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Researching New Educational Paradigms

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Prólogo

Perpetuum mobile en investigación educativa. Claves para el análisis de nuevos paradigmas en Educación

Rosa Pilar Esteve Faubel, Marcos Jesús Iglesias Martínez e Inés Lozano Cabezas

(Universidad de Alicante)

Uno de los vectores que más contribuyen al desarrollo de las comunidades humanas es la Educación. En sus más diversas y variadas acepciones y niveles, desde educación infantil y hasta educación superior y el máximo nivel de titulación y especialización, el Doctorado, la Educación es la llave que abre todas las puertas. La educación permite el desarrollo social, económico, los valores, la integración, la inclusión, la cohesión, la solidaridad, el avance a partir de los resultados de investigaciones que sólo se pueden llevar a cabo de modo cabal si se parte de una profunda formación de base y una cultura general bien fundamentada.

No sólo se trata de acceder a los datos, a la información, antes bien, ello, tan sacralizado en la actualidad (minerías de datos, *big data*, musculatura informática, grandes dotaciones en "maquinaria" e implementos informáticos, e incluso enormes inversiones y algún que otro engaño para conseguir datos personales y procesarlos comercial y aviesamente), sólo es uno de los puertos de partida. Lo esencial, el puerto de arribada debe ser contribuir a dotar a las personas de las potencias del conocimiento que les permita transformar la mera, si bien precisa, información, en precioso conocimiento. Es el conocimiento el que puede revertir distancias geográficas, orográficas, de estatus social, económicas; es el conocimiento el que puede revertir las brechas económicas y sociales.

El conocimiento será de verdad efectivo si se adquiere en el concierto de un sistema educativo que se base en la universalidad de acceso al mismo, sobre la base de la equidad, la inclusión, los valores, la responsabilidad social, el rigor, el esfuerzo y el mérito del valor reconocido y reconocible en el alto servicio al interés general i el procomún. Por la consubstancial amplitud, el conocimiento y, con él, la Educación, está en constante renovación como resultado de una no menos continua innovación. Pareciera inabarcable a la par que infinito. El conocimiento es un *perpetuum mobile*, no tiene fin, siempre está (debe estarlo) en movimiento y, en especial, la Educación. Ni el conocimiento ni la Educación pueden prescindir de la "tradición", de los avances precedentes, que son los que llevan a los avances actuales y, estos, a los futuros. El progreso en Educación se fundamenta en lo que el poeta catalán Josep Vicent Foix resumió en un clarividente verso suyo a principios del siglo XX: "*M'exalta el nou i m'enamora el vell*" (*'Me exalta lo nuevo y me enamora lo viejo'*).

La formación de base es esencial al tiempo que la investigación para la generación innovación significativa es irrenunciable. Ello nos puede llevar incluso a experimentar (o a identificar, o a causar) cambios de paradigma en los fundamentos de los conocimientos de especialidades o, incluso, del Conocimiento. El progreso del conocimiento se consigue con el esfuerzo constante, intelectualmente honrado e intachable en cuanto al compromiso por lo público, la calidad del mismo y la actualización constante, rigurosa y acreditada según método científico. La búsqueda, colaborativa, de la innovación en pro de la mejora de la calidad educativa, debe ser constante y basada en la investigación contratada y contrastable, al tiempo que aplicable para la mejora de la Educación.

En este contextos genérico, el volumen que nos honramos en prologar, han superado un riguroso *double blind peer review* process 15 aportaciones que podemos agrupar en 4 materias genéricas en investigación educativa en las que se parecían actualmente cambios de paradigma:

1 **La investigación educativa para enfrentar y superar (o, al menos, paliar) el azote de la pandemia de la COVID-19**. La investigación educativa no puede mantenerse ajena al deber de intentar responder al embate de la COVID-19 que, en muchos aspectos, ha causado un verdadero cambio de paradigma global, incluso en el modelo sociedad. En este apartado, se incluyen trabajos que evalúan la incidencia de la pandemia en la Educación (**Konaki)** y analizan la respuesta que la enseñanza a distancia, tuvo que dar, forzosamente de modo instantáneo y masivo, como consecuencia de los confinamientos que tuvo que sufrir la población a escala mundial –con estudio centrado en Grecia, con el valor, o agravante, añadido de la dispersión archipelágica de gran parte de su territorio nacional y demografía— (**Davradou**). En este sentido, la educación a distancia y continúa, tuvo que resolver dificultades sobrevenidas como lo fueron los retos de trabajar en multiculturalidad e inclusión durante el confinamiento y la estricta distancia social durante las peores oleadas de la COVID-19 –también centrado el análisis en la realidad griega— en Educación Secundaria (**Tsekouras**). La gestión continua de los recursos humanos, continuada a distancia durante la pandemia por COVID-19, no planteaba retos ni menores ni en absoluto descartables (**Michalopoulos**). Finalmente, en este apartado, se incluye también un análisis con perspectiva histórica de las implicaciones sociales de la pandemia por COVID-19 a fin de determinar cuál ha sido la reacción de los estados hacia las situaciones de multiculturalidad en tiempos pandémicos en los que la economía y la biopolítica devienen conceptos muy delicados y sensibles (**Katerzinis**).
2 **La investigación en Tecnología Educativa**. Se analizan aspectos relevantes en el contexto educativo actual en cuanto a la utilización estratégica de las TIC (Fabra-**Brell y Roig-Vila**). No es cuestión de alardear de capacidad de cálculo o de cantidad y diversidad de implementos informáticos, sino de analizar cómo establecer y aplicar las mejores bases para una implementación pedagógica integradora de las TIC en los distintos niveles educativos –especialmente en educación superior– (**Cazarez Valdivieso**). Por ello se debe analizar cómo deben desarrollar su liderazgo las TIC como elementos fundamentales en una gestión educativa innovadora (**Grau Barrera & Roig-Vila**). A este respecto, se muestran innovaciones derivadas del análisis de reflexiones e investigaciones educativas sobre métodos para la integración de EdTech en el nuevo paradigma educativo (**Mateo-Guillen, Martinez-Roig y Berenguer**). Finalmente se analizan en profundidad algunas claves de la vinculación de la Sociedad de la Información con las Tecnologías de la Información y la Comunicación como clave para su desarrollo" (**Sierra Pazmiño**).
3 **La investigación educativa en Educación Inclusiva.** En este apartado contamos con un análisis de los métodos para mejorar el desarrollo de la vida de los afectados por trastornos del espectro autista (**Dourgounoglou**). Además se analizan aspectos de la intervención docente a fin de promover la resiliencia mental en Educación Primaria (**Kaltsas**). Finalmente en esta sección temática se analizan estrategias de atención en la sociedad post-pandémica a personas con discapacidad (**Panou**)."
4 **La investigación educativa en Ciencias del Deporte y de la Actividad Física.** Ello no tanto –si bien sin prescindir de ello– para conseguir alto rendimiento deportivo en términos de marcas y récords, sino como uno de los componentes consustanciales en el desarrollo personal. Se trata

de una perspectiva paradigmática en materia de Cultura del Deporte y Deporte para la Cultura como quedo establecida por la ONU (2009) y, recientemente, el Consejo de Europa (2019). En esta temática genérica se encuadran los capítulos que tratan de los deportes en la Europa Medieval y su función en la supervivencia –la medieval fue una Edad que imponía condiciones muy duras a las personas– y la prosperidad (**Priskomatis**); y, con una perspectiva centrada en la actualidad, la función de los deportes en la socialización y el desarrollo personal del alumnado infantil (**Bourogianni**).

Los cuatro paradigmas cambiantes paradigmas en Educación en los que este libro presenta trabajos que son resultado de detenidas y rigurosas investigaciones, establecen las coordenadas según las cuales el *perpetuum mobile* que es la investigación e innovación educativas deben invertir sus recursos. Si bien el estudio de tales cuestiones no se agotará nunca, el presente libro evidencia que los y las autoras de sus capítulos, así como el editor y las editoras del mismo, han afrontado el reto de poder, con rigor científico y honradez intelectuales, poder ser útiles a la comunidad educativa y científica, amén del interés general la sociedad.

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Perpetuum mobile in Educational Research. Keys for the Analysis of New Educational Paradigms

Rosa Pilar Esteve Faubel, Marcos Jesús Iglesias Martínez e Inés Lozano Cabezas
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One of the areas that contributes the most to the development of human communities is Education. In its different levels and acceptions, from primary to university education, including the highest degree of specialization, the Ph.D., Education is a key that opens all doors. Education facilitates social and economic development, values, integration, inclusion, cohesiveness, solidarity, and progress taking as a point of departure the results of research that can only be undertaken if we start with an rigorous basic preparation and well-grounded general culture.

It is not only about accessing data and information, something that has become almost sacred nowadays, rather this is just one of simplest ports of entry (data mining, big data, computer technology, machinery and gadgets, together with large monetary investments and the occasional deception that allows hackers to access personal data and make ilegitimate use of these data for commercial purposes). The educational target should be contributing to endowing people with a know-how that allows them to transform basic information into precisous knowledge. For knowledge can reverse geographical distances, social status and economic differences, as well as economic and social gaps.

Knowledge will become effective if it is acquired in an educational system based on the idea of universal access and the concepts of equity, inclusion, values, social responsibility, rigor, effort, and the merit of a recognized and recognizable value in the service of the general and common interest. Because of its amplitude, knowledge and education are in constant, almost infinite innovation. Knowledge is a *perpetuum mobile*, it does not have an end and must always be in motion, as well as Education. Knowledge and Education cannot do away with tradition and previous advancements, which lead to contemporary progress, which in turn will lead to future advancements. The progress in Education is based on what Catalan poet Josep Vicent Foix summarized in a clairvoyant line written at the beginning of the 20th century: "*M'exalta el nou i m'enamora el vell*" ('The new excites me and the old enamours me').

A well-grounded formation is key as much as research for the creation of significant innovation. This can even lead us to experimenting (or identifying and causing) paradigm changes to the foundations of the knowledge of different fields or even of Knowledge itself. Progress in knowledge is achieved through a constant efffort, intellectually honest and uncompromising with regard to a commitment to the public, its quality and constant updating, being always rigorous and accredited according to a scientific methodology. The collaborative search in favor of an improvement of educational quality must be constant and based on demonstrable research that can also be applied to the improvement of Education.

In this general context, the volume we are proud to write a prologue for is composed of 15 contributions that have undergone a rigorous *double blind peer review* process and are divided into four subjects in educational research in all of which we can observe paradigm changes:

1. **Educational research to face and overcome (or al least minimize) the effects of the COVID-19 pandemic**. Educational research cannot ignore trying to respond to the attack of COVID-19 which, in many respects, has caused a real global paradigm change, an even a change of societal

model. In this section, there are contributions that evaluate the incidence of the pandemic in Education (**Konaki**) and study the response that distance learning was obliged to provide massively as a result of lockdowns throughout the world –with a study based in Greece, which had the aggravating circumstance of being a country composed of many dispersed islands— (**Davradou**). In this regard, continuous distance education had to resolve challenges such as working with cultural diversity and inclusion and the strict social distancing during the worst waves of COVID-19 –also focused in Greece– in Secondary Education (**Tsekouras**). The continuous management of human resources, which had to be later done at a distance during the pandemic, did not offer lesser challenges (**Michalopoulos**). Finally, there is an analysis endowed with a historical perspective about the social implications of COVID-19 in order to determine what were the national responses to several multicultural situations in times of pandemic when economy and biopolitics become delicate and sensible concepts (**Katerzinis**).

2. **Research on Educational Technology**. Here there is an analysis of relevant aspects in the contemporary educational contexts of the strategic use of TIC (**Fabra-Brell y Roig-Vila**). It is not about the numerical analysis or about the number of computer gadgets utilized, but about determining how to better apply the pedagogical implementation of TICs in the different educational levels –particularly in higher education– (**Cazarez Valdivieso**). To this end, we must analyze how TICs must lead the way as fundamental elements of innovating educational management (**Grau Barrera & Roig-Vila**). In this regard, there are innovations derived from the analysis of educational research on new methods to integrate EdTech into the new educational paradigm (**Mateo-Guillen, Martinez-Roig y Berenguer**). Finally, some keys of the relationship of the Information Society to the new Information and Communication Technologies are analyzed as being crucial for their development (**Sierra Pazmiño**).
3. **Educational research on Inclusive Education.** This section includes an analysis of the methods to improve the life of those affected by autism at large (**Dourgounoglou**). In addition, there is an analysis of the some aspects of teaching with the intention of promoting mental resilience in Primary Education (**Kaltsas**). Finally, a contribution studies strategies to pay attention of disabilities in our post-pandemic society (**Panou**)."
4. **Educational research on Sport and Physical Activities Sciences.** This is done not with the main intention of improving performance and breaking records (although this is a part of it), but as one of the main components of personal development. It is a key perspective of the Sport Culture and Sport for Culture as established by the ONU (2009) and, more recently, by the European Council (2019). Within this generic framework there are contributions dealing with sports in medieval Europe and their role in survival –medieval times imposed harsh conditions to people– and prosperity (**Priskomatis**); and (with a more contemporary perspective, the function of sports in the socialization and personal develpment of young students (**Bourogianni**).

These four always-changing paradigms in Education that constitute the main focus of analysis of the contributions of this volume are the result of careful and rigorous research. They also establish the coordinates within which we must invest the resources of the educational *perpetuum mobile*. While the study of these questions will never cease, this book is evidence that its contributors and editors have tried to accept the challenge of (with scientific rigor and intellectual honesty) being useful to the educational and scientific community, as well as of working for the general interest of society at large.

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1. The Role of Sports in the Socialization and Development of Children

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ABSTRACT

By socialization we mean the process through which the individual learns and internalizes the various elements of the culture of the society in which he lives (Daskalakis, 2009: 222), which allows him to form his own personality and join various groups. Socializing with smaller (eg family) or larger (eg school) groups and society in general teaches us the patterns of behavior, the perceptions of the group (and society in general) and integrates us into it.

More specifically, the individual develops qualities as a member of a social summation and learns socially acceptable behaviors. The person therefore comes into first contact with the behaviors expected of him and acquires self-perception. Accepts basic social, general values but also future roles (Daskalakis, 2014: 235) who then will be called to serve l as an organic member of society. More specifically, the individual develops qualities as a member of a social summation and learns socially acceptable ways of behaving. The person therefore comes into first contact with the behaviors expected of him and acquires self-perception. Accepts basic social, general values but also future roles (Daskalakis, 2014: 235) who will be called to serve later as an organic member of society.

More specifically, socialization in the sense of the appropriation of the goods of culture or its promotion by a group is a process of recruitment and integration of the individual in the environment and in a particular culture. Everyone is called to adapt to an organized form of life, to use their potential for personal development by assimilating the existing norms-rules and values so that later they feel them as their own (Kogoulis, 2011: 75).

When we talk about the development and especially the positive development of children, we refer to the physical and mental development that results from engaging in sports.

KEY WORDS: development of children, socialization, sports

1. PHYSICAL DEVELOPMENT THROUGH SPORTS

The child's participation in medium-intensity sports activities, which combine muscle strengthening and aerobic exercise, enhance child's health. (Jansen & LeBlanc, 2010). Specifically any kind of sports activity (according to the published surveys by Ortega et al in 2008 as well as Watts et al in 2012):

- helps the child feel better,
- improves his body control
- develops their reflexes
- strengthens their muscles
- maintains the child's body weight at normal levels
- improves cardiorespiratory function
- reduces the hormones that cause anxiety and stress
- increase the child's self-confidence (increase in euphoria hormones such as endorphins and monamines

The main result of exercise in the body is the gradual increase of oxygen transport to the muscles and mainly to the brain. This in turn leads to better brain function, which results in improved memory

as well as increasing the child's ability to concentrate more easily and for longer (Biddle & Asare, 2011; Penedo & Dahn, 2005).

1.1. Mental development through sports

The importance of sport in the life of the child is obvious by simply looking at his development. It is a space that trains body and soul, where the child experiments, conquers, rejoices, decompresses, grieves, coexists, claims and interacts. All this and more is life. It is a place of life.

By participating in a sports activity, children manage to form a complete and multifaceted personality harmoniously and to acquire all the elements they need in order to become mentally resilient. This mental uplift gives impetus to their psychology and shows that it is as important as a parameter as the physical development for the healthy development of our children.

1.2. Environment

In order for a child to be involved in sports, even from a young age, he must have a guide, a prompt, an environment that will motivate him and the confidence that he is doing well.

- An environment of care and warmth is a key factor in the positive development of children through sports.
- Main facilitating mechanisms mainly concern the positive actions of parents, coaches, the best sports organizations, the philosophy of teams.
- An environment can push or repel a child from sports - ways to enhance parental involvement

When children live in a work-oriented motivational environment they tend to develop their inner motivation, feel good about themselves, feel empowered and gain a sense of autonomy and constructive relationships with others. They enjoy their activities, develop less stress and irritability, become more focused and stay more in this activity (eg stay in sports more). On the contrary, an environment of orientation to the "I" is a brake (and frustrates) the above psychological needs of human beings (ability, autonomy, good relations) that are considered important for the development of a "well-being". According to the above basic characteristics of parental behavior, the following practical suggestions are given for the development of positive psychosocial experiences through the involvement of children in sports:

- Giving the good example by participating as well
- Giving motivation and not an order to participate
- Spending quality time with the child, escort on the field, uninterested in training. This strengthens the parent-child relationship. Even the transfer to and from the sports field, the discussions about the experiences gained every day, the successes but also the failures, individual or collective, the concerns and goals set by the child are tools and means to achieve the coveted empowerment of the relationship and consequently the -positive development
- Keeps alive the interest for sports so that the child enjoys sports
- Continuous reward
- Starch and good competition and not competition with other children

1.3. Parents should be interested in their children's participation.

Coaches need to encourage parents to be interested in their children's athletic involvement by knowing the benefits of sports, but also that through sports they come closer and the communication between the parents and their children improves.

1.4. Encourage children to cooperate and be a team

Parents should emphasize the value of cooperation and how important and how valuable the presence of others in their sport is.

The results are not necessarily a picture of good work. It should be understood that in infrastructure sports and especially in team sports the result is usually influenced primarily by other factors such as the presence of a sufficient number of talented athletes in a team and not as a result of adequate training alone. There are teams that, although they train properly, lose matches to others due to the participation of children of different skill levels. This must be understood.

To watch the match and the training from the specific spectator position and not to shout or lead the team In each stadium there is usually a specific place from where parents can watch the match. They should not enter the field for any reason unless the coach calls them in case of emergency. The voices during the match, apart from distracting the players from their game, are not a good example for the children. For parents with this kind of behavior, in addition to verbal encouragement, it would be useful as a gesture to delegate responsibilities, such as organizing sports equipment, to keep statistics, so that they are more focused on their role than on their voices.

Do not criticize the coach for how he does his job There are parents who usually after a match, complain to the coach about the performance of their child or other children and insist on expressing their own opinion. Parents, of course, should talk to the coaches and express their opinion (never after a match). However, if the opposite view is constantly expressed and the philosophy of a sports club is not in line with the philosophy of the parent, and in order to avoid constant controversy, it is legitimate for the parent and the young athlete to leave in a calm and civilized atmosphere and move to a more appropriate environment with its philosophy.

Do not criticize loudly, but encourage your children. Continuous criticism causes stress and emotional turmoil that hinders their performance, while encouragement and praise motivate them. Do not guide children. Parents should not advise children with technical and regular advice because only this advice can bring confusion. Do not make derogatory - bad comments to children, coaches, referees or parents of other teams.

1.5. Show interest, enthusiasm and support to children

Always, after a race or a training session, parents should show interest in their child's presence on the field to congratulate him for his effort and to discuss the various issues that arise. Applaud the efforts of all athletes (and opponents) to control their negative emotions. In case they are angry or anxious about an event they should keep their composure and discuss any problem as soon as they calm down.

1.6. Do not be afraid for the safety of children

Especially the overprotective parents should be explained that the club space is safe, and that if the children follow the rules that govern the sport, the chances of injury are reduced. However, in order to avoid misunderstandings and future conflicts on the part of the parents, it should be remembered that in sports, the case of usually minor injuries is possible.

To help when asked for support by team leaders. To create a general atmosphere of cooperation and responsibility in the eyes of children, parents could help in various activities of a club such as: support for various events (cultural or recreational), depending on the experiences and abilities of everyone, in the organization of excursions, in the visual coverage of the children's games (video, photos), in finding sponsors for the sportswear of the children, etc. To thank and congratulate the coaches for

their contribution to the education of the children. It is very important for the coaches to receive positive motivation for their offer and work. A positive reason helps and gives even more impetus to the continuation of their work.

1.7. Understanding the philosophy of children's sports.

Parents, finally, must realize that in children's sports the development, pleasure and development of the child's skills through learning, effort and participation are important. Young athletes need to be taught that success is about giving your best, not the result.

Inclusion of sports in the child's program

1.8. Extracurricular activities, hobbies

We teach the child that everything fit in his schedule, because otherwise we risk growing up performing tasks without free time, without pleasures, without relaxation.

1.9. Inclusion of sports in the weekly program

We strengthen the observance of the program.

We do not cancel even if he asks for it, because frequent absences create bad relations with the team, an indication of a lack of satisfaction with the training with a result and distance from the co-workers.

Holt and Weiss in 2008 after research on the environment and sports in their publication showed that parents, coaches, sports managers and athletes influence the development of children involved in sports.

Holt and Knight in 2014 after researches showed that sport can be a springboard for positive development results but should be promoted through specific actions and practices. Adequate environment also increases the chances of positive development of children.

Benson et al. in 1996 with his research showed that positive development emphasizes individual abilities by recognizing the potentialities of people to actively contribute to personal development and the prosperity of the social environment.

Bronfembrenner in 1995's research showed that human development and behaviors stem from the interactions of the individual and the environment (systems theory).

Lerner et al in 2013 with his research showed that the right environment, family, school or extracurricular environment can increase the chances of positive development of children.

1.10. Pandemic - stagnation of socialization and development of children

The pandemic has imposed a quarantine, a social distancing, an isolation, an confinement as a means of protection of course, it works like a lack of oxygen. Humans are social beings and perceive their existence through coexistence and interdependence with other people. The pandemic thus deprived the possibility of participation in any social activity, consequently participation in sports of both children and adults.

From various researches and gallops it is clear how much the incarceration deprived everyone of feelings of pleasure and joy, feelings of socialization and interaction with those around them and finally physical inhibition.

The result of this whole situation was the creation of anxiety, anger, nervousness, boredom and a state of negative development that leads to an not at all optimistic future.

But the hopes of resuming children's sports enable us to consider a better sports future for our children that will not only invest in their physical development. The possibility of positive development of young people can become an important starting point on the basis of which young people will be able to function in the future in either positive or provocative conditions of interaction with their social environment.

1.11. Team sports development and socialization

Sport in all its forms has a positive impact on the socialization and development of children, either physically or mentally.

Especially participation in team sports such as basketball, football, handball, polo, volleyball, leads children to learn to practice life skills that can be transferred to other aspects of their lives off the field, such as at school or at home.

Team sports can make a significant contribution to the quality of life of children in a variety of areas:

- Good physical condition. Exercise combined with a well-balanced diet contribute to the creation of strong and healthy children, therefore healthy adults, therefore happy.
- Children enter in a mood of good and proper nutrition, attention to their health, follow a more balanced lifestyle and develop properly and continue to follow this program when they grow up
- Fun. The first and most important gain that we gain by participating in sports, is pleasure and psychological uplift, the source of pleasure, fun and relaxation.
- Socialization. The contact with the other children, the friendships that are created in the field and during the trainings, the communication and the communication are elements that contribute to the socialization of a child more easily.
- Collaboration and team spirit are learned through joint engagement and play
- They learn to set goals and find ways to achieve them, something they will find particularly useful as a life skill throughout their lives.
- They create a character. All athletics and all sports help to achieve this. The child manages the successes but also the failures as well as the fact that victory as well as defeat is in life.

1.12. Sports and health - Sports and quality of life

When we talk about health through our involvement with sports, we mean our physical and mental health that affect the quality of our lives.

According to the KIDSCREEN-52 questionnaire (Tountas et al. 2006), the dimensions of health-related quality of life and their corresponding elements are:

- Physical well-being. The level of physical activity, energy and physical condition of the child
- Psychological well-being. It is also related to positive emotions and life satisfaction.
- Mood and emotions. They focus on the extent to which a child-adolescent experiences depressive and primordial emotions and moods.
- The perception of the self. The perception that the child has of himself. The extent to which the image of his body is experienced positive or negative
- Autonomy. These are the opportunities given to a child to create his own time for social relationships and entertainment.
- Relationships with parents and family life. The relationships and the atmosphere that prevails inside the house.

- Financial resources. The child's perception of his financial resources and the extent to which he feels that he has the necessary financial possibilities that allow him to live a way of life that is comparable to that of his peers.

1.13. Social acceptance

It includes feelings of acceptance or rejection by peers at school as well as stress towards teammates.

Participation in organized or non-organized physical activity elevates the individual in the eyes of those around him, gives him the acceptance he needs and offers him significant organic, mental and social benefits. All this contributes to the faster and greater improvement of his quality of life.

We have seen countless times a young man or woman who is involved in sports inside or outside the school, to have leadership tendencies and to occupy leadership positions.

1.14. School and sports

The child while in school, until adulthood, has a perception of his cognitive ability in terms of learning and concentration as well as some feelings about how he feels and how he experiences his relationship with school. He wonders and according to what he experiences he decides if it is a pleasant and fun place for him.

Performance as motivation refers to a general and stable tendency of the individual to successfully complete activities and tasks which he has evaluated as essential. (Papadopoulos, 1994).

According to Kassotakis (1999), school performance is referred to as the evaluation of student performance in relation to the educational process. The concept of school performance includes: The evolution of the learning process, the existence of motivation, performance, learning outcome as knowledge, assessment, grades, organization of social behavior and finally the emotional - psychological state.

The child's first contact with sports is through school. The experts suggest the development of skills through the school program and with educational intervention programs as well as through sports programs at each school level.

A very important program implemented in primary schools is PATHS (Promoting Alternative Thinking Strategies) by Domitrovich & Greenberg 2000. The aim of the program was to recognize and control the emotions of children. Those who participated marked a significant improvement in social and cognitive skills compared to the children who did not participate.

Anderson in 1997 and Laker in 2000 proposed the teaching of skills that incorporate mind and body in conjunction with sports or other physical activities. Participation in sports activities is the ideal environment for the cultivation and development of social skills. Through sports, children learn to cooperate, take initiatives, set and achieve goals, solve problems, operate under conditions of tension and pressure.

All these experiences improve the behavior of children and educate them in the best way. Another program, GOAL (Danish 1997), focused on developing adolescents' self-confidence and self-control through teaching to younger children, and the results showed that participants experienced a reduction in negative and violent behaviors in relation to the control group.

The SUPER program (Danish et al 1997) had a purely athletic character. The aim was for the child-athletes to understand that there are examples of athletes to imitate and that in sports as well as in life physical and mental abilities are required. It is also very important to set and fulfill goals and that the obstacles that appear can be overcome with effort.

Through the program the teenagers learned that they should have as a measure of comparison their personal performance and not that of others, not to take into account the opinion of third parties who have nothing to do with the subject and "always experience their success and not rejoice with the failure of others".

The PLAY IT SMART program that was implemented in schools, had as a result the development of social skills through football and its wider application at all levels, school, family, society.

The result was an increase in the average score, a decrease in the use of alcohol and other substances and a much more positive situation than before.

Sherman in 1999 implemented a program that combined mental skills and practical training in the Physical Education course. It was found that the combination of psychological skills and exercise can have a better effect on learning motor skills than simple exercise.

In Physical Education programs involving primary school children, there was an improvement in their leadership ability, problem-solving ability and a reduction in absenteeism (Sharpe, Brown & Criber 1995).

2. SOCIAL SKILLS - SPORTS - LIFE SKILLS

Life skills are part of a broader concept of individual psychology, psychological competence. Psychological competence is the ability of the individual to cope with the demands and adversities of everyday life effectively (Gordon Training International, 1970). It is essentially about maintaining a healthy social and personal life behavior that is constantly reproduced in his daily life in the context of his interaction with the environment (WHO, 1994).

Life skills are defined as all the personal, social, educational and professional skills that are necessary for the proper functioning of the individual's life and as a whole make an individual able to cope with issues and questions that he faces daily (British Council, 2014). Life skills in particular relate to personal and interpersonal, social and psychosocial skills that allow people to interact with each other but also to manage their own emotional states, decisions and choices to ensure an active safe and productive life (Unicef, 2012).

There are characteristics that develop during childhood and contribute to the future in establishing a psychologically and socially healthy lifestyle (Duerden, Witt, Fernandez, Bryant & Theriault, 2012). These characteristics are skills common across different cultures (WHO. 1997) essentially representing a person's lifestyle. The goal of researchers and scientists is to describe in detail and record those skills that contribute greatly to key areas of an individual's life, such as working life, developing social relationships, emotional health and mental clarity. From the work of organizations and institutes such as the WHO (1997), Casey Life Skills (2016), Mc Milan Life Skills (2016), National Education Association (2016), American Management Association, the 36 skills of the 21st century emerge.

Analytical thinking	Adaptability	Critical thought	Feedback
Criticism management	Self knowldedge	Inventiveness	Empathy
Stress management	Cooperation	Teamwork	Emotions management
Personal hygiene	Time management	Money management	Negotiating possibilities
Problem solving	Altruism	Cultural empathy	Decision making
Networking	Leadership	Creativity	Responsibility
Social responsibility	Critical thought	Independence	Flexibility

Larson et al in 2006 in his research showed that sports is considered a framework that if properly structured can boost the positive development of children. He himself had decided in 2000 that participation in extracurricular activities gives dynamism and initiative to the child.

Children and young adults through their involvement in sports increase their self-confidence and self-esteem, develop coping skills, addictions, conflicts and strengthen the spirit of cooperation and teamwork, elements that constitute the social dimension in students' lives, both in their childhood and in their adult lives.

The term «social skill» refers to the ability of the individual to interact effectively and positively with the environment and to achieve social goals such as interpersonal relationships, special skills such as friendly relationships with others, acceptance of the different, the acquisition of sympathy and consciousness. (Schaffer 1996).

The World Health Organization defines social competence as the ability of an individual to adapt effectively to the demands and challenges of everyday life (Who 1999).

Nelson - Jones in 1990, argued that social skills are the skills of effective living, psychological health and a high level of human function.

Brooks in 1984 defines social skills as the acquired behaviors that are necessary for an effective life.

According to Jones & Lavalee, in 2009, social skills are all the transferable skills that are essential in life. In the same pattern, Goudas in 2010, states that the skills that are learned in one area of life and then transferred to other environments and situations are called life skills and help those who acquire them to succeed in the various environments in which they live and work. All these situations are experienced by a person from a very young age if he starts playing sports and is active in physical activities.

Papacharisis in 2006 argued that the skills that should be included in what children are taught and learned are:

– To be able to perform under pressure
– To be able to solve problems effectively
– Set goals and overcome obstacles to achieve them
– Manage success and failure effectively
– To act effectively within the team
– Accept the value and belief of others
– Take advantage of their potential
– To know their value
– To know their limits
– Accept responsibility for their actions and negative criticism in order to improve them.

Goudas in 2010, after collaborating with physical education teachers, came up with the 5 most important skills through the involvement of children in sports:

1) Interacting with others
2) Collaborative problem solving
3) Providing help to others but also accepting help from others to achieve goals
4) The achievement of personal goals through the cooperative game
5) To follow a team and its rules

All of these skills are acquired when parents push their children to be active in sports from an early age so that they can experience them for the rest of their lives.

Educating children on life skills contributes to their healthy development, the prevention of unhealthy habits, their socialization as well as their preparation to meet the social challenges of life. At this point, however, we must note something very important. Engaging in sports should remain at the levels of supply and only there. We must be careful not to become an end in itself and a one-way street because it can negatively affect the child's behavior and lead to wrong paths. Of course, we are not talking about great talents that follow a professional career and become examples of imitation (Danish 2002)

3. PSYCHOLOGY AND SPORTS

"Life satisfaction" The image of the self as aware of the thoughts and feelings that the individual has about himself is in a constant social negotiation and constant interaction with the social environment.

For this reason, self-esteem has been a topic of research interest in 23 fields of sociology, psychology, pedagogy and other sciences.

The way a person experiences the positive qualities of his life is defined by Diener (1994) as subjective well-being or overall satisfaction of the person with life.

According to him, there are three dimensions to the expression of subjective well-being: a) positive emotion (including emotions such as joy or satisfaction), b) negative emotion (such as anxiety or despair), and c) life satisfaction. The first two represent the current evaluations of the events that take place, while the last, the cognitive side of the general sense of well-being (Karadimas & Kalantzi-Azizi, 2005).

Guevremont, Findlay & Kohen in 2014 with their research showed that children involved in sports have low levels of emotional stress, higher social behavior, better idea of themselves, better school performance and finally a lower tendency to unhealthy behavior.

Eccles & Gootman in 2002 conducted a study that showed that the participation of children in extracurricular sports activities gives them the opportunity and the opportunity to form supportive relationships and caring relationships with other children, providing them with significant benefits. They also create better relationships with their peers giving them the opportunity to better integrate into the team.

Engaging in sports from an early age reduces stress, increases sociability, develops socializing, enhances interaction and helps to relax and empty negative loads.

Studies from Hay et al in 2004 and Cole & Carpentieri in 1990 have shown that inadequate acquisition and performance of social skills that can be acquired through sports is associated with negative outcomes such as mental health problems, negative interactions with fellow human beings, feelings of rejection and loneliness.

The contribution of sport to the development of the individual is one of the most important reasons why sport is called to be "beneficial". During the first childhood, after the first 3-4 years of the child's life, his world begins and expands abruptly, he meets new people from school, the environment of sports and the wider social context. Gradually he begins to discover and judge his personal ability in the classroom, in the sports team in which he trains, in relationships with friends, in interaction with family. It is his first attempt to "claim" his space and to understand what is his place in it. At this age he begins to form the concepts of self-image and personal sense of worth and appreciation.

At the age of 6-12 most children enter organized sports. During this time, the sport contributes to the development of the child's concepts, which refer to himself. For this reason, the importance of sports in the personal and social development of the individual is highlighted.

Self-image refers to "what one thinks of oneself". It includes the perception of the characteristics, abilities and talents that a child may have. Self-esteem refers to how he feels about the elements he has, it is the emotional "evaluation" of himself, as "good or bad", "worthy or unworthy". These two concepts reflect the individual's view of what he is, of what he is capable of accomplishing, and of what he thinks those around him expect of him.

The self-image is a product of the individual's experiences, collects information and shapes it from two main sources: The way those around him treat him. The way they compare him to others in important features and abilities

The behavior of those around him refers primarily to the behavior of parents, in a family context and the attitude of coaches, in a sports context. When the child constantly receives attention, acceptance, interest, love, he forms the image that he is a "remarkable" person, with value and gradually develops a positive self-image and high self-esteem. The information to the child is likely to be direct, including a positive attitude and point of view (eg you are a very good athlete and I like it) or indirect, providing attention and feedback to the child about his activities.

The children who will receive positive messages about their ability are those who will remain in sports for a long time, having formed a good image of themselves and developing "security" for their future activities. It is the basis of the concept of self-confidence, which will be necessary for them in future activities. Positive self-image is the "shield" of the individual in future failure, it is the basis from which he draws optimism to continue.

Regarding how they compare it with others in important characteristics and abilities, it is necessary to emphasize that children up to the age of 10-11 years, tend to compare themselves with others, in an attempt to "get to know" their ability to "stand out" as something different. It is a condition that springs from human nature, it is the first attempt at self-determination, through determination in relation to others.

Sport is a framework, which provides direct information about the individual's ability, inclination and talent, accompanied by the comments of coaches and parents. The attitude of both coaches and parents at this age, largely determines the development of the child in sports and the length of his stay.

Negative self-image and low self-esteem make a person insecure in their relationships with others, particularly sensitive to criticism and vulnerable to being hurt by situations and people. Many children, in order to "cover" the feelings of personal inadequacy, adopt aggressive behavior or constantly seek, with receptive behavior, the attention of others. This situation reduces their "popularity" and acceptance by others, thus confirming their negative self-image. For many researchers of developmental age, this condition introduces the individual into a "cycle of failure", where the negative behavior of the individual raises negative behavior of others towards the individual and failure to perform actions.

Research in the field of sports has shown that the main reason why children at a young age do not try a sport is because they are "afraid of being cut" by the coach based on their ability. This shows the importance that children attach to the judgment of others and to the "revelation" of their ability through the process of sports. Many of the children said they would not like to participate because "I'm afraid I'm not good."

It is important for both parents and coaches to create the conditions for children at a young age to gradually develop a positive self-image and high self-esteem. Focusing on the child himself and not on comparing him with others, highlighting the positive elements of the child, focusing on his participation, behavior and fun rather than victory and the result are attitudes and behaviors that help the development of the athlete.

Racing experiences are important in a person's life, but sports are neither positive nor negative by definition. It receives its quality depending on the way in which we "use" it in the education and development of the individual's personality. It depends on how everyone "interprets" it, on how they "understand" the result, the success and the participation. It becomes beneficial or not, it contributes positively or negatively to the completion of the individual, depending on his management by those involved in its conduct.

4. CONCLUSION

The conclusion from all the research and from all the points of view recorded in this publication, is that the involvement of children in any form of sports activity results in easier socialization but also better psychosomatic development and therefore their smoother entry into the world. of adults.

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2. Las Tecnologías de la Información y la Comunicación en la Enseñanza Superior. Bases para una implementación integradora

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RESUMEN

Abordamos en este trabajo los aspectos más relevantes que inciden en la Educación Superior y su vinculación con las TIC. Se trata de hacer emerger los elementos fundamentales que inciden en la implementación de la tecnología digital con el fin de lograr una perspectiva curricular integradora.

PALABRAS CLAVE: Tecnologías de la Información y la Comunicación, Enseñanza Superior, medios, alfabetización digital.

1. INTRODUCCIÓN

En este siglo XXI, son notorias las transformaciones vertiginosas que han tenido varios aspectos en la sociedad, siendo uno de los más destacados, el manejo de la información y la manera de comunicarnos, generando nuevos contextos sociales que, como mencionan García et ál. (2017), "los ciudadanos cada día deben asumir los cambios y retos que le impone la sociedad de la información y el conocimiento" (p. 4). Se trata de una sociedad donde se exige ser más competente y preparado para poder convivir en esta nueva era, bien en su cotidianidad, bien en su labor como profesional.

En este contexto, el desarrollo de las Tecnologías de la Información y la Comunicación (TIC) ha provocado la aparición de sociedades del conocimiento entendidas por García et ál. (2017) como "aquellas colectividades que disponen de un acceso prácticamente ilimitado e inmediato a la información" (p.7). La integración de las TIC a la sociedad ha generado varios cambios en todo sus **ámbito**s y ocupaciones. La Educación Superior no es una excepción. En este sentido, abordamos en este trabajo los aspectos más relevantes que inciden en la Educación Superior y su vinculación con las TIC. Se trata de hacer emerger los elementos fundamentales que inciden en la implementación de la tecnología digital con el fin de lograr una perspectiva curricular integradora.

2. LA IMPORTANCIA DE LAS TIC EN LA EDUCACIÓN SUPERIOR Y SUS BENEFICIOS

Leyendo a Barreto e Iriarte (2017), se entiende que "la incorporación de las TIC en la educación superior se hace con el propósito de transformar las prácticas pedagógicas con la ayuda de las herramientas tecnológicas, con el fin de comprender y transformar los tres saberes del conocimiento saber, saber hacer y saber ser" (p.18). Habría que decir también que el docente, al introducir las TIC en las distintas actividades de sus sesiones de clase, logrará potenciar el proceso enseñanza aprendizaje, ya que serán un apoyo para él. Como afirman García et ál., estas interaccionan con actividades didácticas que integran lo visual, novedoso e interactivo. Por su parte, Blázquez y Lucero (2002) consideran que las TIC "facilitan los contenidos, median las experiencias de aprendizaje, propician ambientes de aprendizaje idóneos, desarrollan habilidades y destrezas cognitivas, apoyan las estrategias y las metodologías diseñadas por los docentes, y enriquecen las dinámicas evaluativas" (p.19). Otra de las razones para la incorporación de las TIC en los procesos enseñanza-aprendizaje, en palabras de

Gil (2010) es "mejorar el contenido y los procesos de enseñanza, adaptándolos a las necesidades y demandas de la sociedad" (p. 31).

Por lo mencionado, la introducción de las tecnologías a la educación ha desencadenado varios cambios en los roles del docente y estudiante. El alumno es el responsable de su aprendizaje y el encargado de adueñarse del conocimiento. En cambio, el docente es el facilitador y guía para que el estudiante construya su propio conocimiento, pues, como lo precisan García et ál. (2017): "el alumno ha pasado de ser un receptor pasivo de información a un elemento que participa activamente en su propio aprendizaje" (p. 1). Esto es, pasó a ser el centro del proceso de enseñanza con el fin de desarrollar sus conocimientos y habilidades, ya que es un aprendiz continuo, en colaboración con sus pares, haciendo el uso de las TIC.

Así mismo, la incorporación de las TIC en la enseñanza superior ha generado que la educación sea accesible para todos, gracias a que las universidades han logrado integrar la educación a distancia, como lo destacan García et ál. (2017): "Las TIC pueden favorecer el acceso universal a la educación, el desempeño de la enseñanza y el aprendizaje de calidad" (p. 6). Por consiguiente, las TIC lograrán modificar el ámbito educacional, logrando que la interacción del alumno con la información sea casi inmediata. No obstante, es importante precisar que el rol del docente aún será el de ser un guía, un facilitador, pese a que el estudiante es responsable de la construcción del conocimiento. Como lo expresa Jobs citado por Gil (2010) en *Las tecnologías de la información y la comunicación en la enseñanza superior: una aproximación compleja*, "los problemas de la educación no pueden ser resueltos por la tecnología" (p. 37). En este sentido, es necesaria la interacción permanente entre el estudiante y el docente.

Lo anteriormente expuesto pone de manifiesto que la inclusión de la tecnología en la educación superior también implica cambios en los docentes de la educación superior. Al respecto, Pardo y Sánchez (2010) citados por Barreto e Iriarte (2017), indican que:

> Utilizar las TIC en la educación superior representa la transformación de la práctica pedagógica de los docentes, y el desarrollo profesional de los mismos, pues los forma y prepara para hacer frente a las demandas y cambios de la era en la que se encuentran. A fin de lograrlo, es necesario realizar una integración planificada de las TIC en los contextos educativos. (p.18)

Al respecto, García et ál. (2010) sugieren algunos aspectos que se deben considerar para lograr la integración planificada y de forma estructurada de las TIC en los contextos educativos:

- Planificación de las estrategias adecuadas para la introducción de las TIC en los planes de cada universidad.
- Caracterización específica de cada universidad y los objetivos que se pretenden lograr, con el propósito de que los planes sean realistas y acordes con las posibilidades reales de cada universidad.
- Valoración de las TIC como una oportunidad para reflexionar sobre la educación y el trabajo de formación universitario.

Además, para que la integración al currículo sea completa, se requiere una capacitación continua de los docentes y de los estudiantes, con el fin de que incorporen las TIC en sus labores académicas en contextos educativos en los que se promueva la autonomía, la interacción y la reflexión de los estudiantes en espacios de retroalimentación.

Ahora bien, el propósito de incorporar las TIC en la educación superior y transformar las prácticas pedagógicas con la ayuda de las herramientas tecnológicas no se ha cumplido en la totalidad porque

los propios docentes no se atreven a incluir las tecnologías, por miedo, falta de capacitaciones o de interés o porque les cuesta salir de su zona de confort respecto al uso de metodologías tradicionales. Robles y Barreno (2016) considera que "los problemas más frecuentes para alcanzar tales propósitos son los docentes, quienes deben sensibilizarse y empoderarse en el uso de herramientas digitales, multimedia y web, por mencionar solo algunas". Esto confirma la necesidad de que los docentes deben ser conscientes del cambio de la nueva era y de que se ajusten a las nuevas necesidades que esto implica, con el fin de sacar el mayor provecho de las TIC en la enseñanza y su labor como profesional.

Respecto a los beneficios directos de las TIC en la Enseñanza Superior, cabe mencionar las palabras de Baelo y Cantón (2009): "Las TIC se encuentra en sus primeros pasos en la sociedad y por ende en la inclusión en todos los niveles de la educación, y muy lejos de ser aprovechados tanto por los decentes y los estudiantes, y tomar los beneficios que podemos tomas de estos" (p. 4). En este sentido, y tomando como referencia las aportaciones y experiencias desarrolladas por Cabero (2005), Coll (2007), Tello y Aguaded (2006), citados por Baelo y Cantón (2009, p. 4), se presenta una síntesis de los principales beneficios:

- La facilidad para el acceso a la información y la variedad de información disponible.
- Los elevados parámetros de fiabilidad y rapidez de que disponen para el procesamiento de la información y los datos.
- La variedad de canales de comunicación que permiten.
- La eliminación de las barreras espaciotemporales.
- Las posibilidades de retroalimentación que ofertan, su gran interactividad.
- El desarrollo de espacios flexibles para el aprendizaje.
- La potenciación de la autonomía personal y el desarrollo del trabajo colaborativo.
- La optimización de la organización y el desarrollo de las actividades docentes e investigadoras.
- La agilización de las actividades administrativas y de gestión, además de permitir su deslocalización del contexto inmediato.

