


THE MANAGEMENT SYSTEM INTEGRATED IN THE ANALYSIS OF AN SGI CERTIFICATION

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ABSTRACT

The Integrated Management System (SGI) is a management tool that contributes to improving the performance of companies in relation to issues of Environment, Quality, Safety and Health at Work, and Social Responsibility. Today a fundamental need for organizations, for workers and for society as a whole. The problem presented in the article shows the real concern of companies in the implementation of an integrated management system. The objective is the growing application of integrated management in organizations and making studies about this system important, especially with regard to the difficulties and benefits of implementing an SGI. Therefore, the adoption of the SGI aims, in addition to accidents, environmental impacts and cost reduction, to constantly increase the perceived value by the customer in the products or services offered and to improve its processes. The methodology for this research was carried out through a study during the certification process of the ISO 9001: 2015 standards; 14001:2015; 45001 and the discussion of non-conformities that during the process can compromise the SGI and the maintenance of the system. The research shows a rupture in an organization's Integrated management system, but precisely observed in the mandatory standard ISO 9001:2015 requires us to 6.1 Actions to address risks and opportunities and 7.2 Competence, which can compromise the entire IMS.

Keywords: SGI; Implantation; Law Suit; ISO 9001:2015; Risks and Opportunities

1 INTRODUCTION

The changes from the economic standards established during the industrial society to the society of scientific knowledge, was a decisive factor in technological innovations and became one of the main drivers of socioeconomic development, contributing to the increase of the competitiveness of companies and countries. In a solid economy, technological innovation must be the result of an environment that produces cutting-edge science and directly and indirectly influences the productive sector, especially through the research and development sectors generated within companies.

The aggressive dispute for the appropriation of information, knowledge and the development of innovation in the contemporary world, resulting from the globalization process, as outlined in the conclusions of the White Paper on Science, Technology and Innovation (PEREIRA, KRUGLIANSKA, 2005). Technological growth has admitted an accelerated advance in the advancement of all forms of devices or equipment and internet interfaces, such as cell phones, tablets, laptops, and computer programs, which incrementally and every day, seeking advances every day. increasingly radical. Our young people are inserted in this new digital reality and increasingly identified with these new resources.

Distance learning tutors are the main targets for the use of these new tools, because when they do not know the tools well, they make the learning process that involves the use of new technologies tedious and discouraging for students and teachers to follow these advances in order to update themselves. with these new forms of technologies and digital communication, because, as an educator, the professional needs to behave towards the students in a collaborative and motivating way and if the teacher should propose classes that have these new technologies as tools. New researches are elaborated daily, seeking to create technological tools for the benefit of society. Education receives new possibilities in order to facilitate the teaching and learning process.

According to Costa (2015), a new challenge is configured in the use of technological resources in the challenge of teaching and learning processes, which demonstrates that the lack of professionals prepared in the EAD universe involves the adequacy of their training and making them many teachers resist the use of these new technologies. The objective is to present that technological innovation has strengthened the emergence of new alternative ways of understanding educational processes and the importance of knowledge incorporated by Brazilian schools in the time of the Coronavirus pandemic. The challenge of identifying EAD and digital teaching solutions for learning; simplify access to distance learning and digital

education, so that time is optimized and reversed in internal gains and, as a consequence, new ways of learning and understanding new technological tools.

2 THEORETICAL FOUNDATION

2.1 Understanding what is Technology

Technology is a product of science that involves methods, techniques and instruments that seek to bring a solution to the identified problems, the word technology comes from the Greek "tekhne" which means "technique, art, craft" together with the suffix "logia" which means "study". Etymologically, technologies come from technique, whose Latin word *techné* means art or skill. This derivation shows that technology is an activity focused on practice, while science is focused on the laws that culture obeys (GRINSPUN, 2009, p.70).

Grinspun (2009, p.71) proposes a meaning of the term technology including it within Western culture, where we should understand technology as: "[. . .] application of scientific theories, methods and processes to techniques [. . .] technology as a scientific application is characteristic of modern society. It is an applied knowledge that is part of our Culture". In approaching these ideas, the aim is to always increase the efficiency of human activity in all fields.

Suzuki (2011) argues that the emergence of technology is a process that is confused with the history of man, understanding that he created strategies to improve his daily life, inventing and improving techniques that were later called technologies, which were used by the educator in the teaching-learning process, understanding that the use of technologies brings new possibilities, enchantments and seductions, but it also brings the need for reflection on the pedagogical practice that needs to be significant.

