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The Change of Education with the technology Advancement

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Abstract**—** *With the innumerable changes in the knowledge and technology society resulting from the emergence of the Internet, various communities have emerged and information has been democratized and knowledge better distributed. Technology has advanced so far as to invent the e-book reader. Note the influence and gain with the features that this support offer the user (student), tablet, compared to the printed book. Explain about the influence of this device within the classroom. It showed how coexistence of the two is possible and acceptance and satisfaction by students and readers. In discussing this subject it was observed that both the printed book and the new technologies trends have guaranteed space within the educational environment the tablet and the printed book will walk their paths in parallel without a determined time to their end. The work was not only limited to the printed and digital book but also extended and sought other knowledge gaps, systematization of data and sectoral information. With a brief profile of the book publishing industry and its economic dimensions.*
Keywords**— Digital Books. Technology. Tablets Printed book.**

A Mudança da Educação com o Avanço da Tecnologia

Resumo**—** *Com as inúmeras mudanças na sociedade do conhecimento e tecnologia decorrente do surgimento da Internet, surgiram várias comunidades e a informação foi democratizada, e o conhecimento melhor distribuído. A tecnologia avançou de tal maneira, ao ponto de inventar o leitor de livros eletrônicos. Nota-se a influência e o ganho com os recursos que este suporte oferecer ao usuário (aluno), tablet, com relação ao livro impresso. Explanar sobre a influência deste dispositivo dentro da sala de aula. Mostrou como é possível a coexistência dos dois e aceitação e satisfação por parte dos alunos e leitores. Ao discorrer sobre este assunto foi observado que tanto o livro impresso quanto as novas tendências tecnologias possuem espaço garantido dentro do meio educacional o tablet e o livro impresso trilharão seus caminhos paralelamente sem tempo determinado para o seu fim. O trabalho não se limitou apenas ao livro impresso e digital mais também estendeu e buscou outras lacunas de conhecimento, sistematização de dados e informações setoriais. Com um breve perfil do setor editorial de livros e de suas dimensões econômicas.*
Palavras-chave— Livros digitais. Tecnologia. Tablets. Livro impresso.

I. INTRODUCTION

Recent studies point to the lack of a technical and pedagogical training work for teachers, so that it interferes positively in their practice, thus making it clear that continuing education is much more dependent on personal mobilization than on investment.

Between 1992 and 1995 there was a growing recovery of the national economy with the partial creation of new jobs with specialization: public administration, education, commerce and services. Hiring the formal employment level targeted the dismissal of less qualified employees.

Professional and technological education has generated several modalities of construction of the educational process in its core, but the essential formation has as preponderant element the full exercise of citizenship, thus contributing to its progression in the work.

In this sense, there is a permanent need to seek mastery of stable scientific and technological principles,

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enabling lifelong education, resulting in an acquisition of fundamentals and different forms of work, unifying thinking and doing in the construction of intelligent and productive activities.

With the new technologies: informatics, telematics and industrial automation, they reconfigured the labor market, causing a change in the profile of the workforce and, on the other hand, unemployment and informality.

Information and communication technologies (ICT) that have been revolutionizing the world and causing rapid and profound change in society. These change processes include the world of education, the school and its key members: teachers, students, pedagogical coordinators and principals. As a result, new ways of thinking and living with school-wide technologies are being discussed at the government, academia and industry levels.

Therefore, it is the function of the school to be in constant movement of updating, with the critical eye focused on the training of its teachers, not only on the ability of interaction or formal knowledge.

Thus, eager for new methods and techniques, teachers look for training courses; Such training needs are related to the stage of cognitive, moral and personal development.

The theme to be addressed is very broad, thus, it is based on the formation of teachers with a new perspective of continuing education for teaching practices. It will seek to refer to theoretical production in authors guided by historical materialism as a direction in scientific production.

The discussion about research in the field of education, in the last decades has reached a great development, considering that one of the ways for the advances as a practice inherent to nature, allowing in the process of teaching and learning a greater articulation of knowledge.

It is for this purpose that the study will present as a research method the literature review carried out from the available literature on the topic of interest.

II. CHANGE IN SCHOOLS WITH TECHNOLOGICAL ADVANCEMENT

We are at a convenient time and it is worth rethinking Brazilian education at all levels, whether private or public institutions. Seeking to reverse the backwardness of many schools, the federal government launched the program "Digital Education - Policy for interactive computers and tablets", aiming to provide training facilities for teachers and managers of public schools with the intensive use of information and communication technologies. Communication. According to news from the website of the Ministry of Education, the use of tablet in public schools will start by high school teachers, (598,402 teachers).