3. LA EVOLUCIÓN DE LAS TIC EN LA EDUCACIÓN SUPERIOR

Las TIC han tenido un desarrollo explosivo en la última parte del siglo XX y el comienzo del siglo XXI, a tal punto que han dado forma a la denominada "Sociedad del Conocimiento" o "de la Información". Prácticamente no hay un solo ámbito de la vida humana que no se haya visto impactada por este desarrollo tecnológico: la salud, la educación, las finanzas, los mercados laborales, las comunicaciones, el gobierno, la productividad industrial, entre otros. El conocimiento se multiplica, más rápido que nunca, y se distribuye de manera prácticamente instantánea, por lo que el mundo se ha convertido en un lugar más pequeño e interconectado. En consonancia con lo manifestado, cabe decir que este avance mundial tiene ventajas y desventajas en la educación superior.

Entre las ventajas, se pueden mencionar: la interacción sin barreras geográficas, la diversidad de información, el autoaprendizaje a ritmo propio, el desarrollo de habilidades para discriminar en la red entre la información confiable y valiosa y la descartable, entre otras. Entre las desventajas, se pueden señalar algunas como la referida a que el aprendizaje, a través de una máquina, puede volverse impersonal y frío; asimismo, el aprendizaje virtual no suele ser inclusivo y puede disminuir o anular habilidades y la capacidad crítica, etc.

El rápido progreso de estas tecnologías brinda oportunidades sin precedentes para alcanzar niveles más elevados de desarrollo. La capacidad de las TIC para reducir muchos obstáculos tradicionales, especialmente el tiempo y la distancia, posibilitan, por primera vez en la historia, el uso del potencial

de estas tecnologías en beneficio de millones de personas en todo el mundo. Es por esto que dentro la educación superior las TIC son un generador de oportunidades y un transformador de realidades ya que, con el desarrollo de las mismas, los avances se han maximizado.

La incorporación de las TIC a los procesos de enseñanza superior requiere diferentes tipos de transformaciones. Como se ha dicho ya, de nada sirve introducir nuevas tecnologías si no se producen otros cambios en el sistema de enseñanza. Cualquier proceso de incorporación en este ámbito debe ser analizado y estudiado como una innovación, ya que presenta cambios y transformaciones en todos los elementos del proceso didáctico. Los cambios que se dan en las instituciones de educación superior en relación a las TIC presentan cuatro manifestaciones que veremos a continuación y que podemos considerar como respuestas desde la práctica, todas ellas interrelacionadas dentro de los procesos de innovación.

3.1. Cambios en el rol del profesor

Los cambios que se dan en la institución, entre los que podemos destacar el impacto de las TIC, conducen irremediablemente a plantear un cambio de rol del profesor, de la función que desempeña en el sistema de enseñanza-aprendizaje en el contexto de la educación superior. Por ello, ya sea que comience el planteamiento por una reflexión sobre este rol, o comience por la introducción de las TIC en el proceso, habrá que afrontar el rol del profesor y papel de las TIC en la docencia universitaria como algo prioritario.

Hay diversos autores que se han ocupado de las funciones que debe desarrollar el profesor en los ambientes de aprendizaje que explotan las posibilidades de la comunicación mediada por ordenador. Heeren y Collis (1993) hablan de tres roles: rol organizacional, rol social y rol intelectual. En general, para pode establecer las TIC de manera correcta se debe adoptar un enfoque de enseñanza centrado en el alumno. Esto significa atender cuidadosamente a aquellas actitudes, políticas y prácticas que pueden ampliar o disminuir la proximidad hacía el mundo digital.

El profesor actúa primero como persona y después como experto en contenido. Promueve en el alumno el crecimiento personal y enfatiza la facilitación del aprendizaje antes que la transmisión de información. La institución educativa y el profesor dejan de ser fuentes de todo conocimiento, y el profesor debe pasar a actuar como guía de los alumnos, facilitándoles el uso de los recursos y las herramientas que vienen a ser las TIC quienes ayudan para la innovación y la exploración de nuevos conocimientos y destrezas.

Todo ello requiere, además de servicios de apoyo y asesoramiento al profesorado, un proceso de formación que conduzca a:

- Conocimiento y dominio del potencial de las tecnologías.
- Interacción con la comunidad educativa y social en relación con los desafíos que conlleva la sociedad del conocimiento.
- Conciencia de las necesidades formativas de la sociedad.
- Capacidad de planificar el desarrollo de su carrera profesional.

3.2. Cambios en el rol del alumno

Al igual que el profesor, el alumno ya se encuentra en el contexto de la sociedad de la información, y su papel es diferente al que tradicionalmente se le ha adjudicado. Los modelos educativos se ajustan con dificultad a los procesos de aprendizaje que se desarrollan mediante la comunicación mediada por ordenador. Hasta ahora, el enfoque tradicional ha consistido en acumular la mayor

cantidad de conocimientos posible, pero en un mundo rápidamente cambiante esto no es eficiente, al no saber si lo que se está aprendiendo será relevante. Es indudable que los alumnos en contacto con las TIC se benefician de varias maneras y avanzan en esta nueva visión del usuario de la formación. Esto requiere acciones educativas relacionadas con el uso, selección, utilización y organización de la información, de manera que el alumno vaya formándose como un maduro ciudadano de la sociedad de la información.

El apoyo y la orientación que recibirá en cada situación, así como la diferente disponibilidad tecnológica, son elementos cruciales en la explotación de las TIC para actividades de formación en esta nueva situación; pero, en cualquier caso, se requiere flexibilidad para pasar de ser un alumno presencial a serlo a distancia, y a la inversa, al mismo tiempo que flexibilidad para utilizar autónomamente una variedad de materiales.

3.3. Cambios metodológicos

Muchos de los conceptos asociados con el aprendizaje en la clase tradicional, pero ausentes cuando se utilizan sistemas convencionales de educación a distancia, pueden reacomodarse en la utilización de redes para la enseñanza, dando lugar a una nueva configuración formativa que puede superar las deficiencias de los sistemas convencionales, ya sean presenciales o a distancia. Lo que frecuentemente se ha procurado es reproducir los modelos de enseñanza-aprendizaje dominantes, y así encontramos muchos cursos y experiencias que se basan fundamentalmente en el modelo clásico de enseñanza-aprendizaje.

Las posibilidades de las TIC permiten reproducir de alguna forma estos modelos. La utilización de las TIC en educación abre nuevas perspectivas respecto a una enseñanza mejor, apoyada en entornos en línea cuyas estrategias son prácticas habituales en la enseñanza presencial, pero que ahora son simplemente adaptadas y redescubiertas en su formato virtual.

Las decisiones relacionadas con la tecnología en sí implican la selección del sistema de comunicación a través del ordenador o de herramientas de comunicación que resulten más adecuadas para soportar el proceso de enseñanza-aprendizaje. Estas decisiones parten del conocimiento de los avances tecnológicos en cuanto a las posibilidades de la tecnología para la distribución de los contenidos, el acceso a la información, la interacción entre profesores y alumnos, la gestión del curso, la capacidad de control de los usuarios durante el desarrollo del curso, entre otros. En definitiva, diseñar un entorno de formación supone participar de un conjunto de decisiones a modo de juego de equilibrio entre el modelo pedagógico, los usuarios según el rol de profesores y alumnos y las posibilidades de la tecnología desde la perspectiva de la formación flexible.

4. LA INTEGRACIÓN CURRICULAR DE LAS TIC

Después de contar con la tecnología y que los docentes hayan aprendido a usarla, surge otro desafío: cómo conseguir la integración y apropiación curricular de las TIC, esto es, de qué manera integrarlas en los objetivos, los contenidos, la metodología, los recursos y la evaluación de los aprendizajes. Surge entonces la necesidad de construir una entidad propia para la integración curricular de las TIC. Es por ello que parece fundamental definir qué es y qué no es integración curricular de las TIC; es el primer paso para decidir cómo y cuándo integrarlas en el currículo.

La Sociedad Internacional de Tecnología en Educación (ISTE, siglas en inglés) define las TIC como las herramientas para estimular el aprender de un contenido específico o en un contexto multidisciplinario. En base a ello, podemos decir que el objetivo principal en el campo pedagógico es usar

la tecnología de manera tal que los alumnos aprendan en formas imposibles de visualizar anteriormente. Una verdadera integración de las TIC se consigue cuando se evidencia que los estudiantes cuentan con las competencias que les permiten seleccionar las herramientas tecnológicas más adecuadas, según los propósitos que tengan, obtener información actualizada, analizarla, sintetizarla, experimentar con ella, simular y transformarla en conocimiento. Por ello, para lograr integrar las TIC en el currículo estas deben ser parte integral de los procesos de clase y de las secuencias didácticas que utilizan los docentes, lo cual implica ir más allá del mero uso instrumental de las herramientas tecnológicas, dotarlas de un claro propósito curricular, en pro de la innovación del sistema educativo superior y la respuesta es la adaptación de las TIC en el currículo, con el fin de que se constituyan en el pilar para la construcción del aprender.

Las tecnologías no son usadas para apoyar una necesidad intencional del aprender. Si bien es cierto que son usadas para apoyar actividades educativas, a este nivel muchas veces le cuesta despegarse de una mirada donde la tecnología está en el centro. Es entonces que en este contexto real la influencia de las tecnologías de la información y la comunicación impactan de manera directa al diario vivir a tal punto de convertirse en el eje matricial de la sociedad actual. Un sinnúmero de hechos respaldan que, más allá de una simple herramienta, la tecnología digital forma parte de la cultura, de la cotidianidad, la cual, a su vez, juega un papel importante en el avance certero de la cercanía de las culturas, pero también posee un fondo donde el riesgo de eliminar con el tiempo costumbres y principios en el ejercicio del desplazamiento, se soporta sobre un cuestionamiento acerca del cómo debe emplearse.

Cabe recordar hitos históricos importantes como la Revolución Industrial que, de manera marcada, dejó un precedente acerca de un antes y un después. Aunque para muchos solo haya tenido relevancia solamente en los procesos de producción y en el desarrollo económico, también tuvo un amplio margen de impacto para con la sociedad y la educación. Esto, traducido en el cambio de los modelos tradicionales, permitió dar un salto significativo hacia nuevas formas de entender y comprender el mundo. En ese mismo sentido, la llegada de las tecnologías de la información y la comunicación traen consigo una revolución que ha generado diversos cambios y retos para el sector educativo, permitiendo la creación de modelos de sociedad basado en el conocimiento, es decir una sociedad de la información.

El reto de la enseñanza a nivel superior necesita de un cambio en el proceso de aprendizaje, esto en lo que se refiere a los nuevos retos y las exigencias, para no caer en la monotonía de los métodos de enseñanza. Ello, a su vez, permite brindar una educación más ajustada a la vanguardia apegada a las tecnologías de la información como base indispensable para la aprehensión de conocimientos. En este modelo el rol del docente está en la renovación del conocimiento con el fin de elevar los estándares académicos del estudiante siempre en pro de avocar la problemática que circunda su medio sin apartarse de las exigencias del cambio ante los nuevos tiempos. La integración de las TIC al currículo permitirá los siguiente:

- Los estudiantes pueden tener más experiencias de aprendizaje para darle sentido al contenido curricular.
- Los maestros de diferentes departamentos pueden trabajar unidos sobre unas metas comunes, sin sacrificar sus propios asuntos de las áreas temáticas.
- Los procesos y las metas de los contenidos pueden unificarse sin competir unos contra otros.
- Es una necesidad implantar las TIC en la educación ya que son la herramienta del futuro.

5. USO DE MEDIOS Y TECNOLOGÍAS EN LA ENSEÑANZA

Escudero (2012) define al perfeccionamiento en las técnicas de enseñanza y aprendizaje como un determinado posicionamiento crítico y reflexivo que dirige sus esfuerzos, tanto a validar la educación, como a ir transformándola al servicio de valores debidamente legitimados desde perspectivas ideológicas, sociales, culturales, políticas y educativas. Desde este enfoque, referirse al perfeccionamiento de las técnicas de enseñanza y aprendizaje significa tener presente una diversidad de conceptos y perspectivas teóricas e ideales que permitan el aprendizaje de una forma rápida y concisa, razón por la cual las instituciones educativas deben trabajar arduamente para propiciar una revolución en quehacer educativo; enmarcado en lo que Ferreres (2010, p. 44) denomina: "Proyecto social de cambio ideológico, cultural y políticamente definido y legitimado".

Se plantea que actualmente las TIC han supuesto un fenómeno social que ha revolucionado las actividades diarias y el modo de comunicarse los seres humanos. Esta relación presenta una serie de características. Entre las más significativas figuran:

- **La instantaneidad.** Se trata de permitir transmitir la información en el momento en que se produce y enviarla a lugares muy alejados.
- **La interactividad.** Característica que faculta la comunicación bidireccional entre personas y grupos que interactúan según sus intereses; y la inmaterialidad o digitalización, que convierte la información de un elemento físico en algo inmaterial. Mediante la digitalización se pueden almacenar grandes cantidades de información en pequeños dispositivos e incluso en la nube virtual.
- **Internet.** Los teléfonos móviles de última generación, el GPS, los códigos de barras, las bandas magnéticas en las tarjetas de crédito, la venta online, el correo electrónico o las videoconferencias son algunos de los medios que facilitan las TIC a la sociedad y al mundo de los negocios.

Son muchas las opciones. Entre las redes sociales existentes, algunas permiten buscar y conectar a personas en todo el planeta, así como compartir fotografías y archivos multimedia. Otras son muy útiles para los usuarios que quieren darse a conocer, y por las que se pueden compartir videos y dejar comentarios. Los Blogs o cuadernos de bitácora recogen artículos de uno o de varios autores sobre viajes, cocina, temas educativos o comerciales, entre otros muchos. Existen, también, redes orientadas hacia el mundo profesional, en las que se deja el perfil de formación y se puede optar a un puesto de trabajo. Las TIC forman parte ya de nuestras vidas. Como señala Correa (2012):

> El término perfeccionamiento en el ámbito educativo va siempre enlazado a distintos adjetivos que no permiten la descontextualización del entorno donde tiene lugar. Así se alude a innovación didáctica, innovación tecnológica, innovación curricular. (p. 75)

El entorno de la incorporación curricular de las tecnologías de la comunicación en la enseñanza es una propiedad particular de innovación, simboliza una prueba palpable de esta urbanización conflictiva, tensional y diversa, del cambio en la educación. El desarrollo de la incorporación de nuevas tecnologías en el currículum tiene que ser comprendida como un proceso de innovación y, por ende, debe preocuparse por la concurrencia de un excelente número de representantes e integrantes en el desarrollo del cambio y el mejoramiento que la educación busca.

Desde el punto de vista de Escudero (2012), la enseñanza es "el término definicional clave de la Didáctica, hasta el punto de que en la literatura especializada internacional este concepto aglutina los temas, enfoques y líneas de investigación de esta disciplina" (p. 48). Mediante esto, la enseñanza se

puede definir como la acción desarrollada con la intención de llevar a alguien al aprendizaje. Por lo dicho, se trata de un acto intencional y consciente que propicia el aprendizaje por medio de un proceso de acciones.

Dentro de este orden de ideas, algunos estudiosos han demostrado que la incorporación de nuevas tecnologías en las instituciones, aunque de forma poco proactiva, está contribuyendo a la disminución de la enseñanza tradicional, en la que prima la presencia física de un docente y el contacto personal con el estudiante; y prevalece la apropiación casi absoluta del conocimiento por parte del profesorado. Los medios audiovisuales han ido incorporando nuevas formas de presentar la información, donde no existe la necesidad de un docente físico, ya que la imagen o audio aporta iconos intuitivos y motivadores. Así pues, la didáctica audiovisual en la medida que se relaciona con la enseñanza está, al mismo tiempo, enlazado con el aprendizaje y aunque éste no se presenta en todos los procedimientos de la acción didáctica, siempre está presente de una u otra forma, dándole sentido a la enseñanza y señalando su propósito posterior.

Desde la posición de Aguaded et ál. (2014), las tecnologías de la comunicación deben integrarse en el currículo, desde un modelo pedagógico que asiente y perfile toda la actuación didáctica. Así, los métodos y las tecnologías ejecutan un papel básicamente de auxiliares didácticos. Los profesores se convierten en usuarios de medios para enseñar, mostrar, informar, motivar, investigar, evaluar. Los medios cumplen, en este caso, un papel transversal, ya que pueden ser usados en todos los métodos de enseñanzas, así como en todos los niveles educativos, dado que tienen distintos niveles de profundización. En todo caso, la utilización de los medios se debe hacer de acuerdo con la función didáctica que se haya planificado.

Los estudiantes pueden hacer uso de medios y recursos de creación y expresión con el fin de producir mensajes audiovisuales y multimediáticos, con el objetivo de examinar, conocer, y valorar la realidad. Las tecnologías educativas se introducen fácilmente a ligar la institución con la sociedad, simplificando su incremento social y cultural por una mejora en el proceso de enseñanza-aprendizaje a los beneficiarios de las comunidades. Los medios tecnológicos constituyen apoyos fundamentales en la organización escolar, puesto que mejoran el desarrollo de gestiones de los centros y facilitan la comunicación, tanto en el centro educativo como en el exterior.

Según Mattelart (1993) se establece que una de las estrategias que se ha implementado en el cambio de una sociedad tradicional a una modernizada es la incorporación de nuevos medios tecnológicos en la educación. Se debe agregar que la inclusión de dichos medios tecnológicos en la educación debe ser de gran provecho para los alumnos, con el fin de contribuir a que la enseñanza sea de calidad y el aprendizaje sea productivo.

6. ALFABETIZACIÓN DIGITAL

En palabras de Arroyave (2012, p. 6), definir el concepto de alfabetización digital es:

> Encontrarse con un antiguo debate y con un amplio repertorio de concepciones y definiciones que diversos autores han presentado para definirlo y explicarlo. Existen varias tendencias sobre las cuales se define el concepto, una es la tendencia tecnológica o instrumental que se interesa por el cómo y porqué funcionan los diferentes dispositivos y programas informáticos, convirtiendo la destreza en un fin en sí mismo; otra es la tendencia social la cual se preocupa por la sociedad de la información para todos; la tendencia ética, la cual considera la alfabetización digital como derecho para promover la participación y la inserción social y laboral; y la tendencia de interés y sobre la cual se sustenta el desarrollo teórico y conceptual que se presenta a continuación, es la aplicada o funcional, que se encarga del cómo aprender

a usar las tecnologías en un contexto social para resolver problemas, trata además de determinar para qué sirve la tecnología, y qué aporta para mejorar el desempeño académico, profesional y/o la vida cotidiana.

A decir de Arroyave (2012, p.1), la alfabetización digital es:

> Un tema que está generando una serie de implicaciones educativas tanto a nivel conceptual como práctico; más aún si es entendida, desde una perspectiva socio ecológica, vinculada a una práctica social bajo condiciones de funcionalidad y significación que permita diferentes niveles en la adquisición de competencias, acordes a las exigencias de una sociedad donde las tecnologías de la información y la comunicación forman parte de la cotidianidad. Particularmente, la adquisición y desarrollo de habilidades comunicativas en contextos digitales se convierte en una alternativa innovadora que promueve la participación e interacción de las personas en la sociedad actual. La tecnología digital está modificando significativamente las diferentes formas de comunicación e impactando aspectos sociales, culturales y educativos; estas características y dinámicas que están emergiendo con los medios digitales deben ser consideradas como alternativas de expresión y participación para aquellas personas que han afrontado históricamente condiciones de exclusión y que forman parte de un gran colectivo.

Por otro lado, García et ál. (2017) consideran que el avance que se tiene día a día en las TIC genera diversos cambios en la forma de vida de los grupos sociales, sobre todo de la población más joven, es decir, los miembros de la llamada generación "Z". Estos, según Prieto (2016, p. 67):

> Están un promedio de 7 horas al día frente a una pantalla (televisores, ordenadores, teléfonos móviles, consolas, etc.). Mientras que los jóvenes (generación "Y") y los adultos (generación "X"), presentan dificultades para entender los entornos en lo que se desenvuelven los "Z". En este sentido los adultos, docentes, padres y madres tienen dificultades para comprender el mundo digital.

A lo mencionado anteriormente se agrega que cada generación tiene su propia forma de comprender y percibir nuevos aprendizajes. Es por esto que siempre la última generación del momento será la que pueda dominar, por consiguiente, el último avance tecnológico, debido a que todo el entorno que rodea al niño es indispensable para su desarrollo. Ellos aprenden todo lo que ven y escuchan. Es esta la razón de que los más chicos se puedan desenvolver ampliamente en el campo de la ciencia, antes que los adultos y adultos mayores.

Además, podemos decir que el avance tecnológico marca la pauta para la adquisición de dispositivos y la velocidad en la que los usuarios de la misma consumen la información que se transmite por diversos canales. No obstante, la reducción de la brecha digital únicamente no es tener la última versión de software o poseer los dispositivos más modernos. Cabero (2005) puntualiza que la brecha digital es ese vacío o distancia que se crea entre quienes pueden o no pueden tener accesibilidad, conocimientos y calidad para hacer uso e integrar las tecnologías a programas de formación y enseñanza. Hay que mencionar también que según Gurstein (2011, p. 68):

> La reducción de la brecha consiste en fomentar la capacidad de la ciudadanía para utilizar de manera crítica la información que se puede utilizar de forma libre: Open Data. Para ello, se debe tener en cuenta básicamente:
> - El empleo de licencias abiertas de acceso a la información dispuesta desde Internet.
> - El acceso gratuito o al menos condicionado para su descarga libre, de forma ilimitada, en el tiempo.
> - El empleo de formatos de información modificables.

En este contexto, de acuerdo con García et ál. (2017), una persona se considera analfabeta digital cuando tiene un acceso limitado y/o un desarrollo bajo o nulo de las habilidades que le permitan interactuar en la red comunicativa que proporciona el uso de TIC. Esto es, una persona para obtener alguna información da prioridad a medios comunicativos que ya no contienen toda la información y tecnología, y los factores de esta elección puede ser por negarse a aprender, a utilizar toda la tecnología que nos ofrecen las TIC y, la mayoría de veces, es por miedo a "dañar un aparato electrónico".

De ahí que, en términos generales, la alfabetización digital incluye tener conocimiento de diversas fuentes de información digitales, criterios éticos para hacer uso de la información y capacidades para la tenencia hacer y uso de dispositivos, entre otros elementos. En base a lo manifestado, Guillén et ál. (2016), clasifican la alfabetización digital en cinco dimensiones:

a) **Instrumental:** se refiere al conocimiento práctico y habilidades para el uso del hardware y *software*.
b) **Cognitivo-Intelectual:** trata de los conocimientos y habilidades cognitivas específicas que permiten buscar, seleccionar, analizar, interpretar y recrear la información con la finalidad de otorgarle significado, analizarla críticamente y reconstruirla.
c) **Sociocomunicacional:** relativa a la habilidad para comunicarse eficazmente, a través de las TIC, mediante el desarrollo de textos de naturaleza diversa (hipertextuales, audiovisuales, icónicos, tridimensionales, etc.). Además, está dimensión incluye el desarrollo de normas de comportamiento que impliquen una actitud social positiva hacia los demás como puede ser el trabajo colaborativo, el respeto y la empatía en redes.
d) **Axiológica:** plantea la toma de conciencia en cuanto a que las TIC inciden significativamente en el entorno cultural y político de la sociedad, así como a la adquisición de valores éticos y democráticos con relación al uso de la información.
e) **Emocional:** relativa al conjunto de afectos, sentimientos y pulsiones emocionales provocadas por la experiencia en los entornos digitales para el control de las emociones, el desarrollo de la empatía y la construcción de una identidad digital caracterizada por el equilibrio afectivo-personal en el uso de las TIC.

En definitiva, el buen uso de la tecnología trae, sin lugar a dudas, muchas ventajas y beneficios y permite obtener gran cantidad de información para nuestro uso y bonificación, así como poder compartir información que se ha ido adquiriendo. Al respecto, García et ál. (2017, p. 77), señalan que:

> El uso de las TIC promueve diversos cambios en el comportamiento de las personas o grupos sociales para que sean considerados miembros de los entornos digitales; sin embargo, para adquirir estas ventajas se requiere desarrollar habilidades importantes en el mundo digital, tales como el diseño de una identidad digital que sea coherente con el uso de los diversos dispositivos y plataformas, con la finalidad de lograr una reputación *on line* que sea favorable y lo consolide como fuente fiable. Lo que conlleva gestionar correctamente las diversas plataformas de manera segura con la finalidad de estar protegidos digitalmente, es decir, fomentar la seguridad necesaria para la protección de información personal y softwares dañinos para los dispositivos.

Autores como Nova et ál. (2017, p. 34), aseguran que:

> Actualmente, diferentes ámbitos de la sociedad, especialmente el de la formación, se han visto transformados con el surgimiento de las tecnologías de la información y la comunicación (TIC). Así, cuando se realiza un ejercicio formativo se espera que integre a las tecnologías para lograr mejores efectos en sus participantes. Sin embargo, aunque se percibe un mundo transformado por las TIC, aún se ve que quienes realizan el ejercicio formativo lo hacen acudiendo a las tradicionales formas no mediadas por la tecnolo-

gía. La razón de lo anterior en algunos casos se da por falta de acceso a la tecnología, en otros por falta de conocimientos para usarlas e integrarlas, o finalmente, porque aun teniendo acceso y conocimientos tecnológicos falta la calidad para desarrollar una mejor integración de las TIC a la enseñanza y la formación.

7. A MODO DE CONCLUSIÓN

Para concluir, se puede manifestar que el contexto social cada vez exige más, y para responder a tales exigencias, debemos educarnos. Si eso no está al alcance por diferentes factores, hay que tomar la decisión de autoeducarnos para estar acordes a la sociedad tecnológica. En este sentido, consideramos que el correo electrónico, los foros virtuales, las videoconferencias, las bases de datos, la navegación hipertextual, la multimedia, los videojuegos, los blogs, los videoclips, la fotografía digital, las redes sociales, son algunos de los rápidos y significativos avances que esta sociedad ha presenciado en cuanto a comunicación y conectividad. Estos recursos hacen que saber leer y escribir en formato impreso ya no sea suficiente para desempeñarse adecuadamente en la sociedad actual.

La incorporación de las TIC representa cambios significativos en la cultura, el trabajo, la educación, la recreación y demás contextos sociales. La visión transformadora de las tecnologías de la información y la comunicación y su influencia en las concepciones sobre la alfabetización es ampliamente reconocida. Existen diferentes puntos de vista sobre los cuales se sustentan las transformaciones que se están generando en las bibliotecas y sus usuarios, la literatura, las concepciones sobre lectura y escritura, los materiales, y los métodos de enseñanza; todos ellos exigen una concepción más amplia de alfabetización.

Debemos alejarnos del enfoque de la enseñanza de las habilidades tecnológicas que se centra en enviar a un grupo de niños para que pasen unas horas en una sala de computación y luego utilizan una educación basada en el lápiz, papel y pizarra en el resto de sus clases. La alfabetización digital puede desarrollarse mediante la integración de dispositivos computacionales, software y servicios en línea para instruir sobre otras materias, que pueden ayudar a familiarizar con la alfabetización digital a los estudiantes con la tecnología digital. La sociedad global actual está creando una nueva cultura digital donde las reglas y las normas sociales aún no están adquiridas. Los individuos necesitan aprender a ser buenos ciudadanos digitales y a desarrollar un sentido de responsabilidad sobre la toma de decisiones éticas en línea. En lugar de confiar únicamente en las medidas de protección, ofrecer instrucciones sobre seguridad en línea, privacidad y seguridad, se debe trabajar en la ciudadanía digital, lo cual ayudará a las personas de todas las edades a interactuar de forma más segura en línea. Aprender sobre la alfabetización digital, la ética digital y el civismo digital es crítico para nuestro mundo del siglo XXI.

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3. The evaluation of Distance learning that was applied during the quarantine due of the COVID-19 virus in the Greek data

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ABSTRACT

The whole world is going through an unprecedented difficult experience related to the pandemic of corona virus disease COVID-19. Due to the pandemic, and in order to protect the health of the population, Governments thought the world imposed protective measures, including the suspension of the activity of educational institutions at all levels and substituted live classes by distant learning. The distance learning implementation gave the possibility to the education community to continue the educational activity. In Greece the distance learning periods lasted for approximately two months in spring 2020, for the academic year 2019-2020 and approximately 5 months for the academic year 2020-2021. The response of the school and academic community was remarkable and rapid, although there was no significant preparation and infrastructure. The assessment of this new form of learning revealed several advantages and disadvantages of distance learning. Among the advantages are the possibilities to continue educational activities, even in these circumstances, the protection of the virus, the comfort of studying/teaching from home and the gained familiarity with technology. In the disadvantages it was found that lack of socialization and isolation were among the most serious problems. Technical obstacles, lack of training and knowledge to use digital tools, student concentration problems and teacher work overload were also major disadvantages of distance learning. Proper preparation, training and infrastructure are essential in similar circumstances.

KEY WORDS: distance learning, digital tools, quarantine, Covid-19.

1. INTRODUCTION

For more than one year and a half, the whole world has gone through and still goes through an unprecedented experience, related to the pandemic of corona virus disease COVID-19. The new virus referred to as COVID-19 started in Wuhan of China and was initially spread in Southeast Asia, and afterwards to almost the entire world in a very short time. The World Health Organization has identified COVID-19 as a pandemic in March 2020 (Bäuerle et al., 2020).

The emergence of the pandemic and the protective measures posed by authorities aiming the prevention of the virus spread has disturbed the normal living conditions for the majority of the world population.

Among the several effects of the pandemic and protective measures was the suspension of the activity of educational institutions at all levels (primary and secondary schools, universities and colleges) in the form of live, face to face classes and its substitution by distant learning. Distance learning was employed in order to protect the health of students and education staff. In this respect, educational activity has been transferred from the classrooms to an online environment, where teaching was being carried out via the internet, by synchronous and asynchronous means. This gave the possibility to the education community to continue the educational activity, with several advantages and disadvantages (Hodges et al., 2020).

In Spring 2020 primary and secondary schools in Greece operated, for approximately two months, applying distant learning, mainly using asynchronous classes, and only in some cases synchronous. Similarly, starting in November 2020 till March 2021 (with a small gap of less than two weeks, when schools operated in January 2021) schools on primary and secondary education operated with distant synchronous learning and face to face education resumed in March 2021. As far as the functioning of universities is concerned, the whole academic year was held via internet lectures and exams were also performed over the internet. Similarly, all other forms of non-formal education (eg supporting tutoring, foreign language schools) took place for most of the last year remotely. Sports activities were suspended and no kindergarten centers or playgrounds were operating.

The present study aims to explore the evaluation of distance learning that was applied during the quarantine due of the COVID-19 virus in Greece, based on literature review.

2. PROTECTIVE MEASURES IN EDUCATION AND DISTANCE LEARNING

In Greece, on March 10, 2020 the Greek Government, aiming to the prevention of virus spread in schools, announced the suspension of the activity of all schools in the county, for two weeks, a measure which was applied till May of the same year. The beginning of the new academic year 2020 – 2021 started in the school classrooms, with special sanitary measures and use of face-masks, but this live operation was once more suspended in November 3, 2020 and distance learning was applied until May 10, 2021 (with a small break of some days, when live classes started in January 2021).

The global educational community was not prepared to handle the new and unknown conditions immediately. As the pandemic spread, however, education systems in all countries were forced to reshape their operations, encouraging online teaching. In this direction, in Greece, the days following the closure of the schools, the Ministry of Education activated digital distance learning tools, in order to maintain the contact of students and teachers with the school. Initially, it sought to give autonomy to schools, enabling principals and teachers to adapt distance learning to their needs, as it was non-compulsory and aimed at repetition of the learning material taught. Subsequently, however, there was a shift from non-compulsory to mandatory use of tools for the implementation of synchronous and asynchronous teaching. The aim was to continue learning and follow the curricula, progressing with the teaching material.

3. EDUCATIONAL TOOLS DURING DISTANCE LEARNING

In distance learning, in general, there are two mail types of education: Synchronous and asynchronous, as well as their combination, referred to as Blended Learning (Anastasiades, 2012; Moore & Kearsley, 2012), which can be found, occasionally, with the terms mixed or combined.

The type of asynchronous form of distance learning is implemented through advanced asynchronous internet transmission technologies, which allow teachers and learners to interact at different times regardless of the geographical area in which they may be located. The important advantage of asynchronous distance learning is the flexibility in space, time and pace of learning (Anastasiades, 2008). The tools used in asynchronous distance learning include Learning Management Systems (LMS) and Content Management Systems (CMS), which cover processes for effective content dissemination over the Internet, with main applications being writing, storing, publishing and workflow. The recent asynchronous distance learning systems also incorporate

Synchronous distance learning technologies give the possibility of live communication of students and teachers, making use of modern internet transmission technologies (eg teleconferencing, webcast)

and enable teachers and learners to interact through audio, video and data in real time regardless of the geographical area in which they may be located (Anastasiadis, 2008; Kampourakis & Loukis, 2006).

With reference to the tools mainly used during the distance learning in Greek schools of primary and secondary education, the asynchronous made use of the digital platforms e-class and e-me. Within these platforms teachers set up an environment, where they were loading educational material and an offline interaction with students. For the synchronous distance teaching, the Ministry of Education made a global agreement with Cisco Hellas for the use of the online platform Webex Meetings, which was used by teachers and students (Ministry of Education, 2020). Using Webex Meetings platform, teachers created digital virtual classes and the class operated via teleconference meetings, with or without cameras on, depending on the quality and capacity of internet lines and the choices of the teacher.

The eClass platform is a complete Electronic Courses Management System and was proposed by the Hellenic University Network (GUnet) as a tool to support Asynchronous Distance Learning Services. It is designed to enhance the educational process, is based on the philosophy of open source software, is actively supported by GUNet and is freely distributed.

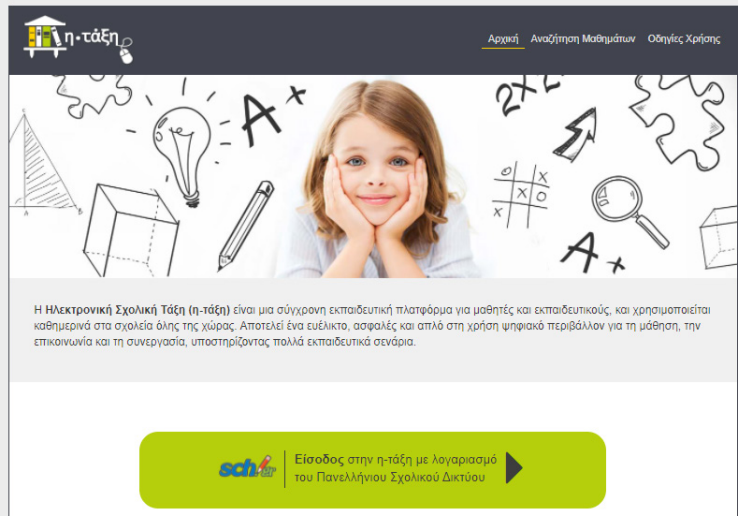

Figure 1. Entry screen of e-class (available at https://eclass.sch.gr/).

The e-class platform is designed with the aim of implementing new educational possibilities. The main roles supported are those of the educator and the student. In particular, the user - instructor can easily and quickly create easy-to-use and functional electronic lessons, using the educational material available (notes, presentations, texts, images, etc). At the same time, the tudents acquire an alternative channel of access to the offered knowledge. The eClass platform supports Asynchronous Distance Learning services without restrictions or special difficulties. It can be accessed using a simple web browser without the requirement of specialized technical know-how.

In general, the e-class platform incorporates 17 subsystems and 4 administration tools. Within the subsystems the teacher can organize the primary educational material in units and lessons. The teacher can activate and deactivate the modules, depending on the needs of the class/lesson, having the possibility to simplify the digital environment for the students. In brief, the subsystems-tools included in e-class are: Agenda (time-schedule with events), Documents (where the teacher uploads educational documents), announcements (for information of the class), discussion areas, working groups, links, assignments, self-assessment tests, lesson description, glossary, digital book, multimedia, learning line, chat, tele-collaboration, questionnaires, wiki, grading, attendance list, statistics.

The digital platform e-me offers an environment of learning, collaboration, communication and social networking. It incorporates technological features that are considered familiar, follows the logic of the tablet in its interface and uses open source technologies. It is open to all members of the educational community by assigning roles to teachers and students. The whole functionality of the platform is offered through applications. Some appear pre-installed on the user's home screen while others can be installed via the e-me store. The main structural feature of the platform are the Cells (Kypseli), collaboration spaces for user groups. Each Cell is associated with four user roles:

- the person in charge of the Hive who has the role of administrator,
- Hive assistants with some management rights,
- the members of Kypseli (cell),
- the followers of Kypseli.

Each cell (Kypseli) has an administrator, assistants, members, followers, a wall/board, applications and saving space for files.

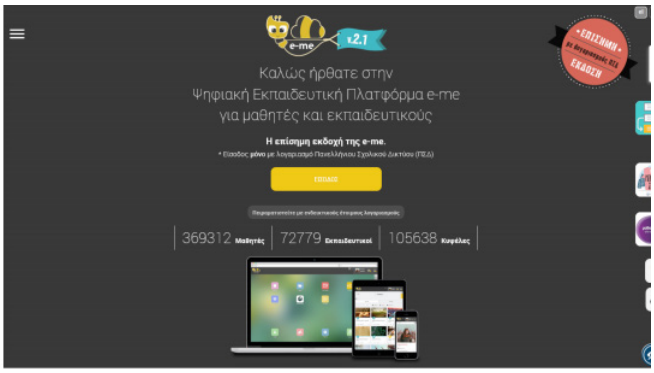

Figure 2. Entry screen of e-me (available at https://auth.e-me.edu.gr/?eme=https://e-me.edu.gr).

The synchronous platform Webex Meetings provides online real-time connection between teacher and students, with use of voice (microphone) and video. The main attributes of the system is screen sharing (the teacher can share his/her screen, or the window of a selected application) with the students, annotation (with the aid of a marker and graphics the teacher can simulate the class blackboard, als also allow students to annotate), polling (for posing questions), messages/chat, hand raising.

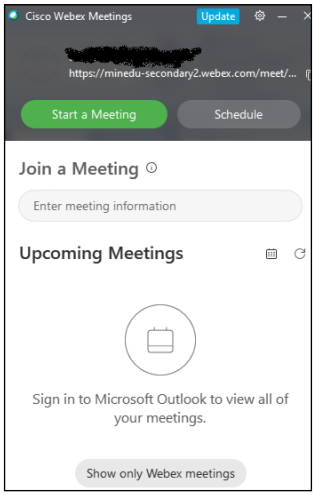

Figure 3. Entry screen of Webex Meetings.

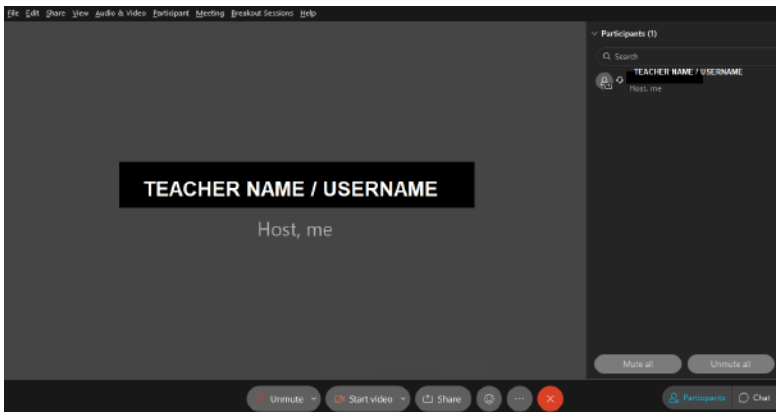

Figure 4. Webex Meetings Environment.

In addition, the national TV channel (ERT) in collaboration with the Institute of Educational Policy (IEP) held a series of educational TV broadcasting programs for students, mainly of primary school and pre-school (kindergarten). According to Papadimitriou (2020), the educational Radio and Television is an innovative body of the Ministry of Education, developing and broadcasting television programs to support the educational process in Primary and Secondary Education, as well as in continuing education and lifelong learning. It can approach the challenges of the digital era and can promote the connection of the school community and learning, supporting and promoting creativity.

The majority of the educational community (teachers and student) tried to respond to the distance education project by adopting digital tools that allow the learning process to resume, although there were cases of allegory, as well as real difficulties, such as lack of infrastructure technical support and know-how. It is worth noting that despite the plethora of support projects by the European Union, both the infrastructure of ICT systems and its integration into educational practice have been unduly delayed in Greece.

4. LITERATURE REVIEW FOR DISTANCE LEARNING DURING THE PANDEMIC IN GREECE

Research regarding Distance Learning that was applied during the quarantine due of the COVID-19 virus in Greece is scarce and it is mostly limited to graduate or postgraduate dissertation research and education schemes proposals for distant learning and blended learning.

In a survey conducted by Tsourekas, (2020) for the assessment of of Emergency Remote Teaching, applied during the quarantine for COVID-19 virus, the views of teachers, students and parents were analyzed. The results showed that the satisfaction of all groups was positively impacted by prior experience in distance learning tools usage and office applications use capabilities. Their satisfaction was also impacted by the quality of internet connection, the availability of digital device for use in the distance learning sessions, and amount of working hours.

Maragaki (2021), explored the of perceptions of ten Secondary Education teachers of Korinthia, regarding the benefits, obstacles and effectiveness of distance learning, during its emergency application in schools during the coronavirus pandemic, with semi-structured interviews. The results of her research showed that the benefits of distance learning include, convenience, savings of time, effort, material (paper) and expences in the distribution of educational material, the opportunity of the student to search themselves for educational material, enhancement of self-action, collaboration between students, building knowledge and therefore a more student-centered approach to teaching,

development and improvement of digital skills of students and personalization - differentiation of teaching, providing immediate and effective automatic feedback, ability to develop critical thinking, connecting theory with practice, self-assessment and active participation of students.

As far as the obstacles created by the implementation of distance learning are concerned, the research of Maragaki (2021) revealed that these include the additional time needed by the teachers, workload and anxiety caused by the effort for get acquainted with new digital environments, lack of knowledge for designing distance learning lessons and difficulty in finding suitable educational material. In addition, lack of digital skills and familiarity with collaborative learning activities (mainly for the students), bullying by classmates, use of inappropriate digital material, lack of close/eye contact and attendance of e-learning by non-students (for example students' parents). The teachers also included in the negative aspects of distance learning the lack of coherence in the classrooms, lack of technological equipment, difficulty of supervision and inability to evaluate students, technical difficulties, (such as inappropriate infrastructure, connection and digital literacy, connection from a mobile phone with limited possibilities) and reluctance of students to participate in distance learning.

This study also highlighted the views of the teachers for future actions, in view of distance learning, which include provision of necessary equipment, training in digital technologies based on the specialization and experience of teachers and access to the internet without problems, at high speed. Also, they underlined the need for restructuring and upgrading material and curricula, the need for parents to provide students with necessary equipment and personal space to attend the lessons, frequent communication with school principal and educational staff and their further training in terms of Lifelong Learning programs.

In a study by Papalambrakopoulos (2020), regarding the role of the teacher in distance learning, the author mentions that this role is complex, due to the fact that the distance teacher has to bridge the gap between the distance between him and his student and, consequently, the lack of interpersonal communication. He/shw needs to apply the formal and informal qualifications of the classical teacher (of conventional education), but also further informal qualifications that will bridge the physical distance between the distance teacher and his learners.

In a research conducted by Makedonas et al., (2020), in 174 high school students, the views and attitudes of the students towards distance learning were investigated. The research was conducted in 2020, after a distance learning period, which was not compulsory for the students (as opposed to November 2020 – March 2021, when attendance was compulsory). The results of the research showed a declining participation in distant learning classes in higher school grades and that girls participated more than boys. The reasons for not attendance were mentioned to be the extracurricular activities and the fact that attendance was not mandatory. The students answered that they did not need any help in setting up the application and to connect. However, more than half of the sample had problems with the connection, and one fifth of the sample mentioned that they did not have the necessary equipment to connect. In addition. The study concludes that the emergency distance teaching was not completely successful, as both students and teacher had problems (many teachers needed to acquire new equipment in order to connect and give lessons).

5. ACTIVITY AND EDUCATIONAL-PEDAGOGICAL PROPOSALS DURING PANDEMIC

During the period of the quarantine, when schools operated in terms of distance learning, there have been quite a few initiatives (most of the ones presented in this paper are included in the 2-day tele-

conference “Distance learning and school reality” - April 25-26, 2020), in an attempt to improve the educational practice, in these circumstances.

These initiatives included combinations of synchronous and asynchronous education online tools (Karaminas, Tsiabasi, Koufopoulos, 2020), the kinds and basic principles of educational material in distance learning (Manousou & Chartofylaka, 2020), and utilization of several tools in distance learning, such as blogs (Vlachou, 2018), video in pre-school classes (Lazari, 2020), games development via internet (Diamanti, 2020) and more.

On the other hand, one of the conclusions of the study was that distance learning has helped students maintain a contact with school and learning subjects. Students also expressed the opinion that school had a positive effect on enhancing their cocialization, in the time of quarantine and students who participated in the online classes demonstrated lower levels of social isolation. The impact of the online lessons was viewed from the students from different perspectives, with the older ones being more positive. One of the problems that emerged was that the students had difficulty in concentrating in distant lessons and the conclusions are that live face to face classes are more effective than distant ones, as in the latter the lesson quality is lower due to difficulty in concentration, distance and lack of immediate supervision. The suggestions of the students for the improvement of distance learning included upgrade of equipment and connection lines (suitable for video conferencing), breaks between classes and reduced homework. The students showed a positive attitude, however, they underlined that face to face lessons are superior.