2.2 New Technologies in Education

New Information and Communication Technologies (NICTs) are the technologies and methods for communicating that emerged in the context of the information revolution, telematic revolution or third industrial revolution, gradually developed since the second half of the 1970s. They are considered NICTs, among others. : Internet, computers, multimedia resources, teaching-learning platforms, social networks, forums, e-learning, podcasts and others. In

general, these new technologies are associated with the interactive world, taking education to a new dimension every day, making the environments in which they develop grow.

The misuse of new technologies interferes with student performance and learning:

Kenski, (2007, p.57) cites some of these misuses of new technologies: “The teacher who reads to the sleepy class the subject of the class in interminable slides, who puts on video that occupies the entire time of the class; or the teacher who uses the internet as if it were just a big database for students to do research.

Antunes et al. (2008) shows some of these new teaching technologies, divided into technologies used in laboratories, classrooms and libraries, as shown in Figure 1, where a relationship between them has the internet making the connection. The great repercussions of technology have brought new scientific paradigms that will affect the pedagogical model, the notion of education in the relationship between educator and student, content and new methodologies (GRINSPUN, 2009, p. 27).

Figure 1 - Teaching Technologies

Laboratório	<i>Internet, Software estatístico, Softwares diversos, Computadores, Impressoras, Scanners, Datashow entre outros.</i>
Sala de Aula	<i>Internet, Computador, TV, Videocassete, Datashow, quadro-branco, Telão, Video, Tv, Microfone entre outros.</i>
Biblioteca	<i>Internet, base de dados de periódicos internacional e nacional e Biblioteca on-line</i>

Source: Adapted from Antunes et al (2008)

2.3 Current Classroom Challenges and Teaching Challenges

The challenges of dealing with students in the classroom and seeking harmony in the environment, whether face-to-face or virtual, involves the way in which the content will be assimilated by the students. In a globalized world, professional training is linked to good content training on the part of the teacher, as well as the assimilation of teaching techniques, especially if it is the distance learning reality.

It is a challenging task for the teacher, considering today's globalization, which is already inserted almost immediately in the relationship with the daily life of the new reality of

students, regardless of their social situation. The current world is globally interconnected and the learning process goes through this need for information connection.

According to Tiba İçami (2006), the class resembles an appetizing meal, in order to arouse the desire to taste it. However, there are often those students who, even without the initial appetite and imminent desire, the meal must be attractive enough to make the student taste it, transforming it into something unforgettable and tasty. Otherwise, a poorly prepared meal and unpleasant to look at, makes the individual not feel like eating, even if he is hungry, he can even taste it, but he will soon put it aside because it is not pleasant.

2.4 The Teacher's Posture in the Classroom

The center of the problem lies in the deficient training of students in basic education in relation to the didactics applied in basic education for higher education, making it difficult for students who did not have quality education in basic education or who studied very restrictedly in higher education. in relation to the contents and teaching methods.

Given this assumption, it can be said that the way most public school students reach higher education does not give them the conditions to effectively follow the teacher's teaching methods, because, unfortunately, the didactics applied by many of these teachers are still there's a lot of traditionalism.

With that, the main problem of learning can become a big problem when the student's basic education when applied with opposite methods, even if partially, to those of higher education.

It can be said that the methods used in higher education are partially applied in a traditional way, even involving a little innovation such as the use of technological equipment, but the attitude of teachers in relation to the way of evaluating still comes from “measuring” a lot. knowledge.

According to Mizukami (2001), in the traditional approach, the student only executes prescriptions that are set by external authorities; is instructed and taught by the teacher.

2.5 Distance Education Today

Contrary to popular belief, the distance course does not compete with face-to-face teaching, but is configured as a complementary part that offers accessibility to subjects unable to attend the physical space of a university.

Today, the EAD reality is inserted in the educational processes either by the need to integrate between the most distant regions and consequently reduce the educational borders. Pedagogically, distance learning, supported mainly by the internet, is already a reality in relation to face-to-face teaching.

The methodology used in distance learning should not differ from that used in face-to-face teaching, as long as it is contextualized and participatory. What is suitable for one type of education is also valid for the other.

2.5.1 Distance Education in the Coronavirus Pandemic

Distance learning is not synonymous with an “online” class. There are different ways to stimulate learning remotely and, if well structured, educational activities can fulfill more than a purely academic function.

For each of these questions, which we believe are the most important to think about doing education in times of a pandemic (and also in the post-pandemic), we want to present the reflections that we have been weaving throughout our years of practice and research in the distance modality. employing the online education approach. We have organized the lessons learned so far into “principles”.

A consistent strategy for distance learning is one that seeks to mitigate the heterogeneous conditions of access and the different effects of distance solutions depending on the students' previous performance. To avoid widening inequalities when using remote teaching strategies, it is essential to understand that the availability of technological resources is different among the different socioeconomic profiles of students and that those who already have better academic performance tend to benefit more from technological solutions. .