With new resources, those responsible for the guidelines that guide the teaching methods in our country believe they provide better conditions for teachers to teach more attractive classes for teens, and prepare them for a better future.

2.1 Teaching technology learning

Despite the pros and cons of using the digital book, the reality is that new teaching resources are available to teachers and students. Based on this principle, the coexistence between the multiple forms of writing and reading is essential.

Chartier (1998) reports that digital media can be linked proposals to maintain written culture with strong educational commitments. “In addition to learning aids, technology circulates texts intensely, openly and universally and, I believe, will create a new kind of literary work or story. Today we have three forms of production, transcription, transmission of text: hand, print and electronic.

The easy access of people in general, including educators, with digital texts these days, often even in the preschool phase. Also according to Chartier (1998), it is worth noting that, “we must take advantage of the new possibilities of the electronic world and at the same time understand the logic of the other form of writing production that brings the reader tools to think and live better”.

2.2 The electronic book

To Cunhae Cavalcante (2008) the electronic book has several terms e-book, electronic book, interactive book and multimedia book, which represents the book in digital format, and can be read on computer or special device.

The evolution of digital technologies emerged very fast and in the universe of printed books incorporated into the digital universe, giving way to electronic books.

As reported by Mesquita (2008, p. 3), in 1998 the first digital reading devices were launched, which are called e-books, reader device. These devices "allow these books to be read on a portable, high capacity storage liquid crystal flat screen." These devices have several features that differ from the printed book, such as pagination and appropriate reading light. Another mechanism used for reading is the computer monitor screen. Lately many

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people have downloaded books and read through the screen of their own computer or notebook.

According to philosopher Lévy (2003, p. 11), "the reader of a book or paper article is confronted with a physical object about which a certain version of the text is fully manifest". As the digital text does not have radically visible borders, but possibilities to mix, cross, gather texts that are inscribed in the same memory.

The printed book also has a concrete space of information. However the digital book beyond the paper economy ensures agility regarding content updating. Not to mention that the hypertext and interactivity contained in this format allows navigation in any direction, opening new personalized horizons of reading and interaction.

According to Fitzsimmonse Fitzsimmons (2011), the internet provides powerful tools for many educators. Children who studied at home were rather limited by the walls of these houses. They had pencils, paper and textbooks and little else, except perhaps for an occasional local study trip. The internet has put the world at the fingertips of these young people, they can make virtual trips to foreign lands, interact with others and access the latest information on advances in any field of study or interest.

2.3 Digital Book Reader –*Tablet*

Since the Gutenberg Bible, which marked the beginning of mass production of printed books in the fifteenth century, and the arrival of desktop publishing in the 1980s, the publishing market had not undergone a transformation like now with the emergence of tablets. The launch of the first iPad in mid-2010 marked the beginning of this new era. The Apple tablet was not the first to be invented, but it was responsible for popularization and was imitated outside the world.

E-readers (digital book readers) have been around for over a decade, with the sole function of displaying static, black-screen and bank texts, but a positive factor of e-readers is that it allows them to add At the same time, being able to read, view images and hear sounds. These devices have an audio reading system for electronic text, which allows people with accessibility to understand the text in the case of poor vision, tired eyesight or completely sightlessness.

The tablet as a device for reading digital books and magazines stands out with its color, touch-sensitive screen, brightness control and interactive graphics capabilities for readers.

2.4 Advantages and disadvantages

Tablets are similar to laptops, use a pen for input, are mobile can take note, draw directly on the screen, can convert handwriting to text, this is a breakthrough compared to the laptop. The student can take to a class in the field. Holds and stores multiple books is lighter and less spacious, its battery lasts approximately 10 hours (triple a notebook).

Disadvantage, it has no CD or DVD player, has a space limit and cannot be modified, does not support heavy software tasks, and for some readers, the small screen reading becomes tiresome.

Even with these small obstacles, school tasks have become more fun, fun and practical with the support of a tablet. With a few clicks, students will have access to the required content and a plethora of extra content at any time, no longer having to travel to the computer lab.

2.5 Technology in the classroom

With the change in teaching materials, students' skills will change as well, students of the future will be creative people. At the same time, they will be able to concentrate more, for that it will be necessary to balance both aspects: the immensity of available information, collaboration and contacts, with the capacity of planning, project execution, mental discipline and concentration.

