teacher is moved to the other side of the river and from there tries to reach his students. He manages to do it with effort, and, let's say, information is perceived and even understood by pupils. However, the quality of assimilation of this knowledge will probably not be higher than in the classroom. In addition, in such a situation, there is neither the classroom atmosphere nor a common fire of initiative, and the general emotion and bodily knowledge is reduced because of the effort wasted on extra effort to hear the teacher from the other side of the river.

Now we will aggravate the spatial situation. Now the teacher is not just on the other bank of the river, but there is also a barrier in front of him, and he does not see the students at all. What is his comfort level now? We can confidently assume that there is no teacher who wants to communicate with students through the wall, without seeing them, hardly hearing them, without feeling their presence, without a variety of smells and emotions. Equally, students are unlikely to be satisfied with such a turn of events, although they can still communicate with each other, discuss the subject and have the opportunity of collective learning.

Then we will make a little indulgence: cut out the separating wall window. In this window the teacher can again transmit information to the other side and see from afar the reaction of listeners.

However, after simplifications, we will again exacerbate the transformation of the learning context. Let each student now be enclosed in a box office of individual space, so that joint body rituals, emotions, initiatives and scents would be impossible. Yet a window is still left to see the teacher through it. For the completeness of the picture, let the teacher himself be in the same box- room. So, all students have now cut out windows, through which they can hear the teacher, and a little bit of their neighbors. It is a surprisingly joyless painting. Even if we assume that the office boxes have food, a comfortable

chair or a sofa that promotes rest for a tired person. Students and teachers find themselves in an autonomous position, separated and alone in their cells.

At the end of the script, we will replace the box-room window with a computer with the ability to interact with the student and the teacher through the display, microphone and camera. After that the picture seems to be quite friendly and comfortable. We received the remote technology. Often, the implementation of some technology is conditioned by its effectiveness. For example: «The effectiveness of e-learning is enhanced by building efficient e-learning infrastructure, and making continuous standardization efforts, while social legitimacy is gained by establishing a sound regulatory system, applying a socially appropriate online pedagogy, raising public awareness, and building e-learning communities» (Teo, Kim & Jiang, 2020).

In addition, the quality of the implemented technology is described in terms of positive/negative relationship of its objects. The general positive attitude of students and faculty to the use of remote methods is noted, for example, in (Gerasimova, Melamud et al., 2018). Higher grades of students in distance learning are mentioned in (Guo, White & Zanelatto, 2015), but more dissatisfaction is mentioned.

In general, the benefits of distance learning methods include technological and technical advantages. Some researchers are still getting results on the preferability of face-to-face learning, but they also appeal to the technological side of learning, the best grades and the overall satisfaction index (Callister & Love, 2016; Weidlich & Bastiaens, 2018).

All satisfaction is based on internal, implicit feelings, difficult in their qualification, for which scales are usually used (Diener, Emmons, et al., 1985). In other words, references to satisfaction are often irrelevant to objective reality and can be manipulated. On the other hand, there is a real factor of fidelity or distinct doubtfulness of this or that approach. We are talking about health, the quality of which can be adequately evaluated and unambiguously related to context characteristics. In other words, any modification of the educational context must be under the close scrutiny of health and environmental professionals, psychologists, therapists and psychiatrists.

Let us now return to the last episode of the educational context transformation scenario

described above. Let's take a close look at the health risk factors of a student enclosed in a separate box office or camera, where any interaction with the outside world is limited to a display with a camera and a microphone.

Obviously, the first factor is the lack of social relations. Here is how experts write about the results of such a deficit: «Outcomes include depression, poor sleep quality, impaired executive function, accelerated cognitive decline, unfavorable cardiovascular function, impaired immunity, altered hypothalamic pituitary–adrenocortical activity, a pro-inflammatory gene expression profile and earlier mortality» (Hawkey & Capitano, 2015).

The same authors specify that the regulation and function of the hypothalamo-pituitary-adrenocortical axis: «influence a wide range of physiological functions that include glucose regulation, metabolism, inflammatory control, as well as cardiovascular, reproductive, and neuronal effects» (Hawkey, Cole et al., 2012).