6. CONCLUSIONS

Concluding this analysis, it needs to be noted that the type of distance learning implemented in the Greek educational system during the pandemic in 2020 and 2021 is a kind of emergency distance education. According to Hodges et al., (2020), differentiate this type of education, as it is implemented in cases of emergency, such as the pandemic circumstances, which made it impossible to maintain in-school education and distance education came as an alternative solution. The aim of such an implementation is to maintain the functioning of the educational system, and learning, under these difficult circumstances. In this respect, the present study focused, not generally in distance learning, but specifically to its emergency implementation, during the pandemic and the quarantine.

In these circumstances, the implementation of the distance learning in Greece operated, with several gaps, obstacles and drawbacks (Maragaki, 2021), but it maintained ongoing the contact of students with educational activity, covered a substantial part of the curricula and supported the educational community.

From the literature review it is clear that there were many negative points related to the distance learning, both for students and for teachers. Regarding the students, the main problem is related to the lack of socialization as they could not participate in an active school community and at many cases suffered from isolation. Other problems for the students were the difficulty to concentrate to online classes, limited connectivity, technical problems (Tsourekas, 2020) and difficulty in organizing their homework.

From the teachers’ side, the difficulties are related to technical problems, lack or prior experience in distance teaching, lack of relevant training, work overload as they had to prepare the digital content and familiarize themselves with the new tools and social isolation, not being able to benefit the positive aspects from work environment in the school.

On the other hand, there were advantages related to distance learning, the most important of which was that it supported the continuation of the educational process, in this extreme case of emergency.

Other positive elements of the distance learning have been the saving of time and effort (Maragaki, 2021), since students and teachers had no need to move to school, the comfort of being in their environment, while working/learning and that they improved their digital skills.

The participation and involvement of the teachers during this period was remarkable, since the majority of the school community members made noteworthy efforts to get acquainted with new technology and methods and to adopt digital tools for teaching. In many cases, there was a lack of know-how by the teachers, who were asked to implement the new teaching process, without proper training and without – in many cases – prior experience.

There was a program for teacher training in distance learning and online teaching (https://t4e.sch.gr/), but this has only started at the end of the academic year 2020-2021, when they had already experienced almost one year with online teaching.

Lionarakis et al., (2020) in the 1st International Educational Conference mention that in May 2020, the availability of the Open Internet Course "Teacher training in the methodology of distance education" was announced. The course was an initiative of the Ministry of Education and was realized in collaboration with the Institute of Educational Policy (IEP) and the Hellenic Open University (EAP). This program aimed to provide teacher training in the methodology of distance education.

The recommendation that results from these observations is that the State (Government and Ministry of Education) needs to be faster in reactions and provide the necessary training and infrastructure in time. Moreover, having this experience, the authorities need to be proactive, in an attempt to be prepared for future emergency situations.

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4. An Overview for to Research Questions about Basics Principles of Treatment on the Smooth Development of the Life of the Autistic Child

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ABSTRACT

Autism is a disorder that is affecting more and more people. A key feature of autism is the fact that people suffering from it live with this disorder in all phases of their life. There is not a specific treatment that can stop the course of autism as a disorder. However, it is possible to find and use a variety of techniques that will help to reduce the symptoms of autism. The Teach program is an essential and valuable pedagogical therapeutic approach. It is an approach that aims to teach basic self-care skills to autistic children and improve their skills. Also an essential autism treatment program is EarlyBird, which helps the education of parents of preschool autistic children.

KEY WORDS: autism, treatment, teach program, EarlyBird, pedagogical techniques.

1. INTRODUCTION

Autism is a disorder that is affecting more and more people. A key feature of autism is the fact that people suffering from it live with this disorder in all phases of their life. Autism in general is an inhibitory factor for people to understand the process of development of events and happenings as well as the way in which they take place in the social process and feel the various situations that take place in their life. In this way the autistic person deals in an effective way with the critical problematic situations that arise in his social relationships, in his communication with other people as well as in the field of his behavior (Bauman, 1994).

In addition, autism has a strong genetic basis and in some cases is found to be directly related to factors that cause birth defects.

The main goal of the treatment of autism spectrum disorder is to improve both the development and the behavior of the child.

The treatment of autism may include both educational and developmental programs as well as the use of medication in order to achieve a sufficient degree of improvement in the behavior of the autistic person, it is considered expedient and imperative to utilize the family and the social environment of the autistic child. In this way, the current goal of dealing with autism should be based on the utilization and inclusion of all stakeholders associated with the autistic child (health professionals, family and wider family environment). Utilizing a variety of modern treatment techniques can lead to the achievement of beneficial results for the child and his family (Baron, 1994)

2. AUTISM – THERAPEUTIC INTERVENTIONS. AN OVERVIEW.

A key point that needs to be said is the fact that there is not a specific treatment that can stop the course of autism as a disorder. However, it is possible to find and use a variety of techniques that will help to reduce the symptoms of autism and the smooth adjustment of the autistic child (Baron, 1994).

Firstly it would be appropriate to mention that individualized activities are an important part of the learning process as they enable children to understand the meaning and value of independent work. In addition, they are a basic work system through which each child learns in an effective way how

to work and is informed in his / her personal space about the work he / she has to complete, its type, its peculiarities, the way it is performed and what he must do so as soon as he has finished his work. Personalized activities may include household skills, self-care skills, etc (Biklen, 1993).

The basic instructions for the execution of a predetermined task should be provided to the children of high intelligence during the learning process through the use of various images or symbols.

However, it is advisable to provide children with low intelligence instructions for each task using both images and symbols as well as words and a variety of textual items which should be used in an effective and methodical way (Bauman, 1994).

Regarding the visual instructions, it is appropriate to mention that they contribute to the completion of various tasks during the healing treatment of autism. The activities that are visually projected on an autistic child in many cases prevent the distraction of the attention and contribute both to the understanding and to the deepening of the respective information provided to the child. Visually presented activities are required to contain visually clear materials and designs. In addition, through visual instructions, it is possible to clarify the requirements of each activity and the sequences of it. The way in which the representation of the instructions is made can possibly be obtained by the use of objects, images as well as drawings (Cohen, 1996).

At this point it is appropriate to say that it is imperative for the autistic child to learn how to follow the instructions during the educational process, to be autonomic during his engaging in various activities and work without supervision of an adult (Bauman, 1994).

In addition to the psychodynamic treatment of the child with autism, it would be appropriate to mention that it is possible to treat the child with autism through an effective psychotherapeutic approach that could serve as a key lever for the suppression of stressful situations that may occur. as well as obsessions which are evident in a large proportion of autistic children. The psychodynamic treatment of the autistic child is required to be applied by specialized scientific staff, either by a psychologist or a psychiatrist (Bishop, 2008).

Therefore, the state should ensure effective support for autistic children through the appropriate and rational use of qualified staff within the school environment and the wider community. Also pediatricians as well as psychiatrists and health professionals in many cases can play a crucial role in the treatment of autism. The diagnosis of autism in the past years was made by a doctor (Bishop, 2008).

Nowadays a large number of clinical psychologists specialize in such disorders as well as in the techniques and ways through which their diagnosis can be made possible. However the basic diagnosis whether the autism spectrum disorder is present or not will be given by a pediatrician or psychiatrist (Baxter, 2015).

Therefore, the parent of an autistic child should address them when it is considered imperative. The inclusion of a thorough clinical history in the diagnostic evaluation, the observation of behavior as well as the control for the existence of possible malfunctions at various levels can be valuable during the diagnosis of autism. Furthermore the healing treatment of autism spectrum disorder can be achieved with the contribution of special educators who are a key factor in the management of behavioral and mental disorders. The special educator can contribute in an effective way to the dynamic integration of the autistic child in the society by helping him to cultivate his skills (Croen, 2006).

In addition, the special educator has the opportunity to participate in the diagnosis of autism and intervene in a dynamic way in order to contribute to the improvement of the child's behavior. In this way the smooth adaptation and integration of the autistic child in the society will be achieved.

Moreover treatment through the use of drugs in many cases can help in an effective way to reduce the symptoms that occur in autistic children. Pharmacotherapy in autistic people should be performed carefully and with continuous and thorough medical examination in order to avoid possible side

effects. Drug treatment can be beneficial for autistic children both in case of hyperactivity and in case of self-destructive behavior or aggression. With regard to the administration of drugs, it is considered appropriate to administer antipsychotic drugs in the context of psychopharmacotherapy as well as the administration of antidepressants in order to be able to deal with possible obsessive-compulsive or ritual behaviors (Lotter, 1996).

Also, the administration of stimulants of the central nervous system can contribute to the treatment of hyperactivity that may occur in the child. Pharmacotherapy, of course, should not be considered by experts as the main and only means of treating autism but as a part of it (Baxter, 2015).

3. THE CONTRIBUTION OF THE TEACCH PROGRAM TO THE TREATMENT OF AUTISM

The Teach program is an essential and valuable pedagogical therapeutic approach. It is an approach that aims to teach basic self-care skills to autistic children and improve their skills and abilities as well as their overall communication and behavioral framework. It is a genuinely structured teaching approach with clear and predetermined boundaries. The autistic child through this program is able in many cases to understand what he has to do each time and acquire basic skills at the organizational level. In addition, the TEACCH program helps the child to reduce his / her anxiety and insecurity that he / she may feel regarding various issues that arise during the learning process and acquire an alternation during his / her daily activities. The character of the specific program (TEACCH) is distinguished by individualization and aims at a specific and predetermined case of an autistic child so that it is possible to achieve positive results during the learning and general educational process (Lotter, 1996).

In addition, this program is characterized by special intervention in the whole range of life of the individual (school environment, home, community, wider family environment, etc.) as well as implementation and use of selective and total approach in the therapeutic process. Parents also have an active role in therapeutic interventions by acting as co-therapists while at the same time the emphasis is placed on the application of a variety of behavioral therapy procedures (Lotter, 1996).

Also through this program, the respective space during the learning process is required to be used for the same activity, while at the same time the spaces used during the educational process should be shaped according to the age level and the perceptual ability of each child.

For example, it would be appropriate to provide younger children with a space for play and teamwork. In this way each child would be able to develop his skills.

It would be also possible for older children to have another space during the educational process, which could be a key trigger for strengthening group work and individual work of each child.

Having a transition area would also be helpful for the children to go there and be informed about the next activity to follow. This could serve as an effective means of providing a psychological sense of consistency in all phases of activity change. The teacher should have his own personal space (Mandell, 2012).

4. THE CONTRIBUTION OF THE EARLYBIRD PROGRAM IN THE TREATMENT OF AUTISM

A decisive factor in the treatment of autism is the family environment of the autistic child, which acquires a substantial power during the dynamic integration of the child in the society. An essential autism

treatment program is EarlyBird, which helps the education of parents of preschool autistic children. This program provides an opportunity for parents to understand the concept of autism spectrum disorder and to have a more meaningful and interactive contact and communication with their child, to resolve a variety of problematic situations that arise and regain control. In addition, this program provides effective support to parents both in the phase of autism diagnosis and in the phase of the child's development and growth. In this way, parents are able to have effective communication with their child and provide the opportunity for him to display desirable and acceptable behaviors in his family environment and in the wider pedagogical process. In this way the foundations are laid so that the autistic child is able to adapt to the special or non-specific context. The age category targeted by the EarlyBird program is primarily childhood and usually does not exceed the age of eight (Croen, 2006).

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5. Aprendizaje y Tecnologías de la Información y la Comunicación. Aspectos relevantes en el contexto educativo actual

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RESUMEN

El aprendizaje y las Tecnologías de la Información y la Comunicación (TIC) parecen ser un tándem estable y necesario, especialmente tras los acontecimientos extraordinarios vividos con la pandemia del COVID-19. El uso y manejo de las TIC nos proporcionan muchas posibilidades para adaptarse a los diferentes estilos de aprendizaje, así como fijar los pilares donde se fundamenten los nuevos modelos educativos del siglo XXI. El modelo educativo actual viene incorporando desde hace unos años el uso de las TIC, sin embargo, su uso de forma competente, tanto a nivel individual como institucional, parece generar aún muchas dudas y cuestiones por resolver. En el presente capítulo intentaremos disipar algunas de ellas.

PALABRAS CLAVE: estilos de aprendizaje, educación y TIC, competencias digitales.

1. INTRODUCCIÓN

¿Cómo aprendemos?, ¿existen diferentes estilos de aprendizaje?, ¿cómo presentar y organizar los contenidos de tal forma que contribuyan a la adquisición de conocimientos y desarrollo de competencias? Estas son algunas de las cuestiones que solemos hacernos todos los docentes cuando nos planteamos o tenemos que diseñar cualquier tipo de trabajo, actividad o proyecto para que todos nuestros estudiantes puedan alcanzar un objetivo educativo que queremos conseguir. El modo de presentar los contenidos depende, en muchos de los casos, el éxito o no de nuestros propósitos educativos, ya que no todos los estudiantes tienen la misma personalidad e intereses, así como tampoco presentan el mismo estilo cognitivo de aprendizaje: "todos los estudiantes no son iguales, ellos aprenden de maneras diferentes" (Orellana et ál., 2002, p.1). En los siguientes epígrafes abordaremos esta cuestión fundamental con el fin de poder dar luz a los factores que inciden en la calidad de la enseñanza.

2. ESTILOS DE APRENDIZAJE Y TECNOLOGÍAS DE LA INFORMACIÓN Y LA COMUNICACIÓN (TIC)

Varios son los trabajos (López,1996; Cabrera et ál., 2005; Huber, 2008; Cazau, 2017; Navoka y Romero, 2019; Puello et ál., 2019; Aguilera y Perales-Palacios, 2020) donde se nos presentan a distintos autores, los cuales plantean modelos teóricos para una clasificación de estilos de aprendizaje, así como también proponen diversas definiciones del constructo estilo de aprendizaje (Barbosa y Amariles, 2019). Nos detendremos aquí con la definición que plantea Keefe (1987) cuando atribuye al concepto de estilo de aprendizaje diversos elementos del estilo cognitivo, afectivo y fisiológico. En palabras de Cazau (2017) estos elementos son los rasgos que conforman al individuo en su aprendizaje y los define como:

> Los rasgos cognitivos tienen que ver con la forma en que los estudiantes estructuran los contenidos, forman y utilizan conceptos, interpretan la información, resuelven los problemas, seleccionan medios de representación (visual, auditivo, kinestésico), etc. Los rasgos afectivos se vinculan con las motivaciones y expectativas que influyen en el aprendizaje, mientras que los rasgos fisiológicos están relacionados con el biotipo y el biorritmo del estudiante. (p. 1).

Para Orellana et ál. (2002) una de las virtudes más importantes de la educación con el uso de las TIC es la posibilidad que tienen estas para adaptarse a los diferentes estilos de aprendizaje de los estudiantes. Del mismo modo, otros autores señalan a los objetos multimedia (texto, vídeo, audio, imágenes, elementos interactivos, etc.) como utensilios para representar el conocimiento de un contenido, de manera que éste se integre con diferentes estilos de aprendizaje. Además, el creciente uso de estos objetos en la enseñanza ha posibilitado y dado muchas oportunidades para presentar múltiples representaciones de contenido, atendiendo así, de forma más eficaz, a los diferentes estilos de aprendizaje y preferencias de un alumnado cada vez más diverso (Birch y Sankey, 2008; Moreno y Mayer, 2007, como se cita en Sankey et ál., 2010)

3. APRENDIZAJE CON TIC: MODALIDADES

En los últimos años, con el creciente uso de las TIC en los diferentes niveles educativos –universitarios y no universitarios–, se han ido estableciendo diferentes tipos o categorías de enseñanza con TIC según las características propias de cada uso y en función de las diferentes formas de acceso al conocimiento (García-Tudela et ál, 2020). Se trata de las denominadas modalidades TIC (ver Figura 1).

En cuanto a dichas modalidades, nos encontramos con los modelos E-learning (aprendizaje virtual), B-learning (aprendizaje combinado), C-learning (aprendizaje en la nube), M-learning (aprendizaje móvil), P-learning (aprendizaje personalizado), U-learning (aprendizaje ubicuo), T-learning (aprendizaje transformativo) y Presencial con TIC. Del E-Learning, conocido como aprendizaje virtual, aprendizaje en red, aprendizaje a través de la web, etc., diremos que "con todas ellas nos referimos por lo general a la formación que utiliza la red como tecnología de distribución de la información sea esta red abierta (Internet) o cerrada (intranet)" (Cabero, 2006, p. 2).

Respecto al B-learning, conocido como blended learning, aprendizaje híbrido, semipresencial, mixto y mezclado, etc., cabe decir que estos términos se utilizan aún de manera intercambiable. Nos referimos en general al B-learning como una combinación de aprendizaje presencial con el online (Salinas et ál., 2018).

El C-learning, conocido como aprendizaje en la nube, es el aprendizaje basado en el uso de herramientas de la web 2.0 (web social), donde el usuario puede compartir y colaborar de forma activa, así como ser creador de contenido: "ejemplos de aplicaciones Web 2.0 incluyen blogs, diarios digitales, wikis, Podcasts, sitios de colaboración, sitios para compartir multimedia, comunidades virtuales y redes sociales" (Garay, 2011, p. 1). Respecto al M-learning, conocido como aprendizaje móvil, diremos que es un tipo de aprendizaje que utiliza objetos de tecnología móvil inalámbrica.

El E-learning está vinculado a "los sistemas de enseñanza y aprendizaje a través de redes digitales con los dispositivos móviles de comunicación con la finalidad de producir experiencias educativas en cualquier lugar y momento" (Zambrano, 2009, p.39).

Respecto al P-learning, conocido como aprendizaje personalizado o entornos personales de aprendizaje, como señala Cabero et ál. (2011), cabe indicar que son muchas y diversas las definiciones de este tipo de aprendizaje, las cuales se agrupan en dos tipos de pensamiento. Por una parte, los que

perciben al P-learning como algo relacionado directamente con elementos de carácter tecnológico/instrumental y, por otra parte, los que lo relacionan con elementos de carácter pedagógico. Los primeros definen el P-learning como un "conjunto de herramientas de aprendizaje, servicios y artefactos recogidos de diversos contextos y entornos para que sean utilizados por los estudiantes" (Cabero et ál., 2011, p. 3), mientras que los segundos lo definen como "sistemas que ayudan a los estudiantes y a los docentes a tomar el control de gestión y de su propio aprendizaje" (Cabero et ál., 2011, p. 3).

En cuanto al U-learning, también conocido como aprendizaje ubicuo, diremos que es un "conjunto de actividades formativas apoyadas en la tecnología mobile, que permite acceder al aprendizaje desde cualquier lugar y en cualquier momento" (Carmona y Francisco, 2012, p. 25).

El T-learning, también conocido como aprendizaje transformativo, se trata de un tipo de aprendizaje asociado a la tecnología digital televisiva que permite el "acceso a un conjunto de materiales de gran riqueza en el aspecto audiovisual y efectuado a través de un aparato de gran popularidad y difusión como es la televisión." (Pindado, 2010, p. 6).

Por último, el aprendizaje Presencial con TIC es un tipo de aprendizaje donde se comparte la formación tradicional presencial con la inclusión en el aula de herramientas digitales que permitan la interacción entre el docente y el discente (Barriga, 2005).

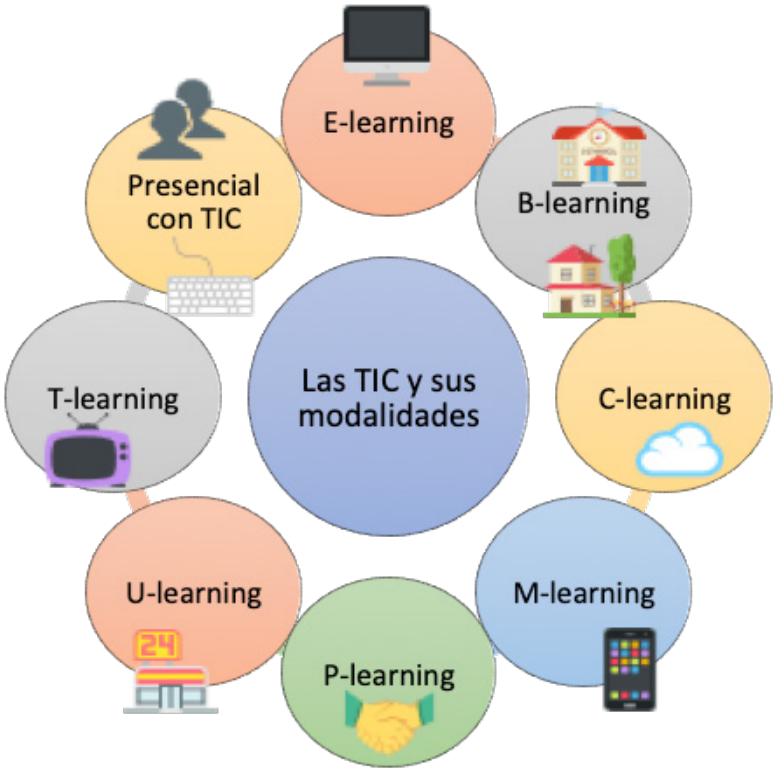

Figura 1. Modalidades TIC propuestas por la literatura científica. Fuente: elaboración propia.

4. MODELO EDUCATIVO CON TIC

Una de las acepciones de definición de *modelo* para La Real Academia Española de la Lengua (RAE) es la referida a *arquetipo o punto de referencia para imitarlo o reproducirlo*. Podríamos decir que nuestro modelo educativo actual parte de nuestra herencia clásica griega hasta llegar a modelos más contemporáneos como la difusión a finales del siglo XIX de la llamada Escuela Nueva (Narváez, 2006) hasta las llamadas Teorías de la Desescolarización de segunda mitad del siglo XX (Negrín y Vergara, 2014).

La Escuela Nueva nace como un modelo educativo en oposición a la Escuela Tradicional y cuyo programa y metodología se basa en el conjunto de intereses y necesidades del niño (afectividad, inteligencia y voluntad) que se convierten en el eje del proceso de enseñanza-aprendizaje y se adaptan, tanto al trabajo individual como en grupo. En la actualidad sigue siendo uno de los referentes históricos educativos más tenidos en cuenta (Narváez, 2006).

Las Teorías de la Desescolarización van más allá e incorporan la idea de que hay que "encontrar alternativas formativas en el ámbito de los medios audiovisuales y las nuevas tecnologías de la información y la comunicación" (Negrín y Vergara, 2014, p. 287) poniendo el acento en la necesidad de que las instituciones escolares aprovechen los avances tecnológicos para transformar los espacios de aprendizaje tradicionales y eliminar los muros de la escuela para ofrecer alternativas de aprendizaje fuera de ella.

En este escenario, desde finales de siglo XX y con la revolución tecnológica que supuso la aparición de Internet a nivel abierto y comercial a finales de los años 80 y principios de los 90 (Tesouro y Puiggalí, 2004) se han abierto nuevos paradigmas para la pedagogía, la educación y el aprendizaje del siglo XXI, "lo que ha llevado a que no sean pocos los autores que estén encontrando en las teorías críticas con las instituciones educativas modernas un referente desde el cual interpretar las posibilidades pedagógicas que ofrece el nuevo fenómeno tecnológico" (Igelmo, 2012, p. 44).

Un modelo TIC o modelo educativo que parta de unas premisas donde la tecnología digital sea el eje vertebrador del proceso enseñanza-aprendizaje parece que se va postulando cada vez más como una idea o principio para la educación del siglo XXI. Así lo atestigua toda la literatura científica cada vez más prolífica sobre cómo integrar las anteriormente citadas *modalidades TIC* en el sistema educativo (Infante-Moro et ál, 2019).

El principal objetivo en un modelo educativo basado en el uso de las TIC es que se pueda establecer una conexión pedagógica entre cualquier contenido particular del currículo y las diferentes posibilidades que ofrecen las tecnologías para llegar a él (Valverde et ál., 2010). Como indica Roig (2010), "si esta es una sociedad digital, es necesario que la escuela también lo sea" (p. 329).

En consecuencia, llegados hasta aquí, y pensando en los nuevos retos a afrontar por las instituciones educativas en este inicio de siglo XXI, Mañas y Roig-Vila (2019) señalan como uno de ellos valorar cómo integrar todas las aportaciones de estos medios tecnológicos TIC en los procesos formales de enseñanza-aprendizaje, así como los cambios culturales producidos a través de ellos. Del mismo modo, señalan que "el cambio de paradigma educativo abre un diálogo que estimula las nuevas oportunidades que estas herramientas de la información y el conocimiento nos brindan creando nuevas experiencias y situaciones, tanto en la vida social, como en la personal y educativa" (p. 75).

Roig (2010) nos indica que ya en 2010 se celebró en Madrid, a través del Ministerio de Educación de España y aprovechando la Presidencia Española de la Unión Europea, un congreso a nivel internacional con la participación de más de 170 expertos y representantes de los Ministerios de Educación de los países miembros de la Unión Europea, las Comunidades Autónomas, así como otros países del ámbito internacional y empresas del sector tecnológico, donde se trató y reflexionó sobre cómo desarrollar "modelos de Integración de las TIC en Educación". En España, con posterioridad, se han ido celebrando más encuentros de este tipo con el fin de intercambiar puntos de vista y experiencias de investigación sobre el uso de herramientas digitales, recursos para el aula, metodologías innovadoras, etc., y así poner de manifiesto la importancia de las TIC en el proceso de enseñanza-aprendizaje. Se trata, en definitiva, de ir construyendo un modelo de referencia para las diferentes administraciones

educativas en la construcción y actualización constante de sus planes de digitalización y alfabetización digital. El propósito ha sido regular un tránsito a nuevos modelos educativos que se adapten a las nuevas necesidades competenciales que previsiblemente tendrán que afrontar los ciudadanos durante el siglo XXI.

El objetivo es prever y anticiparse a nuevos escenarios educativos futuros; en ellos el uso de las tecnologías digitales será cada vez más imprescindible. De hecho, la pandemia del COVID-19 ha sido una prueba de ello. Las nuevas realidades educativas generadas a raíz de esta situación tan complicada han demostrado la posibilidad de un aprendizaje digital a distancia favoreciendo un mayor grado de responsabilidad del alumno en su aprendizaje, donde el docente ha asumido un papel de coordinador, facilitador y guía del conocimiento (Santos y Serpa, 2020). En este contexto toma mayor importancia si cabe seguir reforzando y consolidando los distintos planes de alfabetización digital que desde hace ya unos años vienen en mayor o menor medida ofreciendo organismos mundiales, como son la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO), la Unión Europea (UE) y distintas administraciones nacionales y autonómicas.

Cuando hablamos de incorporar las TIC a procesos educativos debemos tener en cuenta "que debemos utilizarlas no para hacer lo mismo que hacíamos sin ellas o para presentar la información, sino para hacer cosas diferentes y para crear nuevas escenografías comunicativas" (Cabero, 2015, p.19), lo que exige una adaptación de todos los agentes implicados en los procesos educativos escolares (docentes, discentes, centros educativos y familias).

5. LA IMPORTANCIA DE LAS COMPETENCIAS DIGITALES EN EL CONTEXTO EDUCATIVO ACTUAL

Según Cabero (2020), la competencia digital es la capacidad de desarrollo de un uso seguro, crítico y creativo de las TIC con el motivo principal de poder lograr aspectos vitales de los individuos relacionados con el empleo, el ocio, el aprendizaje y una participación inclusiva en la sociedad. En torno a ello, la UNESCO señala la importancia de la adquisición de competencias digitales en los estudiantes y docentes para poder afrontar los nuevos retos que nos plantea nuestra sociedad, la sociedad de la información y del conocimiento (UNESCOPRENSA, 2008). En este sentido, publicó ya en 2008 un documento guía donde resumía los Estándares de Competencia en TIC (UNESCO, 2008) que deben tener los docentes en materia de tecnología digital para después desarrollarlo en el aula con miras a una mejora de la educación.

La Unión Europea por su parte cuenta con el Marco Europeo de Competencia Digital, proyecto también conocido como DigComp, herramienta diseñada por una comisión de expertos para la Unión Europea con el fin de mejorar la competencia digital de los ciudadanos, y desarrollado por el Servicio científico interno de la Comisión Europea denominado Centro Común de Investigación (JRC, *Joint Research Centre*), que pretende ser a nivel europeo un marco de referencia para el desarrollo de la competencia digital, donde señala que:

> La competencia digital es una de las 8 competencias clave que cualquier joven debe haber desarrollado al finalizar la enseñanza obligatoria para poder incorporarse a la vida adulta de manera satisfactoria y ser capaz de desarrollar un aprendizaje permanente a lo largo de la vida, según las indicaciones del Parlamento Europeo sobre competencias clave para el aprendizaje permanente (Recomendación 2006/962/CE del Parlamento Europeo y del Consejo, de 18 de diciembre de 2006, sobre las competencias clave para el aprendizaje permanente, Diario Oficial L 394 de 30.12.2006). La competencia digital no sólo proporciona la capacidad de aprovechar la riqueza de las nuevas posibilidades asociadas a las tecnologías digitales y

> los retos que plantean, resulta cada vez más necesaria para poder participar de forma significativa en la nueva sociedad y economía del conocimiento del siglo XXI. (INTEF, 2017, p.5)

El DigComp (ver Figura 2) establece 5 áreas de competencia: la Alfabetización en información y datos, la Comunicación y colaboración, la Creación de contenido digital, la seguridad y la Resolución de problemas (Quiroz y Lázaro-Cantabrana, 2020). A su vez se distribuyen en 21 competencias estructuradas en 6 niveles competenciales o de manejo (INTEF, 2017).

En España, tanto desde el gobierno central como desde los distintos gobiernos autonómicos, se toma como referencia en sus planes de alfabetización tecnológica digital (González, 2012) el proyecto DigComp de la Unión Europea. La intención es que sean en primer lugar los docentes los que adquieran una formación en competencia digital para, así, poder desarrollar posteriormente la competencia digital en el alumnado. Prueba de ello son los informes emitidos por el Instituto Nacional de Tecnologías Educativas y Formación del Profesorado (INTEF), organismo perteneciente al Ministerio de Educación, Cultura y Deporte (MECD) del Gobierno de España responsable de la integración de las TIC y la Formación del Profesorado en las etapas educativas no universitarias. En ellos se indica cómo llevar a cabo el diagnóstico y mejora de las competencias digitales. Estos informes han servido de guía para los distintos planes de modernización, calidad y mejora de las competencias digitales propuestos por las Consejerías de Educación de las comunidades autónomas.

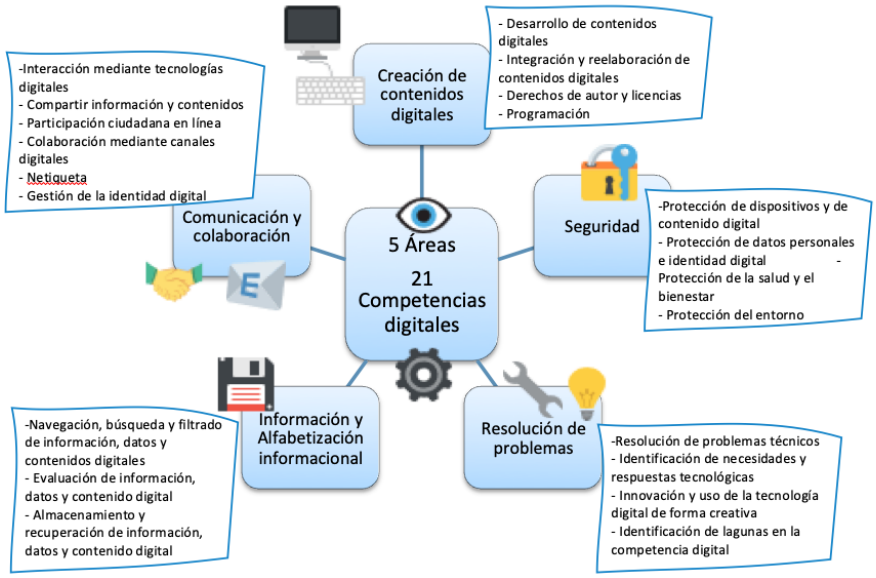

Figura 2. Las 5 áreas de competencia digital y 21 competencias digitales propuestas por el DigComp y asumidas para el marco de competencia digital docente español. Fuente: elaboración propia, adaptado de INTEF (2017).

Desde este enfoque, como señalaban Roig y Pascual (2012), todos los cambios sociales afectan de forma directa a las aulas educativas sea cual sea el contexto geográfico donde nos encontremos y el papel que han de desempeñar los docentes dentro de ellas. La investigación sugiere que la incorporación de las TIC a las prácticas diarias educativas implica un cambio de rol del docente a la hora de trabajar con los estudiantes, al respecto decir que:

> En la actualidad no se puede considerar al docente sólo como un mero conocedor de su materia. Debe saber cómo gestionar la información que de ella dispone y, además, administrar dicha información y servir como orientador a sus alumnos. Una buena ayuda para realizar esta tarea es que el docente se sirva de

> las nuevas tecnologías […] De esta forma hay que tener presente cómo se va a formar a los docentes en relación a las TIC. (Roig y Pascual, 2012, p. 54).

Del mismo modo, otros investigadores señalan en relación al cambio de rol del docente que:

> En este escenario en el que es necesario formarse a lo largo de toda la vida -en base a una diversidad de fuentes y mecanismos- es vital el desarrollo de competencias que nos faciliten la adaptación a los cambios, la capacidad de trabajo en equipo y las habilidades necesarias para colaborar en comunidades de aprendizaje (tanto como receptores como aportando al conjunto), así como en procesos de actividad conducentes al intercambio y al crecimiento. (Hernández-Sellés et ál., 2015, p. 149).

Así, como señalan Cabero et ál. (2015) se hace necesario caminar hacia un modelo TPACK (*Technology Pedagogy And Content Knowledge*; ver Figura 3) de Koehler y Mishra (2008), donde los docentes sean conscientes y capaces de utilizar la tecnología adecuada a cada momento y en cada contenido a enseñar y evaluar. De esta forma, deben poseer un conocimiento profundo sobre la materia (CK- Content Knowledge), un conocimiento profundo de las metodologías de enseñanza-aprendizaje (PK- Pedagogycal Knowledge) y un conocimiento profundo de las herramientas y recursos tecnológicos adecuados, a la vez que necesarios, para poner en marcha cualquier metodología didáctica destinada a trabajar un contenido propio de la materia (TK- Technology Knowledge). Donde, como señala Cabero y Barroso (2016), se interaccionen en esa metodología didáctica estos tres tipos de conocimientos (CK-PK-TK), se desarrollará la llamada competencia digital docente (Tárraga et ál., 2020). Cabe añadir que estudios como el llevado a cabo por Meroño et ál. (2020) confirman una clara relación entre la percepción de TPACK y el rendimiento académico, por lo que se hace necesario contemplar este tipo de modelos pedagógicos. En la misma línea, Prendes et ál. (2017) destacan que una competencia digital docente no solo debe entenderse respecto a cómo usar las tecnologías, sino también comprender el profundo impacto que tienen en nuestra sociedad, para así integrarlas de un modo efectivo.

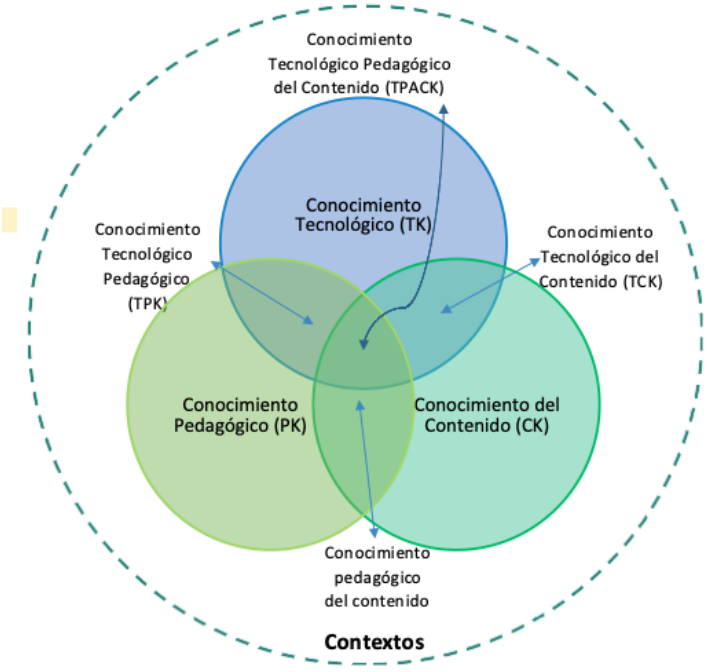

Figura 3. Modelo guía para la aplicación e integración de las TIC en la pedagogía de los docentes que muestra las tres formas de conocimiento primario de un docente: Tecnología (TK), Pedagogía (PK) y Contenido (CK) propuestas por el modelo TPACK. Fuente: elaboración propia, adaptado de http://tpack.org/

Para el desarrollo digital donde el foco de atención sean los centros educativos se crea también desde el gobierno de España y a través del Ministerio de Educación y Formación Profesional, la herramienta Plan Digital de Centro (PDC), instrumento a formar parte del Proyecto Educativo, el Proyecto de Dirección y la Programación General Anual (PGA) de cualquier centro educativo (INTEF, 2020). Para dicho PDC se toma como referencia el *Digitally Competent Educational Organisations*, proyecto creado en 2015 y conocido como DigCompOrg, marco europeo de referencia para que las organizaciones educativas sean digitalmente competentes. Del mismo modo que el DigComp, el DigCompOrg ha sido desarrollado por el Centro Común de Investigación (JRC, *Joint Research Centre*) de la Comisión Europea con el fin de complementar al DigComp y que pueda servir a su vez de modelo para el desarrollo de una "competencia colectiva frente a la competencia individual que usamos de modo habitual" (Prendes et ál., 2017, p. 11).

El DigCompOrg establece siete elementos que reflejan cada uno de ellos un aspecto diferente del complejo proceso de integración y uso efectivo de las tecnologías de aprendizaje digital, pero que a su vez están interconectados e interrelacionados y deben verse como partes de un mismo todo (Kampylis et ál., 2015). Estos siete elementos son Infraestructura, Liderazgo y Gobernanza, Enseñanza y Aprendizaje, Desarrollo Profesional, Evaluación, Contenidos y Currículo, así como Redes de Apoyo y Colaboración. Además, cada centro podrá añadir otros elementos adecuados a sus características específicas (INTEF, 2020).

6. A MODO DE CONCLUSIÓN

Los últimos acontecimientos relacionados con la pandemia del COVID-19 donde la tecnología con fines educativos se ha utilizado a una escala sin precedentes, han provocado una rápida respuesta por parte de la Unión Europea proponiendo un plan de acción conjunta de los estados miembros y publicando desde la Comisión Europea el denominado Plan de Acción de Educación Digital (2021-2027). La prioridad ha sido la de aprender de la propia crisis de la COVID-19 y adecuar los sistemas de educación y formación a la era digital, buscando una educación digital de alta calidad, inclusiva y accesible en Europa. Del mismo modo, alineándose con la Comisión Europea, el Estado español, ante este contexto excepcional, ha propuesto como herramienta para la transformación tecnológica y digital de España el denominado *Plan España Digital 2025*, donde se fomenta la educación a distancia y se prioriza el desarrollo de la competencia digital por parte de estudiantes y docentes con el objetivo de reducir la brecha digital (Portillo et ál., 2020).

Debemos pensar que, tal y como señala Prendes (2018) citando a la UNESCO (2004), "los sistemas educativos de todo el mundo se enfrentan actualmente al desafío de utilizar las nuevas tecnologías de la información y la comunicación (TIC) para proveer a sus alumnos con las herramientas y conocimientos necesarios para el siglo XXI" (p. 10). Del mismo modo, tenemos que pensar que todos los posibles cambios institucionales no pueden verse sólo desde una óptica individual, sino desde una innovación educativa que contemple todos los "elementos que conforman el sistema complejo de las organizaciones e instituciones educativas en el complejo cosmos de sus sistemas sociales" (Prendes, 2018, p. 10).

Apuntar por último que sobre el DigComp existen ya estudios que lo consideran como el marco de referencia más aceptado por los expertos para su uso en los planes de alfabetización digital docente (Cabero et ál., 2020). De hecho, desde el Ministerio de Educación y Formación Profesional del Gobierno de España, en colaboración con las comunidades autónomas, se ofrecen cada dos años datos estadísticos respecto a la competencia digital en los centros educativos. En concreto, se analiza la situación en los centros educativos que imparten enseñanzas de Régimen General no universitarias,

excluidos los centros específicos de E. Infantil y de E. Especial. Estos estudios estadísticos se han centrado más en la conectividad y disponibilidad de dispositivos por estudiante que en el nivel de uso que se hace de las tecnologías por parte de toda la comunidad educativa (profesores, estudiantes, personal administrativo y de apoyo, familias). Tal vez, tal y como señala Quiroz y Lázaro-Cantabrana (2020), el reto está ahora en poder disponer de diferentes instrumentos de evaluación objetiva que nos permitan poder medir por niveles los logros de una competencia digital, tanto individual como colectiva, y que esos instrumentos de evaluación se constituyan en unos modelos sólidos y estables (Cabero y Palacios, 2020) acordes con las necesidades que demanda la sociedad del siglo XXI.

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6. Las Tecnologías de la Información y la Comunicación y el liderazgo como elementos fundamentales en una gestión educativa innovadora

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RESUMEN

La gestión de las Tecnologías de la Información y la Comunicación (TIC) en un centro educativo debe responder a la aplicación de las políticas educativas existentes en el marco administrativo donde esté ubicado dicho centro. A partir de dicho marco, el centro debe articular una serie de medidas y acciones que articulen adecuadamente la integración de las TIC en el mismo. En este capítulo se abordará el proceso derivado de la gestión de centro en torno a las TIC, así como los aspectos fundamentales que definen una gestión de calidad. A partir de ello, se presenta un modelo de gestión educativa cuya base fundamental sea la innovación. Para ello, es fundamental la figura del liderazgo con el fin de afianzar el tándem que vincula las TIC y la innovación.

PALABRAS CLAVE: Tecnología digital, organización escolar, gestión de la innovación, liderazgo

1. INTRODUCCIÓN

En los últimos años son numerosas las inversiones que se han realizado para que las Tecnologías de la Información y la Comunicación (TIC) se integren en los centros educativos, pero la realidad es que, en la mayoría de ellos, son pocos los que las utilizan, y menos aun los que crean entornos de aprendizajes innovadores y adecuados a las necesidades de las nuevas generaciones. Pese a que muchos de ellos tienen experiencia, en el momento de integrar o utilizar estas tecnologías en el aula se sienten como auténticos principiantes y, en muchos casos, los propios estudiantes tienen unos conocimientos técnicos digitales mayores que el propio docente.

Muchas de las políticas educativas, tanto internacionales como nacionales, se han dirigido a promover el uso de las TIC mediante dotaciones de recursos y formación, realizando grandes inversiones. Se continúa trabajando e invirtiendo, pero se han detectado frecuentes problemas en cuanto a la adecuada implementación y aprovechamiento de los recursos. En este sentido, Área (2007) afirma que los distintos informes internacionales que han revisado el impacto y utilización pedagógica de las TIC en las escuelas dibujan un panorama más gris de lo deseable, menos ilusionante de lo esperado.

Se considera necesario proporcionar un modelo de gestión para la innovación y la integración que posibilite a un equipo de docentes de una institución educativa la innovación y la integración digital progresiva para la mejora continua, aportando instrumentos facilitadores de información que favorezcan la toma de decisiones en las prácticas docentes, la innovación y la investigación. En este trabajo se abordan dos de los aspectos que se consideran fundamentales en todo aquello referido a la gestión educativa en el contexto de la sociedad actual, a saber, las Tecnologías de la Información y la Comunicación (TIC) y el liderazgo (Mehdinezhad y Sardarzahi, 2016; Vázquez y Sevillano, 2015). Ambos elementos forman parte del engranaje que debe movilizarse desde la gestión para que un centro educativo se desarrolle en los parámetros de calidad que exige la sociedad de la información en la que vivimos.

2. GESTIÓN DE LA INNOVACIÓN EN EL ÁMBITO EDUCATIVO Y SU VINCULACIÓN A LAS TIC

En el panorama de las políticas internacionales del ámbito de la educación encontramos el proyecto conjunto del Fondo Fiduciario UNESCO-Grupo Weidong "Aprovechar las TIC para alcanzar las metas de Educación 2030" (Del Cerro y Lozano, 2019), cuyo objetivo es ayudar durante a Estados Miembros participantes a sacar partido del potencial de las TIC para lograr los Objetivos de Desarrollo Sostenible (ODS) de aquí a 2030.

Dentro del proyecto se desarrolla, entre otras actividades, la Conferencia Mundial sobre las TIC y la Educación 2030 (UNESCO, 2015). Cabe destacar el debate realizado bajo el título "El uso efectivo de las TIC para el aprendizaje de calidad", en el cual participaron representantes de sector público (Ministerio de Educación de Noruega, Corea del Sur y Uruguay) y del mundo académico (*Open University of the United Kingdom*). Esta sesión tuvo como objetivo compartir políticas efectivas y prácticas innovadoras respecto a cómo se deberían alinear las estrategias nacionales, institucionales y escolares para proporcionar un apoyo en todo el sistema para el uso pedagógico efectivo de las TIC por parte de los docentes, optimizando así los beneficios de las TIC para la calidad del aprendizaje.