According to Moran (2013) and Bacich; Tanzi Neto; Trevisani(2017), they agree that teachers can use technologies in their disciplines or areas of activity, encouraging students to be producers and not just recipients. They can make content available in virtual learning environments to feel free from the monotonous, repetitive, tiring, and unproductive task of speaking and writing the same subjects for different classes and focusing on more creative and stimulating activities such as mentoring. , ask questions, deepen the basic information acquired and contextualize it. The technologies that unleash the most repetitive tasks, thus allowing concentration on the most creative, productive and stimulating activities.

III. DISCUSSION ON TECHNOLOGICAL CHANGE IN EDUCATION

School management and pedagogical coordination should ensure that teachers know how to deal with technology, and management should also be prepared for possible questioning from students' parents.

Planning is not only valid for this purpose, but for any other decision making in the individual's life or within an organization. To achieve the goals it is necessary to set goals and pass the information to all involved correctly.

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According to Las Casas (2019), a vision must be established, that is, an image that the institution hopes to project in the classroom. It can start from a goal setting to be pursued. A vision to achieve optimal student performance, quality learning and understanding of the subjects given.

Tablet versus Printed Book, change often generates insecurity or resistance on the part of those involved, migration should not only be done to save paper and minimize the weight in the students' backpack. Students need to realize the importance of change and the potential of this technology in the method of pedagogical improvement. For this reason, it is essential to elaborate a pedagogical plan that captures students' attention that makes them think, question, discover new ways to study with satisfaction, considering that this tool is part of their generation and is common in their daily lives.

Follow-up is necessary so that students do not lose the main focus and purpose of the equipment.

Dispersion, when using a platform with so many audiovisuals, the student may lose focus of activities. To avoid such situation the ideal is that the teacher clearly sets the objectives to be followed by the students, a pedagogical plan that holds the student's attention.

Also according to Las Casas (2019), an institution or organization is made by people, so nothing more obvious than to implement the process through communication. The first head to make is that of top management. There is also a need for involvement at all levels. One should be concerned with the dissemination of processes within the institution.

As Corrêa (2008) reports the evolution of information technology, the physical book will no longer be sent quickly so that it reaches the deadline, reliably and in good condition, has not been substantially altered by the most contemporary information and telecommunications technologies. More why send the book physically? You can send the information-intensive content of the book and you can travel optical cables at lightning speed and at very low cost. He further states that the market for being information intensive is bound to be substantially changed in the near future.

3.1 Influence of the tablet in the classroom and aspects of improving subject understanding

To evaluate the aspects of performance within the classroom regarding the service applied in teaching and learning, so that it has more meaning, according to Corrêae Corrêa (2017), it is important to observe the relevant items:

- **Access**: Ease of access. The student through technology, has the practicality to acquire knowledge and keep in touch with a universe of information, ie the world is at your fingertips.
- **Speed**: Speed to start the service. Bringing this situation to the world of technology the student will have their doubts answered in record time, even without the help of the master.
- **Consistency**: Degree of absence of variability between specification and service delivery. In the universe of the technological world there is a wide diversity of information so it is advisable to evaluate the stability, reliability of the source to be consulted.
- **Competence**: Degree of technical capacity of the organization to provide the service. In this case we visualize the figure of the institution that, when hiring the master to perform his function, was concerned to bring into the classroom a qualified teacher to clarify, assist, guide and resolve the doubts of students with competence and security of their knowledge.
- **Service**: Degree of attention given by the contact staff, willingness to understand and assist the customer. Degree of friendliness, education and courtesy of the customer contact staff.

The management of the institution must be attentive to the care of students and parents and the public in general, quality care is something that consolidates the brand of the institution, makes everyone look kindly, generated praise, crucial point for the success of an institution or organization.

- **Flexibility**: Degree of ability to change the service package to fit the customer's expectation / desire.

The institution must always be alert to what is happening in its midst, or better in the world. The institution must be ready for new challenges and paradigm shifts. This is what is currently happening with the change of educational material from print to digital, public and private institutions must train their masters to meet the new generation, with an attractive and innovative pedagogical plan.

