ONLINE TEACHING IN INTERDISCIPLINARY TRAINING COURSES IN REHABILITATION AND TRAINING - AN EXPERIENCE REPORT

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ABSTRACT
We have been practicing and researching Online Education for many years, but we could never imagine that, from one day to the next, or people would be learning teaching by digital technologies so effectively. There is a whole didactic conception and study and learning that involves structure, content, training and that ranges from the initial didactic design appropriate to the characteristics of the specific knowledge area to the evaluations of student learning, performed by a trained multidisciplinary team. There is no denying that online education is an improvement caused by technology, which breaks geographical barriers and is capable of bringing quality education to the four corners of the world. Not only people interested in learning, but professors and professionals from the most diverse areas have discovered the potential of this niche market and invest in creating online courses as their own enterprise and as a way to reach a larger audience. About 30 years of research, including that of the U.S. Department of Education, have found no evidence that online learning is qualitatively inferior to that obtained in a traditional classroom. What is simple to conclude is that, as in the classroom, the quality of learning and the potential of the knowledge acquired depends on the interest and effort of the student.

INTRODUCTION
Distance learning or distance education, which is realized through the intense use of information and communication technologies, where professors and students are physically separated in space or time, is being increasingly used in Basic, Undergraduate, Graduate and open courses. The increasing access to information in the present day has great influence in the education process. Distance education allows for the dream of many people to pursue a capacitator or formation. This modality of learning and teaching grants the possibility of students and teachers to interact, even when many miles apart, through digital tools. Also, all the available materials in these digital environments must be constructed according to the characteristics of the students who choose to learn online, mainly when it comes to the design and accessibility of these contents. The shifts in the habitual patterns of teaching are occurring in a very fast pace, the inclusion of technology in the education process has provoked a revolution in the process of teaching/learning. The access to the Internet and the use of computers, cellphones and other devices, allow for a fast and easy dissemination of information (Martins, 2009). The increase in professional qualification and formation distance learning courses increased the number of people who have access to this information. Also, the advance of distance learning allows for the inclusion of individuals who might otherwise have no access to education or information. The flexibility of the schedule, the absence of daily frequency requirements and the uninterrupted access to the classes increases considerably the number of people that can be included in the formation process (Aretio, 2007). Distance learning can be applied in many ways, fromprofessional update to professional formation. This modality of learning can also be used to develop a countries education system (Aretio, 2007). Taking into consideration some studies performed in Brazil, that approach distance learning, specifically in Physical Therapy and Physical Education, the proposal of the present...
study is to suggest a strategy for the certification, qualification and professional formation in Physical Therapy and Physical Education through distance education. The development of the student until their professional formation, such as in other health areas, involves contact with patients and students, the practice of movement and a diverse range of techniques in different work environments such as clinics, hospitals, gyms, clubs and high-performance sports. Therefore, just like the theory, the practice is essential during the formation of Physical Therapy and Physical Education professionals. Studies performed with docents in the aforementioned courses, observed that the pedagogical project in which these courses where based upon contained innovative guidelines, with the goal of improving the traditional model and to address the new demands of these professionals for distance learning (Capellini, 2011). Both graduate courses already adopt a model with some on-line classes, in order to acclimate the students to the virtual environment and to show how useful it can be.