Durante la conferencia, se destaca y se valora el potencial del uso de las TIC como medio para ampliar el acceso a una educación de calidad, promover el aprendizaje individualizado, fomentar la transformación en el aula y desarrollar nuevas alfabetizaciones de estudiantes y docentes. Se reconoce el papel clave de las TIC en las políticas educativas como instrumentos estratégicos, y se destaca la importancia de la implementación gradual y las pruebas piloto.

Otra de las actividades realizadas en el marco de dicho proyecto es el Foro Mundial sobre educación y TIC 2030 (2017), celebrado en Qingdao del 10 al 11 julio de 2017. Entre las tendencias principales que surgen a lo largo de las sesiones, se señala que varios países han estado experimentando con ideas para transformar entornos de aprendizaje con la integración de diversas innovaciones digitales. La tecnología de integración con la pedagogía adecuada es fundamental para diseñar futuros modelos de *e-school* que aborden adecuadamente la visión, los objetivos y las orientaciones de cada país hacia la futura escuela y educación.

Por otro lado, el proyecto de Estándares UNESCO de Competencia TIC para docentes (ECD-TIC) recoge la necesidad que existe de combinar las competencias en TIC con innovaciones en la pedagogía, el plan de estudios (currículo) y la organización escolar, de forma que puedan mejorar sus estrategias de enseñanza, cooperar con sus colegas y, en última instancia, poder convertirse en líderes de la innovación dentro de sus respectivas instituciones (UNESCO, 2008).

Los roles de los miembros de una comunidad educativa han de cambiar y adaptarse a la sociedad de la información y el conocimiento en la cual nos encontramos, creando instituciones educativas más dinámicas, flexibles y capaces de ir adaptándose a las nuevas necesidades de la sociedad, así como al contexto en el cual se encuentren.

Otro aspecto importante es la infraestructura disponible en el centro. ¿De qué recursos disponemos? ¿Cuáles se están utilizando? ¿Se les está sacando el máximo provecho? ¿En qué debemos invertir?

En algunas comunidades autónomas españolas se han llevado a cabo proyectos de integración promovidos desde el Gobierno central. En el caso de la Comunidad Valenciana, por ejemplo, no existe hoy en día ningún gran proyecto a nivel general que facilite la integración de las TIC en los centros educativos públicos de esta comunidad. Los centros de formación del profesorado ofrecen asesoramiento a centros y formación relacionado con las nuevas tecnologías a docentes y Coordinadores TIC,

pero, de manera aislada, sin llevar a cabo un análisis previo de la situación y/o contextualización de la institución educativa a formar como punto de partida y conocimiento de la madurez digital de éstos.

Otras comunidades llevan ya muchos años trabajando y han ido avanzando y mejorando sus propuestas, recursos, documentación, etc. Concretamente, la Generalitat de Catalunya propuso el Plan TAC de centro (Fornell y Vivancos, 2010). En él se recogen las características del centro en relación con las Tecnologías del Aprendizaje y el Conocimiento (TAC), se definen los objetivos y se planifican las actuaciones que se llevarán a cabo en cuanto a los aspectos organizativos, didáctico-pedagógicos y curriculares. Indican, además, que, dada la complejidad que implica la gestión coordinada de las TAC en un centro educativo, se puede establecer la figura de un Coordinador TAC como responsable de esta gestión y valorar la conveniencia de constituir una comisión TAC, integrada por algún miembro del equipo directivo, el coordinador TAC del centro y por profesores de diferentes cursos, ciclos, departamentos o seminarios.

Investigaciones realizadas en Cataluña sobre el Plan TAC coinciden en que éste es una poderosa herramienta desde el punto de vista de la organización y debería ser exportable y transferible a otros contextos educativos teniendo en cuenta la idiosincrasia de cada uno (Espuny et ál, 2011). Paralelamente al plan, los seminarios o la formación recibida deben plantearse de manera que capacite al docente digitalmente, fomentando la innovación en el aula y no dando tanta importancia a la parte técnica de las herramientas.

Los centros educativos están cambiando y, si hace unos años el planteamiento era montar al menos un aula de informática en el centro, actualmente muchos centros se plantean proyectos basados en dispositivos móviles, como por ejemplo los proyectos *one-to-one* o *Byod*. Se nos plantean, pues, los siguientes interrogantes, entre otros: ¿Cómo podemos sacar provecho de la infraestructura del centro para innovar? ¿Qué espacios son necesarios? ¿Qué recursos digitales? ¿Cómo se mejora en el uso de recursos digitales la gestión y el aprendizaje? ¿Cómo pueden los docentes ir mejorando o avanzando hacia las necesidades del siglo XXI? ¿Podemos disponer de ayudas de la Administración para avanzar en nuestro proyecto?

El problema que se nos plantea es cómo llegar en un centro educativo a un nivel de calidad acorde con las demandas de la sociedad, es decir, cómo dar un paso agigantado en las instituciones educativas, de manera general, planificada y organizada con los recursos disponibles actualmente, teniendo en cuenta las condiciones de partida del centro y de los docentes, así como los compromisos, propósitos, objetivos y metas a afrontar. Se suma, además, la inestabilidad existente en cuanto a legislación educativa debido a los continuos cambios de gobierno y la falta de un proyecto común. Asimismo, debería evitarse que los centros tengan que dedicar mucho de su tiempo a aspectos burocráticos, dificultando establecer un proyecto TIC de centro.

A modo de ejemplo, cabe citar a Roig y Flores (2014), que analizaron la integración de las TIC en un centro público de Alicante catalogado, en su momento, como Centro Educativo Inteligente (CEI). En el estudio se reflejaba la necesidad de que el centro educativo contara con una persona experta en informática de manera permanente, así como mejorar las prácticas docentes de aquellos profesores que continuaban realizando sus clases bajo un modelo tradicional. En el caso de Cataluña, ya hace años que se está trabajando con la figura de "dinamizadores externos" (Espuny et ál., 2010), con un perfil profesional específicamente formado y dedicado a las TIC.

En este contexto, cabe citar el *Proyecto iTEC* (tecnologías innovadoras para clases participativas), a través de la *European Schoolnet*. Este proyecto se constituyó con el difícil objetivo de encontrar una forma pedagógica en las aulas europeas, con especial atención en el respaldo al desarrollo de competencias avanzadas entre los docentes y de competencias del siglo XXI entre el alumnado (Tena

y Carrera, 2020). Se realizó un estudio piloto para evaluar los *Future Classrooms Scenarios* y las actividades de aprendizaje con unos 50.000 estudiantes, en más de 2.500 aulas, en 20 países (Lewin y McNicol, 2014). Los resultados demostraron que el proyecto ha logrado su objetivo, y en condiciones reales. El desarrollo de oportunidades formativas como es *EUN Academy* y de materiales, como el *Future Classroom Toolki*t, permite sentar las bases para la creación de un mayor número de aulas con visión de futuro en otros miles de centros educativos europeos.

Sin embargo, para que las TIC ofrezcan múltiples recursos para la acción didáctica y el aprendizaje del alumnado se conviertan en un elemento de motivación, dinamización, innovación y mejora de los procesos de enseñanza y aprendizaje, debe haber mucho más que un cambio en la normativa y/o una serie de instrucciones y recursos. Implica una remodelación de la política educativa que permita reconsiderar el sistema educativo como un todo; desde la concepción del contenido del currículo, a la arquitectura y organización del centro. Como afirman Alonso et ál. (2010), implica sobre todo una forma integrada y coordinada de promulgarla y ponerla en práctica. Consideramos que cualquier plan que se realice un centro debe partir del contexto y de la madurez digital en los que se encuentre para poder ser un proyecto de innovación. Kozma (2003) afirma, además, que la definición del uso innovador de la tecnología en el aula es una tarea difícil, porque lo que puede ser innovador en un contexto (país, región, etc.) puede ser un "viejo sombrero" en otro lugar.

En este sentido, el propósito del Manual de Oslo (OCDE, 2005) proporciona directrices para la recogida e interpretación de información sobre la innovación. Así, se indica que una innovación es la introducción de uno de estos elementos: a) un producto (bien o servicio); b) un proceso, nuevo o significativamente mejorado; c) un método de comercialización; d) una organización nueva, aplicado a las prácticas de negocio, a la organización del trabajo o a las relaciones externas.

Estas directrices, así como el resto del Manual, está enfocado al sector privado. En este sentido, cabe decir que consideramos que la innovación es también importante para el sector público, pero los procesos de innovación que se producen en el mismo son mucho menos conocidos. Debemos obviar, pues, el paralelismo existente entre una empresa entendida como unidad de organización con un propósito y un centro educativo, en el cual cada vez más se aplican técnicas, metodologías, instrumentos, etc., propios de éstas.

Ahora bien, no se puede considerar la innovación en educación de manera aislada, sino que debe formar parte de un proceso, de una planificación y de una gestión global de toda la "empresa". En esta línea, Harvey (2010) señala que la innovación requiere ser parte de la gestión, puesto que tradicionalmente los actores institucionalmente desarrollan procesos de innovación y lo que se requiere es que la gestión favorezca estos procesos y se logre el desarrollo de experiencias de innovación permanentes.

Harvey (2014) realizó un estudio de evaluación de un modelo de gestión de la innovación en el ámbito universitario en la Universidad Metropolitana de Caracas. En él, la gestión de la innovación es asumida como un conjunto de acciones que permiten planificar, desarrollar y evaluar los procesos educativos para lograr la innovación; considerando para ello tres elementos fundamentales: la Organización Educativa, los actores educativos (comunidad educativa en general), y las Tecnologías. Cada centro de enseñanza, aula, equipo de profesionales, grupo de alumno y alumnas, etc. son tan singulares, y cada ambiente y contexto tan diferente, que las generalidades son poco útiles.

Si pensamos en las TIC como una estrategia innovadora para dar más valor y calidad al centro, debemos tener en cuenta el concepto "E-Capacity" y las escalas de medición planteadas por Vanderlinde y Braak (2010). Éstos han desarrollado un modelo conceptual en el cual han contextualizado el concepto de capacidad en la integración TIC, de manera que definen la "*E-Capacity"* de un centro como

la competencia colectiva de una escuela para aplicar las TIC como palanca para el cambio. Desde esta perspectiva, se trata de la capacidad de crear y optimizar el nivel de condiciones sostenibles de la escuela y del profesor para fomentar un cambio eficaz a través de las TIC.

Se han realizado diferentes estudios relacionados con la evaluación de la integración y uso de las TIC como innovación (Área, 2005; García-Valcárcel, 2012; Tejedor, 2010). En este marco, Área (2010) considera que, en los últimos años, en la comunidad académica internacional comenzamos a disponer de muchas evidencias empíricas obtenidas por estudios realizados en diversos países y con variadas metodologías. Se han realizado multitud de investigaciones vinculadas a las TIC en el ámbito educativo, y tenemos datos referidos a ratios cuantitativas de disponibilidad de recursos, de actitudes de los docentes, de formas de uso en contextos escolares, de experiencias más o menos exitosas desde un punto de vista de innovación pedagógica. Sin embargo, carecemos de un corpus teórico suficientemente sistematizado que explique el conjunto de fenómenos y factores asociados, no sólo con la generalización de las TIC a gran escala en los sistemas escolares, sino también que explique o conceptualice cómo se generan procesos de innovación y mejora educativa trabajando con ordenadores en los centros y aulas.

Tal y como afirma Valverde (2016) la conceptualización de la teoría educativa como independiente de la práctica debería ser redefinida por otra que reconozca que la construcción de la teoría educativa puede ser elaborada, de manera colaborativa, por investigadores y profesionales de la educación en contextos reales. El conocimiento del diseño instruccional no es un objeto que los investigadores destilan de experimentos para que luego sea aplicado por los docentes, como meros técnicos ejecutores de las decisiones de otros. Se trata de un conocimiento contextual, social y evolutivo. Por tanto, el objetivo esencial de la investigación en Tecnología Educativa debería ser contribuir a resolver auténticos problemas educativos y proponer principios que puedan justificar futuras decisiones de implementación en los procesos de enseñanza-aprendizaje.

Prendes (2018) va más allá y expone que el simple uso de medios tecnológicos no supone hablar de Tecnología Educativa. Destaca, además, la importancia de fijar nuestra atención en los modelos teóricos que sustentan la acción pedagógica apoyada en tecnologías y la acción didáctica configurada como proceso mediado. Para la autora, el modelo 3D –la Tecnología Educativa como espacio para la docencia, espacio para la investigación y espacio para la innovación— nos capacitará para la reconstrucción del conocimiento y para el avance y la innovación en las prácticas reales del mundo educativo.

3. MODELO DE GESTIÓN PARA LA INNOVACIÓN Y LA INTEGRACIÓN EN UN CENTRO EDUCATIVO. ASPECTOS RELEVANTES

Existe una gran amplitud de factores que forman el conjunto del modelo de gestión que podemos establecer en un contexto educativo. En consecuencia, aunque la bibliografía de referencia es extensa, hay una serie de antecedentes que consideramos significativos desde una visión integral. Así, nos remontamos al Plan TAC (Fornell y Vivancos, 2010) propuesto por la Generalitat de Catalunya como modelo de referencia para la integración digital en un centro educativo. Este Plan TAC aporta una declaración de principios y objetivos, define las prioridades y actuaciones, y establece unos mecanismos de seguimiento, basados en indicadores observables que deben permitir evaluar los logros del proceso (Vivancos, 2008). El *Departament d'Ensenyament de Catalunya* lo presenta como un instrumento que favorece la planificación en las vertientes organizativas, pedagógicas y tecnológicas. Para facilitar la redacción y el desarrollo, pone a disposición de los centros educativos una aplicación telemática general que engloba todas las herramientas necesarias para ello.

Derivados de la aplicación del Plan TAC se encuentra el estudio realizado conjuntamente por Espuny et ál. (2011) titulado "El Plan TAC de centro: cómo afrontar la gestión de las TIC. Reflexiones a partir de una experiencia en el instituto". En éste se desgrana cada una de las acciones seguidas para diseñar el Plan TAC de un centro concreto con el objetivo de facilitar una guía para otros centros.

En la tesis realizada por Ferran (2015) titulada "*Canvis en l'organització i la metodologia lligats a la integració de les TIC a l'aula: el cas de les Escoles Pies de Catalunya*" se realiza un análisis bajo el paradigma interpretativo de las Escuelas PIES de Catalunya a partir de cuatro casos seleccionados. Se describen los procesos de integración de las TIC en estos centros, además de identificar, a partir de la percepción de los agentes implicados en los centros, los factores facilitadores de integración de las TIC que puedan fundamentar el diseño de las propuestas de mejora planteadas al finalizar la investigación.

También es de especial interés el estudio de la tesis doctoral de Lázaro (2015) bajo el título "*La competencia digital docent com a eina per garantir la qualitat en l'ús de les TIC en un centre escolar"*. En esta se definen los ámbitos de intervención para la incorporación de las TIC en el centro, así como los indicadores de calidad para hacer el seguimiento y evaluación del proceso. Se concluye con la propuesta de un Plan para la incorporación de las TIC en los centros, así como una estrategia de colaboración interinstitucional. Otro estudio relevante fue el estudio realizado por Harvey (2014) titulado "Evaluación de un modelo de gestión de innovación en la práctica educativa apoyada en las TIC. Estudio de caso: UNIMET*"*, en el cual detalla la evaluación realizada al modelo de gestión de innovación llevado a cabo en una institución de educación superior, concretamente en la Universidad Metropolitana.

Cabe mencionar, además, el trabajo de investigación realizado por Vázquez (2008a) titulado "Las nuevas tecnologías en la mejora de la organización escolar y gestión académica de los Institutos de Educación Secundaria (IES)", cuyo propósito es dar respuesta a la viabilidad y potencialidad de los recursos tecnológicos en la mejora de la organización escolar y gestión académica de estos centros. Asimismo, es de interés la referencia bibliográfica del mismo autor (Vázquez, 2008b) "Organizar y dirigir centros educativos con el apoyo de las Tecnologías de la Información y la Comunicación" como documento descriptivo de la nueva forma de entender los procesos de dirección y organización en los centros educativos para adaptarlos a entornos eminentemente tecnológicos.

En esta línea temática, Vanderlinde y Braak (2010) presentan un marco conceptual probado empíricamente para examinar y evaluar el modelo *e-capacity*, entendido como la capacidad de las escuelas para crear y optimizar el nivel escolar sostenible y las condiciones a nivel docente que pueden brindar un cambio efectivo en torno a las nuevas tecnologías. El resultado es la construcción de escalas de medición que resulten útiles en investigaciones futuras. En el proyecto "iTEC: *Innovative Technologies for Engaging Classrooms*" (Tena y Carrera, 2020) donde se recopilaron datos entre 2010 y 2014 de dos mil quinientas aulas, se trabajó de manera cooperativa entre ministerios de educación de veinte países, proveedores de tecnología educativa y expertos en pedagogía, así como docentes de primaria y secundaria en aulas de toda Europa. Desarrollaron un proceso que ayuda a los profesores a innovar en sus prácticas pedagógicas con respaldo de las TIC, a partir del *Future Classroom Toolkit* y servicios adicionales de formación. En enero del 2012 inauguraron en Bruselas el *Future Classroom Lab*, un entorno de aprendizaje inspirador, que desafía a los visitantes a repensar el papel de la pedagogía, la tecnología y el diseño en sus aulas. A través de seis zonas de aprendizaje, los visitantes pueden explorar los elementos esenciales para impartir el aprendizaje del siglo XXI: habilidades y roles de los estudiantes y profesores, estilos de aprendizaje, diseño del ambiente de aprendizaje, tecnología actual y emergente y tendencias sociales que afectan a la educación.

A partir de este proyecto se ha definido un proceso de diseño de aprendizaje basado en proyectos. Este proceso ayuda a los profesores a innovar en sus prácticas pedagógicas, con el respaldo de las TIC. Además, se ha desarrollado el *Future Classroom Toolkit* (kit de herramientas para el Aula del Futuro) y servicios adicionales de formación, con la finalidad de que docentes de varios países puedan adoptar la innovación digital en los centros. Ahora bien, se considera que no existen instrumentos de evaluación que faciliten el análisis cuantitativo de resultados propios de la integración progresiva digital en los centros educativos.

El 30 de septiembre de 2020 se adopta el nuevo Plan de Acción de la Educación Digital 2021-2027 de la Comisión Europea (Gómez y Gómez, 2020). La Comisión lanzó otras dos importantes comunicaciones que insisten en lograr la recuperación y el crecimiento futuro de la Unión Europea, así como en acelerar la transición hacia la neutralidad climática y el liderazgo digital:

- Espacio Europeo de Educación (EEE) para 2025, con el objetivo de facilitar que todos los jóvenes europeos puedan beneficiarse de la mejor educación y formación posibles.
- Espacio Europeo de Investigación, competitivo, abierto e impulsado por el talento para mejorar el panorama de la investigación y la innovación en Europa.

A través de estas iniciativas, se plantea una visión común para el futuro de la educación y se pretende aprovechar el potencial de la investigación y la innovación para lograr los objetivos planteados.

En este orden de cosas, el Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado (INTEF) ha elaborado recientemente un Plan Digital de Centro (Sampol et ál, 2020) cuyo principal objetivo es ayudar a los centros educativos para favorecer e impulsar el uso de los medios digitales, tanto en los procesos de enseñanza-aprendizaje, como en el resto de los procesos de gestión de centro, siempre con el objetivo último de colaborar en el desarrollo integral del alumnado. En la misma línea, pero centrado en las competencias digitales, cabe citar el proyecto DIGCOMP: "*A Framework for Developing and Understanding Digital Competence in Europe"* (2011-2016). Este tiene como objetivo crear un consenso a nivel europeo sobre los componentes de la competencia digital mediante el desarrollo de un marco conceptual que pueda servir de referencia para los marcos, iniciativas, currículos y certificaciones actuales. Para dar continuidad a este proyecto, surge el "*European Framework for the Digital Competence of Educators: DigCompEdu*" en referencia a los educadores y, posteriormente, se elabora el Marco Europeo para Organizaciones Educativas Digitalmente Competentes (DigCompOrg). En esta línea, Cabero et ál. (2021) afirman que este marco complementa, en lugar de reemplazar, a otros marcos y herramientas que ya están en uso para fines específicos. Por ejemplo, el marco DigComp se puede usar para desarrollar aspectos relevantes de la competencia digital del alumnado.

Se precisan, por tanto, visiones globales –la calidad está en el total y no solo en las partes—, compromisos generales y dinámicas de visión global. La estrategia de dividir y gestionar los centros educativos por partes ya no tiene sentido. Puede servir para gestionar, pero no para avanzar (Gairín, 2004). En esta línea, Gento (2002 y 2013) va más allá y afirma que la excelencia o calidad en una institución educativa no debe ser únicamente el ejercicio de liderazgo de la dirección. En su modelo de referencia sobre calidad de una institución educativa se incluyen factores tales como los valores, la satisfacción del personal y estudiantes, el efecto de impacto, la metodología educativa, la disponibilidad de medios personales y materiales, la organización de la planificación, la gestión de recurso y el liderazgo educativo.

4. EL LIDERAZGO COMPARTIDO COMO FUNDAMENTO DEL PROYECTO DE GESTIÓN EN EL CONTEXTO EDUCATIVO

La legislación ofrece pautas en torno a la figura de la dirección de una institución educativa, pero, aunque esta figura forma parte del liderazgo planteado en el modelo de gestión que se considera idóneo, no se sitúa como núcleo ni se toma una estructura de organización educativa vertical. Más bien se trata de un modelo de dirección escolar apoyado en la potencialidad de las TIC, donde Vázquez (2008) define el denominado "modelo de movimiento de mejora". En dicho modelo el liderazgo del proyecto es asumido por un grupo de docentes del centro del que también forma parte el equipo directivo y el coordinador TIC del centro como figuras elementales para la gestión para la innovación e integración digital progresiva. Merma y Gavilán (2019) expresan que la autoridad del docente del siglo XXI no puede fundarse en principios autocráticos definidos por la escuela, sino que se debe legitimar en base a un proceso relacional donde cobra una importancia decisiva su capacidad para encarnar la norma institucional con el fin de lograr, tanto el consenso de los estudiantes, como los objetivos que plantea el proyecto educativo del centro. El rol de liderazgo no es atribuible exclusivamente a la dirección, ya sea individual o colegiada. Además, cabe considerar el liderazgo colegiado que lleven a cabo diversos órganos pluripersonales. El ejercicio de tal rol ha de contemplarse en varios niveles y ámbitos de actuación, toda vez que las oportunidades para dinamizar a personas en formación son múltiples y diversas (Gento, 2013).

Desde una perspectiva crítica, Gairín (2004) opina que el liderazgo pedagógico, más que una práctica más o menos compartida y orientada a la eficacia y eficiencia escolar, pretende lograr que el profesorado se convierta en un profesional reflexivo que analiza colaborativamente las prácticas escolares vinculadas a los contextos sociales y políticos de referencia. Añade, además, que se podría hablar de un liderazgo cooperativo con compromiso social. Dentro de la definición de liderazgo pedagógico, González (2017) expresa que éste gira en torno a tres ejes: aprendizaje, resultados de aprendizaje y responsabilidades colectivas y distribuidas. Es decir, no se trata de asignar a una persona la iniciativa del cambio sino de posibilitar el liderazgo compartido, asumiendo responsabilidades entre los profesionales con dedicación en las competencias asignadas en sus respectivas tareas (Caetano et ál., 2020; López et ál., 2021).

El trabajo realizado por Alles (2007) y nombrado por Martín (2010) señala que el mejor modelo de gestión por competencias para una institución educativa será aquel que, representando la cultura de esta, sus valores y su estrategia –misión y visión—, imponga un modelo desafiante pero posible. Presenta, además, las competencias para una organización con los estilos de liderazgo autocrático, participativo y colegiado. Obviando el liderazgo autocrático por distanciarse de nuestro enfoque, en la tabla 1 se muestra la comparativa entre el estilo de liderazgo participativo y colegiado.

Tabla 1. Comparativa entre el Liderazgo Participativo y Colegiado.
Fuente: elaboración propia a partir de Martín (2010).

	Liderazgo Participativo	**Liderazgo colegiado**
Base del modelo	Liderazgo	Asociación
Orientación administrativa	Apoyo	Trabajo en equipo
Orientación de los empleados	Desempeño Laboral	Conducta responsable

	Liderazgo Participativo	Liderazgo colegiado
Resultado psicológico de los empleados	Participación	Autodisciplina
Necesidades de los empleados satisfechas	Categoría y reconocimiento	Autorrealización
Resultados de desempeño	Animación de impulso	Entusiasmo moderado
Competencias	▪ Pensamiento estratégico/visión de negocios ▪ Iniciativa ▪ Innovación ▪ Compromiso con la rentabilidad y el crecimiento sostenido ▪ *Empowerment* o conducción de personas con delegación ▪ Creatividad aplicada a la tarea ▪ Influencia y negociación	▪ Liderazgo sobre su equipo (para mejorar los recursos humanos). ▪ Creación y desarrollo de equipos efectivos y de alto rendimiento (para mejorar los recursos humanos). ▪ Desarrollo de su equipo (para mejorar los recursos humanos). ▪ Incrementar las relaciones con los clientes (para los clientes). ▪ Entregar servicios con valor para el cliente (para los clientes). ▪ Experiencia profesional demostrable (para los clientes). ▪ Desarrollo de la organización (para mejorar el crecimiento y rentabilidad de la firma). ▪ Construir valor (para mejorar el crecimiento y rentabilidad de la firma). ▪ Gerenciamiento óptimo de recursos (para mejorar el crecimiento y rentabilidad de la firma). ▪ Innovación de los procesos (para lograr la excelencia). ▪ Gerenciar proyectos (para lograr la excelencia). ▪ Campeones del conocimiento (para lograr la excelencia). ▪ Manejar el riesgo (para lograr la excelencia).

Por todo ello, todo proceso de cambio exige la implicación de diferentes profesionales que pueden actuar como dinamizadores del cambio o como destinatarios del mismo. Surge así el agente de cambio como el profesional que capitaliza las acciones que puedan promover y dirigir el cambio. Este actúa sobre la estructura, tecnología, ambiente o las personas, con el fin de facilitar la implantación del cambio deseado (Gairín, 2004). Ahora bien, ¿quién puede ser ese agente de cambio? ¿Qué tipo de liderazgo se adecúa a la mejora continua?

En este sentido, se considera que el modelo de gestión que debe desarrollarse en un centro educativo contempla un conjunto de agentes o colaboradores, los cuales participan, tanto en la mejora continua del propio proyecto, como en el rol de liderazgo colegiado adquirido en la propia institución educativa por todos los órganos pluripersonales (Ordóñez et ál., 2021). El estudio empírico realizado por Hallinger y Heck (2014) busca una visión de cómo el liderazgo escolar colaborativo contribuye a

la mejora de la escuela. Entre los modelos conceptuales de los efectos de liderazgo hacemos referencia al modelo de efectos recíprocos. Este no hace suposiciones insostenibles sobre el papel heroico de liderazgo, sino que se presenta este para el aprendizaje en relación dinámica con otros procesos de la organización, influyendo mutuamente. Además, las condiciones iniciales de la organización relacionadas con los cambios en el liderazgo colaborativo mediado influyen directamente en los cambios posteriores observados en la capacidad de mejora y aumento del rendimiento y el aprendizaje de los estudiantes (Hallinger y Heck, 2014).

Cabrera y Julio (2018) concluyen en que comienza a tomar más fuerza la idea de que el liderazgo en las organizaciones escolares puede ser mejor comprendido y practicado como proceso colectivo de influencias alineadas con el sentido de un proyecto educativo, ya sea por desagregación de roles directivos o por agregación, a través de los equipos directivos. Añaden, además, que la práctica del liderazgo distribuido emerge como un atributo de la cultura organizacional, donde, tanto los liderazgos formales, como los informales, interactúan naturalmente e influyen con el objeto de dinamizar el centro educativo hacia su mejora.

5. A MODO DE CONCLUSIÓN

Se considera necesario tomar como referencia las cuatro variables determinadas por Hopkins (1996) y establecidas dentro de los fundamentos para la innovación de las instituciones educativas, entendida, a su vez, como la capacidad para el desarrollo de un centro educativo. Estas son: las características del centro, el rendimiento de los alumnos, las estrategias internas de mejora escolar y las estrategias externas de mejora escolar. En este sentido, resulta especialmente relevante contextualizar el empleo de las TIC en labores de organización escolar y gestión educativa.

Para afianzar el progreso de transformación digital, los centros educativos deben invertir esfuerzos en evaluar procesos y resultados en torno a la consolidación de una estrategia digital de centro, así como favorecer el debate sobre el uso que se hace de las tecnologías de aprendizaje (Lopez-Agudo et ál, 2021: Prendes y Fernández, 2021). Así, hay indicadores a tener en cuenta como son el liderazgo de las instituciones educativas, la gestión de los procesos emergentes y de la complejidad organizacional, la eficacia escolar y la optimización de la gestión escolar. Todo ello se transversaliza por medio de herramientas tecnológicas que fomentan la (co)gestión y participación activa de toda la comunidad escolar en el devenir organizacional del centro escolar (Vázquez, 2008a). Como vemos, se ratifica el valor del liderazgo, la eficacia y optimización para la mejora de un centro escolar, así como la colaboración y participación activa de toda la comunidad educativa.

Por otro lado, hay una serie de factores que facilitan las innovaciones con TIC en los centros educativos (Fombona et ál, 2020). Pablos et ál. (2010) identifican: la actitud positiva de los colectivos docentes, equipos directivos y comunidad educativa en general; la disponibilidad de espacios y recursos informáticos para el desarrollo de innovaciones. Asimismo, el equipo directivo debe tener conciencia de la importancia de la incorporación de las TIC en los centros, por lo que se corrobora la importancia de la definición del compromiso, propósitos, objetivos y metas a afrontar por toda la comunidad educativa como elemento clave del modelo de gestión.

En dicho modelo de gestión, además, es necesario contemplar un liderazgo de calidad. Este debe estar conformado por un grupo de trabajo autónomo, pero debe estar bajo la supervisión del equipo directivo (Franco y Alvarado, 2021; Bohorquez y Andrade, 2021). El objetivo es otorgar a los miembros el control colectivo, dotándoles de autoridad, responsabilidad para planificar, dirigir, organizar, promocionar el personal adecuado, incluso comprobar la ejecución de las tareas correspondientes

(Barry, 1991). En definitiva, se trata de un liderazgo compartido que fomenta el trabajo en equipo que corresponsabiliza, delega y genera un clima de confianza entre el personal de la organización (Mejía, 2021). Solo en estas condiciones se genera el clima adecuado para posibilitar una organización y, especialmente en lo más sustantivo de la misma, sus valores, su pensamiento y su acción pedagógica (Fernández, 2005). Cabe añadir que, dentro de un plan de implementación de capacidad digital, no se debe olvidar el modelo de dirección y liderazgo que debe asumir una responsabilidad compartida para coordinar, supervisar y evaluar la eficacia de la integración de las tecnologías digitales en la cultura del centro educativo (Cabero et ál., 2021).

Con todo lo expuesto, se permite constatar la importancia de un modelo de gestión en el cual participe y colabore toda la comunidad educativa, de manera que se fomente la eficacia y la optimización de los recursos. Con ello, se podrán mejorar los procesos de enseñanza y aprendizaje, integrando las TIC, tanto en las tareas de organización y gestión, como las propias de dicho proceso de enseñanza y aprendizaje. Por su parte, el liderazgo compartido se convierte en un aliado de este modelo como fundamento de un proyecto de gestión para la mejora continua de los contextos educativos de la sociedad actual.

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7. Mental resilience and teachers' intervention in primary and secondary education

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ABSTRACT

The term "mental resilience" refers to the ability of the individual to overcome any adversity and to continue with his evolution. In addition to learning, students' mental resilience develops at school. This paper aims to highlight the importance of the intervention of secondary education teachers who, in addition to knowledge, should equip students with communication skills as well as skills in managing emotions and stressful situations. In addition, to present some important intervention programs which increase students' mental resilience such as "the Reaching In-Reaching Out" experimental research program, the Comer's Model, the Zigler's School of the 21st Century, the School of the Future e.t.c. In conclusion, teachers can find problems of students which require the special intervention of school, as well as the intervention of students' families. Finally, the need to plan and implement training programs for primary and secondary school teachers on mental health promotion is highlighted.

KEY WORDS: mental resilience, educational intervention, implementation of mental health programs.

1. INTRODUCTION

Mental resilience generally refers to the ability of the individual to be positively adapted to traumatic experiences and adversity (Masten, 2001). Mental resilience as human ability can face, overcome, and transform the adversity of a person's life and is not a permanent feature of it, nor it remains unchanged throughout his/her life. (Masten & Curtis, 2000; Hatzichristou, Lambropoulou & Adamopoulou, 2012). In today's contemporary society, students are likely to be in school without significant help when they face adversities. After the family, school is the most important factor that can create the appropriate environment and conditions that promote the mental resilience of adolescents (Hederson & Milstein, 2008). Teachers' help is necessary so that students acquire those skills that will help them strengthen their self-esteem and self-confidence and at the same time they will help them in their development and progress (Cefai, 2011). However, a large number of primary and secondary education teachers does not have the right knowledge so that it can implement health promotion programs for students and as a result education and training are deemed necessary.

In addition, it is necessary to apply intervention programs that are scientifically documented and positively evaluated as existing school psychologists are not sufficient to meet the needs of students (Yovani, 2018). This work highlights the important role of teachers in increasing mental resistance in school and describes programs which if implemented they could contribute to increasing mental resilience of students. Such an important pioneering program based on practical application is reaching in-reaching out (RIRO) which is of important assistance for teachers who want to implement intervention programs (Kordich & Pearson, 2004). Yet, other equally important programs are the Comer's Model (Comer's School Development Program), the Zigler's School of the 21st Century, School of the Future, which was based on the principles of James Comer and Edward Zigler, the Child Development Project - CDP, the Boyer's Basic School Model, the Sizer's Essential Schools Model.

Finally, it should be stressed that many times the implementation of these programs is not easy and meets enough resistance. For their successful implementation, it should be included proper planning, goals, cooperation, communication, and proper allocation of available funds.

2. THE CONCEPT OF MENTAL RESILIENCE

According to Reivich & Shatte (2002) mental resilience is defined as the ability of the individual to overcome obstacles and adapt when circumstances are not ideal and consider that the response to stress-causing events can be affected by the estimate of the situation and his/her experiences. According to Matsopoulos (2011) mental resilience is a polymorphic feature and a process of a person who focuses on his/her positive adaptation, despite the important difficulties or traumatic experiences he/she may have in his/her life.

In addition, mental resilience indicates possession of several skills that help a person manage and resolve problems (Masten & Curtis, 2000). Understanding resilience is important as a means of developing interventions to prevent and/or treat common mental disorders which can result in anxiety, depression, and stress reactions (Connor & Zhang, 2006; Davydov, Stewart, Ritchie & Chaudieu, 2010). Two dimensions should be assessed to identify the concept of mental resistance. The first concerns whether a person is doing well in his/her life in relation to a set of expected behaviors and the second concerns whether the individual is exposed to difficult circumstances that could jeopardize his/her smooth development (Masten & Curtis, 2000; Hatzichristou, Lambropoulou & Adamopoulou, 2012).

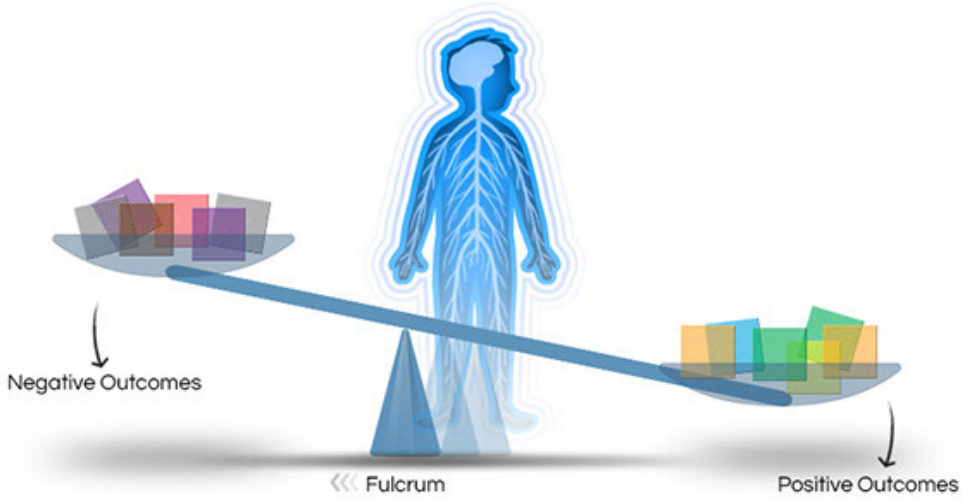

Figure 1. *A balance scale of mental resilience.*
Source: Harvard University https://developingchild.harvard.edu/science/key-concepts/resilience/

2.1. The mental resistance of adolescence

Adolescence is considered critical, as teenagers can develop delinquent behavior, tendency to use addictive substances, even suicidal trends. The mental resistance of teenagers is differentiated from that of adults which is usually exposured to stressful events and risks. For adults, it refers to the treatment of a stressful event and return to the previous daily life after their exposure to it, while adolescents refer to the prevention of their participation in delinquent habits and strengthening their character

(Fergus and Zimmerman, 2005). An estimated 13% of children and adolescents worldwide have significant mental health problems such as anxiety, disruptive behavior disorders, attention-deficit/hyperactivity disorder, and depression. Especially if left untreated, these disorders can often persist into adulthood, with lasting effects on many aspects of life (Wolters Kluwer Health, 2017).

Over the years, many programs have been designed to solve mental health problems in schools, where children and teens spend so much of their time. Substantial researches have shown that school-based mental health interventions can be widely implemented and can lead to improvements in mental health, physical health, educational, and social outcomes (Mufson et al., 2004; Vernberg et al., 2006).

Interventions at this critical age are important because they can lead to the prevention of psychosocial difficulties and improve the mental health of students. They also can compensate for the negative effects of traumatic experiences they may had (Fergusson & Horwood, 2003).

Moreover, the support for classmates and friends of adolescents in early childhood can compensate for the impact of difficult parental care or any difficult socio-economic conditions they may experience (Fergus and Zimmerman, 2005).

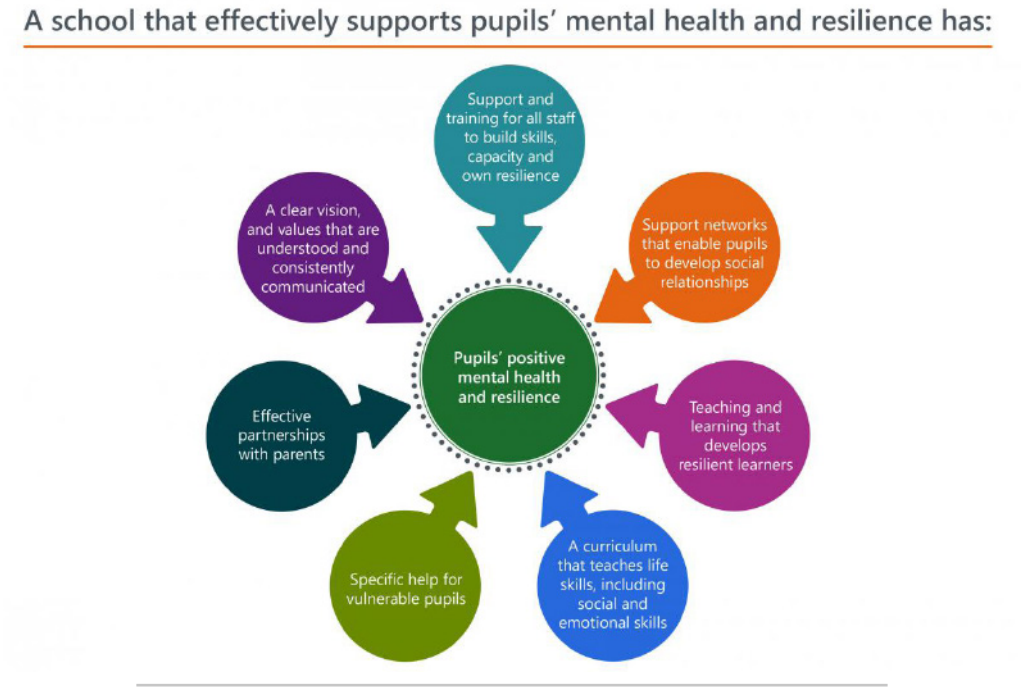

Figure 2. Components of effective teachers' support towards students.
Source: https://www.islingtoncs.org/iMHARS

2.2. Mental resilience in schools

School is the right place to develop mental resistance and all skills that are necessary for the smooth growth of students. Promoting mental resilience in the context of school environment facilitates not only the learning process but also the adaptation of students to the social environment.

In addition, mental resistance of adults working in schools is important, because they not only play an important role in the mental resistance in schools but also act like adults that protect the lives of children experiencing difficulties. Through creation of warm personal relationships, school can promote mental resilience in students better than any other community. The key factors for reaching this goal are the appropriate organization of school, teaching methods, courses, and of course, the contribution of the teachers themselves (Hatzichristou, 2011).

3. IMPLEMENTATION OF MENTAL HEALTH PROGRAMS

World Health Organization (W.H.O.) proposes and encourages the implementation of interventional mental health programs for promotion of their mental health. (https://www.who.int/mental_health/resources/Child_ado_atlas.pdf). Mental health promotion programs are structured and organized intervention programs, designed by expert scientists in mental health. These programs in schools on the one hand aim to prevent mental health problems and problematic behaviors of students and on the other hand aim to enhance teaching skills that will help children develop emotions and social skills (Kourmousi, 2013).

3.1. The role of teachers

The influence of teachers in the social development of adolescent students is important since they have daily contact with their students, unlike other professionals, and can easier identify changes in their moods (Moor et al., 2007). According to Murphy, Abel, Hoover, Jellinek & Fazel (2017) with ongoing data collection and appropriate school-based mental health programs teachers have the potential to enhance skills that allow children to strengthen their mental health state. Teachers should be distinguished from mental resilience so that they can respond successfully to their work. It should be stressed the importance of the relationships that teachers develop with their students since their daily interaction has an incommensurable power: they can establish a relationship that could play a vital role in the students' mental health development (Núñez, 2020). Teachers must also be distinguished from a pleasant mood, patience, enthusiasm, to be honest, to have communication skills, can create an atmosphere that facilitates the expression of emotions (Hatzichristou, 2011).

Moreover, they must have communication skills, empathy, social awareness, and must finding ways to cause the interest of students (Maridaki - Kassotaki, 2013).

Yet, teachers should overcome obstacles such as time constraints in school which is a factor that prevents the process of promoting mental health along with the stereotypes that should be eliminated in the classroom (Henderson & Milstein, 2008).

In addition, poor organizational structure and large-sized schools increase the likelihood of miscommunication resulting in less strong relationship links and a less intimate climate among the members of school community.

Therefore, as we rethink schools› role in children and young people›s mental well-being, it is fundamental to rethink the role, consequences, and possibilities that teachers offer to support their students in what is related to academic issues (Núñez, 2020).

4. LEVELS OF PREVENTION

Most of school-based mental health prevention are designed to focus on mental health promotion or primary prevention for all students in schools as well target students at high risk of mental health problems (Wolters Kluwer Health, 2017). Prevention includes a wide range of activities, known as "interventions", aimed at reducing risks or threats to health. There are three categories of prevention according to the current separation criteria and depending on the already diagnosed problems: Primary, secondary and tertiary (Durlak & Wells, 1997).

4.1. Primary prevention

Primary prevention programs are applied to students in order to prevent exposures to hazards. These programs are addressed to all students and are intended to promote their mental health, strengthen their self-esteem as well as strengthening their social and communication skills. These programs,

depending on their specific objectives, are applied by school psychologists or by teachers who have been trained in collaboration with school psychologists.

The programs that help students with difficulties learn are the most important in primary prevention. The difficulties faced by students in schools are enough. The main problem relates to reading disorders and difficulties in understanding mathematics (Murphy et al., 1990; Hatzichristou, 2009). Students with learning problems find it difficult to keep in with their classmates and acquire the same knowledge. Many experts consider it necessary to implement interventional programs at pre-kindergarten and kindergarten, especially for students at risk (Durlak, 1995; Hatzichristou, 2009).

A typical example of such intervention is the implementation of the "Success For All" program, implemented by Slavin and its research team in many states of America and the results from its evaluation have been particularly positive (Slavin, Karwelt & Wasik, 1994). It combines intervention and teaching on an individual basis during the first classes of primary and providing support services to students' families (Hatzichristou, 2009).

4.1.1. Intervention programs to support children in transitional stages or crises

These programs are addressed at groups of students who are in a transitional stage in their development or family life, or experience some stress-crises with intense emotions and negative interactions in the family and in their environment. In these programs are involved children who face parents' separation or problems with a family member as well as they may experience symptoms of stress following a natural disaster (Hatzichristou, 2011).

4.1.2. Prevention programs for the use of addictive substances

Programs relating to the prevention of addictive substances are particularly widespread in schools of many countries. The first interventional programs implemented were almost exclusively focused on the harmful consequences of drugs and how the use of them can change the behavior of students towards their peers and their family environment (Bangert-Drowns, 1988).