- **Security**: Level of personal or good security of the customer who passes through the service. With regard to physical safety, the institution must ensure and inspect in advance any spaces or equipment that may cause accidents to the members of the institution and the general public. In terms of classroom service to students using technology. It is up to the direction of the

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institution together with the teachers to plan, determine, delimit what should and should not be researched on the Internet, without impairing the smooth progress of students' teaching and learning.

- **Cost**: Cost to the customer of being a customer. Includes the price, but may include additional costs, such as the cost of access to the process.

The number of schools using tablets should increase considerably and in rapid steps after that. This is what private institutions expect, help with their investments by the government. ”

- **Integrity**: Honesty, sincerity and fairness with which the customer service is treated. As a service provider, its mission is to treat all citizens with respect, transparency and honesty.
- **Communication**: The ability of the service provider to communicate with the customer in a desirable way (intelligible, of adequate frequency and richness).
- **Cleanliness**: Tidiness and tidiness of service facilities.
- **Comfort**: Level of comfort offered by the service facilities.

Since staff and students spend much of their time in a classroom or other part of the establishment, it is no fairer for this institution to provide a comfortable and safe environment.

- **Quality of goods:** Quality of specification, conformity, durability and reliability of material goods that are part of the value delivered package (level of specifications itself): aesthetics, among others.

To Slack (2015), in the organization or institution, the main thing is the power to change the form of competition and, therefore, to change the priority of performance goals. Such changes may be triggered by the movements of competitors or the need imposed on society. Performance objectives are seen as fundamental points for the improvement of the services provided and, consequently, the achievement of greater competitiveness by the institution.

Know how to listen, respect the opinion of others and know how to argue to reach consensus when the points of view differ.

- **Cost**: Advantage in cost do more for less.

In everyday life it is necessary to know how to negotiate, know the product or services to make the best decision without prejudice.

Performance objectives should be pursued by prioritizing the specific needs of the institution's client groups (students) and the actions of competitors.

To Slack; Chambers; Johnston(2015), the content of the strategy is the set of policies, plan and behavior that the institution will have to follow. This strategy is about prioritizing your performance goals, project decisions, planning and control decisions.

3.2 Paperless Future School

It is important to report that countries like South Korea have one of the best education systems in the world. South Korea has succeeded in launching education based on extrinsic models (which happens when you do something because you get something in return, such as money, or because you have to do it, for example, when you have to study for an exam).

The South Korean government invests 5% of GDP in education and parents of students invest up to 20% of family income in the education of their children. The early years of primary school are a priority, a law allocates much of the resources to this stage.

Teachers are evaluated and valued, the average salary of teachers of basic education is approximately $ 10,000. The workload, students spend on average eight hours in school. The system encourages students to seek first place and perfection.

At the moment, the digital transformation of Korean education is unprecedented, not so much because of the lack of investment by other countries, but because of their educational model.

3.3 Textbook segment

Textbooks make up the largest segment of the publishing market, accounting for more than 50% of the copies sold and revenues in the sector. Private demand accounts for approximately 30% of total market turnover and government purchases for around 20%. But in number of copies sold, the situation is reversed: the government market accounts for a third of demand, while the private market retains about 20% of the total.

The publishing segment focuses on four major publishers in the market, Grupo Abril (Ática and Scipione publishers), Santillana Group (Moderna publisher), Saraiva and FTD, these publishers along with the government, stand out as the main agents this market. Other publishers, such as Positivo, Editora do Brasil, Edições SM and Editora IBEP-Nacional, also stand out.

PNLD(2019) (in millions of copies). The sale of textbooks is determined by the choice made by the teachers, who have decision-making autonomy over books

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to be adopted and used in the classroom for three years. These sales become the main focus of attention among publishers, their market reference, especially government purchases. After the publication of the results of the works selected by the Ministry of Education (MEC), Secretariat of Basic Education (SEB) in conjunction with the National Fund for the Development of Education (FNDE) is the moment of great investment by publishers, for the dissemination of his large-scale national books (Painting 1).

Painting1 - Government sale of the textbook

Teaching stage	Benefited Schools	Benefited students	Total copies	Acquisition value
Child Education	74.409	5.448.222	646.795	R$ 9.826.136,60
Early Years of Elementary School	92.467	12.189.389	80.092.370	R$ 15.852.107,23
Final Years of Elementary School	48.529	10.578.243	24.523.891	R$ 24.516.830,94
High school	20.229	6.962.045	20.835.977	R$ 51.830.577,40
Grand total	147.857	35.177.899	126.099.033	R$ 1.102.025.652,17

Source - National Education Development Fund Website(2019)

With complementary content and applications that add usefulness to the teaching and learning potential offered in textbooks. Among other services that publishers offer.

