Challenges of an educational organization in times of COVID-19 and the contribution of the learning organization

Desafios de uma organização educacional em tempos de COVID-19 e a contribuição da organização de aprendizagem

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**ABSTRACT**
This study aims to present the challenges faced by educational organizations in times of Covid-19 and the contribution of the Learning Organization in the teaching-learning process. It presents a literature review through data from papers which describe the difficulties faced by educational organizations during the pandemic period and the role of Learning Organizations in that scenario. Through this analysis, it is hoped to create new ways of delivering content related to learning and working, rethinking evaluation systems, adopting various technological resources and constantly seeking to acquire new knowledge and skills that can contribute to minimize the impacts generated in the recent pandemic scenario.

**Keywords:** COVID-19, learning organization, challenges, teaching-learning.
1 INTRODUCTION

On January 30, 2020, the World Health Organization (WHO) announced an outbreak of the new coronavirus (Covid-19), a disease caused by SARS-CoV-2 that has gained global attention (Msembur et al., 2023). The number of cases of this new virus grew exponentially, becoming a public health crisis of international importance (Zhai et al., 2020). SARS-CoV-2, the infectious agent responsible for the Covid-19 pandemic, can cause symptoms ranging from common flu symptoms such as body aches, fever and sore throat, to acute respiratory failure and death (Chen et al., 2020; Lau et al., 2020).

Wuhan, the epicenter of Covid-19, is a city with over 500 industrial plants and other facilities. With the need for isolation and no forecast for the end of restrictions, workers faced the ominous uncertainties of the virus infection. This situation also impacted companies linked to that region (Zhai et al., 2020).

In that panorama, various organizations had to find ways of dealing with challenges brought about by the pandemic. The outbreak of the new virus caused all organizations to suffer a significant social and economic impact (Adedoyin; Soykan, 2023). The fear of contagion forced society and organizations to change their routines. Among these, educational institutions have been particularly affected.

With the temporary closure of schools due to the pandemic, educational institutions had to find new ways to continue their work and minimize the negative impact on education (Lien; Khan; Eid, 2023). Thus, various educational institutions adopted different technologies to keep their students in the learning process.

In this context, a popular concept in the business world emerges that can contribute to the organizations’ resilience, which was named “Learning Organization”. This term is used for companies that adopt a learning culture, allowing their employees to learn and continually transform (Asgari; Tavakolian; Taleghani, 2023). Organizations will need to rethink their evaluation systems and create something that works and is effective during the confinement period.
Given this scenario, the objective of this study is to present the challenges faced by educational organizations in times of Covid-19 and the contribution of the Learning Organization in the teaching-learning process.

2 CONCEPTS OF LEARNING ORGANIZATIONS

According to Peter Senge, the disseminator of the concept, "Learning Organizations" are companies which create an environment conducive to the continuous learning of their professionals, with the aim of expanding their knowledge and skills and that of the company to face future challenges like the one faced by Covid-19 pandemic.

In essence, individuals, on their own as well as in a team, and organizations should be prepared to deal not only with today's problems, but also to face possible future challenges in a creative way. Evaluative research is a means of promoting individual and team learning about organizational issues.

An important consequence of evaluative research is the promotion of relationships between members of the organization, and the dissemination of learning throughout the organization serves as knowledge transfer process. For this purpose, evaluative research provides a path for the continuous growth and development of people and the organization.

The ability to learn, emphasized by Kolb and Stata cited by Starkey (1997) as an advantage for organizational success, is based on knowledge, previous experiences, mental models, and also on new perceptions, new knowledge and modified behavior. For Garvin et al. (1998), "Learning Organizations" are those companies that have the ability to create, acquire and transfer knowledge and to modify their behavior to fit new knowledge and perceptions.

"Learning Organizations" seek to improve processes, even those that seem efficient, and learn from errors and failures (Leithwood; Louis, 2021). This allows them to avoid future mistakes and to correct deviations, which sometimes would not be perceived if the process were considered correct and assertive. Furthermore, "Learning Organizations" acquire knowledge from everyone
involved, including suppliers, customers and competitors, by observing their mistakes and successes and thus, learning from experience.

It is observed in this context that the main success factor of "Learning Organizations" lies in the organization's ability to involve people in the learning process and encourage them to contribute to joint growth (Yuan; Chayanuvat, 2021). "Learning Organizations" should promote a learning culture, influencing people, providing a shared vision, and disseminating learning growth.