Perception of social isolation, increases alertness and anxiety about implicit threats and increases the feeling of vulnerability, while increasing the desire to be in a team. These psychological processes affect physiological functioning, reduce sleep quality and increase morbidity and mortality (Hawkey & Cacioppo, 2010). N. I. Eisenberger and co-authors points out: «It is a basic feature of human experience to feel soothed in the presence of close others and to feel distressed when left behind» (Eisenberger, Lieberman & Williams, 2003).

There is evidence that increased perception of loneliness is accompanied by depressive symptoms (Bedard et al., 2017; Mwilambwe-Tshilobo, Ge et al., 2019). But the risks continue to spread. In (Holt-Lunstad, Smith, et al., 2015) it is indicated: «substantial evidence now indicates that individuals lacking social connections (both objective and subjective social isolation) are at risk for premature mortality». And in (Rico-Urbe, Caballero, et al., 2018) we can read: «Loneliness is a risk factor for all-cause mortality». Mortality from the creation of a distance learning context? Isn't the price of such a transformation great!? But that is not all. In his book (Churchland, 2018) the author writes: «separation and exclusion cause pain, and the company of loved ones causes pleasure; responding to feelings of social pain and pleasure, brains adjust their circuitry to local customs. In this way, caring is apportioned,

conscience molded, and moral intuitions instilled».

The author further stresses: "A key part of history is oxytocin - an ancient molecule of body and brain, which, reducing stress reactions, allows a person to develop confidence in each other, necessary for the development of close relationships, social institutions and morality. This is an important new evidence of what really makes us moral. Oxytocin, which binds brain activity, social participation and morality, is mentioned in many works, for example: (Kosfeld, Heinrichs, et al., 2005; Heinrichs, Baumgartner, et al., 2003; Riedl & Javor, 2012).

Thus, participation, care, trust and morality, about which much was mentioned in the beginning of the article, are antagonists of remote learning. Are we ready to sacrifice morality to distance education?

But educational isolation also leads to serious psychiatric problems. These include generalizable psychiatric syndrome (Grassian, 1983), attention deficit syndrome (Kim, Park et al., 2019), depression and neurosis (Mengin, Allé, et al., 2020).

Even in healthy people serious mental and physical disorders are provoked (Bennion, 2015). Some authors associate social isolation with incarceration and point out that solitary confinement is itself a cruel punishment (Coppola, 2019), the consequences of which are significant (Smith, 2006) and call it social death (Guenther, 2013).

Finally, we have received extensive literature on the problems of psychology and psychiatry in social isolation due to COVID-19 (Guessoum et al., 2020; Li & Wang, 2020; Banerjee & Rai, 2020; Killgore, Cloonen et al., 2020). According to these studies, not a single positive result for mental and physical health in creating artificial loneliness for a person has been identified.

So, what can be achieved by transforming the context - the context of being, the context of communication, the context of education? Numerous research results in completely different fields show clearly negative consequences of students' health, psyche, morals in the conditions of deprivation of their vitality, pulling out of each other's arms, making them nervous and worried about the lack of full-blooded communication, depriving them of care about each other and the opportunity to help.

Conclusions

Many of the works studied in this essay are trying to solve the problems of physical, mental and moral health: depression, meaning, emotion, trust, knowledge, care, communication. But they almost do not ask the question of causality of these manifestations of personality. It is this disinterestedness, in our opinion, which leads to the appearance of harmful practices of treatment of a person in education, upbringing, treatment, care. This indifference, along with the callousness of calculation and the desire for numerical estimates, leads and has already led to monstrous practices of distance education. In this detachment, distance from the person there is a sign of complete indifference and irresponsibility, expressed in the form of lack of attention, care, denial of sensitivity and personal empathy. This position is worse than the cynicism of performativity that S. Ball has written about (Ball 2003). It is a multiplier effect of moral mortification and complete human degeneration. What is terrifying is that such a ruin to personality is surrounded by increasingly thickening pink clouds of illusions of happy e-learning, surrounded by the smiles of happy parents, happy teachers, and successful students.

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