There may be some resistance to the methodology in distance learning by some older professors or the more traditional ones who have not had the experience with distance learning and/or are not open to change. According to Martins (Rubens Martins, 2005) there is a certain resistance to the distance methodology, not only for the undergraduate degree of Physical Therapy and Physical Education, but also to many other areas of health, for fear of a decrease in the quality of the courses. The author also defends the inclusion of semi-presential courses, respecting the specificities of each area, considering the moments for practical classes. In a study, he created a didactic material on the teaching of respiratory physical therapy, which consisted in bronchial hygiene maneuvers, and pulmonary reexpansion and oxygen therapy. The material was provided on the internet and the students learning was validated. The used media were videos, photos and written material. The students had access to the material for 15 days. After this period the students improved their knowledge in a statistically significant manner. The author the cited research suggests that technologies of communication can facilitate the learning in respiratory physical therapy (Berto, 2006). Researchers analyzed the perception of docents in Physical Therapy and Physical Education on the use of distance learning, they observed that 60% of the sample believed in the improvement of the learning with the used of distance education (Tonani, 2008). The main factor for the success of the distance learning where the media being used as well as the ease of access, both for students and professors. Today, with the wide range of tools there are for the online environment and the dissemination of the internet worldwide, distance learning has become a reality in all sectors of education (Almeida, 2003). For students of Physical Therapy and Physical Education the suggested model for distance learning is the teaching/learning model, due to the relevance of theory and practice. The virtual environment incentivizes the student to problem solve, stimulates research, applies directed exercises, answers questions, besides allowing for the opportunity of self-learning and the use of real-time conversations through video chats, and forums. One of the most interesting points of online learning for students is they become an active element in their learning process, with more initiative and compromise (Cantisani, 2016). The current coronavirus pandemic has brought a new reality for teachers and students, and specially to the traditional model of teaching. The distance learning has taken lead as the main model during the pandemic, from the elementary level to higher learning. Many students and docents had to enter the digital environment, change their opinion and adapt to distance learning, be it theoretical or practical, besides the increase in the number of people seeking courses, online events and etc. The online courses market has increased significantly in the last years and continues to be in expansion throughout the world. Professionals from a diverse range of areas have entered this market with more security and market analysis has shown that it is a good business option. Every year, many companies and specialized channels perform studies on the growth of the online courses market worldwide. Recently, for example, Forbes magazine presented data that show the distance learning market in the US will reach the incredible mark of $325 billion dollars before 2025. The last prediction made by Forbes $107 billion dollars until 2015, which was proved right and was surpassed in the following years.

A research by Global Market Insights, initiated in 2017 and updated in February of 2019, puts forward data and previsions on the online course market in the global level. We will present some of the information in this report and will analyze it later on. Distance learning technologies are allowing for many professionals and companies, as well as learning institutions, to share and provide educational content bases in innovative and interactive methods. For that, there are a diverse range of service providers offering learning platforms for students, helping them access online study materials and to participate in virtual classrooms. The increase in the effectiveness of these programs, with the help of multimedia content such as live classes, videos, images and written materials, is an important factor that drives the growth of the online courses market. Since the systems of e-learning demand many hardware and software recourses, cloud based e-learning offers a massive reduction in operational costs, also allowing the users to have online access to the content without needing to download or install specific software.

![Graphic 1. Representation of Online Activity in the Americas](image)

It is expected that the Latin American online courses market grow to reach over USD10 billion until 2025, due to the development of learning institutions that raise the literacy levels of the region. In markets such as Brazil, Mexico and Argentina, it is noted that public institutions are investing in the development of educational platforms. In may 2018, for example, the Brazilian government announced investments
of around US $ 270 million in the formation of teachers throughout the country. With the application of these resources, the demand for low cost learning technologies is growing rapidly in the country. Besides, the increase in internet access is accelerating the demand for online courses. The university level education in Brazil has experienced quantitative and qualitative advances as well as significant development.

**Online Courses Market in Brazil:** The online learning Market in Brazil has surpassed 1.5 million students, but its potential is still immense. According to Natanael Oliveira, CEO of Marketing Com Digital e Make Sales Daily Corp., the online learning world in Brazil is still attached to universities and professional courses. Basically online options are for those who cannot attend on site classes or live too far away. The huge opportunity is on a new outlook on online learning as a business model. In an interview with Exame magazine, Natanael cites the example of a company that sells kids toys, they, in the example, can create a new source of revenue by creating online courses for parents who want to learn how to help in the development of their children. A perfect combo that already exists in a diverse range of sectors in the USA. He goes forward to say that there are those who create their own online education platform and simply share their knowledge and experience through online courses. It is only when entrepreneurs, of the most diverse range of sectors, start to see online learning as a revenue platform, that Brazil will advance to the next level.

The truth is that, while there are people looking for online courses as a means to buy a certificate to put on their resumes, there is also a group of people who seek an opportunity learn, grow and advance their career.

**“Online learning is for those who want results, not simply a certificate of completion”**

Concluding, there is a shift happening in the traditional model of teaching, the implementing of technologies in all sectors of education is a reality. Certification, qualification and professional formation courses for students and professionals of Physical Therapy and Physical Education present a huge potential of success, taking into consideration the theoretical and practical model, through video classes, written material and online chats. This model is also applicable to basically all sectors of health, taking into consideration their specificities. The greater objective of teaching and education is to reach the largest amount of people possible. Online learning is absolutely a game changer for teaching and education.

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