4.2. Secondary prevention

Secondary prevention aims to reduce the impact of symptoms or indications of disorders (emotional, social) and learning difficulties that have already occurred. This is done by detecting and treating these symptoms as soon as possible to halt or slow its progress, preventing difficult situations from occurring or at least minimize their negative effects,. Secondary prevention programs are applied to a person or group level, depending on their special objectives, by school psychologists or other staff, with cooperation and supervision of experts.

Many times the exact distinction between primary and secondary prevention programs is difficult due to structural design, multiple targets and their implementation to groups of students before the start of the disorders (Hatzichristou, 2009). Students are evaluated by psycho-diagnostic evaluation methods (Pfeiffer & Reddy, 1998).

A typical program of this intervention is the "Project Achieve" to support students belonging to high-risk and low-performance groups (Knoff & Batsche, 1995). The main purpose of this program, which is applied to many U.S.A. schools, is to promote a school reform process that improves teaching and learning. It is also addressed to students' families and teachers. When implementing the program each teacher is responsible for one student. Furthermore, it enhances the importance of both parents continuing to be actively involved in their children›s education (Hatzichristou, 2009).

4.3. Tertiary Prevention Programs

Tertiary prevention aims to soften the impact of a disorder that has lasting effects. Tertiary Prevention Programs mainly concern students with diagnosed disorders and special needs, and are intended to be properly induced within the family and school. The specific programs are applied by skilled scientists.

5. INNOVATIVE MODERN PROGRAMS

Next, we will describe some innovative programs which were developed by the collaboration of scientific groups of universities and schools, and are applied to schools in E.U and U.S.A.

5.1 . The Model of the Basic School

The Boyer's Basic School Model (Baker, Terry, Bridger & Winsor, 1997) is applied to primary education where students from different classes undertake teamwork. Priority is given to creating such groups so that students feel that they are important members of the school community. These groups continue to exist until students complete all classes of primary education.

5.2. The Boost program

The Boost program is a product of multi-partner cooperation to support teachers in creating an innovative strategy to improve students' mental health and life, through empowering their social and emotional skills. "Boost" is funded by the Horizon 2020 program of the European Union. It started in January 2018 and will last for 4 years.

The main objective of the program is the development, implementation and control of a new approach based on social and emotional learning to promote mental health of children in primary education. The program address, in particular, at children derived from different cultural and socio-economic environments.

5.3. Sizer Essential Schools model

This program is applied to secondary education (Sizer's Essential Schools Model). Priority is given to the role of teacher as a mentor and in the context of schoolwork. Thus, students acquire positive attitudes towards school life and are committed to achieving their goals. A small group of students is created where they work together with small groups of teachers for a long time. In this program, there is a lot of flexibility that facilitates teacher's work, which can also address at students who face particular difficulties.

5.4. The Reaching In Reach Out (Riro)

The Reaching In Reach Out (Riro) program is a recognized Canadian government's empirical research program, which is addressed to professionals who come into contact with children. Its material is based on the Methodology of the Ellis ABC cognitive model (1962) and the methodology for researchers of Positive Psychology (Seligman & Csikszentmihalyi, 2000). This is a pioneering model after connecting two completely different approaches, the humanitarian approach of positive psychology and at the same time uses Ellis's cognitive-behavioral model so as to increase its effectiveness when used by teachers. According to Ellis's cognitive-behavioral model, a professional therapist can identify as well as correct the dysfunctional thoughts and perceptions that are not related to reality. Locating and correcting these dysfunctional thoughts and perceptions can help students feel better

and have better behavior. Positive psychology seeks conditions that help people experience positive emotions, develop the best features of their personality and create positive relationships, positive families, positive groups, positive societies.

In addition, it deals with concepts such as happiness, meaning in life, mental durability, positive elements of character and attempts to give scientific answers to factors that are necessary to enhance them (Lakiotis, 2016).

The Riro program consists of courses that have a total of twelve (12) hours, including testimonials and presentations from facts. It has been included in a multi-phase evaluation process since 2002 and is an integrated package of material and education addressed to adults engaged in children (Kordich Hall & Pearson, 2004). The most important advantages of the program are the possibility of triangulation, quantitative and qualitative methods for its evaluation, at all phases of the program and the particular approach followed, as each phase of the program is one improved version of the previous (Kordich Hall & Pearson, 2004).

5.4.1. Enhancement of Knowledge of Teachers on Mental Resistance

The primary objective of Riro program is to shape teachers' knowledge on the use of the various techniques that will use to promote the mental resistance of student's whether they relate to their meetings with school pupils and school issues or they relate to their meetings outside the school area and for non-school issues. Subsequently, this knowledge should be strengthened and stabilized (Yovani, 2018).

5.4.2. The change of attitudes of teachers and the strength of their beliefs

Several teachers believe that their role is only to share their knowledge to students and do not consider it necessary to deal with promoting and improving their mental health. The reasons may be either they believe that they do not have the skills to do it or they have to only deal with their teaching duties. With the implementation of Riro program and training of teachers, their role is enhanced and they are expected to act as examples for students and as promoters of their mental health. At the same time, they will be able to increase the self-efficacy of students making them capable of creating a positive climate in the classroom.

5.5. The Child Development Project (CDP)

The Child Development Project, was piloted in California Primary Schools in the early 1980s. Its purpose is to develop close interpersonal relations at School, between the students themselves but also between students and teachers (Battistich, Solomon, Kim, Watson & Schaps, 1995). In addition, it aims to create a positive psychological climate in the classroom and close collaboration of school and family. Particular attention is given to the planning of analytical programs with activities that help students actively participate in the learning process through communication, and harmonious cooperation with their classmates by enhancing their incentives for learning (Baker et al., 1997; Hatzichristou, 2009).

5.6. Feel Well, Learn Better

Feel Well, Learn Better (ABMA) was a pilot project in France conducted in primary and secondary education schools for three years (2013-2016). Its aim was to combat frequent absences and social problems through the promotion of harmonious interactions among pupils and teachers. Nineteen

schools participated, to which changes were made at the level of organization and operation, following the advice of the responsible team.

The results showed a clear improvement in the school environment, in which a more positive climate was formed.

5.7. Comer Model - Comer's School Development Program

Comer's School Development Program was developed by a group of mental health scientists at the University of Yale in the mid-1980s and was applied to many public schools in New Haven (Comer, 1980; Holtzman, 1992). The program emphasizes learning and mental health issues to address the problems of children in elementary school and especially children of minority groups that are greatly involved in difficult socio-economic conditions. The main purpose of the program is the cooperation and interconnection of schools and students' families, resulting in improving the quality of the school life of students in the context of a systemic reconstruction and reform of the school environment (Comer, 1980).

5.8. Zigler's School of the 21st Century

The Zigler's School of the 21st Century was developed by Edward Zigler and its associates at Yale University's Center in Child Development and Social Policy. It is particularly addressed to families that do not have the financial opportunity to provide daily care to their children because parents are absent in their work (Zigler, 1989; Zigler & Lang, 1991). It includes an all-day program for preschool children from three years to kindergarten, for the entire school year and care for childhood from kindergarten to the end of primary education (Zigler & Lang, 1991). The peculiarity of this program is that includes a daily care network in the family and implementation of parents' family and education support programs (Hatzichristou, 2009).

5.9. School of the Future

The School of the Future is a complex intervention program based on James Comer and Edward Zigler's innovative programs (Holtzman, 1992). The main purpose of the program is to investigate the degree in which public schools could be used on the one hand as service centers to promote the physical and mental health of children, and on the other as social services for the help of children and families that seriously face socio-economic problems (Hatzichristou, 2009.

The program is addressed at kids and teens and aims to improve life and school performance of students through the development and cooperation of schools, local services, teachers and parents (Holtzman, 1992; Hatzichristou, 2009).

6. CONCLUSIONS

Students should be treated by everyone as responsible people and feel like members of the class and the school community, resulting in internalizing social values and acceptable behaviors. As regards teachers, they have the power to identify any problems of students that need particular care and affect them positively. They also should help increase the active involvement of students in the learning process. This is particularly important in comparison with other resilience factors. Through the design of daily activities, teachers can integrate mental health promotion issues in class and discuss them with students. Teachers should also encourage and support their students, especially those coming from non-supportive family environments, where there are no positive standards and no close and healthy interpersonal relationships are created.

As regards parents, their active participation in school activities, school-based school programs and interventions is an important factor that helps to strengthen the mental resilience of children with serious psychosocial, academic and behavioral problems (Kourkoutas, 2007).

Schools must have well-trained teachers who must be equipped with skills that allow them to implement teaching methods, design and implement psycho-educational interventions to make them capable of solving problematic behaviors (Matsopoulos, 2011). It is important to emphasize students' skills and not their negative characteristics. Finally, primary and secondary education training programs should be designed and implemented in order to enable teachers to promote the mental health of their students and protect them at the same time.

Support for mental health and resilience is most effective when embedded in school and applied consistently across the whole school community. Children and adults learn new ways of interacting, thinking and behaving when they observe and create experiences that enrich their lives. Everyone benefits from this approach, and resilience breeds resilience: a resilient community enhances the resilience of its individuals and vice versa.

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8. Historical Pandemic Analysis and the Social Implications of Covid-19 *What is the States' reaction towards multicultural populations in times of pandemics, economic downturns, and the omnipresent involvement of biopolitics*

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ABSTRACT

Contemporary societies and economies and consequently their governmental social institutional structures have grown and evolved according to the financial demands imposed by the need for global trade and interrelations between countries and businesses. The traditional social governmental approaches that had mainly their starting point and had been implemented in Europe of the previous century, have long been questioned for their effectiveness, especially at times of massive interconnections between ethnic practices and values of different civilizations that choose to live together. But has this relative problematic really paid off during the time of the contemporary pandemic? A brief reference of past pandemics that as well shook the world is presented.

Before the subjective health crisis, an equally severe one, of economic nature, had hit most of the European countries, mainly the ones at the south of the continent, which provoked equally damaging social problems. How often do the remains of that crisis along with those of the new one reconstitute the priorities of public management towards immigrants, migrants, and asylum seekers to a key factor for political speculation for local governments?

KEY WORDS: Covid-19, pandemics, health crisis, financial crisis, multiculturalism, public governance, social policy, biopolitics.

1. INTRODUCTION

There is no denial nor doubt that the time we as global citizens undergo is a time of turbulence regarding social, economic, political, health, personal, cultural, even psychological and environmental impacts deriving from the way countries around the world in all five continents chose to fight the global pandemic of Covid-19 that broke out in January 2019 in China, (WHO website). The spread of this lethal virus and its results on all of the mentioned fields was much higher than expected at that time, giving it the substance of a pandemic as it spread from country to country and continent to continent in a period of a few months.

This essay will deal with the omnipresent issue of the pandemic that the Globe faces in our times, a brief history of past pandemic break outs that literally changed the faith and the life pathways world population had managed to create then and now, what modern States, societies and social partners have to think over on how to deal with the matter by always bearing in mind what past populations did and how today's societies of Spain and Greece have reacted in order to solve the deadlock problems they faced. All this will be put under the lens of the continuous fiscal and monetary observation of the Southern Europe economies by both the EU policy centers and the I.M.F., financial surveillance institutions that constantly put the necessity of the State Welfare policies - policies that had evolved mainly in England as a reaction to the monumental industrial revolution's social problems no matter the financial

progress it provoke (Ashton T.S., 1997) - in question. Social policies' continuous alternating context, due to the norms that financial globalization imposes to the world, hand in hand with the ever-changing technological evolution, and the role this has to play to confront firstly the moral and furthermore, secondly the dysfunctional issues that arise in the societies due to the plentiful factors that determine how modern policy makers should act before health issues like the nowadays pandemics.

1.1. Pandemics

At first, a reference of the pandemics and their impact on human populations from the social perspective of their implications at the flow of history, must be mentioned.

A definition of pandemic by the World Health Organization is that "*A pandemic is the worldwide spread of a new disease",* (WHO, 02/24/2010). Pandemics is certainly not a new phenomenon for the global societies but not all viruses that widespread fast and persistently lead to pandemic crises. Almost all influenza outbreaks come from the contact of humans with animals and for the most cases those influenzas have been contained in the field that was firstly traced. It is useful at this point to make a reference to the first human societies that actually survived by using animals dating back thousands of years BC, like the Middle, Upper and Late Paleolithic populations that were utterly reliant on their close environment for their survival. The usage of animals was imperative for them not only by using their skin as garments but using the whole of the animal even as shelter from the elements of nature. Painting of such scenes inside caves in Europe, Mesopotamia, and Africa attest this comportment of prehistoric human populations, (Clottes J, 1989).

An outbreak of a local epidemic that could have burst after the previously mentioned reasons to a larger or even a global scale is the definition that have given Morens et al (2009). A pandemic main characteristics are a) diseases that extend to vast geographic areas, b) movement of diseases or spreading through contagion that can be located from place to place, c) extremely high or explosive spreading of the disease meaning that it can be traced simultaneously in places far from each other, d) minimum or close to zero population immunity, e) new diseases or alternations of already known ones, f) high grade of transmissibility and infectivity, g) severe or even lethal diseases linked to the virus in quite vast geographic areas. The in high numbers todays international swapping of people between countries and continents, fosters uncountably the spread of a virus.

One can locate the exceedingly early influenza symptoms in the contact of human beings with viruses at the first agrarian societies where man established physical contact with animals as he managed to domesticate them and use them for a variety of tasks. In a study conducted by Nicolas Rascovan et al, (2018) traces of Y. pestis were found in the ancient DNA datasets and this finding is probably considered to be the most ancient case of plague in human history. The social impact of the plague of Y. Pestis at that time was the house burning of the infected population and even the destruction and abandonment of the exceedingly early mega-settlements, consisting of around 10 to 20 thousand people, in people's effort to avoid contamination. This specific plague can be taken for a pandemic due to its spread in vast areas of Eurasia mainly in early human gatherings built on the merchants' roads.

These findings rank social response like house burnings, destruction of communities and halt the populations migrations due to the plague, quite high on the so-called priorities of these early human conglomerations.

Moving on to history, as humans created more civilized societies and even more complex interconnections between the early villages and cities, severe conflicts that involved massive numbers of

people like wars, turned epidemics far easier to pandemics. Malaria, tuberculosis, leprosy, influenza, smallpox, and other infectious diseases first appeared during these hardship periods.

1.2. Brief historical data of pandemics

A short quotation of the most lethal plagues and pandemics is needed in order to understand their wavy appearance through time.

The plague of Athens (430 B.C.) which was a typhoid fever that killed a quarter of the then Athens population, the Antonine plague (165-180 A.C.) possible smallpox or measles killing five million of the returning soldiers to the Italian peninsula from the Near East, the plague of Justinian (541-542 A.C.) being the first bubonic plague reaching Constantinople from Egypt and resulting to the death of nearly 40% of the city's inhabitants as well as being the reason for killing almost half of the known world's population, the Black Death (1347-1351 A.C.) started from Asia, spread to Europe via merchant ships and had one third of the world population deceased. It even altered the feudal regime in the British Isles because of the economic and social alterations it provoked. The Columbian Exchange (1492 A.C.) was responsible for the extinction of nearly 90% of the indigenous populations of the New World. Previous plagues of the Europeans were passed to those populations even by their African slaves. The Aztec civilization was utterly destroyed in 1520 by smallpox epidemic leaving the Spanish rulers that were immune to this virus, intact, (Serge Gruzinski, 1992), the Great London plague (1665 A.C.) ended with 20% of the city's population deceased, the Yellow Fever (1793A.C- to date) originating from West sub Saharan tropical Africa was an epidemic that local African populations had reached semi immunization to it, it reached South and Northern America in the 18th century by the Spanish and Portuguese importers of enslaved Africans making it one of the most dangerous infectious diseases the Western world had faced. The Third Plague Pandemic (1855 A.C.), a bubonic plague, started in Yunnan China, moved to India and had more than 20 million victims in both countries and was active until 1960. It took its name by being the third plague to affect Europe after the Justinian and the Black death ones.

One of the most recent and highly lethal plagues was the Spanish flu (1918-1920 A.C.) that infected nearly half a billion people and killed almost 100 million in four successive waves around the world. The world at that time was living the horror of WW1 and views over its origins vary significantly. It is believed that it started from Kansas, USA. It took its name by the severity the at-the-time press believed that Spain faced by it, due to the illness its King Alfonso XIII suffered. It is considerably thought as the pandemic that was relocated by the massive use of modern means of transportation like trains and ships soldiers had to use so they would be present at the war field and civilians for their transportation needs, (Laura Spinney, 2017).

From all the above it is evident that when natives established contacts with immigrants, explorers or military personnel, a virus turned to pandemic.

The mentioned pandemics and plagues that human populations faced over the centuries can only be of a precious lesson to be thought over. The persistence with which old viruses still challenge both health systems as well as societies and democracies as a whole, is an indicator that only if mankind takes past challenges it faced as examples, then it could place hope in the prism of solutions, although that -hope- is not yet seen as a direct result of the current pandemic.

The current pandemic crisis due to the Covid-19 virus can be considered as severe and profound as the Great Depression in the 1930's, that had the world trade diminished by a rough 50% and pushed unemployment rates around the world to figures as high as 30%, (Paul Krugman, Robin Wells 2018), and the WWII that started right after that again with the whole world participating in much different fields this

time and by having millions of casualties by all of them, (Anne Sharp Wells 2014). The pandemic's dynamics force universal changes in fields that vary from human's health to supply chain management and distribution networks in levels and depths of intense change from what we already know and experience.

2. THE NEED FOR SOCIAL POLICY IN MULTICULTURAL STATES

In the light of these data, enormous questions arise today about the substantial progress of human civilization. The positive and promising globalization that marked the end of the 20th century is now widely disputed for its contribution to the progress of human civilization, as it has contributed to an even wider gap between rich and poor via an unequal economic growth, key factors that propelled mass movement of people from undeveloped nations to richer and more prominent ones, (Andrew Kohut et al, 2008). Global entrepreneurship, its main feature, has led to the unbridled personal enrichment of a global oligarchy, enticing powerful governments to the detriment of State health and education structures, while foreshadowing a more uncertain and bleak future.

Global coordinated mass response to these historic social shocks was the only answer human societies had to implement in their efforts to fight pandemics. To do so, thorough governmental approaches and policies referring to the matter, had to be put in place. Social policy measures rank at the very top of them and act as the basic pillars of the needed governmental approach to address such issues. The transition from acts of charity and case-driven acts to solid State-run Welfare systems, was the necessary and ultimately unique precondition for the protection of both individual wealth and social security. The established sentiments of the rights and obligations of humans, as well as the general awareness that labor force was the main productive and developmental economic pilar of all nations, was the element that States needed to provide fundamental social policy measures for.

With that outlined, Welfare State and the individual social policies it implements, social protection, access to health - education and employment, is indeed the foundation of the desired policies that need to be implemented in the benefit of society as a whole, as past experience of solving problems of human deprivation has shown. The experience from Progressive Era and New Deal in the USA is of great importance for the understanding of how social policy acts were formed in the largest capitalist economy of the world, (Daniel T. Rodgers,1998. Elliot A. Rosen, 2014). Massive problems, addressing a health problem of world proportions like the nowadays pandemic constitutes a major social problem, put in discussion policy methods and concepts that fermented in the flow of history since the era of modernity, era of causality -17th century and era of enlightenment 18th century, (John Carter, 2012).

In the context of the ambiguity for the need for Social Policy measures, theoretical approach meets confirmed facts from day-to-day observation and constitute the principles to form and suggest solutions in order for the complexity of today's social issues to be addressed. One of these issues is poverty and social exclusion, two meanings that is hard to differentiate one from the other and could hardly anyone distinguish which provokes which. A definition of poverty was given by Professor David Piachaud (1981) citing that is a situation of «unacceptable deprivation» closely related to social exclusion, if not its cause. Social exclusion, in its turn, is linked to the term of marginalization which refers to the eradication of humans from the solidarity social networks, (Paul Spicker, 1993), a situation that entails the risk of evolving into disrespect form the excluded to the rules of society, (Philippe Nasse, 1992).

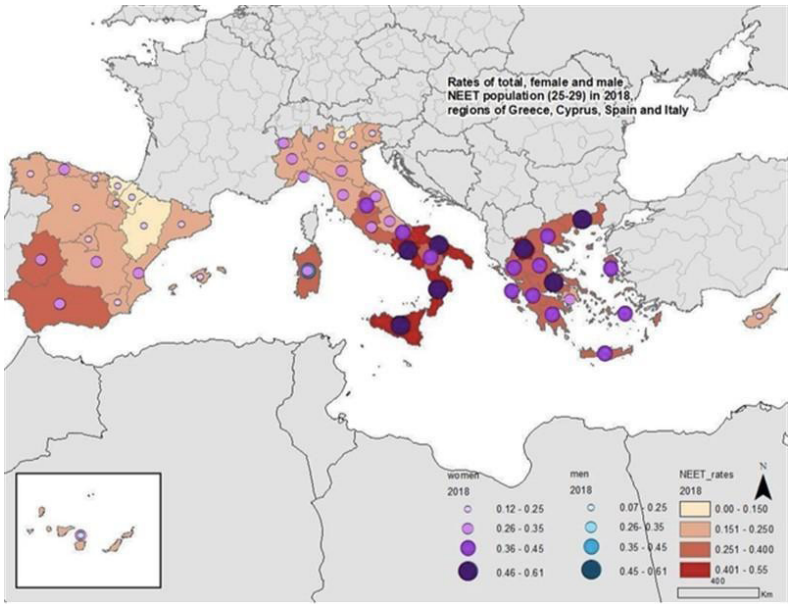
2.1. The 2009 and forth economic crisis

One of the most severe hits for the social State's policies came after the 2009 economic crisis that appeared in Europe after the similar of 2008 at the United States. Great monetary amounts were needed for

the bailout of the various financial institutions in need, a factor that withdraw economic resources that would otherwise be led towards social policies. All this rise of demand for the State's financial aid towards the monetary section of economy, triggered once more the preexisting questions over the necessity of multifarious social policies. The quite narrow room for manoeuvre of the States, due to the imposed austerity measures from the Troika (comprising the International Monetary Fund IMF, the European Central Bank ECB and the European Commission) had left no questions on which way States were obliged to take regarding the deficit reduction coming from State policies of previous years, (Rod Hick, 2017).

The unprecedented rise of unemployment mainly, but not only, at the southern European countries like Portugal, Spain, Italy, Greece and Ireland and the simultaneous annualize of unemployment into a structural State wise problem, led to the augmentation of poverty, social exclusion, and marginalization. A disastrous vicious circle was put upon States, systems and societies that demanded more and more financial resources to handle the getting worser and worser situation by the State's mechanisms of social policies, without these later being able to answer the ever-growing demand. The problems of unemployment, poverty, unequal distribution of wealth and social exclusion were even higher for the vulnerable social classes like children, single-parents families and of course the immigrants, migrants and asylum seekers that had to deal with an even more acute social dysfunction, that of xenophobia and racism. Quite notable were the sanctions ordered by the Troika in case each of the previous mentioned States did not proceed to the tapering of unemployment compensation meaning that unemployed people, usually natives that are registered in each State's Unemployment's Office catalogues, would still benefit from it, and not push themselves to take up a job offer recommended for them, (Featherstone K., 2015). That behavior of natives was cherished by the growing sentiments of work dereliction due to the lower wages achieved nationwide due to the massive influx of far-lower-than-average-income immigrants, (George Borjas et al, 2007).

The following map from YouthShare presents the rates of unemployment in four European countries, Spain, Italy, Greece and Cyprus in 2018, that is a decade after since the start of the economic recession that hit the EU. It is highly noticeable that the most hit areas from the economic crisis are the ones with the highest unemployment percentages and being the ones that annually receive the highest percentage of immigrants from northern Africa or the Middle East.



Source: YOUTHShare

The high percentage of the "Neither in Employment nor in Education Training (NEET)" populations is a proportionally alarming fact that combined with the influx of immigrants rings a bell to the regional governments.

This is a key point that New Public Governance schemes should focus on so to avoid political decisions in favor of a less open and a less free world. Populist and nationalist beliefs mixed with racism and xenophobia against austerity measures ranked high even long before the break of the Covid-19 health crisis. The daily hate crimes, either lethal or not, and the immoral approach the (im)migrants usually experienced in Greece for example, was and still is a decisive key debate of the each time ruling class to handle. The fear of people that the high numbers of immigrants entering these States would cause national identity to be lost, not to mention their fear of each country's natives turning into jobless and destitution social classes, ranked the opposed to the free movement of people political parties either winners (like the Brexit decision makers), making their entrance to the parliament (golden dawn party in Greece) or even promising to erect walls dividing one country from another as Donald Trump promised to do with Mexico. These are effects linked to the financial drawbacks of globalization as Branko Milanovic put it by using the term "the elephant curve" which graphically describes the truly little that gained from globalization the lower and middle classes of the West in contrary to the ones from east Asia and China (2016).

2.2. The pandemic economics

Commencing by the Willem Buiter's remark following the economic situation caused by the Covid-19 crisis, almost all the countries of the world are nowadays, that "*just-in-time economics will give way to just-in-case economics with multiple supply chains to ensure continuity in another crisis*", (Willem Buiter, 2020) one can understand the close ties between countries in terms of production and distribution of goods. Globalization has brought, no matter its faults, an unprecedented quality and quantity of goods to people that had never before thought they could have access to, but at the same time it has also brought one of the most devastating perils of human history, the Corona Virus.

The closure of borders between countries in order to prevent further expose of natives to the incoming virus from abroad via business or leisure trips, exposed significantly the dependance and reliance of the West trade to the cheaper and faster production methods of east Asia and mainly China, the country-ground zero of the virus. The lack of production infrastructure in the Western countries for a variety of goods like masks, ventilators, raw materials used for the chemical production of final products, at the beginning of the world's fight with the pandemic, put in jeopardy all their efforts dealing with it. Besides the materialistic side of the case, foreign people were also taken for virus carriers into a State's territory. The closing of borders for peoples' movement and the imposition of strict restrictions to travels, is the outcome of the countries' worry for their own wellbeing. Such decisions can only have one effect on peoples' consciousness, especially to the ones that have always put themselves behind nationalistic notions, and that would be the rage of superstitions, fear of the other and ethnological racism.

With nearly the totality of the developed countries in a constant series of wavy lockdowns since March 2020 due to the virus upbreaks, social isolation and marginalization is the new norm and regularity that societies learned to cope and go by. This phenomenon could easily be called a major destruction to the already successful or semi successful paths that regional States achieved for the integration of multicultural populations in their territories. Isolation literally juxtaposes integration. The outcome of peoples' mobility for work or leisure, reaching high numbers the later years before

the current pandemic crisis, is the understanding of how important is one to have language skills and cross-cultural understanding to be able to communicate and work using one's emotional experiences with a diversified ethnological mix of coworkers for increased productivity and healthier relationships, (Fujimoto Y. et al, 2007).

The Stately imposed paternalistic measures, as chief epidemiologists suggested, on world trade leads to the question of which regime type handled pandemics better, the democratic or the authoritarian ones. Examples can be drawn in favor or against for either one. China, an authoritarian country with past experience of pandemic-scale viruses like the SARS, handled the current situation efficiently and the same can be said for autocratic Singapore and Taiwan. On the other hand, authoritarian Iran has had quite poor results on its fighting against it. In the democratic range of the scope, the U.S. and Italy performed disappointingly while S. Korea and Taiwan performed likewise China. The key role for the succession of each taken measure is the level of legitimacy of the each time evolved political system.

Democratic decisions are solely based on people's voluntary compliance with them, especially the ones that have to do with massive social control, than on the imposed enforcement from local governments. This compliance is linked to the trust of the examined population with their political regime and the level of conviction the first show to the guidelines the later impose, like mass testing, quarantine, social distancing, and vaccination. Southern European democracies since the economic recession talked earlier, have faced a staggering declining trust of their people towards advice from the government, (Archer et al., 2020), while an alarming percentage of the local populations perceive public policy guidelines, referring either to the examined issue or not, as an expression of the governments' corruption and faulty decisions, finally turning to definite refusers of the governments guidelines, (OECE Library, 2018) The same low figures that apply for Europe, were also applicable on the U.S. administration of Donald Trump hitting a historical low of 17% trust to the government, (Pew research center, 2021). Revolts against vaccination have been spread across wealthy nations of the first world that reached violent levels following the continuous lockdowns of everyday life and business activities, (OECD: Enhancing public trust in CV19 vaccination, 2021). An alarming reminder to the world is the similar Rio de Janeiro's revolts back in 1094 against smallpox vaccination, (Needell, Jeffery D., 1996) when natives mixed their aversion to the underprivileged conditions they had to live by, the influx of foreigner workers to transform Brazil's economy and the immediate and somehow violent process the government chose to implement vaccination for the population, does not present major differences to the reasons people project against vaccination today.

The above problematic over the reasons of the vaccination refusers is directly linked to the ideas of supremacy of the tribe transmitted via populist channels of supranational superiority and religious fundamentalism. According to Foucault's work "Discipline and Punish" (1977) these are literally the very basic foundations of a strict disciplined society behaving in order ways. The Covid -19 pandemic has enormously fostered the massive receptiveness of native populations to the ideas of structuralism in governance, meaning that if not the absolute totality at least the majority of a population is aligned to the governmental norms which are striving for the wellbeing of natives as being the productive economic force of the State, (Horton, 2020) giving to Foucault's theory of biopower a true essence. Foucault's biopower theory is all about disciplinary techniques in all aspects of peoples' lives, be it health and preserving good life conditions among natives, ranking as the first priority for State and its mechanisms. In that context anyone non-native, foreign person is among the threats and perils that could devastate, and harm the natives' health secured by the government-imposed norms. This kind of perception often leads to the foundation of bio geopolitics.

2.3. The Bio geopolitics aspect of the pandemics

According to WHO Chief Tedros Adhanom Ghebreyesus "*a virus is more powerful in creating political, economic and social upheaval than any terrorist attack",* (WHO, Feb. 2020). The disease that spread out in Wuhan, China put in effect in an international-wide level the theories over biopolitics of Michel Foucault (Foucault, 1999) and Rudolf Kjellen, (Gunello, 2015) that in their works both implemented the notion of structuralist and post-structuralist ways of how States should administer populations by order to ensure sustain and continuation of life norms. Biology and political science have long been in conjunction even reaching the highest form of normalizing their relation in Hitler's Nazi Germany where its racist pollical beliefs were founded on racial exclusion.

The fear of punishment and the normalization of stately imposed behavioral acts among the administered, work as a tool for the obedient population body to be marked as the moral and responsible while the disobedient, be it radical natives or foreigners that due to the language or culture limitations cannot actually follow the rules, are marked as the immoral and irresponsible part of a society. Foucault's theory of biopolitics centers its structure on two pillars, that of the human body (anatomo-politics) – as the most basic mean for the continuation of production in liberal and neo liberal economies – and the discipline power orders exercised on populations of sovereign States. Covid 19 has fostered numerous examples across the globe where States have stopped interrelations with others and even raised barriers to the movement of foreign populations as a threat to the lawful community, while local communities played their role in excluding foreign populations that reside in a given State, from their everyday customs like children going to school just because they descend from heavily infected countries. Equity, freedom of movement and expression and sustainability of ethnic and cultural diversity have all been under constant pressing questions by the regional decision makers. Discomfort and even inconvenience occurs whenever such dire crises emerge and they even follow paternalistic patterns between regions, but the burden is much heavier for the racial "other".

According to Derrida, *the virus neither living nor death, neither organism nor machine is always the foreigner, the other, the one from elsewhere,* (Edwards, 2008). Pandemics management engulfs by many a license to exhibit fear and hate, it often makes it easier for given parts of a society to awaken sentiments of harassment, xenophobic acts, and violence towards vulnerable foreigners, sentiments that had been long kept hidden. Partitioning societies, as Foucault suggested that could best suite biopower tactics, leave outside social cohesion like access to education or health care those who even by their social beliefs (Muslim women do not usually trust their health cure on male doctors, foreigners that have poor knowledge of the spoken language on a given country, thus have limited access to the State's public health commands) or by racism expressed to them which decides who is in and who is out even on nation wide scale. Social media influence should not be supplanted. Waves of ethnical, cultural, and religious racism are daily projected on popular online social media channels that many see in them a friendly and affectionate mirror of their own racist feelings.

The massive acceptance of coercive measures like quarantine rules or self-distancing by those who are either self-described or appraised "biologically nationals", according to Foucault's étatisation *du biologique,* (Foucault, 1978) literally does formulate a kind of a docile and obedient to the rules of surveillance mechanisms, biopolitical subjects. Subjects that tend to keep both their political aspect of existence as well as their fundamental right to their bodies, thus being accepted as members of a society, not a privilege though for the vulnerable ones that happen to have been placed in the same society for a variety of reasons.

This remark has two sides that both seem to be equally accepted by an-each-time massive audience. The first one underlines the inequality emerged during a pandemic between those who are actually granted access to healthcare, due to nationality, skin color or descent and the ones that do not. This quote is more than justified in the data drawn from the "St. Andrew" Patras, Greece General Hospital during the months of March and April 2021 where in a monthly total of 1.800 visitors to be checked for the CV-19, only a handful of 45 persons were from a foreign origin, a figure that represents a rough 2.5% of the total visits. The second side is that all people, no matter their descent, are turned into a single and robust community against the virus as this is the only way to fight it efficiently, (Jean Luc Nancy, 2020). This point of view though does not really look at the real situation an asylum seeker goes by without a shelter or a job he can have access to from home.

Peoples' mobility is the cornerstone of biopolitics governance. The State's expression of power in these sensitive times of human interactions is the very essence of the Foucauldian *differential vulnerability*. The stake that governments put in the hierarchy of nationalities, colors, and cultures in the event of a mass mobility, is literally too high to be ignored. The figurative continuum for the lives of the natives in power is the absolute goal of such governmental approach, an approach that unfortunately overlooks that way too many underpaid mostly Asian foreigners work as couriers, food delivery personnel, supermarket clerks and so on, jobs that kept people and the economy going during the insatiably wavy quarantines.

3. CONCLUSION

Bankruptcy, rates of unemployment due to the continuous lockdowns and the general economic downturn the world is facing because of the sluggishness of production, all favor the discussion on how the sovereignty of States should be of the highest priority at any cost, even the lives of misplaced people seeking asylum or political security in another country. The Foucault's partitioning theory, while implemented, makes use of differential vulnerability which means that regular and irregular foreigners are granted access or not to a country according to the regional agreements between the two States.

Salus populi suprema est lex, meaning that human's welfare is the supreme law (T. Hobbes, Leviathan, Penguin, Harmondswoth, 1968) has its own strict limitations in today's world. Unfortunately, human civilization in its evolution has completely forgotten the consequences of the virus of these last centuries. From then until today, the so-called modern societies have invested primarily in the war industry, continuing the catastrophic consequences of the two world wars, and sowing human misery, hunger, and disease in many parts of the world. Mankind spends untold sums on the development of space technology, forgetting that human life exists on this planet and is the most valuable asset that needs to be supported and improved through the modernization of health and education systems available for all. And, finally, it ignores Nature itself, with continuous and systematic destruction of fauna and flora, in the name of supposedly human progress.

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9. Pandemic and Education

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ABSTRACT

The Coronovirus Disease Pandemic (Covid-19) is a Current Pandemic caused by Coronovirus SARS-COV-2 and was first recognized in the city of Yuhan, the capital of Cheaki province of China, in December 2019. Up until today, millions of cases have been confirmed in the whole world, more than 2.51 million deaths were noted due to the disease and more than 100 million people have recovered. This article aims at the critical assessment of the general situation in education on the occasion of the lessons we took from the health crisis, as well as to emphasize on some aspects of the new bill that arrived in the greek parliament, related to managing professional empowerment and development of pedagogical role of the educators.

KEY WORDS: COVID-19, Pandemics, Education, Distance Learning, School Leadership Standards.

1. INTRODUCTION

The Coronovirus Disease Pandemic (Covid-19) is a Current Pandemic caused by Coronovirus SARS-COV-2 and was first recognized in the city of Yuhan, the capital of Cheaki province of China, in December 2019. Up until today, millions of cases have been confirmed in the whole world, more than 2.51 million deaths were noted due to the disease and more than 100 million people have recovered.

The World Health Organization (WHO) declared Covid-19 as a global public health emergency situation on January 30, 2020, as well as a pandemic on March 11, 2020. Sure, as in many other aspects of everyday life, Covid-19 had a serious impact on students, educators and educational organizations around the world. The pandemic caused problems and created issues in schools, colleges and universities around the world. The outcome of the pandemic was to close all educational institutions so that students can follow social distance measures.

Smooth transition from a conventional training environment in remote and virtual learning could not happen overnight. This rapid transformation is linked to various obstacles and challenges, but because no one knows when this pandemic will fully disappear, educational institutions around the world have decided to use the technical resources already available to create online educational material for students of all academic students domains. It was not the first time that conventional educational activities had been suspended. SARS also influenced the conventional educational activities of a large number of countries around the world and not just SARS-COV, or the case of the I 1N1 Flu. Similarly, Covid-19 forced academics to reconsider the traditional learning manner (face-to-face) and began to consider remote learning as a feasible choice to cover the loss of personal contact in the classroom for three to four months, reducing the risk of pollution for students. Online courses have been provided by hundreds of institutions.

This article aims at the critical assessment of the general situation in education on the occasion of the lessons we took from the health crisis, as well as to emphasize on some aspects of the new bill that arrived in the greek parliament, related to managing professional empowerment and development of pedagogical role of the educators.

2. LESSONS FROM THE QUARANTINE

The Season of Health Quarantine has confronted us with unprecedented Situations, while we also experienced a more visible aspect of globalization.

It gave us another chance to think, what we have not done so far in education and we got from it enough lessons very quickly.

It brought to the forefront the importance of the country's development in every aspect the smart and rapid digitization of all sectors of governance, economy, communication, culture and education, as well as technological literacy of all citizens.

At the same time, we were confronted with the problem of the new form of social inequality, due to the digital gap (UNCTAD,2020, Klein & Morton, 2020), but also with the fear of sliding in digital surveillance situations.

Interpretations for lag and exploitation of the opportunities of the Technological Revolution in our country are many, The causes are also many, with deep historical-social and economic roots, but these are not to be analyzed at present.

3. AN EXAMPLE

Judging by the standards of other countries, it has become obvious that they are no longer sufficient frivolous and timid steps, stiffness, the slow rhythms of inspired reform works. What we need now, are well-designed jumps and not just, unclear and spasmodic steps in individual domains.

As with the wider socio-economic system, so with issues of education we are currently debating, the true meaning is in quality and not just the size of the jump that our place really needs to achieve.

When the former president of Estonia, Thomas Ilves (the man who succeeded – to turn his country from point zero within two decades in 'the most advanced Digital society in the world "), was asked:

"How can other countries follow the example of Estonia",

He replied:

"In a way, it is annoying what I am about to say, but … do what we did". And he continues:

"But Estonia's success is not so much the exemption from obsolete Technology, as much as the miscarriage of obsolete way of thinking (ETEK, 2020).

4. NEW FORMS OF COLLECTIVE CREATION - THE ROLE OF THE MEDIA

Something else we saw during this period, was the rapid response of citizens and bodies in the need to come up with new forms of collective creation and communication in emergency situations. There have been pleasant surprises of co-creating artistic performances from a distance, through the Media and social media networking, as well as multiplication of teleworking and web-based cases discussions, which testify to the latent forces of society.

Regardless each one's opinion on the role that the Media played during this period, we also saw with interest the unusual activation of a social dimension of their mission.

With this reason, questions are raised about whether - and how the Media, in cooperation with democratic institutions, could play a more substantial and better educational and connecting role in other issues as well, such as:

- the development of civil society, social solidarity,
- the introduction of new business standards, the environment,
- culture etc,

under strict terms, however, to avoid potential practices of populism, party exploitation and indirect propaganda policy than those held.

5. DISTANCE LEARNING AND EDUCATION

Our initial impression was also that:

- The emergency for remote learning and education, which up until now normally seemed more like luxury, found unprepared Governments and many educational institutions. But words of satisfaction were heard for the results of the extra application of this method during the period of generalized quarantine, on the basis of the indicators monitoring of online courses by trainees.
- State's movements have been necessarily immediate and everyone did what best could. The bet was thought to have succeeded, but sooner or later the system will be forced to resume its action so far, as it has been supported for many years internationally (TAM, & EI AZAR, 2020, Li & Lalani, 2020, Stumbury, 2009, PERETIATKOWICZ, 2006).
- During this time work was produced, which provides us with many data to investigate in the field of educational activity of the educational world and they indeed deserve to be studied to configure a realistic image on this subject.
- During the period of compulsory isolation at the pupils' home what which mostly - and beyond minor positive exceptions - we saw that was applied, was some rough solutions transporting traditional teaching and viewing on the television's or computer's screen, which was disadvantaged even more by conventional wood-centered teaching due to increased passivation of trainees, lack of two-way communication and of the inability to satisfy the interactive possibilities of technology, combined with innovative teaching methodologies.
- However, we have to exempt the invaluable contribution of specially trained ICT teachers, coordinators and other experienced teacher operators, who supported the teachers this difficult period when they were invited to dive into unprecedented and uncharted waters and teach.
- We hope those who have the liability of decision-making to understand, that the practices of distance learning are not only for extraordinary situations, nor just complementary forms of teaching, as it has been officially and publicly said. They are forms of teaching, which expand learning and contribute to the intended progressive transformation of the teaching process, generally, at all levels of education (MCCOMBS & Vakili, 2005, Richardson, 2015, Brinkman, Mast, Payne, Underwood, 2008, Alariris, Karagiannidis, Earm, 2008, Raptis and Raptis, 2017).

As far as education is concerned in general, we have consciously realized that the first 20 years of the 21st century found our educational system and so-called "digital school "of the country (such as many other European countries) awkward and unprepared to operate in response to the needs of emerging, new social reality.

But this is a prima facie impression. It would be interesting, for our purposes, if a survey was conducted on activation of colleagues cooperation between the teachers and its results during this time

and by whether pupil engagement methodologies were applied to complex problem solving projects with some degree of autonomy and cooperation with others, which require expertise and self-confidence of teachers in planning such sort of learning activities.

The outward transparency, which usually characterizes the processes of remotely teaching, has brought to light, once again, the general issues that have to do:

- With the awareness of the impact that lack of development of teaching skills in remotely open, Construction and cooperative learning has on education, which will aim not only at technological modernization, but mainly in reforming and upgrading learning and cultural environment in education.

- They also have to do with the fact that the difficulties of pedagogy exploitation of ICTs in the educational process do not only concern teaching applied in the context of the various forms of distance education and cooperation, but stem from the general difficulty of transformation of mentions and everyday practices at school with regard to pedagogical utilization of digital technology, independently from whether it is attempted by the physical presence of pedagogical partners or from distance. (How would we expect teachers to have learned to teach better from distance when things are not being done in the class?)

All these confirm the general finding that, the difficulty of transition from traditional to the contemporary model of education of the 21st century society is located more in the pedagogical dimension of the venture rather than in the technological, as it either comes to a second fate, or it lies inside a hard to find, dark box (Rail and Raptis, 2017).

6. THE BILL ABOUT EDUCATION

6.1. Some positive steps

Among others, in the pandemic, we also had the new bill on education! And in order not to be negative with everything, at first glance, we see that in the new government bill there were some positive measures and strategies for the coverage of important educational needs, including the provision for:

- Creating english-speaking departments for foreign students at universities
- Introduction of english to small ages in an experiential way
- creating a sustainable and appropriate training system for teachers and upgrading school leadership.

As to the latter, it is a positive step (at rhetoric level at least). Recognition, on behalf of the state, of its obligation to give priority to professional development and empowerment of teachers through the implementation of an innovative system of continuing training and intra-school support, something that has long been backed up and suggested for decades.

Strengthening the school as a scientific and pedagogical production area project, with the empowerment of the professional skills of the teachers and the educational leadership has always been a key issue.

6.2. Reservations

But because there is a distance between words and practice and since we still have not seen the result of the final processing of the subject and concrete measures in the process of implementing these declarations, it is logical to have some reservations about whether these pursuits ultimately will be realized.

One of the reasons for our reservation is the great financial cost that is required for successful implementation and continuation of such a great and demanding institution. (So it is not unlikely to see either its abandonment, or distortion in the act of desirable system of continuing training and support of both teachers, as well as school. There is always a danger, that this system wil be finally deducted to epidermal and fragmentary solutions, such as other training programs, that simply bring teachers to desks for a while, without essential help and sustainable results).

The result, of course, remains to be seen in practice. But the main reason for our hesitation, which also affects everything else, is the fact that so far no satisfactory indications have been given (during the processing phase and of the implementation of the laws) that the political leaders that make the final decisions have really understood:

- what modern theories of education, learning, teaching and whole pupil growth have brought to light - and make a difference - in relation to the traditional school model, which we want to change,

- Neither how difficult, time-consuming, complex and painful it is for teachers to learn (but also all of us) all that mediate in order to build the necessary - scientifically documented - experience and to develop those skills that will make us capable of planning pedagogically advanced learning environments and apply innovative teaching standards, which are harmonized with both the checks of education science and the intended "Skills of the 21st century ". Based on experience, it would take teachers three years of intensive retraining in a Integrated Technological and Pedagogical Training Program, in order for them to acquire solid and dynamic bases to be then able to learn on their own, responding to new developments, develop innovative applications and become active multipliers of important experience in their educational community.