3 DISCIPLINES BASED ON LEARNING ORGANIZATIONS

According to Senge (1990), it is crucial that all disciplines develop together. Therefore, systems thinking is considered the fifth discipline, integrating all the others into a unified body of theory and practice.

To achieve effective organizational learning, which makes an organization increasingly better in the learning process, it is necessary to consider the five disciplines that, according to Senge (1990, 2004), Senge apud Eyng et al. (2005) and Santos Filho (2004), should promote a change in the individual's mentality. Thus, the five disciplines focus on personal mastery, mental models, shared vision, team learning, and systems thinking (table 1).

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Concept</th>
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<tr>
<td>Personal Mastery</td>
<td>It is the discipline that drives people to clarify and deepen their personal vision, focus their energies, develop patience, and see reality objectively.</td>
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<tr>
<td>Mental Models</td>
<td>These are deeply ingrained assumptions, generalizations, or images that influence how we understand the world and how we act. This discipline translates personal vision into shared vision. It's a practice of sharing images of the future that foster commitment and participation, rather than mere compliance.</td>
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<tr>
<td>Shared Vision</td>
<td>This discipline starts with dialogue, the ability of team members to suspend their assumptions and think together. Team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations.</td>
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<tr>
<td>Team Learning</td>
<td>This is the fifth discipline that integrates all the others, turning them into a cohesive body of theory and practice. It's the discipline that helps us see interrelationships rather than linear chains, and to see processes of change rather than snapshots.</td>
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For the effective implementation of the principles of Learning Organizations, it is indispensable to have a unified vision within the organization, with all individuals committed and believing in the company's purpose. This vision should be of a collective, creating a strong sense of belonging to the organization and promoting teamwork.

These organizations are characterized by knowledge sharing, where the socialization and diffusion of formal and informal knowledge are encouraged, as well as the social interaction of individuals, including the formation of multifunctional project teams with employees of various skills and knowledge.

According to Goulart (2010), companies need to be receptive to creativity, innovation, acquisition of new knowledge and adoption of new ways of performing tasks. Companies must be in constant learning. A learning organization continues to improve its capabilities and accomplishments. Successful companies are those where employees are able to effectively handle problems on their own, have freedom to express opinions and offer innovative solutions, and, even when following orders, these are subject to questioning and negotiating.

4 THE CHALLENGES OF LEARNING ORGANIZATIONS

It becomes essential to discuss the need to develop a culture of Learning Organizations to prepare organizations for future demands and to maintain competitiveness in a constantly evolving environment. This culture is being spread in educational institutions, creating new approaches to learning and working. In the knowledge society, as observed by Drucker (1999), people need to learn how to learn. Indeed, the most important skill is the ability to continuous learning and the motivation to do so. The post-capitalist society requires lifelong learning and, for that, discipline is necessary.

Thus, Covid-19 presented an even greater challenge, requiring organization in a way that everyone can overcome the difficulty, while simultaneously adapting to the acquisition of new knowledge. Here comes the contribution of Learning Organizations, as teaching organizations need to
innovate and adapt using various technological resources to supplement face-to-face teaching, which is so ingrained in our culture.

Learning Organizations are those that innovate, planning differentiated activities and remaining competitive in the market. The challenges are great, but with planning and efficiency, they can be overcome.

The various technological resources have become essential tools in this process, as they continue to sustain learning in all teaching organizations. Each organization chooses to use the most viable resources available at the moment to meet current needs.

Education plays a crucial role in transforming society, as well as technology as a means to achieve it. Together, they represent a "fundamental dimension of social change, since the evolution and transformation of societies are built through the complex interaction of cultural, economic, political, and technological factors" (Soffner, 2014, p. 58).

Certainly, not all organizations will be able to adapt to this new reality, as much depends on the structure of the organization. Therefore, the concept of Learning Organizations emerges as an alternative for teaching organizations that wish to innovate and disseminate new forms of learning and working. The key to learning is to get feedback and dedicate time to reflect, analyze and assimilate the implications of what the feedback has to communicate. Another key to learning is the ability to generate new responses; try new methods and get feedback from the results of new behavior. This requires time, energy, and resources. Therefore, a learning culture should value reflection and experimentation and should provide its members with time and resources to do it (Schein, 2009, p. 369-370).

Society has changed and the needs are different. It is crucial to transform classroom practice to meet these new demands and consider these new understandings about the teaching and learning process. "Every human being is modifiable" (Meier and Garcia, 2007).