2.5.2 Knowing the Distance Learning Modality

In general, distance learning is based on some key characteristics, such as flexibility, economy, convenience and innovation.

Distance education using computers and the internet is characterized by the possibility of an “interface” in multiple ways and the approach of contents in an interactive way, in favor of the construction of knowledge. In the midst of technological changes, this type of teaching emerged as an alternative to overcome limits of time and space.

EAD is flexible because the student has the freedom to attend classes when, where and through which platform they think is best. Unlike a traditional classroom, where classes are scheduled for a specific time and in a specific location, the student has much more control to make their own schedule and, most importantly, study at their own pace. As each person has a study method that works for them, flexibility is a very important fact of distance learning.

- EAD is more economical
- Convenience
- Flexible
- Innovation

2.5.3 Inclusion of Distance Learning as a Pedagogical Practice

Currently, the world is marked by the presence of digital technologies, and with that it is imminent that the teacher adapts to this current situation, and what even looks for ways to improve and qualify to identify and insert with these new tools in their pedagogical practice in the classroom. On the importance of the teacher in training.

Teacher training must occur permanently and for life. New resources, new technologies and new teaching and learning strategies will always emerge. The teacher needs to be a permanent researcher, who seeks new ways of teaching and supporting students in their learning process (JORDÃO, 2009, p.12).

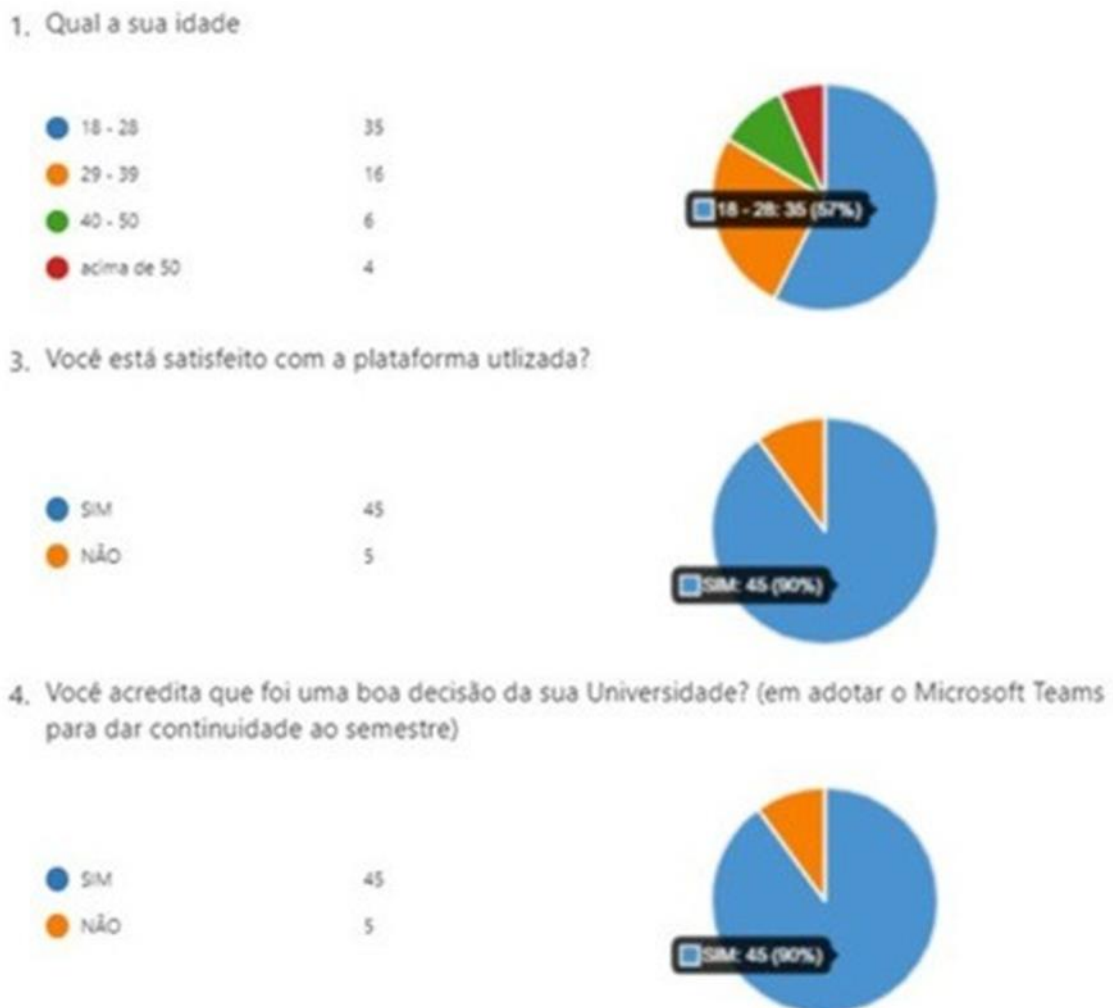
The importance of the teacher in acquiring skills and techniques related to the inclusion of digital technologies is related to the reality in distance learning student learning. However, the biggest challenge for the teacher or tutor is to interact with these new technologies to the contents taught in the classroom, or virtual environments.