7. INDICATIVE NEGATIVE POINTS

The reservation for the final result is also justified by the inconsistency of some measures that have interfered with the new bill and contradicts the possibly progressive philosophy of the agreed intentions. Someone could devote many pages to the analysis of the reasons for the expected reaction of critical teachers and parents in some appointed points of the bill, for example, the unacceptable measure of resetting the indication of students' comportment on their diploma, which makes you wonder:

Where did they remember that again and how did they think about that? How this perception of stigmatism and life punishment is consistent with the education of opportunities, prevention, active, responsible, participatory activity of students in creative and interesting activities of diversified learning where they find a renowned position in the student community, the assignment of responsibilities, social interaction with understanding and respect for their particular needs, by including them in the learning and pedagogical process and the emergence of their positive, latent capabilities?

Here we are not talking about adult offenders and criminals, but about the education of young and developing persons.

Many would say: Well, should there be no limits? Students will know that they can do what they want without consequences?

We all agree on that. For this reason, there are several options at school regulatory character, from reprimand, descriptive assessment of behavior to progress checks, to suspension, school change and referral of the difficult situations to experts.

There is some distance from this point, to the level of stigmatization and causing obstacles to the professional career of graduates.

To manage such problems, on one side, there is:

- The traditional, negative regulatory approach to safeguarding limits in behavior with threat as a weapon, the vindictive and authoritative exercise of penalties and praise, which shape negative heroic roles and build similar self-reliefs and self-fulfilling prophecies and, on the other hand,
- positive treatment, which also teaches the limits, but focuses on the value of the person, as well as the logical and physical consequences of antisocial behavior, based on the rights of all and not on cold punishments and discharges, poisoning the pedagogical relationship. An education focusing on the individual, is constantly looking and chooses positive strategies of psychosocial and learning empowerment of high risk students with which it manages to translate negative roles and behaviors in graduate forms of creative and positive idealization. (Durlak et al, 2011, DURLAK ET AL, 2015, SNYDER, & LOPEZ, 2009, COLLABORATIVE FOR SOCIAL AND EMOTIONAL Learning, 2013, Burns, 2010, Zins, & Elias, 2007, Josef, 2015, Street, & Porter, 2014, Taylor et al, 2017, Moore, 2020).

The first choice manufactures impetuous soldiers.

The second choice manufactures competitive people, responsible, self-controlled, with empathy and creative outlets.

Difficult? Definitely yes. But, as it happens with the case of the teaching strategies that consistently adopt modern learning theories, so the new education has results. It is not a simple eve. It is something we can and all of the institutions ought to understand and, gradually with advisory support, learn to apply to our children.

It was mentioned in the Greek Parliament, by the Prime Minister himself, the argument in favor of this rectangle, that it is a good thing that this measure comes back, because the unwavering and troubled students should know that there are impacts when they do not respect and do not comply with the rules of social cohabitation.

But the challenge is in not to rush to ignore the positive approach in education, because legislatives, and also non-experienced parents and teachers do not know other options, in addition to classical punishment.

There are also many other points in the bill, revealing obsolete examining and low sensitivity to issues related to:

- The fair access opportunities of pupils and teachers in education's goods and the risk of reproduction of social inequalities,
- Separation even dilating of laboratory and flexible learning from the normal course,
- the effects of overloading students with many courses and mechanical intensification of their studies at the expense of thinking, creation and their healthy psycho-social development,
- the increase in the number of pupils in the classes,
- the role that the specific institutionalization of the issues can be played, in regard to the indirect reinforcement of debit and other points, which they are discordance among what positive one can recognize in this bill.

Despite the reservations, however, we can only positively welcome the ambitious aspirations of the announced legislative framework as well as some aspects of its philosophy,also mentioned, among others, in intra-school training systems and supporting mechanisms of the teachers' worl, which are expected to turn school to a production of innovative applications and authentic professional experience.

8. THE REFORM THAT HAS NOT BEEN YET

Now we know that the essential and deeper upper class knowledge (the one needed so that individuals can survive dynamically in complex and open working and cultural environments, to become innovation rapporteurs and actual problem solvers rather than simply their reciprocal resonances) is not passed ready from textbooks to teachers and teachers to students, nor is it ensured by upgrading educational manuals or by simply supplying schools with modern technology tools. Other things are needed to be carried out in the classroom, for which a valuable catalyst is the educator as a teacher. Today's teacher with his multiple roles, needs to have knowledge, experience, pedagogical inspiration and the ability to become themselves designers of learning environments, educational programs and learning material, a creative facilitator of the learning process, an animator-consultant and coordinator in the service of learning, a teacher, a critical researcher, innovation rapporteur and Lifelong Apprentice (Rail and Raptis, 2017).

This is the reform that has never happened. Detailed programs, school books, technological infrastructure and computers are certainly important fields in order to reform education. However, they remain inert and untapped, if no teacher intervenes, who will be able to turn the inanimate and illogical means of education into transformational tools of knowledge, action and experience of students, for promoting them at levels of deeper conceptual understanding, critical and creative thinking, problem solving, personal and social development.

The teacher is the most critical factor of any reform effort, the catalyst for any kind of transformation of the educational process.

Certainly the brave disposal of funds for upgrading buildings, technological and environmental infrastructure (which also needs the required design with modern pedagogical criteria) is also a necessary but not capable by itself, treaty, in order a renaissance effort, like the one that is now announced, gets flesh and bones.

9. RECEPTIVE, PROGRESSIVE AND WITH SENSITIVITIES THE GREEK TEACHERS

At this point I would like to highlight that these labels in no way imply deficiency of our educational potential, but the weaknesses and anchorages of our education system (starting with politics and the academic educational leadership).

The system is mainly suffering at the level of practice of scientific experience and not as much at the level of theoretical knowledge, which is running out in iniversity amphitheaters, educational programs, informational seminars and instructions officially provided to teachers.

On the contrary, I believe that most greek teachers are socially, sensitive, they have been motivated for learning, further studies and professional development, while a large portion of them has been active in educational programs and has developed a good practice work.

We would even say that what they manage is in a stubblance of the circumstances having a lonely battle and, for many of them, threatening for their self-image and for their daily survival, having at their disposal insufficient supplies and help. There are enlightened teachers who make miracles in adverse conditions, introducing research, theater, game and social action to their lesson, take part in european programs in which they succeed, they look for ideas in educational gates and repositories and do teachings with the use of digital technology, which are standards of good practice. Besides the percentages of high school graduates that are capable of importing to tertiary education in our country is large. But scientists who excel abroad is a remarkable fact because they can find more opportunities to emerge their internal potential, which in their homeland is usually buried.

However, these individual cases, as necessary and commendable they may be, they do not cease to be sporadic, often resembling to bright fireworks without continuance and without a significant impact on the school culture of learning, especially in cases where the bureaucratic model of educational administration prevails at school.

There have been many examples of creative and anxious teachers with special studies, with promoted skills and appetite for original work, who are prevented from acting and creatively using the computer lab, sometimes with the causal guise of compliance with class or damage prevention, sometimes because they do not understand the value of the proposed actions and sometimes due to the fear of responsibilities in front of the possibility of overriding the beaten track.

It is not rare the phenomenon of prosecution of teachers for introducing new demons with innovative methods of personal-centered and diversified teaching through new technology.

But the basic responsibilities belong to the central authority that has not formed an effective and modern system of continuing training with emphasis on coupling theory and act, with programs that provide positive standards in teaching strategies, with opportunities for scientific experimentation in terms of educational reality, culture of responsibility, initiative, humanism and creation to schools.

So insisting on a philosophy for an educational reform that will be built from the bottom upwards, with the terms that have been said, we am obliged to point out some prerequisites for the success of this venture, as there is usually distance between good intentions of a new bill and the act and confirmation of its viability.

9.1. Proposed Training and Continued Training Model

A modern model of education and ongoing teacher training is advisable to be systemic, networking, co-operative, in the sense that there will be open interaction and cooperation between the Ministry, the University,the institutions of educational planning, research and educational policy, school counselors and school.

Tthat means that the structure of the system, will not be just hierarchical, but it will have the form of network and collaborations will be able to permeate all levels.

Example of such a collaboration can be the suggestion of one or more schools to apply an experimental work plan seeking at the same time synergy with other factors of educational leadership.

But also the operators at the upper levels do not simply propose and decide new political and innovative applications, but they apply them experimentally to schools and then they all together investigate their results.

9.2. Modern anthropocentric and developmental evaluation models

Evaluation in general is an integral part of the educational process, but not the education's therapy, such as the reformers so far imply.

In the evaluation of the teacher work it is proposed:

- To take account of the figures on their activity regarded to their action in the design and implementation of standard learning scenarios in educational act, which is voluntarily watched by other colleagues. If they have not taken part in training programs, then it is necessary in their assessment to be judged by leniency and opportunities to be provided to further develop their professional experience.
- The whole system to put at the heart of their educational transformation teachers, without undercutting the difficulties and requirements of the operation.
- To treat teachers with the respect they deserve and with the way we want them to approach students.
- Instead of evaluation to be the motivation for teachers and the fear that paralyzes and creates phobic reactions, it should be used:
  - I. in a positive manner as means of self-improvement and as a starting point for further reflective action and replaced by positive, activist adult educational strategies
  - II. by providing flexibility and many opportunities to teachers for undertaking responsibilities, designing learning scenarios and sampling teaching in the framework of intra-school and extracurricular partnerships, for organization or participation in educational projects of scientific experimentation
  - III. by providing endogenous and social incentives, as is the official view and identification of their work

9.3. Modern Training and School Leadership Standards

Analogue must be the context in which the teacher is working, besides the material and technological infrastructure.

The school manager needs to have skills of modern educational leadership that has vision and abilities to inspire teachers, to lead them to collective cooperation and educational innovation and support them appropriately.

But they should also have secretarial support, and flexibility to pay all his attention to pedagogical issues, aspiring to convert school to nursery of scientific and pedagogical work, with students as their protagonists.

The school manager promotes Intra Chief Training Programs, which they either take place with teachers' initiative or they are officially notified, supported and evaluated by university or other training and advisory institutions.

Schools and teachers presenting innovative projects and collective actions, which upgrade the learning environment of class and establish ethos of cooperation among colleagues, are morally rewarded and their work is projected online both for the dissemination of experiences and to strengthen their incentives and their collective image.

9.4. Positive Standards

An indicative example is that of certain Scandinavian countries, particularly Finland, where not only students attribute, without being exterminated by excessive, for their development, teaching hours and work at home, (giving sufficient space to satisfy their development needs) for thought, action and creation.

But also teachers work in the class half the hours that teachers of other countries do, devoting the rest to their ongoing training and efforts to improve their work and collectively upgrading their professional development.

Thus, these countries built a remarkable history in the area of the practical scientific experience of applying appropriate teaching strategies in their everyday life with intra-school discussions on difficult and interesting cases.

10. UPGRADING BASIC STUDIES IN UNIVERSITY: IMPORTANT CONDITION

In general, a plan of upgrading the educational process needs a self-upgrading of all educational factors and first of all the pedagogical schools or departments of universities.

Because if they do not integrate in their teaching, and the university teachers of these parts, practices of applied pedagogy and if they do not connect with the educational reality, how would we expect them to have developed the necessary training experience our educational world needs!

As much as it seems self-evident, not all pedagogical departments provide balanced studies in terms of both the scientific range and education and the coupling of theory with the act as well as the assurance of existence of the basic future educational cognitive objects for the exercise of the professional mission.

This unfortunately does not happen in all pedagogical departments, while in some there are deficiencies on very basic objects, (such as theories of learning and psychology) and at the same time showing overlaps and imbalances).

All of these, of course, require commensurable funds!

A common trait, moreover,of the education policy of the countries with successful education, which present world-wide high performance in many areas, is that they have given high priority to the

upgraded teacher and professional level of teachers (in many of them everyone has postgraduate studies on key issues) by decentralizing the responsibility of educational planning policy and reforming of the goals and conditions of the learning environment at school, in a culture of initiative, scientific experimentation and group cooperation, ongoing training, reflection and self-evaluation, resulting in the progressive philosophy of educational programs that can be implemented, self-improved and evolved dynamically and with flexibility.

And we have to recognize that the university parts of ICT in education, along with others adopting practices of applied pedagogy, contribute maximum towards this direction and have written the history of scientific experience and research with such programs of training and educating teachers.

11. PANDEMIC AND EDUCATION

It is said what played a significant role in the successful management of the pandemic was mainly the fact that the issue was left in multidisciplinary teams of internationally acclaimed specialists and experienced researchers, who advised and worked flawlessly with government officials at all levels of the making and implementation of decisions.

And one wonders:

How many more reasons should there be in order something similar to happen in the subjects of education, in this case, and in the drafting of new bills on education, with the aim to conduct a prudent, scientifically proved, possibly revolutionary changes that will cause a strong dynamic of multifaceted development and progress in our country?

But in the case of Education everyone has theories and crystallized views and it seems that many of us, for our good fortune, in the case of dealing with coronavirus our politicians accepted and were not ashamed to show that they are unaware of the issue and even boasted about this cooperation and confidence.

It seems that nothing similar happened with the bill on education to the recent successful management of health crisis that we are: that is, the final documents of this bill to be the culmination of knowledge and interdisciplinary cooperation of scientific teams consisting of internationally renowned academics, researchers and teachers from leading institutions of all the country, with previous experience and action in educational programs applied to the educational reality with positive results and recognition of training providers.

Maybe not all experts were listened to or not enough was done in some places - and as it should have been under the circumstances –

This parallelism, of course,of education and the pandemic is not that good,

because the crisis in education recommends a much more open, complex and qualitatively different, since it is not solved by complete obedience to experienced experts' recommendations, studying mathematical models, digital governance and systematic surveillance!

On the contrary.

This shows the seriousness of the situation and the importance of the partnership – in a more permanent basis and at all levels - among political leadership and the appropriate, human- central scientific community.

12. NEED FOR CONSENSUS AND FOLLOW-UP TO SUCCESSFUL PRACTICES

In our place it has been repeatedly established that conservative forces, oppositionally repulsed and the obstacles that both the education system itself (with its various contradictions at its various levels) and the wider social system puts, are often succeeded unsurpassed.

The agreement between political parties, the scientific and consensual way of design and implementation of educational innovations, but also the ensurement needed for continuity and their research attendance in a depth of time are also necessary.

For this reason, the choice of persons who will set up the new operator and the committees that will take on the design, implementation and monitoring of systems of continuing training and training of the new and already active teachers must be very careful.

These persons need to have not only theoretical expertise, but also increased research and action in the field of school education, application of innovative teaching methodologies at all levels as well as educational policies of other countries proved to be successful and democratic.

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10. Innovations in Content and Language Teaching by integrating EdTech in the new Higher Education paradigm

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ABSTRACT

In the current higher education paradigm, the integration of technologies has become necessary but not always effective. The main objectives of this study are (a) to provide a repertoire of some current and well-known technological tools that have demonstrated to be efficient to teach content through a foreign language; (b) to analyse if with the use of the technological tools proposed comprehension is eased, and the support provided guarantees more effective learning. The instruments to determine the Faculty of Education students' perception of the effectiveness of the technological tools used in the CLIL subject are two questionnaires. The first questionnaire attempts to check students' prior knowledge about the use of some technological tools. The second questionnaire attempts to verify if incorporating the use of the previous technological tools have helped them to (a) understand better the content in English (b) create meaningful activities to teach content through a foreign language as future teachers. As main results and general conclusions, we could state that although the pre-test shows that students were not very familiarized with most of the tools, they used them to create their own activities successfully. Through the analysis of their final marks, we have verified that with the use of these tools the number of failures has been reduced and in general, the marks have been higher.

KEY WORDS: CLIL, EdTech, ICTs.

1. INTRODUCTION

Nowadays, bilingual education is increasing in Spain, and especially at the University of Alicante where the number of degrees offering the possibility of teaching subjects in English has been increasing during the last years with the incorporation of the ARA *(Alto Rendimiento Académico)* groups. This new trend creates new educational needs and demands the application of new teaching methodologies.

At the University of Alicante, within the Bachelor's Degrees of Primary Education and Early Childhood Education, students can do a course on CLIL which stands for Content and Language Integrated Learning. This elective course was incorporated into the English specialty of the Degree seven years ago, and the students' demand to take part in it keeps increasing. The CLIL methodology aims to teach content in a foreign language, in this case, English, emphasizing the simultaneous learning of the language in a similar way as they acquire their first language (Marsh et al., 2001). The teaching of content through this methodology requires teacher training as it involves changing the way in which content was traditionally taught through students' first language (Gómez-Parra, 2020). The acquisition of new knowledge through a foreign language is seen as a more complex task due to the lack of some specific vocabulary (Alhujaylan, 2021).

Technological advances in the field of education have greatly benefited the consolidation of new teaching methodologies like CLIL (Bolarín-Martínez et al., 2021). As a consequence of the technology development of the last decades, a set of new language teaching approaches emerged a while ago by the name of Computer Assisted Language Learning (CALL) (Asiri et al., 2021).

CALL is defined as "the search for and study of applications of the computer in language teaching and learning" (Levy, 1997, p. 1). The use of Information and Communication Technologies (ICTs) through the Computer Assisted Language Learning (CALL) methodology, is simultaneously being incorporated together with CLIL to the syllabi of the academics within Europe (Scott & Beadle**,** 2014). The relationship between CLIL and CALL is obvious, for the instructors teach content in a foreign language and therefore, the visual support provided by the ICTs demonstrates to be efficient (Rahmati et al., 2021).

Literacy in the current world means far more than learning to read and write with the aim of complete specific tasks (Bahari et al., 2021). Technology and society are continually changing so literacy tasks are themselves always changing too (Chapelle & Jamieson, 2008). In line with the humanistic perspective, teachers have put emphasis on the process of learning, providing students with plenty of activities involving real communication. Considering that, the educator has to find the way of fitting the computer as a useful tool into English language pedagogy, which involves teaching strategies, materials and activities (Chapelle & Jamieson, 2008).

When teachers design a CALL activity, they should always consider the different pedagogical and methodological theories of second language learning (Mateo-Guillén, 2016) as well as provide guidance to learners by selecting appropriate language and by structuring learning activities with the aim of helping students to become more autonomous learners (Chapelle & Jamieson, 2008).

Research on second-language acquisition suggests that it is beneficial to provide learners with opportunities for interaction because it involves getting clarification about the meaning of the target language. In CALL activities, this interaction can take place as much between the learner and the computer as between the learner and another person (Chapelle & Jamieson, 2008; Oh & Song, 2021). Therefore, one of the characteristics of CALL activities and materials is that they must be interactive. Moreover, CALL adapts much more to the students' necessities than other materials do because they can regulate the time they spend, the help they need or the activities that they want to do (ibid).

1.1 Introducing CALL when designing CLIL material

Since the beginning of the 21st, there has been an explosion of materials to support primary teaching on the Internet. Most of the pages visited by teachers are those offering teaching resources such as worksheets and lesson plans, but looking more deeply, some of these visits are for inspiration, information, pupil resources and ideas rather than simply tailor-made plans. Lesson plans are usually very general and cannot be used "off the shelf", because planning is what happens in our heads and not what is written down. (Harlen & Qualter 2004, p. 166).

The CLIL methodology emphasizes the use of ICTs to design activities in order to provide students with supportive materials and visual aid to understand better the content which is taught through a foreign language. In this regard, Harlen and Qualter (2009) consider that the use of ICTs may somehow transform teaching and learning by means of new pedagogies. However, the drawback relies on the fact that CLIL teachers, making use of ICTs, have the urge and need to learn how to properly use the new technologies and to efficiently use them to support learning (Mehisto, 2010). Since the younger generations have grown up with a continuous use of ICTs, which have become part of their normal lives, the incorporation of sound pedagogical resources within the dynamics of the classroom does not only open the students' eyes by bringing the world into the classroom but also helps the teacher to define the purpose of the activities.

The rapid velocity at which ICTs are developing enables a wide range of possibilities that undoubtedly support learning at all stages of education, from pre-primary to higher education (Mehisto et al., 2008). If in the past the incorporation of technology into the classroom meant the need for investment by the part of the educational authorities, the current tendency is to adapt all resources and technologies to the devices students typically use outside of the classroom for recreational purposes, namely: smartphones, tablets, laptops… which, together with the growing tendency of having a wifi connection available at an easy reach, has increased the chances to work remotely (Durán-Bautista & Huertas-Malagón, 2021; Wilden, 2017).

The amount of teaching material and resources available on the web, numerous beyond count, are for the teachers to explore, to gather ideas, to test them and to use them in the CLIL class in a purposeful and engaging manner. Its usefulness relies on the possibility offered to the students to be part of their own learning. By means of meaningful attractive activities, they are the ones to explore, to revise ideas cooperatively, to collect and record data, and finally to share their findings with their classmates making use of a language that is not their own.

This new paradigm does not fluently and freely run in the web unwatched remaining there for the taking. On the contrary, it requires the effort of subject teachers and language teachers who must come to an agreement with regard to the goals. There lies the importance of planning. Coyle insists that the priority when setting the goals, by means of discussion and brainstorming, is to "increase learner engagement" (Coyle et al., 2014, p. 50) and to "develop learners who use the CLIL language spontaneously in a range of settings", that is with the interaction within the classroom.

The main objective of this paper is to provide a repertoire of some current and well-known technological tools that have demonstrated to be efficient to teach content through a foreign language. These assets are listed in a chart divided into different categories depending on the type of activity teachers want to create. This classification results from the experience of the teachers of the CLIL course who have repeatedly used these tools in the subject. And also, from the analysis of the previous knowledge of CLIL students in comparison with the results of their effectiveness after being used by them when creating their own CLIL units by means of adapting existing materials or creating new ones to fulfil the needs of their future students. The present study aims to analyse if by using the technological tools proposed comprehension is eased, and the support provided guarantees more effective learning.

2. METHOD

2.1. Description of context and participants

At the University of Alicante, the number of degrees offering the possibility of teaching subjects in English has been increasing during the last year with the incorporation of the so-called ARA *(Alto Rendimiento Académico)* groups.

From the Faculty of Education, we offer students of the third and fourth year of the Bachelor's Degrees of Primary Education and Early Childhood Education the possibility of receiving training on how to apply the CLIL methodology to teach subjects through a foreign language. During the seven years of teaching CLIL the use of ICTs has resulted almost mandatory in content and language instruction as they facilitate the understanding of concepts, for this reason, it is relevant to analyse which technological tools are used nowadays to provide effective content and language teaching and learning.

This research has been carried out at the Faculty of Education at the University of Alicante. The study was conducted with a convenient sample of 89 undergraduate students of the CLIL subject in the academic year 2020-2021 during which the subject has been taught online.

2.2. Instruments

In order to determine the students' perception of the effectiveness of the technological tools used in the CLIL subject, we carried out two questionnaires. The first questionnaire consists of 11 questions that attempt to check students' prior knowledge about the use of some technological tools they will later need to create their own CLIL units. The second questionnaire consists of other 11 questions and it was carried out as a post-test to verify if incorporating the use of the previous technological tools have helped them to (a) understand better the content in English (b) create meaningful activities to teach content through a foreign language as future teachers. Also, the final marks of students CLIL units have been analysed to check how the use of the technological tools may have influenced the final evaluation of the subject,

2.3. Procedure

Regarding the process, (1) the students answered an anonymous questionnaire through Google Forms to check their prior knowledge about the different technological tools that are used in the current educational context. (2) The CLIL teachers organised a four-hour technological workshop to introduce the different technological tools and get students to become familiar with them. As the 2020-2021 academic year has been taught online, the students received instruction through the ZOOM platform. First, the teacher explained the different tools within a category, and then the students were directed to the break-out rooms where they carried out an activity by using the previous tools in groups of four. The same process was repeated with all the tools that make up the different categories depending on the activities they had to create. (3) The evaluation of the effectiveness of the proposed technological tools was carried out in two ways, (a) through a post-questionnaire on students' perception of the utility and feasibility of the different technological tools. And (b) through the analysis of the marks obtained by the students in the creation of their own CLIL units.

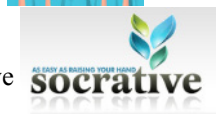
3. RESULTS

3.1. Technological tools to create CLIL activities

Table 1 collects some of the most useful and innovative digital tools used by the CLIL teachers and also by the pre-service teachers taking the CLIL course in the Bachelor's Degree in Primary Education when designing their own CLIL units.

Table 1. List of ICTs used for different activities in CLIL methodology teaching.

Type of activity	Digital tool
Create free websites and educational blogs	– WiX® – Weebly – Google sites – Blogger

Type of activity	Digital tool
Create free surveys, questionnaires, quizzes and word clouds	– Kahoot!  – Socrative  – Google forms  – Doodle  – Quizizz  – Quizalize  – Plickers  – Mentimeter 
Create interactive video lessons	– EDpuzzle  – iMovie  – Chromavid  – Camtasia studio  – Powtoon  – VideoScribe 
Create interactive and 3D presentations	– Google slides  – Emaze  – Prezi  – Genially  – Slides Carnival 

Type of activity	Digital tool
Design and edit images	– Canva – Befunky – Pixlr Editor – GIMP
Create online virtual boards	– Padlet – Linoit
Practise Interaction and Telecollaborative projects	– Tlk.io – Google Hangouts – iclicker – Zoom – Microsoft Teams – Google Meet
Create digital flashcards and multimedia educational games	– Cram – AR Flashcards – Educaplay

Type of activity	Digital tool
Create avatars, video stories and comic strips	– Voki for education – Tellagami – Plotagon Education – Storyboardthat – Pixton – Toondoo
Create Augmented Reality activities and 3D design	– HP Reveal – Aurasma – Aumentaty – SketchUp – Tinkercad
Create Digital Storytelling	– Storyjumper – Bookbuilder – Tika Tok

2.2. Evaluation of the effectiveness of the proposed technological tools

The utility and feasibility of the proposed technological tools was first self-evaluated through a questionnaire. The results of the students' perception are compiled in Figures 1-3, which in turn gather several tools related to three main goals, namely, the development of tools for virtual teaching and collaboration (Fig. 1); tools for content production (Fig. 2); and tools for content and language instruction (Fig. 3).

Among the tools for virtual teaching and collaboration (Fig. 1), the students pointed out *Google Classroom* (80 % of students surveyed) and *Google Sites* (54 %) as the most useful to construct educational websites and blogs (Fig. 1A). For the elaboration of surveys, questionnaires, quizzes and word clouds (Fig. 1B), *Kahoot!* was by far (95 %) the best considered. Respect to the technological tools for practice interaction and telecollaborative projects (Fig. 1C), *Google Meet* and *Zoom* were

found the most useful (among many choices in Table 1) for the 85 and 64 % of students, respectively. Finally, 99 % of students preferred *Padlet* to create online virtual boards (Fig. 1D).

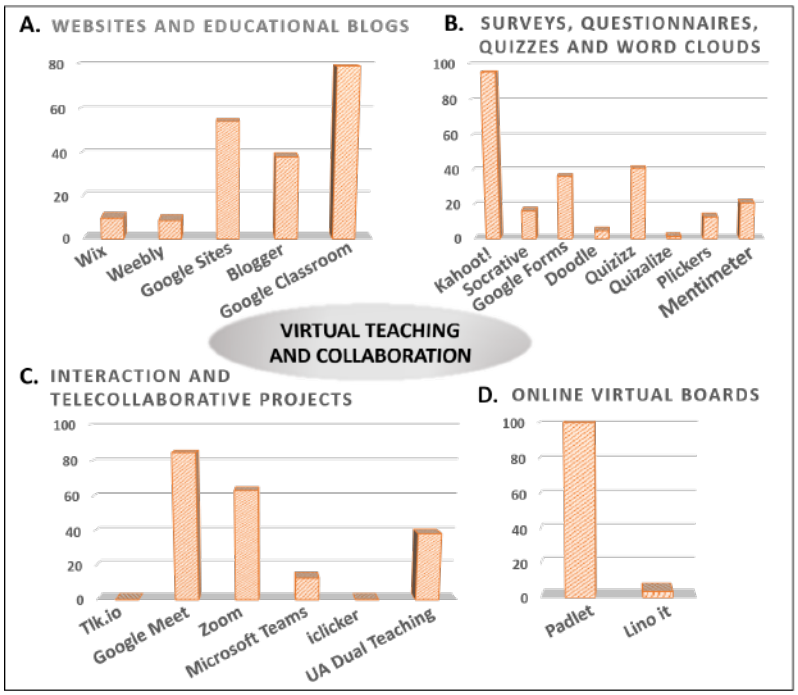


Figure 1. Students' perception about diverse tools for virtual teaching and collaboration.

With respect to the production CLIL-related content, Fig. 2 shows that *Prezi* (84 %) and *Genially* (64 %), on the one hand, and *iMovie* (64 %) and *Powtoon* (49 %), on the other hand, are the favorite tools to create interactive and 3D presentations (Fig. 2A) and interactive video lessons (Fig. 2B), respectively. For the design and edition of images (Fig. 2C), *Canva* clearly stands out (89 % of the students), while *SketchUp* (42 %) and *HP Reveal* (32 %) seem to be highlighted by the students for augmented reality activities and 3D design (Fig. 2D).

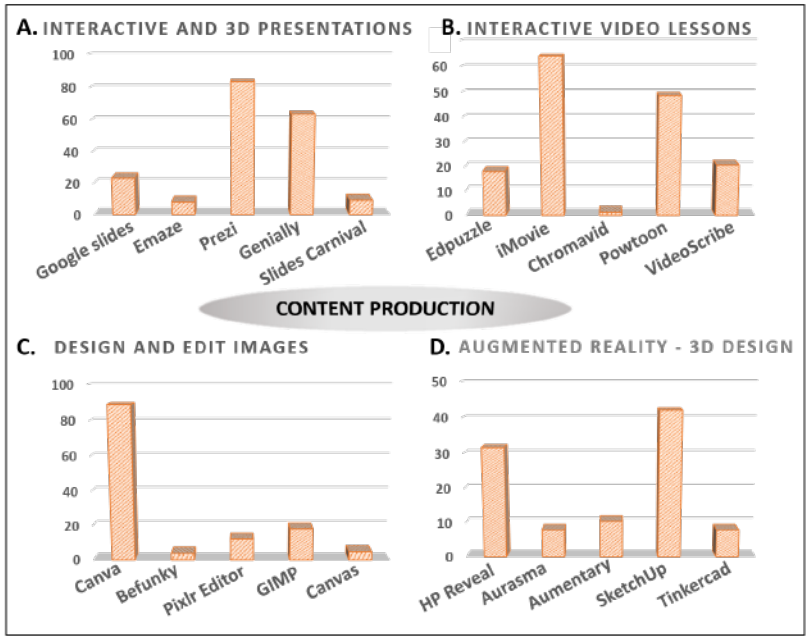


Figure 2. Students' perception about diverse tools for CLIL-related content production.

As for the tools to create content and language instruction, the obtained results indicate that *Pixton* is the best choice (for the 82 % of the students) to work with avatars, video stories and comic strips (Fig. 3A); whereas *Educaplay* was found the worthwhile tool (for the 73 %) to create digital flashcards and multimedia educational games (Fig. 3B). For digital storytelling, however, none of the provided tools was significantly highlighted by the students (Fig. 3C). The preferred tool in this case was *Storyjumper* for the 52 % of students.

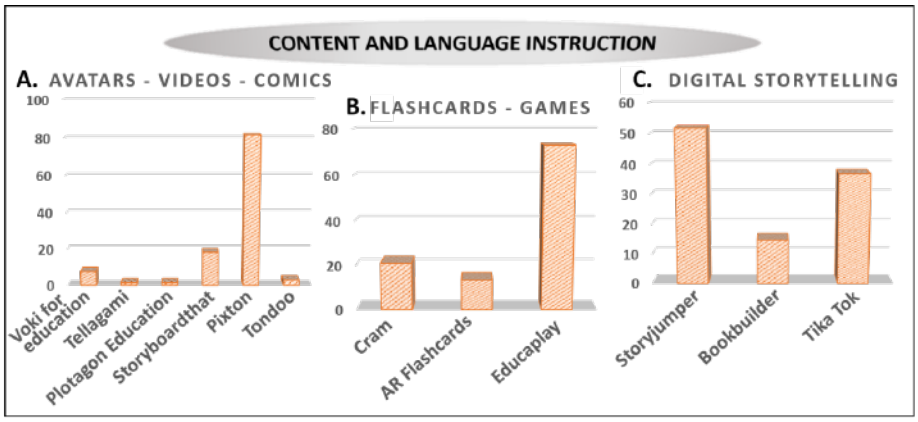


Figure 3. Students' perception about diverse tools for CLIL instruction.

On the other hand, the effectiveness of the proposed technological tools was analyzed from the marks obtained by the students in the creation of their own CLIL units in the last two academic years 2019-20 and 2020-21 (Figure 4). Although the same tools were taught and used in both academic years, the COVID-19 pandemic forced a promoted usage of technological tools and online instruction and training. As observed, independently of the year, more than 85 % of marks were equal or superior to *C* grade and most students (more than 70 %) obtained a *B* (by far the most frequent mark) or an *A*. Hence, these results generally reflect a high degree of success in the creation of CLIL units.

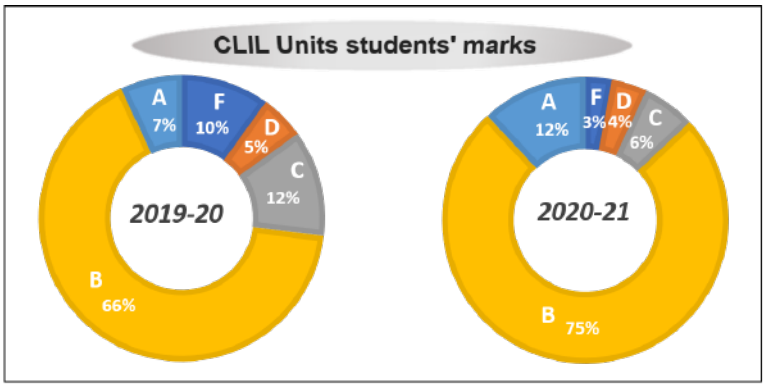


Figure 4. Students' marks obtained in the creation of CLIL units in the academic years 2019-2020 and 2020-2021. Note: marks range between 0-10 points (A = 9.0-10.0; B = 7.0-8.9; C = 6.0-6.9; D = 5.0-5.9; E = 0.0-4.9 points) and M = 7.4 and SD = 1.6 for the academic year 2019-20, and M = 7.8 and SD =1.4 for the 2020-21).

Nevertheless, the results clearly show an improvement in the creation of CLIL units in the last academic year. Thus, the percentage of lowest marks (F and D) decreased from 15 to 7 % and that of highest ones (B and A) increased from 73 to 87 % when the use of technological tools was promoted in the course 2020-21.

3. DISCUSSION AND CONCLUSIONS

As a main conclusion, we shall state that the incorporation of the aforementioned technological tools aimed to accomplish one of the main goals of the CLIL subject which is to create multi-modal and seek achievement materials with a great variety of formats. For example, the tools proposed to create educational blogs and online virtual boards help to create safe online learning environments and foster cooperative learning. The tools devoted to creating free surveys, questionnaires and word clouds make the learning intentions (language, content and learning skills) and process visible for students. The usage of the digital tools that create interactive video lessons and interactive or 3D presentations seek ways of incorporating authentic language use and help to make language and content learning meaningful (Dizon, 2021). The use of these tools gives students the possibility to go in-depth or reinforce content already learnt in the classroom. The technological tools proposed to create digital flashcards and multimedia educational games, avatars, video stories and comic strips or Augmented Reality activities systematically foster academic language proficiency and promote learning skills development and cognitive fluency through scaffolding of content, language.

The results obtained in the first questionnaire show that CLIL students were, at first, unfamiliar with the use of some of the proposed tools. However, they quickly became familiar with them and used them later to create their own CLIL units. As the second questionnaire shows, they also consider them as essential and useful tools when learning and teaching content through a foreign language. As the results of the students marks regarding the creation of their own CLIL units show, with the use of some technological tools comprehension is eased as they provided visual aid and support which helps to clarify the specific content.

To conclude, CLIL teachers have the need to create their own learning materials and adapt and complement the existing ones. New technologies have greatly facilitated this task. We could state that incorporating EdTech when teaching content through a foreign language has several benefits for teachers and students. Its integration increases the level of motivation in students as they can actively participate in the activities. These tools also provide with plenty of opportunities for an authentic language use across the curriculum.

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11. The continuous training of the human resources in hepatitis c. How it affected the pandemic of COVID-19

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ABSTRACT

This research deals with the interaction of two very common diseases : Hepatitis "C" and the "Covid-19". Below, the following is summary of the transmission method both of diseases, the treatment methods as well as the prevention methods. Regarding "Covid-19" and how this pandemic was tacked by the most advanced medical – technological States through existing technology production of vaccines but also the new one. Mean while, examined the way to handle the treatment of human cases in the sensitive area of health. What were the risk, take moral barriers, the professionalism that must exist in employees who are already sick or probably those who are going to be sick due to increased the occupational risk.

KEY WORDS: Transmitting, Kill, Unrecongizable, Foreign, Immunogenic, Annonymous.

1. INTRODUCTION

1.1. Hepatitis C, symptomatology and epidemiological data

The hepatitis C virus (HCV) is an acute infection that affects the liver. It is a hepatotropic virus, which is responsible for chronic hepatitis and liver disease. The key interactions between HCV virions and hepatocytes are important to induce viral infection and initiate the life cycle of the virus. Furthermore, the introduction of HCV is crucial in tissue modification and virus specificity (Zeizel et al., 2013).

HCV transmission occurs through transfusions and is the leading cause of hepatitis after transfusion at a 90% responsibility. Transmission through sexual contact and other body fluids is also possible. The majority of the infection is anticancer and patients show an increase in transaminases, with no clinical symptoms but chronic transition and chronic hepatitis. The symptoms of HCV are nausea, vomiting and pain in the right hypochondrium. As the disease progresses, fever of 3-7 days and obstructive jaundice may occur, as does the liver cell disease, lasting 2 weeks. It can also coexist with hepatomegaly, splenomegaly, swollen lymph nodes and arthralgia (Haratsi-Giotaki, 2014).

The infection is usually subclinical. Few patients show symptoms before the first 20 years of the disease from infection. To date, the diagnosis is limited. The infection is detected through routine tests, for example blood donation and insurance companies. Infection is also the main cause for liver transplantation. In cases of infection, vaccination against hepatitis A (HAV) and hepatitis B (HBV) viruses is necessary so that liver damage does not develop further (Tortora et al., 2009).

In general, hepatitis C is considered a serious health issue, affecting more than 170 million people worldwide. The majority of patients with this infection have difficulty clearing the virus and progressing to chronic infection. Cirrhosis, portal hypertension, liver failure and hepatocellular carcinoma are the result of chronic infection with the virus and over 300,000 deaths occur annually due to infection from this infection (Zaltron et al., 2012).

The possibility of infecting a healthcare professional during the medical practice is limited, but still possible. According to the CDC and its estimates, more than 380,000 needle punctures occur annually

in US hospitals (Panlilio, 2000). Internationally, there are 300 cases of occupational transmission of the virus, with 102 being documented (McCarthy, 2002). In Greece, according to records from KEEL of 1996- 2003, 126 cases of occupational exposure to the virus is recorded with the 26 even be for the year 2003. In any case, there chemotactic ioprofyllaxi and there was no occupational transmission of HIV.

The average risk of transmitting the virus after transdermal exposure to blood is 0.3% (95% confidence interval = 0.2% -0.5%) and the average risk of transmitting the virus after mucosal exposure to blood is 0.09 % (95% confidence interval = 0.006% -0.5%). The average risk associated with exposure of non-contact skin to body fluids other than blood or bloody impurities is very low. The main methods of occupational exposure are transdermal, through piercing with a needle or other sharp object and contact with mucous or intact skin. The biological fluids through which there is a risk of infection with the virus when in contact with a patient are blood, semen and vaginal fluids as well as cell culture. The biological fluids that are at risk of transmitting the virus are pleural fluid, CSF, peritoneal fluid, synovial fluid, pericardial fluid and amniotic fluid. Finally, saliva, tears, urine, feces and vomit are at a suspected risk of transmitting the virus to biological fluids. In the case of these, the genome of virus and the virus is not detected in such a quantity that there is a risk of transmission of the virus (CDC, 2001).

There is no vaccine for hepatitis C virus. It is therefore important to take certain precautions to avoid infection or transmission of the virus. These measures are the use of gloves, masks and clothing of sick staff, to observe the general precautions against the virus, to observe all hygiene measures, such as frequent and proper hand washing and disinfection of surfaces that come in In case of illness of a healthcare professional and contact with medical procedures which make the rest of the staff or patients dangerous to transmit the virus, he / she should receive instructions from a hepatologist, in accordance with the guidelines of the National Organization of Public Health of Greece (Pantazis & Brokalaki, 2008).

1.2. The vaccination against covid -19

The covid-19 vaccine so far seems to be the most effective solution in the fight against coronary heart disease. The vaccines are generally estimated to have saved at least 23 million lives between 2011 and 2020. Development of covid vaccines began after the release of the SARS-CoV-2 virus genome on January 10, 2020. Since then, more than 200 vaccines have been tested (http: // www .efiathanasopoulou.gr /% CE% B5% CE% BC% CE% B2% CF% 8C% CE% BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE % B1% CE% B9-% CF% 84% CE% B5% CE% BB% CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80% CF% 81% CF% 8C% CE% B2% CE% BB /).

These vaccines, although different from each other, have a common goal of producing antibodies to protect us from possible invasion of the virus in our body. But let's see how some of them work:

- **Inactivated virus** scientists take the virus and heat it too much or add chemicals such as formaldehyde or beta- propiolactone to "kill" it, fatally destroying its RNA & proteins (but not so much that the proteins become "unrecognizable"). because they need to look "real" enough to elicit an immune response!)
- **Viral proteins (subunit vaccines)** contain harmless fragments (proteins) of the COVID-19 virus instead of the whole germ.
- **Recombinant viral vectors** contain a harmless virus (eg adenovirus or measles virus) designed in the laboratory to include genes from Sars-Cov-2. This virus does not replicate - one of the proteins needed to replicate has been genetically deleted so that the virus cannot make copies of itself once it enters the body. When genetically modified adenovirus is injected into human cells, coronavirus proteins (glycoprotein S) are produced that trigger the immune system to form antibodies. This vaccine was developed at the University of Oxford and is considered one of the pioneers because it has borrowed technology from a similar vaccine for the related MERS virus.
- **M-RNA vaccines** mRNA-1273 is a modified messenger RNA (mRNA) - which enters the cytoplasm in tiny lipid droplets and provides information on the formation of glycoprotein S, through which the virus binds to human cells to enter them. The glycoprotein S is recognized as "foreign"

by the body and causes the formation of antibodies against the virus. Although it has not been approved so far for human use, it is considered a great achievement and will be the medicine of the future (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC%CE%B2%CF%8C%CE% BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE% B5% CE% BB% CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80% CF% 81% CF% 8C% CE% B2% CE% BB /).

The Russian vaccines of Johnson & Johnson, the CanSino China and the Oxford vaccine (Astra Zeneca) using technology of adenoviruses as viral vectors. The Oxford vaccine contains adenovirus chimpanzee while Chinese using human adeno i v (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC%CE%B2%CF%8C%CE%BB%CE%B9 % CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE% B5% CE% BB% CE% B9% CE% BA% CE % AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80% CF% 81% CF% 8C % CE% B2% CE% BB /).

In contrast, Moderna and Pfizer vaccines use mRNA technology.

Sinovac Biotech in Beijing is testing an inactivated virus vaccine, as are the Organic Products Institute in Beijing and Wuhan. GSK & Sanofi work together to do what they do best: Sanofi makes protein S and GSK makes immune boosters (chemicals that are introduced along with viral proteins to make them more " immunogenic " - that is, they use viral proteins). All COVID-19 vaccines except one will be given in two doses over a period of a few weeks (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC%CE%B2%CF%8C%CE%BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE% B5% CE% BB% CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80% CF% 81% CF% 8C% CE% B2% CE% BB /).

The Russia became the first country in the world approved the vaccine on August 11 (Sputnik V), which claim to be 92% effective after testing 16,000 volunteers. Prior to the completion of all phases of clinical trials, it was administered to senior officials as well as to the scientists themselves who make it, which has provoked reactions. One of the people who received it is the president's daughter, who claims to have created a strong antibody titer (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC%CE%B2%CF%8C % CE% BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE% B5% CE% BB% CE % B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80 % CF% 81% CF% 8C% CE% B2% CE% BB /).

The vaccine (Germany-USA) from Pfizer and BioNtech was reported to be more than 90% effective after trials (third phase) in more than 43,000 people (http://www.efiathanasopoulou.gr/%CE%B5%CE % BC% CE% B2% CF% 8C% CE% BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84 % CE% B5% CE% BB% CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80% CF% 81% CF% 8C% CE% B2% CE% BB /).

Then, the American company Moderna stated that its vaccine showed almost 95% effectiveness, also after large final phase tests (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC%CE%B2%CF % 8C% CE% BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE% B5% CE% BB % CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF % 80% CF% 81% CF% 8C% CE% B2% CE% BB /).

The China already has four vaccines in the final phase of clinical trials. Although the tests have not been completed, three of them have already been administered, as part of an emergency program, to builders, diplomats and students who have visited more than 150 countries around the world during the pandemic and none of them have contracted the disease. the fourth was approved for the Chinese army in June (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC%CE%B2%CF%8C%CE%BB% CE%

B9% CE% BF-covid -% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE% B5% CE% BB% CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80% CF% 81% CF% 8C% CE% B2% CE % BB /).