Educational organizations must promote a learning culture, influencing the proactive behavior of their employees, generating a shared vision of learning and
knowledge socialization, creating means for the organization to truly become a Learning Organization.

5 THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGIES - ICTs IN TIMES OF PANDEMIC

The society is living in the information era, primarily driven by two transformative forces that will define the 21st century: digitalization and globalization. In both situations, a broad and diverse set of information is fundamental, as its availability will drastically change how society lives and its expectations.

The definition of technological resources is as crucial as understanding the profile of collaborators and adjusting the trainings according to each one, as not everyone has the same skills or performs the same functions. In the current context, where we live in a globalized world, the need for trained professionals is even more urgent. According to Demo (2010), the skill of learning to learn is essential for lifelong learning.

Perrenoud (1999) sees skills as a sequence of operations, inductions, and deductions that utilize high-level schemas. From this perspective, all areas of the organization should be reconsidered. Mattos (1982, p. 21) highlights that money is becoming less physical and more informational, transforming into "electronic currency".

The effectiveness of Information and Communication Technologies (ICTs) is the focus of research in this area, as they are fundamental for the realization of learning. Wright (2012) defines technology as the use of objects by human beings (tools, machines, systems and materials) to modify natural and built environments.

ICTs are varied, and what should be considered is "which one will be most suitable for the moment and will bring the desired result for the organization". Learning Organizations’ contribution is critical to ensuring the most effective development possible. The technology specialist should certify that members of Learning Organizations understand and utilize this tool to its full potential.
In the knowledge era, organizations are utilizing a series of digital tools to monitor and improve new and old processes, aiming to enhance the quality of life of customers, businesses and employees.

Learning Organizations work with new ideas for businesses, aligning with their policies to implement new knowledge that can change the organizational environment. Therefore, organizations need to keep up with the changes in modern society and its new demands. It is vital that there is transparent interpersonal interaction so that collaborators genuinely feel part of the company.

This is a process of preparing organizations for the accelerated pace of the digital world. By reinventing their roles, Information Technology professionals need to stop being mere guardians of information and become real partners of knowledge, demonstrating entrepreneurial spirit, business knowledge and specialized skills to enhance the power of information, contributing to the teaching-learning process in organizations.

The Internet, as a technological tool, creates a universal space for information sharing, serving as a commercial alternative and altering all communication between people and companies. In this sense, Learning Organizations can provide this learning, creating highly favorable environments for learning.

Moreover, Learning Organizations encourage creativity and promote openness to internal and external learning experiences. In this process of knowledge seeking, creativity becomes an essential characteristic, as it will open new learning possibilities. Technology provides global electronic connections, real-time information, and greater interactivity with customers and suppliers.

At a time when organizations are grappling with changes brought about by technology, global competition and the transformation of operational modes, they had to face an even greater challenge due to Covid-19: becoming more creative, reinventing themselves and creating new forms of learning.

Facing such a scenario of changes, it was necessary to assess all these issues and try to minimize the impacts caused by Covid-19 until the end of confinement. Therefore, it was hard not to predict possible impacts, especially on
companies, and how they were, or have been, using these new tools to survive in that pandemic scenario, meeting their needs and those of their internal and external customers. Overcoming Covid-19 became a challenge that had to be won; it has fostered a dawn of times for change and effective actions to achieve objectives.

6 FINAL CONSIDERATIONS

This study highlighted the challenges faced by educational organizations during the Covid-19 pandemic and the crucial contribution of Learning Organizations in the teaching-learning process. The principles of Learning Organizations remain effective and relevant to institutions, especially in recognition that there is always tension in associating learning with the organization.

Learning Organizations play a vital role in educational organizations that wish to innovate and maintain the teaching-learning process, using various resources and ICTs, thus disseminating knowledge to all. Their concept, tools and methodologies help organizations in the pursuit of continuous learning.

It is undeniable that technology is an essential tool in the teaching process, but the real protagonists of this story, who will determine the project's success, are the educational organizations and the contribution of Learning Organizations. It is up to educational organizations to propose well-elaborated curricula, new forms of learning and working, constantly seeking to acquire new knowledge. Knowledge is a crucial factor, obtained through a process of mutual learning, and requires organizations to undergo continuous training.

Based on the study conducted, we conclude that the results are relevant concerning the contribution of the Learning Organization, as it has proved effective in its application in the recent pandemic scenario. Future research can contribute to the identification of other challenges faced by educational organizations and the discovery of strategies to deal with these challenges.
REFERENCES


