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TRAINING AND DIDACTIC INNOVATIONS FOR DISABILITIES AND SPORT DURING COVID-19: A COMPREHENSIVE EVALUATION

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Abstract: Among the sectors most affected by the ongoing health and social pandemic there is certainly that of education, which suddenly found itself forced to overturn its habits and its methodological settings in teaching provision. Technology has become central, especially in university contexts characterized by courses with a high number of students, and distance learning has established itself as an essential rule to guarantee the continuation of the training processes. The purpose of this paper is to investigate whether the transformation that took place was also the cause of the start of a didactic innovation process based on the adoption of technological supports and new methodological settings with specific reference also to the sphere of disability and the environment. sports education.

Keywords: Innovative Didactics; Educational system; Sport; Disability; COVID-19.

Introduction

Didactics is an ancient discipline, although has significantly changed in recent decades in terms of operational procedures and significance.

Nowadays, it is the science of communication and educational relationship. The specific object of didactics is the study of the teaching practice, the rational organization of methods and actions aimed at achieving an effective educational project.

The didactic strategy relates to the way of teaching, thus providing a purpose to this activity; the person who teaches (the teacher) will be able to convey his or her message in an accurate way, facilitating the learning process of the student (the learner) (Rugelj, & Zapušek, 2018).

In this regard, it is necessary to find out if all this has been preserved and if the teaching and training principles have been supported and enhanced, despite the health and social pandemic caused by COVID-19. Furthermore, the critical moments often provide the cues to start periods of progress and development, and in this case too, the Research world has the task of analyzing if this has actually happened in the field of training and education.

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1. Innovative Didactics

Innovative didactics is a new teaching style, based on enhancing students' skills through new learning methodologies, from e-learning to team work, thanks to comparison and sharing experiences that increase students' participation and take the class to a much higher level of communication, using new technologies (Bottino, 2015).

Hence, we are facing a revolution in the didactic space that aims at changing school environments, introducing new tools and new learning spaces for an innovative didactic method. For example, open and engaging environments for group work have led to greater collaboration both among students themselves and between students and teachers (Lazzari, 2018).

The real progress in the environment and learning process is due to the widespread diffusion of digital, interactive and multimedia tools in classrooms, and at school in general. In fact, thanks not only to the use of a didactic-technological support such as the Interactive Whiteboard, but also to the use of tablets, the learning space in everyday didactics is greatly enhanced.

It is no coincidence that we also speak of "Bagless School", i.e. of virtual spaces, innovative labs and the opportunity to take a tablet to study at school (Moricca, 2016).

Among the various problems of innovative didactics, we can certainly find the economic ones, which, for example, are due to the presence of a single computer used by the whole family. This occurs especially in this period in which many people are forced to work from home, as the technological tools are not provided by the Italian school system (Di Palma, & Ascione, 2020).

The most used methods for innovative didactics are:

• Learning-by-doing. The best strategy is to learn through actions: this has always been considered the most effective didactic methodology.

• Project work. Managerial skills are conveyed by working in a team and creating a project.

• Business Game. Students are practically divided into groups, and compete with each other.

• Role playing. It is very frequent also when selecting personnel in a company; it highlights not only the role and the behavioral norms, but also the creative side of a person.

• Outdoor training. As students get involved, they get used to working in very different environments, compared to those thanks to which they are used to deal with each other and with their teachers.

• Business theater. A theater activity is simulated, during which the mind gets used to developing flexibility and creativity in solving problems.

• Brain Storming. Through this methodology students are encouraged to develop their creative sphere, in order to find alternative solutions to various kinds of problems.

• Problem Solving. Developing a strong critical sense is the main objective of this methodology, bringing students to think about the different solutions that arise from a problem.

• E-learning. Thanks to Internet technology, it has been possible to develop a learning methodology that would not exist without the use of the network.

• Third mission activities. This is the set of activities with which universities interact directly with society, alongside the traditional teaching (first mission, based on the interaction with students) and research (second

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mission, mainly involving the interaction with scientific/ peer communities) missions. With the Third Mission, universities come into direct contact with further subjects and social groups than the ones they already cooperate with, and open up to new ways of interacting characterized by very different and context-related content and form.