The effectiveness of the vaccines as they claim will range from 90-95%, an extremely impressive fact if one considers that the corresponding one against the flu ranges from 40-60% (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC % CE% B2% CF% 8C% CE% BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE % B5% CE% BB% CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF% 80% CF% 81% CF% 8C% CE% B2% CE% BB /).

The development of vaccines is generally a long process. Under normal circumstances, it lasts an average of about 10 years (even the fastest vaccine ever developed - the mumps vaccine - took four years). This time, however, due to the urgent need to find a solution, pre-clinical and clinical trials to test the efficacy and safety of candidate COVID-19 vaccines have either been omitted or completed at a rapid, almost frantic pace, which makes the world to question their safety. In May, a poll of 1,640 people in the United States found that 28% of Americans believed Mr. Gates wanted to use vaccines to implant microchips in our bodies. fell from 72% in May to just 51% in September. In August, 48 Chinese workers in New Guinea were barred from entering due to concerns that they had been given an «anonymous» experimental vaccine (http://www.efiathanasopoulou.gr/%CE%B5%CE%BC%CE%B2%CF % 8C% CE% BB% CE% B9% CE% BF-covid-% CE% B5% CE% AF% CE% BD% CE% B1% CE% B9-% CF% 84% CE% B5% CE% BB % CE% B9% CE% BA% CE% AC-% CE% B7-% CE% BB% CF% 8D% CF% 83% CE% B7-% CF% 83% CF% 84% CE% BF-% CF % 80% CF% 81% CF% 8C% CE% B2% CE% BB /).

The following is a table showing the effectiveness of the covid- 19 pandemic vaccination vaccine.

Table 1. The efficacy of the covid- 19 vaccine.

How some of the Covid-19 vaccines compare

Company	Type	Doses	Storage
Oxford Uni-AstraZeneca	Viral vector (genetically modified virus)	x2	2 to 8°C (6 months)
Moderna	RNA (part of virus genetic code)	x2	-25 to -15°C (7 months)
Pfizer-BioNTech	RNA	x2	-80 to -60°C (6 months)
Gamaleya (Sputnik V)	Viral vector	x2	-18.5°C (liquid form) 2 to 8°C (dry form)
Sinovac (CoronaVac)	Inactivated virus (weakened virus)	x2	2 to 8°C
Novavax	Protein-based	x2	2 to 8°C
Janssen	Viral vector	x1	2 to 8°C (3 months)

Source: UK government, Reuters BBC

Source: https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.bbc.com%2Fnews%2Fworld-africa-55975052&psig=AOvVaw1CEjGJwBhe1PaybbojOTpn&ust=1629372845609000&source=images&cd=vfe&ved=0CAoQjRxqFwoTCPib6P-8uvICFQAAAAAdAAAAABAD

Vaccination, therefore, provides the possibility of stopping the spread of covid -19 and is the only solution for this (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines). As health personnel are required by the state to be vaccinated (https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiBm6Tuvbf-CHHQ2Q % 2F% 3A% 2Fwww.ertnews.gr 2Feidiseis 2Fellada%%% 2Fpolitiki 2Fyp-ygeias-ypochreotikos-emvoliasmos-ygeionomikon-os-tin-1i-septemvrioy% 2F & usg = AOvVaw2H-syr56k-pZYAZiiqGGSpv), this means that all private doctors and nurses and public hospitals are or will be vaccinated, so there is no question of fear among them or exclusion and marginalization due to fear of spreading the virus. Something, of course, that does not exist in the case of a patient with hepatitis C who belongs to the staff of the health sector, where, as mentioned above, there is no vaccine, while it is a lifelong and chronic disease, and in fact highly contagious.

2. PURPOSE

The following can be seen from the above. Hepatitis C infection is a chronic disease, with a subtle or perhaps subacute infection, that infects the liver and can lead to death. The epidemiology of the disease is great, both for every common citizen and for health professionals. Clearly and the risk infection in health professionals, due to their contact with both work tools and patients is greater (Karkasina, 2012).

The question that this research proposal focuses on is the issue of research confidentiality, the behavior of colleagues towards a fellow doctor diagnosed with hepatitis C and how the pandemic affects this attitude.

Friendly secrecy is linked to the solidarity of colleagues that is characteristic and imperative in certain professions. The goal of peer confidentiality is to secure certain business secrets, the nature of which varies. In each case, they have seized it, despite obstacles we can scarcely imagine. « Of course, it is a matter of much discussion and study and the question is whether it really exists today (Karkasina, 2012).

In the context of peer confidentiality, one colleague covers the other and avoids public disapproval. This is a traditional moral value in the field of health. However, today the current trends impose the absolute priority of the patient›s interest and so the official bodies motivate the health professionals to report immoral, indecent or dangerous attitudes and behaviors of their colleagues. In Greece, a similar instruction or motivation is not yet available from an official body, but its future configuration and encouragement of health professionals in reports, complaints or disclosure in the interest of patients. Also, under Article 14 of the Code of Nursing Ethics, «medical and nursing staff are prohibited from criticizing or disapproving of the work of their colleagues, doctors or other staff» (Karkasina, 2012).

It is important to ensure the reputation of the colleague and this is based on the following two factors. Initially, the doctor and the nurse cover their colleagues, so that, when the time comes and someone makes a mistake, they accept the corresponding behavior. This is a matter of solidarity and close working relationships. Ensuring fame also ensures the entire health industry. Criticism and malicious comments among colleagues negatively reflect the health profession and public opinion disapproves and disgusts these stakeholders in the field of health (Theodosopoulou et al., 2011).

Nursing is interrelated with Medical Science and the corresponding professions are interdependent. The Ethics of Nursing is influenced by the Ethics of Medicine in terms of its principles. They therefore correspond to each other on the issue of peer confidentiality, as they stem from the same point. Thus, securing a reputation is equally important in both cases (Theodosopoulou et al., 2011).

It is very important to protect the reputation throughout the organization or business. Success in an organization or business is measured by the result produced in monetary profits or in the level of fulfillment of goals. Therefore, it is in the best interest of an organization or business to maintain confidentiality. On the other hand, when peer privacy is not guaranteed and there is dissatisfaction or rejection of the doctor or nurse, the reputation of the person who is disapproved and the whole organism is at stake. The importance of confidentiality can be seen from the following. In the case of a private hospital, not maintaining confidentiality in the person of a doctor or nurse is very destructive to the organization (Fagin & Garelick, 2004).

The fact, then, that the staff in health areas exposed to a great risk of infection by the hepatitis C. Potential infection can endanger other staff as well as patients. However, the question that arises is whether understanding, support, encouragement or other marginalization and disapproval passes to a patient with hepatitis C working in the health field from his colleagues? This is the key question of this study. Also, how the pandemic affects the attitude of the patient›s colleagues and whether a patient is favored by covid compared with patients with hepatitis C.

3. METHODOLOGY

The personal experience of the author, who works as a doctor in a public hospital in Athens, prompted the investigation or even the proposal to investigate the issue of marginalization of colleagues who are patients with hepatitis C by also colleagues. This is an extremely important issue both for the efficiency and productivity of fellow patients who experience disapproval and outcry from their colleagues, as well as for the body itself and its function. In this context, what would be recommended would be to conduct a quantitative survey, using a questionnaire, in order to show the attitude and mentality of nurses and doctors about the cases of their sick colleagues.

Scientific research is the means by which the researcher will prove knowledge. The main characteristics of the research approach are objectivity, self-correction, but also the focus on controlling the theoretical information that preceded the presentation of the research part of the work, ie the theory, in the first part of a research paper (Robson, 2010). At the same time, the researcher aims to arrive at valid results and reliable knowledge (Kasimati & Moustaka, 1984).

The researcher, therefore, seeks the truth through the theoretical and research approach of a subject. After all, scientific research aims to provide answers to important questions. This is achieved through the use of scientific methods (Filias, 1998).

Research is considered necessary and necessary, as it aims to upgrade the quality of work. In this proposal, therefore, the quantitative method is recommended. A key feature of quantitative research in approaching research questions is the fact that empirical generalizations and regularities are sought through it. In addition, it is possible to test the causal theoretical hypotheses. In general, the quantitative method applied focuses on the testing of theoretical hypotheses and their relationship to the social phenomenon studied at work. In this case, then, the data are collected and standardized. In addition, quantitative research provides the possibility to use and extract answers from a large sample, larger than what should be used in qualitative research. Therefore, the margin of the sample is wider, and therefore more representative, compared to qualitative research. At the same time, the susceptibility of the data to statistical methods of analysis makes quantitative research take a more widespread form of empirical research to study the social phenomenon chosen (Kyriazi, 2002).

Recommended, also, the questionnaire as a data collection technique in this research, as it allows the collection amount of data in a short time, which would be extremely time consuming and there-

fore hardly possible with other technique. At the same time, the data that will be collected can be quantified and conclusions can be drawn, with statistical methods, which are generalizable to wider populations. In addition, the anonymity of the answers may contribute to the sincerity of the answers (Vamvoukas, 1991).

4. RATIONALE

Health professionals are expected to admit that their attitude towards hepatitis C patients is negative, that they treat them with fear, caution, because of the criticality and ease of transmission to them. Thus, given this, now, research, it will be proposed to carry out special training of staff by the administration, in order to be fully informed about the contagion of hepatitis C, but also to emphasize that patients with this infection should not be disapproved, either they are sick citizens or they are sick colleagues.

5. EXPECTED OUTCOME

Expected to confirm the author about the deprecating attitude that have doctors and nurses against fellow with hepatitis C.

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12. Counselling of people with disabilities in a post-pandemic era

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1. INTRODUCTION

The sector of Guidance and Counseling for young generation is under fast changes because of the developing expectation that youngsters have in the modern multicultural accession environment. Worries exist on research issues about students, and in particular the students with special educational needs. The field of Counseling can benefit a lot of students with special educational needs and their families. Moreover, I can feel the parents need to be encouraged to deal with feelings of failure, stress and pessimism. On the other hand, it is noteworthy the fact that students obviously have the wiling to participate in this dynamic procedure of guidance. They need the adequate information and the specific skills, so they can be prepared for the future demands in adulthood. Finally, the knowledge on this sector will improve the quality of my educational role and will contribute to the personal fulfillment as a human identity.

In Salamanca of Spain (7-10 July 1994) has been conducted the International Conference for the Education of People with special needs in cooperation with UNESCO and under the aegis of Ministry of Education and Civilization of this country. The purpose of the Conference was highlight and to be thoroughly studied the objective aim of "Education for all". The Salamanca statement confirms the right of every individual to education as it was stated in 1948 from the Universal Statement of Human Rights. It has been charged with the statements of the United Nations in 1993 that are related to their established rules for equal opportunities to education of persons with disabilities encouraging nations to take their education as an integral part of their educational system. The Salamanca statement, among others, calls and encourages all governments to introduce mechanisms of participation and decentralization in actions of planning, application and evaluation of educational initiatives for children and adults with special educational needs. To make bigger effort for the planning of strategies that will target to the early recognition and intervention and also to the integration of subjects of vocational education to the Inclusive Education's repertory. To encourage and to facilitate parent's participation, communities and organizations of people with disabilities in planning actions and decisions making which will concern to children with special educational needs welfare.

Employment occupies significant space in people's life given the fact that provides the means for economic survival as much of the same as and their families, experiencing job satisfaction and enhancing self-confidence (Jacko et al, 2010). However, it is worth pointing out that special emphasis should be given to people with disabilities as according to researching data compared to their peers, typical population, they work less while at the same time they participate in less voluntary actions (King et al, 2005). It is important to spot the reasons of this reality and mainly the challenges that they face during the procedure of reaching and finding employment (Linday, 2011) but previously during the selection of professional direction.

In addition, it is worth noting that the common characteristics in people's personality with special educational needs begin from their restrictions in three levels:(a) restricted early experiences, such as fewer opportunities for environment's exploration, restricted perception of professional opportunities, (b) weakness on the level of decision making due to the fact that others usually take decisions for

them (c) low self-emotion in which contribute the negative attitudes and the environmental standards (Salmont, 2004:217-218).

Counseling in Special Education focuses on the cultivation of people's social skills on the level of personal care and of interpersonal relationships in order to succeed the active participation to social life, the autonomous living and adjustment to the environment. Thus, teacher-counselor contributes to the development of programs about learning social skills, on pointing out and assessing of the problem, on mentioning the goals, on analyzing the work and on evaluation of progress. Despite of this knowledge, teacher needs to have capacity of empathy, acceptance of others, internal balance, stability and self-knowledge. The continuous and specialized information of teachers who work with children with special educational needs as well as the existence of supportive and collaborative frame with specialists set up basic prerequisites so that the teacher will correspond effectively to multiple requirements that his professional identity dictates (Kontopoulou, 2001).

Moreover, many specialists point out the necessity of counseling services at schools, which concern the students, the parents, the teachers but also the community in which the school unit belongs. This kind of Counseling aims to people's enhancing prosperity who are involved into the educational procedure both the personal and social level (Athanasiadou, 2011). The ultimate goal of those services is the connection of life out of school with this in the school, in order that the person will be able to manage any issue without affecting any field of his life such as his social or family life. The achievement of those goals requires the development of a quality cooperative relation between the involved persons. This means that the person who undertakes the role of counselor needs collaborate with the teachers of the school unit, the headmaster, the parents and the institutions of community which probably can contribute positively in the reduction of problems that arise. The positive benefits of collaborative programs arise from the emphasis that is given to the teamwork and the common goal setting of all involved persons (Epstein & Van Voorhis, 2018). The school culture and the school environment are called to overleap barriers which prevent the students of different race, sex, students with special educational needs and low socioeconomic background to participate in educational procedure, to be informed and to intervene in time. The spectrum of Counseling application in Education is wide: the enhancement of the students and their parents, the student's development of skills, the restitution of the issues which complicate their increase, the professional guidance, the prevention, the information and the prompt and targeted intervention. The teachers and the counselors are called to ensure the providing of equal opportunities to all students avoiding the existence of any kind of discrimination (Morgan, 2015). Offering equal opportunities to all pupils requires the teachers' and counselors' appropriate educational training. This educational regards on the one hand the management and the satisfaction of special needs and on the other hand of multicultural needs (Nelson & Guerra, 2014). The students' counseling and professional orientation in the modern multicultural environment and mainly the people with special educational needs can contribute to the development of new knowledge, a tool which is necessary for the pedagogical science.

The purpose of this article is to highlight the situation, regarding counselling of people with disabilities, in the post-pandemic era.

2. THE PROFESSIONAL CHOICE OF PEOPLE WITH DISABILITIES

Work occupies an important place in people's lives as it provides the means for the economic survival of both themselves and their families, the experience of job satisfaction and the strengthening of self-esteem. (Jacko et al, 2010). The results of supported and competitive work are significant in terms

of economic gains, wider social inclusion and job satisfaction (Cimera, 2008). However, it is worth noting that special emphasis and attention should be given to people with disabilities, as according to research data compared to their peers, typical population, work less, while also participating in fewer volunteer activities (King, Baldwin & Evans, 2005). As it turns out, it is considered important to identify the causes of this reality and especially the challenges faced by people with disabilities in the process of finding and finding work (Lindsay, 2011), but first when choosing a career path.

Furthermore, it has been argued that the way in which individuals generally approach the career selection process has a direct impact on the implementation of the professional decision (Germeijs & Verschueren, 2007), while any decision within this educational and professional context can affect any future educational and professional decision.

According to Parsons, the ideal career choice stems from matching a person's individual characteristics, such as skills, personality, and educational background with professional factors, such as financial earnings and the workplace, to ultimately achieve the goal, which is professional success and then professional development. He also emphasizes that choosing a career path involves more stress than just finding a job (Kazuyuki & Kuo-lin, 2006).

Career selection is a process that follows a course of phases and stages and is harmonized with all the experiences, knowledge and information available from the wider social environment. In particular, young people with disabilities are faced with many challenges and obstacles in choosing a career path and moving from the school context to the labor market. Thus, they should have already acquired and cultivated skills, such as problem solving, the function of critical thinking to evaluate possible alternatives (Crudden, 2012), decision making, leadership, communication skills. Finally, people with disabilities must have a strong educational background and knowledge, initially for the use of assistive technology but also skills and interests related to the career path they have chosen, in order to mobilize, set goals and move forward in their implementation. (Benz, Lindstrom & Yovanoff, 2000).

In conclusion, exposing children to a variety of real work environments for early work experience and exploring possible professional careers is considered critical. Early intervention in career choice planning with the support of the family framework plays a key role in career choice and should be done before the age of sixteen (Crudden, 2012), so that they can meet the requirements imposed by the each professional context. Optionally, in this way they will be able to change, if they wish, professional careers, as they mature and expand their horizons and interests over time.

Young people, now, as they make a significant transition from a structured school lifestyle to a less structured outside world, need knowledge and guidance to explore, plan and make decisions about their future careers (Nathan & Hill, 2006), while at the same time they will be called upon to make important professional decisions within this framework. However, the professional decision-making process is a complex process in which many people face obstacles and difficulties that prevent them from making the right decision (Gati & Saka, 2001).

According to Gemeijs & Verscheueren (2006) there are six aspects to the core of the professional decision process: 1) choice orientation, 2) self-investigation, 3) broad environmental investigation, 4) in-depth environmental investigation, 5) decision making, 6) commitment.

The decision-making process presupposes a relationship a) between individuals' beliefs about the effectiveness of their ability to perform their duties, b) the outcome of their expectations about the importance of their decision in the success of future professional decisions, c) exploring their professional careers and career goals; and d) their professional behaviors, such as planning and investigating (Punch et al, 2006).

In conclusion, making appropriate professional decisions presupposes the assistance of a competent counselor in order for individuals to be able to create or take advantage of potential career opportunities that will arise (Amundson et al, 2008). Selectively, the way in which individuals generally approach the entire professional decision-making process has a significant impact on the implementation of the decision made for their career (Germeijs & Verschueren, 2007) so it is necessary to give due importance. Thus, the individual, taking into account the available information from the evaluation of himself, his qualities, his characteristics, the given situations, proceeds to make decisions and turns the decision made into an emotion (Amundson et al, 2008).

3. VOCATIONAL COUNSELING AND VOCATIONAL GUIDANCE OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

One of the most difficult situations in the life of a person with a disability, especially today, when unemployment has become a major social problem, especially for young people, is their vocational rehabilitation. All people have equal rights regardless of whether they have a mental, motor, psychiatric, behavioral problem. Society has a duty to integrate them as a whole and not to exclude them. The period of adolescence is a transitional stage before adulthood and entering the labor market. Individuals are prepared and trained based on their needs in all areas, in order to have all the necessary supplies to meet all the challenges that will be presented to them (Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015).

It is considered an important position that Counseling should take, as evidenced by the international and Greek perspective, because it can contribute to the education of children with disabilities by facilitating and supporting children and their parents. It can also contribute to the assessment of special educational needs and to foster a climate of camaraderie between teachers and parents.

Therefore, the role of vocational guidance and vocational rehabilitation is particularly important for these individuals to integrate smoothly into society, but also to gain financial benefits in order to be able to support themselves but also to strengthen the feeling of self-sufficiency (Migliore, Mank, Grossi, & Rogan, 2007).

According to studies, the work of people with disabilities is lower in percentages, compared to the typical population (Wittich, Watanabe, Scully, & Bergevin, 2013 · Hall & Wilton, 2011). In addition, the most important of the objective and achievable goals set by Counseling and rehabilitation efforts is the severity of the disability (Estrada-Hernandez et al, 2008 · Leonard, 2002), as well as people with sensory disabilities and communication disorders. have higher employment rates and achieve better occupational rehabilitation than people with motor or mental disabilities and mental disorders (Rosenthal et al., 2006; Dutta et al., 2008; La Grow, 2004).

Previous research on the situation of special vocational training in Greece, showed that 45% of the units did not apply any vocational guidance procedure, while in the remaining cases it was occasional (Dellasoudas, 1991). However, in recent years in our country great efforts have been made in the field of vocational training of people with disabilities (Balaskas, 2006) and important steps in order to cultivate a different approach to their equal participation in the social and professional arena (Petrakos, 2005). However, many career skills management programs do not take into account the special needs of the various target groups (Vlachaki & Gaitanis, 2012). The integration of new information and communication technologies in all aspects of everyday life, would facilitate the provision of services in key areas (eg education, vocational training, employment) and ultimately the socio-economic integration of people with disabilities (Basdekis, 2013).

An important point of differentiation of vocational guidance for people with disabilities, in relation to the counseling of typical people, is that it is provided individually and specialized. In this context, the corresponding school orientation can work in order to create the best possible situations for the professional rehabilitation of the individual, especially in the stage of transition from the school community to the work environment (McGaughey, & Mank, 2001).

Unfortunately in Greece the disabled do not have enough opportunities for apprenticeship or probationary work. Care should also be taken that these programs aim not only at the development of professional skills (as is usually the case) but also at the systematically planned development of interpersonal skills, which are necessary for the completion of the individual, and therefore for the improving his professional skills. (Panitsidis, & Papastamatis, 2009).

4. IMPACT OF COVID-19 ON EMPLOYMENT, INCOME AND LIVELIHOOD FOR PEOPLE WITH DISABILITIES

People with disabilities are less likely to get a job than other people, and when they do, they are more likely to be in the informal sector (OECD, 2010). As a result, they have less access to employment-based social security than other people, which reduces their financial resilience under the current situation with COVID-19. Those who are self-employed or www.ohchr.org (UN, 2018) may be prevented from working from home due to a lack of equipment and support available at work, and are at increased risk of losing their income and employment. their. In addition, COVID-19 measures can indirectly affect people with disabilities, hindering the work of family members and those who support families, negatively affecting the overall income of the whole household. Lack of income is a disproportionate burden for people with disabilities and their households, who are usually faced with additional disability-related costs and expenses (adequate housing and equipment, assistive devices, special goods and services, etc.).), leading the fastest to poverty.

What are some promising practices?

- In response to COVID-19, Bulgaria, Malta and Lithuania have increased funding for their social protection systems to expand social support services to cover more beneficiaries, including people with disabilities (IMF, 2020).
- In Argentina and Peru, people receiving disability benefits will receive an extra amount due to the COVID-19 crisis (https://www.argentina.gob.ar/noticias/bono-extraordinario-para-las-personas- con-discapacidad-que-cobran-pensiones-no). France announced a similar measure, favoring recipients of disability benefits (https://informations.handicap.fr/a-prime-solidaire-aah-covid-12818.php), and Tunisia's emergency plan includes cash benefits for low-income households, people with disabilities and the homeless (IMF, 2021).
- The United States of America (https://www.benefits.gov/benefit/945) has introduced tax relief programs that can help alleviate the financial situation of people with disabilities in this context.

What are some of the key actions that states and other stakeholders can take?

- Providing financial assistance to people with disabilities without any income (eg lump sum payments, tax relief measures, subsidies on goods, etc.).
- Increase existing invalidity benefits, including advance payments to cover additional expenses.
- Automatic extension of any disability benefits that are about to expire.
- Provision of financial compensation for the self-employed with disability who have a reduced income.

- Implementation of financial assistance programs for people who stop working to support or prevent the infection of a member / family member with a disability and who are not covered by unemployment or sickness benefits.
- Providing financial support, including tax credit, to employers of people with disabilities to provide the necessary teleworking equipment.
- Ensure that food delivery programs include people with disabilities and meet their needs, including the necessary measures to deliver food to their homes.

5. CONCLUSIONS

Historically, people with disabilities have generally had higher unemployment rates. However, before the pandemic, the share of people with disabilities employed was growing faster than for people without disabilities, indicating progress in closing the unemployment gap due to disability (Kessler Foundation, 2019). However, pandemic-related redundancies have disproportionately affected people with disabilities. From March to April 2020, the number of employed people of working age with disabilities decreased by 20% (950,000 people), while the number of employed people of working age with disabilities decreased by 14% (Kessler Foundation, 2020a).

People with disabilities who lose their jobs during a recession may be less likely to return. Based on the trends observed in previous recessions, it is likely that people with disabilities experiencing job loss will be slower to regain their previous employment status. During the Great Recession, the employment rate decreased more for people with disabilities than for people without disabilities and the recovery rate for people with disabilities was slower (Livermore & Schimmel Hyde, 2018). The current recession caused by the pandemic, although different from the previous ones, is likely to have a similar impact on post-recession employment rates for the disabled (Federal Reserve Bank of St. Louis, 2020).

More people may have recently become eligible or choose to file for disability benefits and claim disability support. During the Great Recession, Social Security Disability Insurance (SSDI) claims increased by 28% and about a quarter of this historically large increase was attributed to the recession. Many of these applications were approved, indicating that many disabled workers left the workforce due to the recession, despite being able and willing to work (Kessler Foundation, 2020b). Incentives for returning to work have been applied in an effort to reverse this trend with mixed results. For example, the Social Security Administration's Ticket-to-Work program provides disability insurance beneficiaries with a voucher that they can use for free vocational rehabilitation and employment services. While participants are more likely to return to the labor market, participation in the program is persistently low (Eimicke et al, 2017).

During the pandemic, processing of SSDI claims has slowed due to office closures, so it is too early to know what impact the pandemic will have on claims. Budget deficits for the program exacerbated by the pandemic recession are already limiting the number of application approvals, possibly affecting the program in the long run (Stein & Weaver, 2021). Meanwhile, while labor market participation for people with disabilities has remained relatively stable so far, the current recession and prolonged weak labor market, as well as aversion to personal interaction at work, may be more attractive to people. claim disability benefits instead of continuing to look for work. This could lead to a significant increase in demand for these benefits. Those infected with COVID-19 may have long-term chronic illnesses that may qualify them for disability benefits or future support, which will further increase further demand pressure (The Law Office of Martin Taller, 2020). Policy makers should note that

labor force participation rates have been relatively stable so far for people with disabilities, indicating that those laid off want to return to work (Kessler Foundation, 2020b). This suggests a small window of opportunity for people to connect with education and resources before they become discouraged and permanently disconnected from the job market.

People with disabilities face obstacles to staying at work. Even if people with disabilities remain busy, the effects of COVID-19 can make it difficult for them to stay busy. For example, adults with certain disabilities are more likely to have an underlying medical condition that may put them at increased risk for serious illness from COVID-19, and experts estimate that adults with intellectual disabilities are three times more likely to die from COVID-19 if infected (Rabin, 2020). These risks can make some people feel insecure when doing work that involves interacting with others. In addition, certain disabilities may make it difficult for individuals to participate in the necessary COVID-19 mitigation practices, including social distancing, mask use, and increased hand hygiene (Centers for Disease Control, 2021). In addition, public transportation offers are limited in many cities and people with disabilities are more likely to rely on public transportation (Cochran, 2020).

The changing nature of work, accelerated by the pandemic, is an opportunity for policymakers to expand support for new ways of working more and more flexibly, but which without intervention could become increasingly unfair. Although working at home may be preferable for many people with disabilities, there are obstacles and consequences that can make it difficult for some. For example, while people with disabilities earn on average less than their non-disabled counterparts, disabled workers who do housework face even greater pay gaps because they are more likely to be placed in lower, remote positions. compared to their non-disabled peers. However, if this inequality can be addressed, employers can find disabled workers at home who may have difficulty working personally and are a valuable workforce for redesigned jobs (Schur et al, 2020).

In this environment, counseling for people with disabilities plays a particularly important role. The counselor must work at many levels, namely exploring the meaning that the individual has given to his or her career so far, exploring the personal meanings attributed to work-related matters, reinterpreting his or her career and to give him direction for the future.

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13. Sports in medieval Europe: their role in survival and prosperity

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ABSTRACT

By survival we mean to continue to live despite difficult situations or circumstances, and by prosperity we mean being successful and well financially, living comfortable in a state of well-being. "Humans are not the fastest or the strongest animals on the planet, but when it comes to survival, we have had the unique advantage of being clever" (David Perlmutter). "True prosperity entails much more than wealth: it reaches beyond the financial into the political, the judicial, and the wellbeing and character of a nation – it is about creating an environment where a person is able to reach their full potential" (Source: 2020 Legatum Prosperity Index™). Survival and prosperity were, and always will be a priority for humans, and certainly were a priority in medieval European life for both the nobles and the serfs. The Middle-Ages marked a millennium of turmoil and dramatic changes in the political, philosophical, theological, social, and state system in Europe. People had to find creative ways to adapt, survive, and prosper, and they did. Engagement in sport activities was an efficient way to improve their life and survive, and they rediscovered sports in various forms: military training, competitive tournaments, recreational activities, games, hunting, or brutal entertainment.

KEY WORDS: sports, medieval, Europe, feudal, prosperity, survival.

1. INTRODUCTION

Engaging in sports in Europe most likely was with the introduction of sacred games in antiquity, such as the four major Pan-Hellenic games that had a dominant position among all other athletic events in Ancient Greece: the Olympic Games in honor of Zeus in Olympia, the Nemea games in honor of Zeus in Argolis, the Isthmian games in honor of Poseidon at the Isthmus of Corinth, and the Pythia games in honor of Apollo in Delphi (Γιαννάκης 1990). Sport was undoubtedly the most important element of ancient Greek culture and civilization, and one of the most vibrant legacies of the ancient world to the modern.

(Photo: https://upload.wikimedia.org/wikipedia/commons/thumb/8/85/GR-olympia-palaestra.jpg/1200px-GR-olympia-palaestra.jpg)

The first Olympic Games were held in 776 BC, in order Greeks to thank gods for their benevolence. It was the popular perception, that through the games they would win the favor of the gods. The Olympic Games were held every four years in ancient Olympia. The athletes who won in the Olympic Games were crowned with a wreath of a wild olive tree, and returned triumphant to their home city. There, a part of the city walls were demolished – in a purely symbolic action – so as to show that a city that has an Olympic champion has nothing to fear!

The word sport as a meaning was formed in the post-Homeric times, as the word was not found in either the Iliad or the Odyssey (Αυγερινός, 2007). In antiquity, sports were in a purely competitive form, something that certainly changes with the passage of time and the abolition of the Olympic Games in 392/93 AD by Theodosios.

The ancient Egyptians were the first to introduce board games and games such as archery, javelin-throw, and wrestling, around the 3rd millennium BC (David, 2003). Greece, however, stood as the true cradle of sport, because there sport took the form of free and noble competition.

During the Roman Empire period, from the 4th century BC, sports degenerated and turned into bloody games at the Roman hippodrome and elsewhere. These games were bloody gladiatorial fights, took place in huge stadiums, and usually had financial reward.

An era follows, after the 8th century AD, where sports were only for the nobles. The most important sport was equestrian fights to the death. The opponents, divided into two teams, were thrown at each other, without following any rules.

In the 12th century, people began to fight with each other in a more peaceful way. They started organizing games were they were throwing big bullets, as they are throwing weights today. The bullets they fired were made of tow, wrapped in sheepskin, and thrown on the wall. At first they were thrown barefoot, but slowly this sphere changed shape. From the 16th century, when rackets first appeared, those primitive balls evolved to the modern tennis balls.

Even though organized sports reappeared in the early 19th century in Great Britain in the competitive form they had in antiquity, the word sport is French and dates back to the Middle Ages where it was synonymous with play and fun.

From 1896, with the establishment of the Modern Olympic Games, sports started gaining enormous publicity, and wide economic, political and social dimensions. Rules and regulations were created, as well as specializations in the field of sports. In the modern world, media are clearly the vehicle for the globalization of sports, a unique product that can unite people regardless of color, ethnicity, or social and economic level. With the strengthening of international relations, the number of athletes and sportsmen is increasing, new governmental and non-governmental organizations are being created, while sports competitions are also improving. Sports organizations can be distinguished in clubs, in athletic federations, in National Olympic committees, in the International Olympic Committee, as well as in in professional athletes› organizations, and associations of coaches, referees and game officials. The sport industry is flourishing in every level.

Following this long path of sports involvement in people's lives, we will examine sports impact in their life in the Medieval period in Europe, which in general lasted from the fall of the Western Roman Empire in the 5th century (476 AD) until the Renaissance in the 15th century (1.492 AD), and is divided in three main periods:

- The Early Middle Ages (5th-10th centuries AD) – late antiquity/fall of Rome, migration period, Byzantine Empire, rise of Islam, birth of the Latin western Europe, church and monasticism, rise and fall of the Carolingian empire.

- The High Middle Ages, and (11th-13th centuries AD) – medieval culture, flowering of medieval society, feudalism.
- The Late Middle Ages (14th-15th centuries AD) – feudalism, crusades, famine and plague, strengthening of the nation-state, schism, fall of the Byzantine Empire, technological, military, and cultural progress.

2. METHODOLOGY OVERVIEW

By examining sports impact in people's life in medieval Europe, we will also answer the following questions:

1. Was the society supportive to sports?
2. Under what conditions sports were essential for survival?
3. How sports contributed to a better life and prosperity?

In the current paper the aforementioned questions regarding engagement with sports and survival and prosperity in medieval Europe, will be investigated.

3. SPORT IN MEDIEVAL EUROPE – PHILOSOPHICAL BACKGROUND.

Even in the barbaric years of Europe that we later called the Middle Ages, there were holidays and celebrations that left people enough free time. Time, that was naturally filled with games, sports and other leisure activities, as no one have ever said no to a little leisure.

Of course, some of the games and sports of the time were quite violent, dangerous, or even inhuman, at least by our current standards. As for the victims, whether they were animals or human beings, this did not seem to play an important role for the medieval sports fan, as the rights of both animals and humans were not included in any agenda!

For the most important and famous of the Scholastic movement, St. Thomas Aquinas (1225-1274), good physical condition was of great importance, as he believed that through it you acquire the ability to prosper morally and socially. In his classic work, "Summa Theologiae", Aquinas states: "In order to attain happiness, perfection is necessary in both soul and body. Since it is a natural consequence for the soul to be united with the body, how is it possible to believe that the perfection of one (soul) must exclude the perfection of the other (body)? So let us announce that in order to achieve absolute happiness, the perfection of both these elements is necessary" (Aquinas, 1964-66 as cited by Mechikoff, 2009). Aquinas, being an extremely daring speaker, always strongly supported his ideas. In this context, he brought to the surface an issue on which there was a large number of disagreements and diametrically opposed views. Did this question refer to whether the individual's intelligence depends in part on his level of physical condition? The philosopher noted in this regard that "because some people have bodies, which are easier to exercise well, their souls have a greater capacity for perception" (Thomas, 1947 as cited by Mechikoff, 2009).

Aquinas' view was that man has the ability to broaden his cognitive horizons, both through the use of his body through his training, and through logic and the general training of mental functions. Nevertheless, Aquinas treated the mind as an element of a higher quality, and for this reason it will be eventually separated from the body. Since, according to the aforementioned assumption, the use of body and mind enabled the individual to be led to a high social and spiritual level, it was logical for everyone to wish to have a healthy mind supported by a healthy body. It is questionable why Aquinas believed that good physical condition benefited the physical, mental, social and moral well-being of Christians at a time when most medieval Christians were depriving themselves of the body. For

example, the heretical Manichaeans (Christians in Mesopotamia who advocated an ontological duality: light-darkness - good-evil - matter-spirit) considered the body to have a diabolical nature and therefore could never be united with a noble and immortal soul. On the contrary, from the works of Aristotle we understand that the great Greek philosopher believed that man is a mixture of soul and body and that the soul needs a body that will absorb knowledge; a view that greatly influenced the beliefs and teachings of Thomas Aquinas.

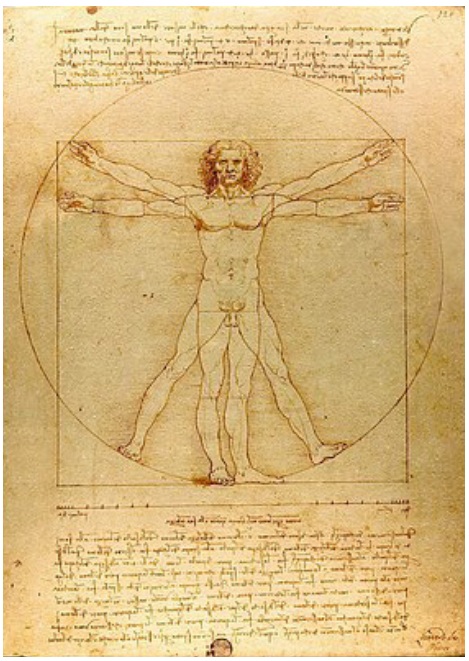
Another renown philosopher to deal with the body and exercise during the Middle Ages was the Spanish-born Moses Maimonides (1138-1204). Maimonides, argued that "nothing is more useful in protecting health, than physical exercise". This view is based on a series of reasoning presented by Jacov Sobovitz (n.d) as follows: men must have good health because by doing so they glorify God and achieve mental development, and physical health because it is a necessary element that without it they cannot understand God's greatness.

The Italian St. Bonaventure also known as Giovanni di Fidanza (1217-1274) is another philosopher-thinker to address issues related to the body and exercise. He wrote that the body does not imprison the soul, but rather is its ally, and in this way the individual continues to exist in a state of mental and physical union (De Benedictis, 1946 as cited by Mechikoff, 2009).

Petrus Paulus Vergerius (1370-1444) was one of the first Italian humanists and his work was so important to the evolution of humanity that he is known as the true founder of the new education. His belief on the body is perceived indirectly and not directly; Vergerius did not write about the body, but about education in general and the education of the body, that is, about physical education.

Vittorino da Feltre (1378-1446), the most famous of the Italian humanists, was educated in Padua - like Vergerius - where he studied grammar, mathematics and Greek literature. In Padua he managed to become a professor of grammar and mathematics and remained there until 1415 when he resigned, because it is said that he was tired of the unruly and luxurious life on campus (Woodward, 1921 as cited in Mechikoff, 2009). Thus, the independent Vittorino founded the school "La Giocosa" (The Game), which was the first school to mix the spirit of Christianity with the teachings of classical philosophers and the ideas of the Greeks regarding physical education. La Giocosa, or the "happy house" as Vittorino usually called it, was a school aimed exclusively for the sons of the rich of the time, and was the ideal place for educating boys, as it was surrounded by large meadows and bordered by a river, allowing students the comfort of practicing freely and without difficulty. Vittorino finally adopted the name "Gymnasium Palatinum" or "Palare School" (the school-palace) for his school, copying the name of the Gymnasiums that existed in ancient Greece. This movement was a radical change from the schools of medieval times, where education was based solely on the practice of the mind. Vittorino da Feltre was one of the first to introduce physical education as an integral part of education. The purpose of the philosopher was to develop the health of his students, and he achieved it by putting them to participate daily for at least two to three hours in various physical activities, including horseback riding, running, fencing, hiking, and ball games, while on the same time he was organizing sport events in order to sharpen the sport spirit and the sense of competition (Demirel, D. & Yildiran I, 2013).

Leonardo da Vinci (1452-1519), who was not only a great inventor and famous painter, studied anatomy in depth in order to depict the human form as accurately as possible. Thus, he managed to draw the "Vitruvian man", a painting which depicted in a completely realistic way the muscular structure of man, adding proof that the body was the central topic of discussion of the Renaissance world (Vegio, 1933 as cited in Van Dalen & Bennet, 1971).



(**Photo:** https://en.wikipedia.org/wiki/File:Da_Vinci_Vitruve_Luc_Viatour.jpg)

Baldassare Castiglione (1478-1529) also considered sports and more specifically horse riding to be a very good form of exercise, as he notes "although it is an exhausting and difficult activity, it helps the rider to become lighter and more agile than any other physical activity and beyond the usefulness that distinguishes it, if this lightness it offers is combined with grace, then in my humble opinion riding is the best and most fun spectacle" (Castiglione, as cited in Mechikoff, 2009).

According to Burns (2006), the Renaissance and the Reformation that followed the Middle Ages in many ways were interconnected. More specifically, both had the characteristic of returning to the fundamentals and both had the individual at the center of their philosophy. However, they also had differences. One way to distinguish the Renaissance from the Reformation is that the Renaissance was a spiritual alarm clock, confined mainly to the higher social classes and especially to the aristocracy, while the Reformation was primarily a religious awakening that influenced the culture of the entire Western world. In both cases, however, the power of the Catholic Church was seriously diminished, and this change had a profound effect on the way Western civilization perceived the human body.

Desiderius Erasmus (1466-1536) was a kind of ascetic, which was explained through his strong beliefs about the proper role of religion in human culture. The doubts he expressed about health and exercise issues and the role they should play in men's life were at the heart of discussions in colleges and universities in northern Europe during the Reformation (Demirel & Yildiran 2013).

While Martin Luther (1483-1546) helped change the way people think about the use of our bodies, John Calvin (1509-1564) had perhaps the greatest influence on the perception of people of the time towards sports. With his work "The Principles of the Christian Religion", which he wrote at the age of 26, he rejected the ideas of Humanism, and was in favor of the doctrine that playing sports and exercising was something devilish and that the real pleasure was in cultivating the spirit only. We see that Calvin's views on the body were clearly influenced by the beliefs of the Church of the Middle Ages, which emphasized that anyone who used his body for fun and recreation would go straight to hell. Eventually these ideas of the philosopher found millions of supporters and specifically Protestants who lived in France, Scotland, England, Switzerland and even North America.

Roger Ascham (1515-1568) also valued physical exercise as a way to relax and calm the mind, so that it remains sharp and free of malicious thoughts during a man's life. This idea of the English humanist was immediately and widely accepted, in an era when industrial development had begun, and the world began to entertain and practice more with the excuse that in this way their minds were rested from trouble and suffering, and so they could perform much better in their workplace. Ascham considered important not only various sports activities such as horseback riding, running, shooting, hunting, but also other activities such as dancing and singing. The philosopher also wrote a dissertation called "Toxophilus", focusing on the art of archery (Ascham, as cited in Mechikoff, 2009). In "Toxophilus",Ascham included details both on how to choose the right bow and take care of it properly, and on how to achieve the perfect shot. This book was one of the first to accurately describe the appropriate steps you need to follow in order to properly engage in a sport, while it was one of the first of its kind to be released in the Western world.

While in the beginning of medieval Europe involvement of people with physical exercise was sparse, the teachings of the aforementioned philosophers lead to increasing participation. This change takes place between the 11th and 12th centuries (Mechikoff, 2009). During this period, a large number of nobles began to turn to monasticism, mainly because of a law which proclaimed that only this way they would acquire the right to inherit their father's property. Thus, as these nobles had secured their father's estate, their younger brothers, who were not entitled to any part of the inheritance, usually followed the life of a knight, warrior, or priest. Those who became priests often engaged in various popular activities, such as hunting and hawk-training, but also in warlike activities similar to those of the knights. In this way, these young priests conveyed their interest in various kinds of physical activities to the ecclesiastical community, which gradually began to accept it. A great example of the love of people for sports and physical education was medieval England. There both slaves and aristocrats engaged in a variety of sports such as archery, hunting, fishing, swordsmanship and ball games, while at the same time they were not missing the opportunity to have fun with jousting and bullfighting (Mechikoff, 2009). The villagers of the time enjoyed sports such as the "La soule", a ball game which often resulted to the loss of property, and many severe injuries. (Ascham, 1969). La soule was an extremely violent sport and for this reason the Church was strongly opposed to it.

With the rise of the feudal system tournaments were very popular social events. The king, or the lord of the area was at the forefront of these festive events, in which the subordinate to the king lords always took part with their knights. Historically, these type of tournaments had their roots in war and therefore their winner won it all: property, military equipment, horses, and slaves. These events were known for the cruelty of the participants, who had no chivalry or kindness in their veins. There were numerous cases where the winner held hostage one of the losers in order to ask for ransom from his family in order to set him free. However, such incidents were extremely limited in the famous and well-organized tournaments that started taking place around the end of the Middle Ages (Hardy, 1974).

4. COMPETITIVE SPORTS IN MEDIEVAL EUROPE.

Main objective of participating in sports, or practicing sports in the Middle Ages was in order to increase your fighting skills. The feudal system was built in exchanging land for military service. Kings expected their lords to provide them with skilled and well-trained soldiers and knights to fight their wars. Sports in medieval Europe were designed in order to provide excellent fighting skills, and

improve fitness and strength. The acquisition of wealth was the goal of the people – serfs or knights – participating in sports, games, and tournaments.

The emotion of brute strength, courage and good physical condition were enough to make the following games very popular in medieval European society.