3 DISCUSSION AND RESULTS

Teams is Microsoft software designed for team collaboration. The initial concept of the application was designed for collaboration of corporate teams, but lately it has also been used for educational purposes. In short, it is a tool that can help teachers with administrative and classroom tasks. Direction, coordination and teachers can communicate and collaborate with the entire team in one place. Policies and procedures, forms, instructions for various tasks and responsibilities, websites and other materials can be shared across teams for quick access.

Through the use of Microsoft Teams software, it was possible to have access to which age group responded to the form and it was noticed that young people predominated in the research, the degree of acceptance of students in relation to the platform adopted by the Private University was 90%, demonstrating that the quality of education has been achieved. The decision taken by the university was accepted by 90% of respondents as shown in Figure 1.

Figure 2 - Age Group and Satisfaction



Source: Author

4 FINAL CONSIDERATIONS

This article seeks to identify a great need for reflection on the part of the team that works in the area of education with regard to inclusive education, which should involve the whole

society in this discussion, in search of establishing actions aimed at the insertion of improvements in education. through understanding local needs.

Each and every teacher, both at higher and basic education levels, must equip themselves with theoretical tools and establish reference points in order to achieve the proposed objectives in their area of pedagogical activity.

The importance of the teacher in acquiring skills and techniques related to the inclusion of digital technologies is related to the reality in distance learning student learning. However, the biggest challenge for the teacher or tutor is to interact with these new technologies to the contents taught in the classroom, or virtual environments, because, in addition to creating tools, it is necessary to make use of them. Therefore, it is important to seek to qualify yourself on the technological tool you intend to use to adapt it to your planning.

Demonstrate about the importance and benefits of new technologies in the teaching and learning process in general, directly or indirectly to survival, in an increasingly globalized world, new technologies in the academic training of education professionals, technological resources, as a pedagogical practice in classroom.

Through the realization of this Case Study, it was understood that the digital transformation comes, quickly changing our habits in all spheres, especially in the area of learning.

Every day EAD teaching is a new tool to help this new way of learning that involves all technological innovations; and increasingly decreases the time and resources deriving from human management.

The impacts of the Coronavirus on Education were not pleasant, it is true, but social distancing and the suspension of face-to-face classes imposed a moment of reflection for the entire school community. With the forced stoppage, educators, researchers and managers in the area of Education and Public and Private Universities sought ways to renew teaching. The world is currently marked by the presence of digital technologies.

A consistent strategy for distance learning is one that seeks to mitigate the heterogeneous conditions of access and the different effects of distance solutions depending on the students' previous performance. To avoid widening inequalities when using remote teaching strategies, it is essential to understand that the availability of technological resources is different among the different socioeconomic profiles of students and that those who already have better academic performance tend to benefit more from technological solutions. .

5 REFERENCES

PEREIRA, José Matias; KRUGLIANSKA, Isak S, Innovation management: the technological innovation law as a tool to support industrial and technological policies in Brazil, RAE electron. vol.4 no.2 São Paulo July/Dec. 2005.

COSTA, SM The influence of technological resources in the teaching and learning process. 2014. 43f. Completion of course work (Specialization in Fundamentals of Education: Interdisciplinary Pedagogical Practices) - State University of Paraíba, Sousa, 2015.

GRINSPUN, Mirian Paura Saboza Zippin (org.). Technological Education: challenges and perspectives. Sao Paulo: Cortez, 2009.

KENSKI, Vani Moreira. Education and technologies: The new rhythm of information. Campinas, SP: Papirus, 2007.

MISKULIN, RGS Theoretical-methodological concepts on the introduction and use of computers in the teaching/learning process of geometry. Campinas. Doctoral thesis. Faculty of Education at UNICAMP. 1999

SUZUKI, JTF; RAMPAZZO, SRR Technologies in education. São Paulo: Education do Brasil, 2011.

TIBA, .Içami. Teaching by learning: new paradigms in education. 18. ed. rev. and current. Sao Paulo: Integrare, 2006.