2. Didactic Innovations, Technologies and Students with Disabilities and Special Educational Needs

The use of technology offers an effective and unquestionable help in the didactics addressed to students with disabilities or special educational needs.

First of all, they facilitate individualized didactics, tailored to the experiences and objectives within a class context that does not marginalize the student. The so-called "digital" class creates a cooperative and collaborative working environment (Garrison, & Vaughan, 2008).

The technological tools have both an enabling and rehabilitating purpose; to the first group belong those tools allowing students to carry out activities that they would not otherwise be able to do (such as, for example, aids for users with motor disability and visual impairment).

Therefore, distance learning can create quite a few inconveniences, if not structured and organized wisely also for students with disabilities, and if not aimed at backing up the training and social action of the supporting teachers. It is useless to deny that distance learning risks increasing inequalities and pushing aside the fact that school not only means learning, but also relationship; it is the inclusion of disabled students that needs this relationship the most (Gover, Loukkola, & Peterbauer, 2019).

Families, as usual, have to take charge of everything; it is then taken for granted that they have the tools to cope with this new way of " being at school". As a result, the most vulnerable groups are at risk of being left behind; we are speaking not only of disabled students, but also of foreigners, SEN students, and those living in disadvantaged social contexts (Panciroli, Corazza, Vignola, Marcato, & Leone, 2018).

In an emergency situation such as the one we are experiencing today, whilst distance learning makes it possible not to stop learning, it is good to remember that school is not just about training to learn; to learn notions, all I need to do is turn on the computer and study the materials made available by the teacher, but it is just like when you learn to drive and you need the instructor next to you. This means that schools need to be ready to manage these needs remotely with the use of technology (Laurillard, 2015).

There are many difficulties in this particular context, and both teachers and school managers have proved to be unprepared to deal with them; a first step forward is certainly to collaborate with the supporting teachers, by developing personalized materials (Baroni, & Lazzari, 2015).

Very important for this category of learners is also the continuous feedback, thus the teacher must search for tools capable of providing immediate feedback so that the students can feel like living even a very remote connection with their teacher, albeit digital.

3. Innovative didactics in Sport

Both in group and individual activities, sports technology has certainly changed the very way of experiencing them, with the advent of clothing with wearable technology and fitness trackers, especially in the very popular variant of the fitness watch, through which athletic trainers, professionals and amateur sportsmen and women can monitor their health and physical performance under constant stress.

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During some competitions the tips are sent directly to the athletes' ear, and health conditions can be detected in real time by their doctors.

In this period of pandemic, we can see those innovative didactics, in addition to being used for education, is used in the sports world too; indeed, some clubs have adopted alternative ways to monitor their athletes' progress and to not make them lose team spirit. Tottenham Football Club, for example, as shown in a video published on Twitter, decided to create a virtual training session; the players were coordinated by Carlos Lalin, one of Mourinho's most loyal followers since his career at Real Madrid, who would suggest and monitor the exercises to be performed, while being connected via webcam.

This aspect could, and should, be replicated in all the sub-groups of the sports system, with particular reference to the training environments aimed at children and the whole amateur sector, and at those who, through sport, live a social and pedagogical moment intended to stimulate social-relational connections between individuals and between the latter and environment around them.

4. Evaluation at the time of COVID-19 pandemic

Docimology is a branch of pedagogy that can be specifically collocated among the experimental techniques dealing with the study of the evaluation systems of test, where evaluation is of fundamental importance since grades are no longer understood in a strictly numerical sense (Giannoli, 2016).

Formative evaluation is primarily used to check the students' starting level, with a diagnostic function; this makes it possible to propose and encourage activities that are suitable for them (Sursock, Smidt, 2010).

Evaluation is then employed throughout the entire educational process, in order to deepen students' knowledge and to regulate and constantly improve the planning of the educational activity. Finally, at the end of the four-month periods and the school year, there is a summative evaluation which highlights the results achieved and a picture of the final overall situation of students (Rivoltella, P.& Rossi, 2019).