3.4 The book and innovation

Digital books, one of the objectives of this work was to seek to identify their presence and trajectory in parallel to the printed book, a support that constitutes their innovation resulting from technological development. The advancement of digital technology has facilitated the creation of digital content and its various reading media (e-readers, tablets, notebooks, smarphones etc.).

In the scientific, technical and professional books segment, the market is very fertile for the growth of digital book consumption, due to the greater feasibility of merging the use of e-readers and other digital content reading media among its consumers.

In the editorial segment of the textbook, innovations are inserted by demand, by market need. Innovation is introduced as supplementary support services for teachers and students, making it largely possible through the growth of technology, which allows, in this case, the use of the internet as a platform for offering these services.

3.5 Digital Book

The technology of producing printed books is widely known. The publishing industry is facing an innovation that changes the nature of its product and will impact, in various aspects, and in all activities of the production chain. Initially referred to as a digital book, or e-book, such innovation not only applies to the shift to a new way of presenting the content of print books, but to a radical change that will impact all processes of authoring, production, publishing, distribution. , consumption etc.

Publishers will continue to be managers and packers of content in the form of books - print and digital - and services, capable of meeting the demands and needs of the market. At this early stage these new product still resembles a simple copy of the printed book, scanned and displayed on monitors of different types of equipment such as computers, e-readers and tables.

3.6 Copyright

The first copyright law was Law No. 496 of August 1, 1,898, and the last update of copyright law was Law No. 9,610 of February 19, 1998, which consolidated copyright law. Where it states that the author has exclusive rights to the work with a term of up to seventy years after his death. It is observed that this law may be limited in view of the current universe of technological innovations.

When it comes to publications in electronic media, “the author has the right to authorize the reproduction of his work in any way he likes, including the Internet” (MARTINS FILHO, 1998). The great difficulty of copyright in this environment is the possibility of copying and dissemination without permission of the author, which would be a scam to copyright. This is what happened with printed books when they were fully xeroxed at universities.

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The most difficult control of copyright on the Internet is because this is a very vast universe with no barrier to obtaining the information. For this reason, knowing who is the author of a text or having control of illegal reproductions circulating on the Internet has made this task complex and difficult to perform.

Publishers are currently reproducing books in digital format that sell for less than the printed book, while retaining the rights of authors in general. Even so, there are still illegal reproductions circulating around the network penalizing and hindering the process of copyright control.

Throughout the course of the book and reading and writing practices, technology has played a key role. Along this path from inscriptions on clay tablets, papyrus, parchment, paper, book, computer, CD-Rom, to the emergence of the Internet and ebooks, tablet and others.

We live today in the age of the Knowledge and Information Society, with almost every function and activity of people being directly linked to the computer. It is not news that the book does not follow the same path.

At first the idea that the printed book will disappear will become extremely unacceptable. This is because the book is rooted in the culture of print and the traditional habit of the reader.

As was the case in the past when Gutenberg had no taste for handwritten text, most of which had the appearance of a manuscript, electronic book producers today are reproducing the practicalities of the printed book to the digital book.

IV. FINAL CONSIDERATIONS

The printed book has a trajectory that guarantees a high degree of reliability and stability, has the quality of the record of humanity, one of the advantages over the electronic book, since the electronic books do not guarantee the longevity of its use. But with the advancement of technology this assurance of reliability will gradually be earned by users. It is evident that the printed book will not be replaced. Given that there is room for the two to follow in parallel.

One sector of the publishing market that could be hit by these new trends will be printing. With the arrival of the digital book, another parallel competitor for digital book development emerged, it is the digital programming companies that have special platforms to work with publishers in the creation of digital books.

Regardless of the supply chain, there must be rapid reform and transformation to receive, perform and distribute these tasks as best as possible within the organization.

Publishers need to design a new layout, hire contributors to enable them for media archiving, track, revise, approve, and release for playback. It seems to be practical and simple, but in practice, it is not as easy as it seems. Files lose much of their original formatting, so flowing text books look better than those with many images. Some publishers are choosing to turn the file into PDF and then convert it to ePub format; It is still under discussion whether it would not be interesting to build a specific layout for the digital book. However, the trend in the near future is for publishers to do the entire digital book process internally, but that will require the right technology and platform.

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