Parents can provide teachers with very important information about their children so as to better understand and help them, thus improving the relationship between school and families and the so-called "horizontal" continuity. However, school evaluation falls within the exclusive competence of teachers (Brooks, & Pomerantz, 2017).

Every kind of innovative didactics must be associated with an innovative evaluation (Pitzalis, M., Porcu, De Feo, & Giambona, 201). In fact, with distance learning, it is even more important to know what to evaluate in a student. Specifically, we might even ask ourselves: What should we evaluate at the time of COVID-19 pandemic?

• We could employ summative evaluation, which aims to ascertain if students possess knowledge and skills through objective tools, thus assigning a grade or a judgment to then fill the gaps and enhance or consolidate knowledge.

• A second tool available is formative evaluation, which must tend to support and strengthen the learning process of the student, and be able to tackle the lack of immediate interaction that is (unfortunately) typical of the E-Learning context.

• Finally, we can also find proactive evaluation, which recognizes, highlights and rewards any step forward made by the student, in order to increase the positive emotions of success necessary to their subsequent commitment.

It goes without saying that it is crucial to preserve the balance between these 3 types of assessment.

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The object of the evaluation (knowledge and competence) must never be confused, because the quality of both didactics and learning depends on it (Ferrari, 2018).

Knowledge and skills are only the tip of the iceberg of competences. We can only see the tip, only what is on the surface, and knowledge and skills are the first things we see of an individual's iceberg.

But no less interesting and important is knowing the processes through which they have been achieved. We are speaking of all those resources such as commitment, cognitive strategies, motivation, social context and awareness, which can be "observed in a situation" rather than "recognized through tests" (Vivanet, 2016).

In conclusion, it should not be ignored that the teachers also evaluate themselves and their work by evaluating students, i.e. the efficiency of their project and the consistency of the project with the class group for which it is intended. A sort of "compass" with which to monitor the training path and make any changes to it, if necessary (Di Palma, & Ascione, 2020).

5. Analysis of the University experimental didactic approach: the tool Microsoft Teams

A tool used mainly in the university context to deal with this critical emergency caused by "coronavirus" and to continue online training is Microsoft Teams, a unified communication and collaboration platform that combines work chat, teleconferencing, content sharing (including simultaneous work on files) and integration of applications (Di Palma Maulini, & Ascione, 2020).

A very important aspect of the platform is the possibility to turn the lesson into didactic material always available to students; in fact, the student can re-listen to the lesson previously recorded by the teacher, making it possible to be attended by students-workers too. On the contrary, in "traditional" didactics, the lesson is an instantaneously-delivered service and gives the users no chance to enjoy it at a later time (Tafuri Ascione, Di Palma, Priore, Maulini, & Agosti, 2020).

Another feature is the possibility to download the files from the platform to any device, so as to have them available at any time even with no internet connection.

Another benefit of the platform is the reduction in home/room rental costs for non-resident students. Among the main problems of this platform, we can find:

-       Lack of technical support for teachers;
-       Difficulties in administering written tests; - Audio-Video disturbances; - Loss of connection.

It is important to note that the nature of these problems is mainly technical, and can therefore be improved over time.

In order to evaluate the didactic effectiveness of this experimental tool adopted for university courses, a questionnaire was developed and submitted to university students via Google docs; the results of this questionnaire are shown in the following graphs:

Concluding remarks

The results showed that the didactic innovation introduced mandatorily in the education system due to the Covid-19 Pandemic has obtained more than positive reactions from the students interviewed in this experimental analysis. This allows us to appreciate the positive side of this situation, that is, the ability to have turned a critical issue into an opportunity for growth towards a didactic progress characterized by technological support in the teacher - learner interaction. In fact, there are many positive aspects, regarding the new distance learning

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approach, appreciated by students; in addition, a good propensity for it to become an integral part of a future didactic methodology, combining the traditional one with the one adopted in the covid-19 period, has emerged. The hope is that the efforts made in this period will not be wasted, and that they can provide a solid basis for a tangible improvement of the university and school educational system.

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