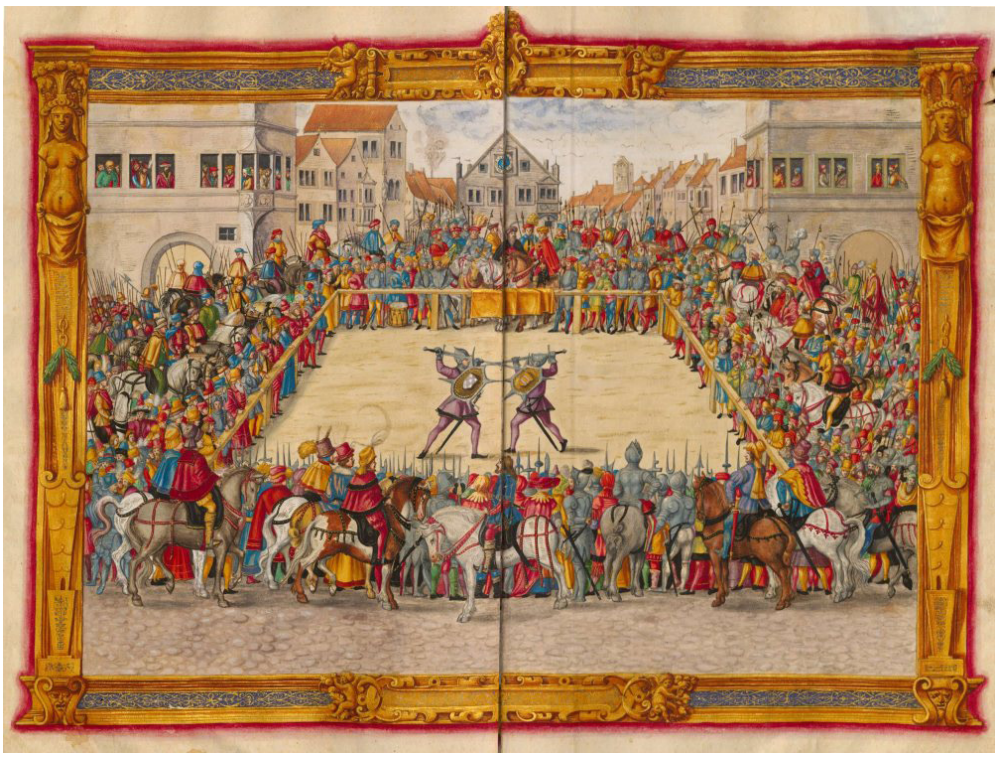
Jousting

This is an evolution of their equally dangerous Roman predecessor, the gladiators duels. Two knights clashed trying to throw each other down, with serious injuries and deaths during the duel. It was one of the most popular – if not the most popular - sports in medieval Europe, as it was intertwined with the feudal system and knighthood. The sport offered the opportunity to knights to train in battle conditions, while the audience found it very interesting to watch! Many knights got rich from this sport, as the victory included the acquisition of the armor and the horse of the loser, which the loser had to buy again from the triumphant. It was the invention of the musket in 1520 that would gradually make the sport a thing of the past, although it would be revived in 1962 in the USA, when it became the official sport of Maryland!

(**Photo:** https://upload.wikimedia.org/wikipedia/commons/thumb/d/d0/Paulus_Hector_Mair_Tjost_fig2.jpg/440px-Paulus_Hector_Mair_Tjost_fig2.jpg)

Duels

It was towards the end of the medieval period that duels became extremely popular in the aristocratic class of Europe, for the reason that it was a great opportunity for the nobbles to train in hand-to-hand combat, in war-similar conditions. Many duels of course got out of hand, since they were the ideal method to settle accounts, defend your honor, or win the heart of a lady! Duels were legal, and considered the best way of settling such issues, as they said God was on the side of the innocent. The winner was rarely considered a murderer, and his social status was drastically improving. Duel became a sport, with tournaments organized and a variety of weapons used, with the sword being the most popular. After the opponents agreement, more weapons could be used, and the duel ended when the forfeit of the loser. A popular version was the knights melees (from the original French word "meslee" which meant quarrel, fight), where knights split into groups, thus leading to chaotic mass bloody battles with nothing chivalrous in them.



(**Photo:** https://upload.wikimedia.org/wikipedia/commons/e/e7/Gerichtskampf_mair.jpg)

Archery

Archery was more than a sport in medieval Europe. Carrying a bow and arrows was required by all law class Englishmen aged 15-60, by a law passed in 1252. Designated areas – called butts – were organized in order to practice the sport. Archery training proved crucial during wars fought and won due to that reason; according to historical sources in the battle of Crecy in 1346 the English using the long bow (invented by them) lost 50 men, compared to 2.000 lost by the French.

Fencing

The beginning of the art of fighting with the sword is lost in the depths of the centuries. In medieval Europe we have the appearance of the armor - protective iron uniforms - which offered full coverage of the body due to the reason that the swords became bigger, heavy and quite sharp. The first special schools of fencing are established and very quickly, the sport spreads spectacularly throughout Europe. Fencing is the most popular method of resolving disputes, and a necessity to practice in order to get prepared for wars and battles. The first rules of the sports established in Spain in 1.474 AD.

Gameball

Anyone who thinks that football, or even better rugby is a violent sport, should take a look at their medieval counterpart. First of all, there were no rules for the number of players of each team, no fouls and any other formalities: violent play and fouls, were perfectly acceptable. The goal was simple: two teams trying to pass the ball from the line to score. We said, however, that there were practically no rules and often things got out of hand, when even local factors came into play: the matches between neighboring villages, for example, lasted for days and it was not uncommon for someone to leave the field stabbed, since knives were not forbidden! A landmark here stands the 16th-century Welsh poet

William Midleton, who vividly describes the many injuries suffered by *Gameball* players, a game so terrifying in its execution that King Edward IV and other European monarchs were eventually forced to ban it. Evolution of *Gameball* to nowadays soccer and Amarican Football took some centuries in order to happen!

Hunting

The aristocratic classes of the Middle Ages paid great importance to hunting, and the prestige derived from slaughtered wild beasts, such as bears, wild boars, and deer. This was because hunting offered to the nobles of the time the golden opportunity to show their shooting and riding skills. But hunting was not an easy task, as there were many dangers awaiting; from the wild animals, and from accidents from the riding itself, or from friendly fire! Hunting was, of course, a class privilege of the aristocracy, as when the serfs or the poor tried to poach, the punishment was barbaric and exemplary: usually hanging, but castration or blinding of the poacher were not uncommon. But there was another punishment, clearly more diabolical in its capture: the poor villager who was caught hunting was literally sewn on deer skin and then released, with the horrific sequel being easy to imagine…

Hurling or Shinty

The game comes from Ireland; historical records indicate that the sport was brought by the Celts when they migrated to Scotland, and remained extremely popular in medieval Scotland and Ireland. Local matches were imperative on New Year's Eve, when opposing teams hosted an extremely large number of fellow villagers in their ranks, doing the sport a proper clearing of accounts, at a time when the winter scene meant the game was often played on icy lakes, wearing ice skates made of cattle bones. Today's hockey is a pale reflection of its medieval predecessor, whether it was played on grass or on ice. And of course in terms of violence, hurling did not share anything with hockey, as everything was allowed there, without even protective equipment! Excessive consumption of alcohol resulted to drunk athletes trying to score with a hand-made tiny leather ball!

Irish Brawl

Bat and stick fights were common and very popular almost everywhere in medieval Europe. None of them, however, was more popular than the Celtic shillelagh (from the Celtic "siúil éille", meaning "oak bat"), which became the national sport of the Irish in the Middle Ages. And if the rods today look like the sticks of the elderly, their original use was warlike, as a defensive weapon against wild beasts and would-be robbers. It was the ancient Celts who conceived the idea of violent competition, which later evolved into a sport with strict regulations, as it was no longer a drunken fight, but an official sport with specific moves, defensive and offensive positions, etc. In medieval Ireland, brawl became the official way of settling territorial claims: the family dragged a coat on the ground with a stick and challenged the rival faction to touch it. The battles back then were fierce and violent, leading even to the death of the gladiators. Women could take part in the deadly sport, with a precious privilege: while male opponents could not touch them, they had the opportunity to open their heads!

Hammer throw

Again Celtic in origin, the ancient sport dates back to at least 2000 BC, although it became very popular in medieval times and especially in Scotland, when Edward I forbade Scots to bear arms. So they turned to the hammers as consolation, giving sport characteristics to the activity. The 7 kg for

men, and 4 kg for women hammer had to reach as far as possible; the triple rotation around their axis resembles to today's hammer throw. Of course, in medieval Europe there were no safety nets, or any protective measures, making the sport very dangerous for the spectators.

5. RECREATIONAL SPORTS IN MEDIEVAL EUROPE.

Since it is estimated that other than Sundays, people in medieval Europe had eight weeks of holidays, there was enough time for recreational sports – some fore fun, other brutal - such as the following:

Torture of a Bear or a Bull

This bloody medieval game was so popular that every town and village in Britain hosted a special area for this barbaric event, which could be called animal torture. The bull was originally used for the needs of the bloodthirsty audience, gradually giving its place to the bear, which became a even more popular in Elizabethan times, with Elizabeth I herself often taking part! Torturing the bull was said to be the best process for softening the meat, which made it easier to digest; of course the technique was the same whether we were talking about a bull or a bear. The unfortunate animal was tied to a stick in the center of a tent, with pepper stuffed its nose so that it would be sufficiently irritated. Then the wild dogs took action, with the bulldogs (as their name suggests) being the number one breed for this barbaric spectacle: the dogs attacked the tied and immobilized animal, targeting its most sensitive parts for mor than an hour and until the poor beast could not stand any more. The dogs were also seriously injured, and all this in order to make the meat of the animals softer and to satisfy the greedy instincts of the crowd. Civilized England would have to wait until 1835 for the Parliament to pass a law banning public torture of animals. Unfortunately, bullfights are still legal in Spain and other parts of the civilized world!

Golf

The ancestor of the modern golf was played for recreation n the middle ages, and was popular amongst the nobbles who by using a stick and a leather ball were trying to hit a target several hundred meters away with the fewest strokes.

Horseshoes

A game still popular in our days, was played for amusement by throwing horseshoes at a target, usually a stick, aiming to get the closest they could to the target.

Marbles

Similar game to horseshoes, they draw a circle and the goal was to shoot their marbles in it.

Chess – the popular mental skills game from antiquity to the 21st century, was played in medieval Europe in all ranks of society, not only for amusement but for strategy also as you can tell from the pieces and their meaning.

Games for children

Hide and seek - The popular children's game was played exactly as we know it today, with the same loose regulations.

Tag - Same as hide and seek, tag was played as we play it nowadays; one child designated as "tag" was chasing the other until successfully tagged another.

6. CONCLUSION AND DISCUSSION

The philosophers and thinkers in medieval Europe were in favor of sports, since they considered them very important for the prosperity of people. The church and clergy were opposed, but the need of the people to exercise in order to become better and more skilled warriors in order to improve their quality of life and gain wealth, pushed them to participate in games and engage in sport activities.

Becoming better skilled in combat was crucial to survival, and many battles and wars were won by well-trained soldiers and knights, who acquired wealth or land for their services. There were knights who earned fame and glory in jousting, or crusades, redeeming their preoccupation with sport activities. Serfs had also the opportunity to earn a poor meal by participating in a tournament, game, or hunt.

It is clear that involvement in sports was very beneficial to people in medieval Europe, as it was to people before them, and it is to people after them.

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14. La sociedad de la información y su vinculación con las Tecnologías de la Información y la Comunicación como clave para su desarrollo

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RESUMEN

En este trabajo abordamos el concepto de sociedad de la información, nuestra sociedad actual, desde la perspectiva vinculada al uso de las Tecnologías de la Información y la Comunicación en la misma. A partir de ahí, buscaremos los anclajes que vinculan dicho concepto con la educación que demanda la ciudadanía en este contexto. Y es que, a medida que nuestra sociedad avanza y evoluciona, se van generando nuevas necesidades e intereses en ámbitos como lo social, económico, político, cultural, educativo, etc. En todas ellas, y la educativa no es una excepción, la implementación y uso de las TIC es fundamental. Se trata, en definitiva, de posibilitar nuevas y mejores maneras de innovar en el proceso de enseñanza-aprendizaje de cualquier nivel educativo.

PALABRAS CLAVE: sociedad de la información, Tecnologías de la Información y la Comunicación, digitalización.

1. INTRODUCCIÓN

En una era marcada por la llegada de la revolución digital, la cual ha transformado la cotidianidad de las personas, aparecen nuevos conceptos y teorías que buscan explicar los cambios por los que atraviesa nuestra sociedad, y reflexionar sobre el camino hacia el impacto que nos conducen las tecnologías en años venideros, incluyendo aportaciones fundamentales de otros investigadores para comprender estos distintos entornos, tal como lo mencionan Prendes y Román (2017).

Las Tecnologías de la Información y la Comunicación (TIC) representan una parte importante del entorno social y económico. En este sentido, se han implementado nuevas estrategias para el crecimiento de esta área, que ha llevado al crecimiento e innovación, a su vez, de ciertas áreas como las telecomunicaciones y utilizadas en ámbitos sociales, como la educación y la salud, contribuyendo al progreso tecnológico. La implementación de las TIC en todos los ámbitos de una sociedad ayuda en gran medida, de manera interpersonal y social, a generar mejores capacidades en el individuo, lo que ayudará a que se tengan mejores posibilidades de mejora en el ámbito académico y profesional. De acuerdo con Chillón (2004), citado en (Rivas y Merchán, 2017):

Las ventajas de la revolución de las TIC pueden convertir la brecha digital en una oportunidad digital para todos, se es consciente que actualmente la desigualdad está distribuida entre los países desarrollados y en desarrollo. El internet, con sus múltiples posibilidades de comunicación interpersonal y social, se convierte en un instrumento muy importante para el desarrollo y participación de la comunidad en la vida económica, política, cultural y social, pero también se corre el peligro de disgregación o discriminación de quienes no están conectados. (p.3)

En general, la inserción de las nuevas tecnologías se ha ido incrementando conforme las necesidades del contexto social (Caetano et ál., 2020). Sin embargo, esto no se ve generalizado y reflejado de manera general, ya que hay sectores en los cuales existe una desigualdad, no solamente tecnológica, sino más bien social, muy asociada a la diferencia entre nivel económico, nivel ocupacional, nivel de estudios, edad y sexo. Esto deviene en la denominada brecha digital.

2. LA SOCIEDAD DE LA INFORMACIÓN COMO MARCO CONTEXTUAL DE LA EDUCACIÓN EN LA ACTUALIDAD

La sociedad de la información es un concepto que hace referencia al papel destacado de la información en la dinámica de las relaciones interpersonales y de los procesos incorporados a los distintos ámbitos de la sociedad. La misma ha dado apertura a que miles de personas en el mundo desarrollen sus actividades, al brindar soluciones a varios problemas de distinta índole: cotidianos, académicos, culturales, sociales, económicos, entre otros, por medio de la creación, acceso, procesamiento e intercambio de material electrónico. En base a esto, actualmente se plantean distintas definiciones, algunas de las cuales señalan que:

La sociedad de la información la signan las tecnologías de la información y de la comunicación, las cuales juegan un rol importante ante las nuevas realidades que viven las instituciones universitarias en lo concerniente a las actividades de docencia, extensión, investigación y gestión; (y) con relación a su posibilidad y capacidad de almacenar, transformar, acceder y difundir información, donde el talento humano es factor fundamental, para el cual se deben promover procesos de aprendizaje permanente que permitan modificar los hábitos de trabajo y conduzcan a enfrentar con éxito los desafíos presentes y futuros. (Méndez et ál., 2013, p. 74)

La sociedad de la información crea una nueva forma de organización de la economía y la sociedad. Una de sus características principales es el esfuerzo por convertir la información en conocimiento. Mientras mayor es la cantidad de información creada por una sociedad, mayor es su necesidad por convertirla en conocimiento. Ortiz (1995) señala que otra dimensión de la sociedad de la información es la velocidad con que la información se genera, se transmite y se procesa. Al mencionar sociedad de la información se puede distinguir la importancia social que se le atribuye a la comunicación e información en la actualidad, donde se involucran las relaciones sociales, económicas y culturales. Por otro lado, Valderrama (2012) sostiene:

Los reduccionismos y determinismos tecnológicos conducen a un totalitarismo tecnológico que más allá del uso instrumental de ciertas tecnologías, se refiere a la imposición del modelo único de las TIC y a la generación de un modelo de subjetividades tecnológicas. (p. 14).

A partir de los criterios expuestos inicialmente, podemos declarar que la sociedad de la información ha originado una necesidad por la tecnología en las personas, convirtiendo su idiosincrasia y provocando una fuerte dependencia, así como un cambio en la mayoría de los hábitos del ser humano dentro de su cotidianidad. En consecuencia, esto ha propiciado a la llegada de una nueva cultura informática, encaminada a un formar mundo totalmente diferente e informatizado con la incorporación de las TIC y su principal insumo: la información, que ya se encuentra integrada en nuestra vida cotidiana y asimismo se ha convertido en un arma generadora de poder.

En la misma línea podemos evidenciar como ejemplo, en datos estadísticos presentados por el Instituto Nacional de Estadística y Censos (INEC) de Ecuador, el incremento sustancial de usuarios de Internet, que pasó de 36,2% de la población en 2012 a más del 80,6% en 2016 (INEC, 2016). Indiscutiblemente, con la aparición de la sociedad de la información se ha empezado a vivir una nueva época en la historia contemporánea, la cual está caracterizada por la acelerada evolución tecnológica y por el aumento exponencial en los niveles de información generada y difundida mediante las TIC. Este progreso se ha convertido en una parte importante dentro de la vida y desarrollo de las personas, lo que supone una evolución en todos los ámbitos de la actividad humana. Al respecto, Verón (2016) refiere que "la sociedad de la información no está limitada a internet, aunque este ha desempeñado un papel muy importante como un medio que facilita el acceso e intercambio de información y datos" (p. 879)

3. LA SOCIEDAD DE LA INFORMACIÓN COMO CONTEXTO PARA EL DESARROLLO ACTUAL

Existe el convencimiento de que el desarrollo de la sociedad de la información, lejos de ser un fin en sí mismo, es un objetivo que tiene como razón de ser la mejora y el aumento de la calidad de vida del ciudadano. Roig y Cobos (2019) indican que no podemos olvidar que el sentido real de la acción de innovar conlleva un compromiso ético personal que persigue mejorar las situaciones cotidianas. Esa mejora debe ser entendida como una actitud progresista, reflexiva con la realidad, en definitiva, una meta de vida. A su vez, manifiestan que es un contexto de cambios al cual las personas han logrado de una u otra manera adaptarse a estas necesidades. La introducción de las TIC comporta la configuración de nuevos escenarios para el aprendizaje.

Son muchas las acciones emprendidas en los últimos años orientadas a hacer llegar las ventajas del uso de las TIC a todas las regiones y ámbitos sociales, y es necesario partir de estos ejercicios reales, de su mayor o menor fortuna, para aprender de la experiencia y seguir avanzando sobre bases sólidas. Las TIC se han convertido en una herramienta fundamental para la lucha contra la pobreza y también la falta de educación; prácticamente una necesidad para el desarrollo. A través de ellas, los países desarrollados tienen una gran oportunidad de alcanzar de forma efectiva los objetivos de desarrollo de primera necesidad, como son la reducción de la pobreza y la provisión de servicios básicos de salud y educación. Por ello, los países que estén en disposición de aprovechar este potencial que otorgan las TIC, demostrarán indiscutiblemente un aumento considerable en su crecimiento económico y principalmente en el bienestar humano, y podrán aspirar a modalidades más contundentes de gobierno democrático y participación ciudadana.

Como señalaba la UNESCO en su contribución para la primera reunión preparatoria de la Cumbre Mundial sobre sociedad de la información en 2002 (UNESCO, 2005), la sociedad de la información debe tener como eje principal a los derechos humanos: debe estar basada en la igualdad, la dignidad humana y la justicia social, también debe ajustarse a las necesidades y aspiraciones de todos y cada uno de los grupos sociales que esta integra. Por ello, el uso de Internet y las aplicaciones relacionadas con las TIC deben servir preferencialmente para afianzar los principios democráticos y avanzar en áreas como la educación, la ciencia y la cultura, integrando oportunamente las nuevas tecnologías con las más tradicionales.

Dentro de esta perspectiva, ampliar el acceso a la sociedad de la información, y llevar la era digital a cada individuo en su hogar y establecimiento educativo, debe ser una meta, tanto local como global. Para ello, es necesario tener un espacio en el gobierno, en el ámbito interno, y de cooperación, a nivel internacional. El esfuerzo debe centrarse, tanto en el desarrollo de la sociedad de la información, como en el desarrollo económico y social, pues, como se ha manifestado anteriormente, la existencia de una brecha tecnológica potencializa el desarrollo de otras. Por ello, es difícil considerar un adecuado desarrollo de la sociedad de la información dentro de países subdesarrollados donde ni siquiera se logra sustentar las necesidades más básicas en ciertos grupos o poblaciones.

Sin embargo, desde la base, se puede, y se debe, ir construyendo una sociedad de la información igualitaria, capaz de atender a las necesidades personales de cada ciudadano, que considere las tecnologías como un medio puesto al servicio del desarrollo humano, económico y productivo. Para lograr este objetivo, debe construirse garantizando una amplia difusión, un amplio reparto de la información y una participación efectiva de todos los agentes implicados: ciudadanos, gobiernos, sector público y privado y sociedad civil. La contribución de cada uno de ellos es de vital importancia para lograr alcanzar los beneficios de la sociedad de la información.

Así, toda iniciativa debería construirse bajo programas diseñados por los gobiernos, las organizaciones nacionales e internacionales, y con el apoyo, participación e implicación del sector privado y la sociedad.

4. LA SOCIEDAD DEL CONOCIMIENTO COMO EPÍTOME DEL SABER

A pesar de que en muchos contextos se identifica sociedad de la información con sociedad del conocimiento, consideramos que esta última aporta algunas diferencias con respecto a la primera. No solo se enfoca en el ámbito académico, además de ser un modelo o paradigma de desarrollo social y económico donde se debe tener interés central en el saber, sino que además enfatiza una mayor inversión en educación, innovación y el uso de las nuevas tecnologías con el fin de desarrollar nuevos saberes.

"El conocimiento será cada vez más la base de los procesos sociales en diversos ámbitos funcionales de las sociedades. Crece la importancia del conocimiento como recurso económico, que conlleva la necesidad de aprender a lo largo de toda la vida" (Krüger, 2006, s.p.). La importancia que le debemos dar a una sociedad del conocimiento es primordial a diferencia de otros factores sociales. Nuestra sociedad está en constante cambio y evolución, donde se debe formar ciudadanos que se puedan adaptar a la progresiva innovación. Debemos tener claro que en una sociedad del conocimiento no solo se trata de contar con las mejores infraestructuras o personas que seas expertas en el ámbito académico, sino más bien considerar que se genera un valor agregado a las actividades de nuestro contexto social, dándole importancia siempre a la producción de conocimiento:

En una "sociedad del conocimiento" las estructuras y procesos de la reproducción material y simbólica de la sociedad están tan impregnados de operaciones de conocimiento que el tratamiento de información, el análisis simbólico y los sistemas expertos cobran primacía frente a otros factores de reproducción como capital y trabajo. Las sociedades del conocimiento no son simplemente sociedades con más expertos, más infraestructuras y estructuras tecnológicas de información, sino que la validez del concepto depende de la verificación de que la producción, la distribución y la reproducción del conocimiento ha cobrado una importancia dominante frente a los otros factores de la reproducción social. (Krüger, 2006, s.p.)

5. LA EDUCACIÓN QUE DEMANDA LA CIUDADANÍA EN EL CONTEXTO ACTUAL

Conforme nuestra sociedad avanza y evoluciona, se van generando varias necesidades en el contexto social de cada cultura. Entre esas necesidades encontramos la educativa, la cual va acompañada por varios factores que pueden lograr mejorarla, como es la implementación de las TIC. Estas pueden propiciar nuevas y mejores maneras de innovar el proceso de enseñanza-aprendizaje en todos los niveles educativos; para ello se debe propiciar que todos los actores de la comunidad educativa se enmarquen en el desarrollo de nuevas metodologías educativas.

Actualmente las escuelas ya no son el primer punto de contacto de los niños y niñas con los dispositivos tecnológicos: los medios digitales son una parte central de sus experiencias extraescolares y de sus relaciones e identidades cotidianas (Lopez-Agudo et ál., 2020). La vida de los niños y niñas de hoy está completamente "mediatizada". La cuestión no es si los educadores deben hacer uso de los medios digitales, sino cómo deben hacerlo. Y mientras buscamos responder a esta pregunta, claramente necesitamos mirar más allá de la idea de que el uso de la tecnología será motivado instantáneamente, o si, de hecho, lo hará de alguna manera determinada (Buckingham, 2013).

Las viejas prácticas tradicionales educativas cada día van siendo obsoletas e inclusive en países del tercer mundo como Ecuador, donde la falta de tecnología se ha visto en la desventaja de tener que

seguir con un modelo conductista tradicional, el cual poco a poco se fuerza a desaparecer obligatoriamente gracias a las nuevas necesidades educativas. En la sociedad de la información el modelo del profesorado cuya actividad se basa en la clase magistral está desfasada. Las redes telemáticas pueden llegar a sustituir al profesor si éste se concibe como un mero transmisor de información, ya que en las redes tienen gran capacidad para almacenar información y desde ellas se puede adaptar dicha información a las necesidades particulares de cada alumno (Fernández, 2001).

Las capacidades o aprendizajes básicos que debería tener toda persona en la actualidad son importantes para una sociedad del conocimiento. Entre estas competencias se encuentran el aprender a adquirir los instrumentos de la comprensión, aprender a hacer e influir en el entorno propio, aprender a vivir juntos, a cooperar con los demás participando en las actividades sociales y, sumado a esto, se debe tomar en cuenta la inserción y correcto uso de las TIC.

En la actualidad, están teniendo lugar cambios en la forma de actuar sobre la realidad y en la manera de interactuar con los demás. Como consecuencia del progreso científico y tecnológico, también se está produciendo un cambio en relación con los valores, las ideologías, los nuevos órdenes políticos y económicos, etc. (Macarena, 2002). Tal y como se afirma en el informe Delors (1996), la educación abarca desde la infancia hasta el final de la vida. Asimismo, se consideran cuatro aprendizajes como básicos para quien aprende a lo largo de toda la vida:

1. Aprender a conocer adquirir los instrumentos de la comprensión.
2. Aprender a hacer e influir en el entorno propio.
3. Aprender a vivir juntos, a cooperar con los demás participando en las actividades sociales.
4. Aprender a ser personas autónomas y críticas capaces de formular juicios propios y hacer frente a las circunstancias de la vida.

Como indica Macarena (2002), la tecnología se convierte, de esta manera, en una fuente de motivación y estímulo para los procesos de enseñanza-aprendizaje. En este caso, el control de los aprendizajes reside en la persona que aprende y del propio proceso de aprendizaje, independientemente del nivel educativo.

6. NUEVAS FORMAS DE ENSEÑAR Y APRENDER CON TIC

La educación a través de medios digitales crece debido a múltiples factores que obligan al contexto educativo a adquirir nuevas y mejores competencias educativas. Se generan nuevas metodologías innovadoras donde está presente el uso de herramientas y recursos tecnológicos. La educación virtual o educación en línea es el resultado del gran número de alternativas que han generado los avances en las TIC (Fombona et ál., 2020). Tales alternativas han promovido la realización de proyectos educativos que propician una actitud participativa donde todas las personas tienen la oportunidad de acceder a un proceso formativo de calidad sin importar el momento o el lugar en el que se encuentran (De la Hoz y Martínez, 2014).

La comunidad educativa y todo su contexto académico está en la obligación de poner a disposición de estudiantes y docentes las TIC, ya que son de gran importancia, especialmente en la Educación Superior, donde los recursos y herramientas tecnológicas sirven para las competencias con las cuales el estudiante universitario se verá beneficiado en su vida profesional. El sistema educativo no solo debe poner a disposición de los estudiantes las nuevas tecnologías, sino que debe motivar su uso. Se debe abordar su adopción en las instituciones de Educación Superior, como un imbricado proceso que permee diferentes áreas en el ámbito administrativo, académico, investigador y social, en aras de formar personas en un entorno cambiante y globalizado (De la Hoz y Martínez, 2014).

Conforme va cambiando la sociedad, la educación y la manera de enseñar también lo hace, ya que con el apoyo de las herramientas tecnológicas la educación tradicional ha ido migrando a entornos digitales, los cuales son un espacio en el cual se facilitan muchos de los procesos y actividades que tradicionalmente han quedado obsoletos. Hoy día se considera a la educación como la renovación total de la ya tradicional enseñanza, al permitir una mayor interactividad entre profesores y alumnos sin que el tiempo y el espacio supongan mayor dificultad. Este proceso de transformación ha desencadenado en un reto significativo para toda la comunidad académica, el cual consiste en ponerse a la par con las tendencias culturales y sociales de una población que ha adoptado la tecnología como instrumento vital en la gran mayoría de sus actividades diarias (De la Hoz y Martínez, 2014).

7. DE LA SOCIEDAD DE LA INFORMACIÓN A LAS SOCIEDADES DEL CONOCIMIENTO

Mansell y Tremblay (2013) establecen que la sociedad de la información es el fundamento de la sociedad del conocimiento, mientras que Araiza (2012) hace algunas precisiones:

Primero, a veces son utilizados como sinónimos, pero no lo son, aunque están íntimamente ligados y por ello son tratados conjuntamente. Segundo, existe una convención que señala que la sociedad de la información es condición de la sociedad del conocimiento, que la primera tiene más que ver con la innovación tecnológica y la segunda con una dimensión más amplia de transformación social, cultural, económica y política; o, dicho de otra manera, que la sociedad de la información es una etapa previa de este nuevo tipo de sociedad que nos llevará finalmente a la etapa del conocimiento (p. 36).

Además, Heidenreich (2003), señala que "la sociedad de conocimiento indica la importancia de las tecnologías de la información y la comunicación (TIC) y su utilización en el proceso económico; lo cual es similar al término sociedad de la información" (p.25). Como vemos, el conocimiento y la información tienen gran impacto dentro de la sociedad, su conjugación a través de las TIC tiene el poder de modificar la economía de un estado. Dentro de este contexto, la sociedad del conocimiento considera a la innovación como fuente de impulso para varias problemáticas presentes en la actualidad. Por lo tanto, se determina que no podría existir sociedad del conocimiento sin la sociedad de la información como base de la innovación.

Barroso (2013), al referirse a ambos conceptos, plantea que en la sociedad del conocimiento todos "poseen capacidades y competencias para ser miembros activos en la construcción social del conocimiento, mientras que la sociedad de la información se vincula con las posibilidades de difusión de información que ofrece el entorno digital" (p. 64). Un claro ejemplo de esto son las plataformas virtuales, ya que posibilitan la incorporación y difusión de varias herramientas web, como redes sociales, noticias y sitios académicos en un mismo lugar; además, el estudiante puede participar en la creación de estas de modo que potencialice sus habilidades y destrezas dentro del ámbito educativo como un reto dentro de la sociedad del conocimiento.

Al respecto, Levine y Marcus (2010) manifiestan que la construcción del conocimiento práctico se sustenta en los procesos de colaboración y cooperación entre las sociedades de la información y del conocimiento. En este punto, podemos mencionar que el constante avance científico y tecnológico ha sido relevante dentro de la sociedad en los últimos años, ya que se han creado diversos mecanismos para obtener, generar, transmitir y aplicar la información en bien del desarrollo humano. Por ello, el conocimiento se ha convertido en el principal elemento dentro de la sociedad. Khan (2003) plantea que "la sociedad de la información es la piedra angular de las sociedades del conocimiento". El concepto de "sociedad de la información" está relacionado con la idea de la

"innovación tecnológica", mientras que el concepto de "sociedad del conocimiento" incluye una dimensión de transformación social, cultural, económica, política e institucional, y una perspectiva más pluralista y desarrolladora.

En este contexto, el desarrollo de la ciencia, la investigación, la educación, la tecnología y la cultura avanzan hacia un proceso de mejora continua para crear escenarios capaces de enfrentar el crecimiento económico. Por ende, la producción científica de los académicos de una institución superior puede dar cuenta del auge científico. Una muestra de ello es la Universidad Central del Ecuador (Quito, Ecuador), institución que en 2015 registró más de 300 artículos en *Scopus* (Scimago, 2015). En este sentido, el concepto de "sociedad del conocimiento" es preferible al de la "sociedad de la información" ya que expresa de mejor manera la complejidad de los cambios que se están efectuando. El conocimiento en cuestión no solo es importante para el auge en el ámbito económico, sino también para potenciar y desarrollar todos los demás sectores de la sociedad.

8. CREATIVIDAD, TECNOLOGÍA E INNOVACIÓN COMO FACTORES DE LA SOCIEDAD DEL CONOCIMIENTO

Los factores que más destacan en función del crecimiento y desarrollo de la sociedad del conocimiento son la innovación y la creatividad, ya que de una u otra forma han propiciado cambios en todos los niveles estructurales y operacionales al convertir procesos, implantar tecnologías, proporcionar nuevos servicios, etc. La sociedad actual no habría sobresalido o se encontraría en un completo abandono si no se contara con estas variables, pues la sociedad del conocimiento se origina a partir del intercambio, la recolección, la gestión y la manera como se produce el saber. Por ello, si existe conciencia de que las personas estamos inmersos en una sociedad llena de verdad, cuyas principales características son el conocimiento, sus implicaciones, compatibilidades y relaciones con los campos de estudio y ciencias, entonces se puede llevar a cabo una sociedad innovadora, tecnológica y creativa.

Para Summo et ál. (2016) la creatividad se "enfrenta a un verdadero desafío, ya que aparte de que no se vislumbra todavía como un valor esencial en la formación personal del ser humano, debe difundirse en una sociedad marcada por el uso de tecnologías cada día más desarrolladas" (p. 86). Además, Bell (1973) refiere la sociedad del conocimiento como una sociedad en la que primero adquirió primacía el conocimiento teórico sobre el empírico. Castells (2000) la define como una sociedad cuya convergencia tecnológica se extiende cada vez más hacia una interdependencia creciente de las revoluciones de la biología y la microelectrónica, tanto desde la perspectiva material como metodológica. Cebrián (2010) señala que, en cualquiera de los contextos políticos económicos actuales, la sociedad del conocimiento está obligada a fundarse en un marco crítico, de contraste, de sopeso de ideas y deducciones.

Actualmente la creatividad, la tecnología y la innovación son significaciones íntimamente relacionadas dentro la sociedad de la información y del conocimiento, la cual genera constantemente nuevos cambios en la educación, que justifican más requerimientos para alcanzar un adecuado aprendizaje, direccionado a los procesos de colaboración y cooperación entre personas.

9. A MODO DE CONCLUSIÓN

Podríamos afirmar que la innovación más relevante de los últimos tiempos son las Tecnologías de Información y Comunicación o TIC (González-Calatayud et ál., 2021; Roig-Vila et ál., 2021). Esta tecnología ha cambiado drásticamente la educación actual, poniendo a disposición de estudiantes y docentes una gran variedad de recursos y elementos orientados principalmente al intercambio de

información y comunicación dentro del proceso educativo. Dentro de las TIC se fortalece el aprendizaje colaborativo, basado en recursos como Internet; o la educación en línea o virtual, y que designa Cabero (2006) como "una modalidad formativa a distancia que se apoya en la red, y que facilita la comunicación entre el profesor y los alumnos según determinadas herramientas sincrónicas y asincrónicas de la comunicación" (p. 2). De esta manera podemos apreciar que las tecnologías digitales han intervenido drásticamente en el proceso de aprendizaje, propiciando cambios considerables en la metodología de enseñanza (Viana y Peralta, 2021).

En base a este criterio podemos afirmar que el recorrido dentro de esta nueva era requiere mayor sapiencia de los medios y recursos digitales, y que solo tiene sentido si estos aportan algo al desarrollo de la sociedad y del ser humano en sí (Pangrazio y Sefton-Green, 2021). Por ello, sabemos que aún falta mucho por conocer y trabajar principalmente en los países subdesarrollados. Así lo demostró un estudio de la OCDE, sobre el uso de las TIC en la escuela, donde se revisaron 500 sitios web. El estudio arrojó como resultado que sólo el 28,2% de ellos contienen actividades con preguntas y sólo el 5% incluyen resolución de problemas y toma de decisiones. En cambio, el 42% contiene ejercicios de memorización y más del 52% se basan fundamentalmente en la recuperación de la información (Carnoy, 2004). Desde entonces, pocos avances ha habido en determinadas zonas geográficas mundiales.

De hecho, este conflicto ha estado presente en varios países en vías de desarrollo, lo cual empeora frente a conflictos sociales, tales como la marginación de grupos sociales, tanto en las zonas rurales, como en las urbanas. De esta manera, las carencias de información y comunicación son cada día más notorias, creando la necesidad de profesionales de la educación más competentes en este tema y capaces de aportar respuestas efectivas frente a los nuevos requerimientos del contexto educativo, así como del entorno familiar y social, entre otros.

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15. Readiness of secondary education teachers, working in multicultural and inclusive schools, in the prefecture of Preveza for distance education during the pandemic covid-19

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ABSTRACT

The aim of this article is to examine the views of secondary school teachers of inclusive, multicultural schools in the Prefecture of Preveza on distance education during the pandemic, but also to assess with their own eyes the willingness and level of technological ability.

Regarding the self-efficacy of secondary school teachers for distance learning, it also seemed that there was a high level of readiness of teachers in the prefecture of Preveza, while the attitudes of the participants towards distance education were positive. Where there appeared to be lower rates was in the perceived behavioral control of secondary school teachers towards distance learning, while the dimension of the subjective rules of secondary school teachers towards distance learning had particularly low rates.

In terms of whether demographic characteristics affect the technological competence, attitude, perceptual control and subjective rules of secondary school teachers towards distance learning, it appeared that there is a significant correlation in most cases, which is consistent with previous studies.

KEYW ORDS: ICT, COVID-19, Secondary Education, Multicultural, Inclusion, Preveza.

1. INTRODUCTION

Many disorders in education systems have occurred around the world in recent decades and have radically changed almost all aspects of education (UNESCO, 2020. Alam et al., 2020). From natural disasters to the recent unprecedented pandemic, millions of people have been affected (UNESCO, 2020). According to a UNESCO (2020) report, the COVID-19 pandemic caused the largest education system disruption in history, affecting 94% of the world's student population in more than 190 countries. Consequently, it was necessary for school systems around the world to rapidly switch to distance education and home learning (HBL), resulting in significant changes in conventional teaching practices, which had to be moved from traditional face-to-face learning. in home learning with a combination of technologies (Sokal et al., 2020. World Bank, 2019. Kong, 2020. König et al., 2020. Noman et al., 2018. Rasmitadila et al., 2020).

As with other countries around the world, Greece has faced two major challenges in tackling the coronavirus pandemic (COVID - 19): providing distance education and exam management. Other challenges have arisen, which show that no approach will suit all countries. The pandemic, covid-19, has affected all those involved in policy-making.

In some parts of the country, school closures began on March 5, one of the measures due to the relatively slow rise in infection rates. The Ministry of Education and Religions responded to the crisis by calling for the opportunity to advance the long-awaited reforms to develop the digital skills of the educational community. In fact, the crisis has been compounded by the provision of a wide range of delayed online services to citizens in addition to education.

The interventions were escalated immediately after the closing and priority was given to (the last class of secondary education in order to adequately teach all the examined courses of the Panhellenic). All secondary schools had arranged distance education arrangements by March 23, which was the start date for primary schools.

However, this project has been complicated by the legacy of the Great Recession, which has delayed much-needed ICT investment and exacerbated poverty: according to OECD data based on the 2018 PISA, 1 in 5 students in the poorest quarter of Greek schools do not have access to a computer they can use for work and 1 in 10 does not have internet access. More than 1 in 3 students attended schools whose principals claimed that their teachers did not have the necessary technical and pedagogical skills to integrate digital devices into their teaching. A total of 4 out of 10 students attended schools whose principals acknowledged that there was no effective online learning support platform.

Since 2011, the European Union Structural Funds have helped Greece create basic infrastructure for the digital school. These were implemented by the Institute of Computer Technology and Publications «Diofantos», the body of the Ministry that promotes ICT in education. All schools in the country as well as teachers - but only one in five students - registered in the School Network before the pandemic reached our country. With the arrival of the pandemic, the Ministry of Education also issued instructions on how to use and operate both asynchronous teaching and modern education.

Asynchronous learning, which does not take place in real time, is mandatory and every teacher is required to create and upload lessons, exercise book or assignments on the two platforms of digital education, e-me and e-class for students and teachers.

In contrast, modern teaching takes place in real time:

- Or through Webex services. To address inequalities, the Ministry provided free access via landline and mobile phones following an agreement with the three mobile network providers.
- Or through the platform of School Network sch.gr, which uses open software Big Blue Button and can work on smartphones and tablets.

Despite the proactive approach to the challenge of distance learning, many challenges had to be overcome along the way. For starters, during the implementation phase, there were network congestion problems, which required the Ministry to work with service providers to find ways to relieve the pressure. Educational television was also activated on March 30 for primary education, tailored to current needs. It was estimated that 100,000 students attended her programs.

Not all teachers and students had the necessary technological equipment. The government has enacted an emergency law governing issues related to the education system response, which will allow the public provision of goods (eg laptops, devices and software) and services (eg communication with teachers). and students) without competition. Under a rigid centralized system, the law also allowed universities to spend up to 60,000 euros without prior authorization to provide equipment for distance education.

Teacher readiness was another challenge. IT teachers, in particular, are concerned about the time they spend supporting their colleagues, in addition to preparing their own classes and courses. However, many educators have openly expressed their concerns about privacy and data protection. Their copyright concerns about the courses they teach and upload to asynchronous education platforms were also highlighted. Some questioned the choice between platforms imposed by the ministry or self-selected by teachers. The Association of Primary Education Teachers has called for freedom of choice in the use of platforms and has opposed the compulsory use of modern distance education, arguing that implementation cannot be guaranteed for all students.

Another issue discussed was the length of the school year and the timing of high-level, central university examinations. Initially, exams were expected to be delayed by only a few days, but as optimism about the early opening of schools waned, three possible solutions were explored: extending the school year, including Saturdays, or reducing or postponing the curriculum. exam date by one month or postpone national exams to September. Students and families were pressured not to postpone exams until September to avoid the additional financial cost of additional private tuition.

The decision was made to limit the curriculum to what had been taught until mid-March. Examinations should be done in schools, but the exact method such as transferring students and supervisors to examination centers should be taken in consultation with the health authorities.

As everywhere in the world, the pandemic is forcing the Greek public education system to address issues that had not previously been resolved. Political leadership sees an opportunity in the crisis to give teachers more autonomy, to promote public-private partnerships and to teach soft skills such as flexibility, adaptability, social empathy and responsibility. On the other hand, as the health crisis pushes the need for investment in education to the forefront, an impending economic downturn will make this task even more difficult in the coming years (OECD, 2020).

Multicultural schools are part of Greek education, so distance learning was implemented in them as well. From the end of the 1980s and the beginning of the 1990s, Greek society began to perceive its multicultural character as a mosaic of different cultures. This strong feeling at that time is explained by the mass movement to Greece of repatriated and foreign Greeks from the countries of the former Soviet Union, Northern Epirotes from Albania, and mainly economic and political immigrants from the Balkans, Eastern European countries and the former Soviet Union, the Middle East and Africa.

Cultural diversity is clearly not observed in Greece only for the last thirty years, if we consider the existence of traditional minorities (religious, cultural, etc.) living in Greece. Indicatively, we mention the Muslim minority of Western Thrace, the Muslims of Rhodes, the Jews, the gypsies, etc. Until the beginning of the 90's, Greek society considered, we would be wrong to say, itself as a very homogeneous society, something that certainly proved to be a utopia.

Obvious as it is, multiculturalism touches not only the Greek reality, but also all western societies. However, analyzing the causes of this diversity, we will observe that it is not only due to population movements as a consequence of migration or the presence of minorities that we meet within borders. If we exclude these movements and the minorities that we encounter on a global scale, we must admit that the new socio-political conditions allow us, if they do not force us, to move. More specifically, at a time when supranational economic systems have prevailed, European integration and international communication, it is certain that these conditions create interdependent relations between countries, so peoples come into cultural contact and communication. Equally important in the influence of geopolitical changes is the geographical position of Greece, as at the end of the 20th century historical changes took place in the Balkans and in Greece, thus a new political, economic and cultural communication framework was born (Kesidou, 2004).

Due to the above, the movements of populations and socio-political changes are often «blamed» as to blame for the diversity and diversity of the societies that characterize them. But it is worth wondering if there is diversity even in the most relatively homogeneous societies and groups. Especially if one considers how different everyone is from each other, since each person is unique with his own personality. Historically, then, it proves that the orientation of education can not continue to be monocultural following the ethnocentric mentality of the 18th and 20th centuries. The school must evolve and modernize in order to be able to adapt to the current reality.

In 1996, Law 2413 (Government Gazette 124 vol. A / 17.6.96) was passed, which framed intercultural education, the establishment of intercultural schools, as well as the duties of these and the teachers who will work in them. Article 34 defines the purpose and content of intercultural education: "1. The purpose of intercultural education is the organization and operation of primary and secondary schools to provide education to young people with educational, social, cultural or educational specialties».

Indeed, the new order of things requires a redefinition of the complex and diverse order, which must be approached in different ways. The new conditions are changing the demographic and cultural map of our country, a phenomenon that is not, however, current. The question is whether the education system can meet the needs of these children, who are not just educators. And this raises the question of teacher training in intercultural education.

Regarding the schools of intercultural education, Article 35 of the same Law states that:

«1. Schools of intercultural education are the ones provided by the provisions of articles 3, 4, 5 and 6 of law 1566/1985 (Government Gazette 167 A) kindergartens, primary schools, gymnasiums, lyceums of all types and technical-vocational schools." Having consulted the most recent list of intercultural schools13 in Greece, it is observed that there are neither kindergartens nor technical - vocational schools. 13 Primary Intercultural Education in Primary Education and another 13 in Secondary Education were registered (8 Gymnasiums and 5 Lyceums. Indicatively by areas:

- 13 Primary Schools (3 in the Prefecture of Attica, 1 in the Prefecture of Chania, 6 in the Prefecture of Thessaloniki, 2 in the Prefecture of Rodopi, 1 in the Prefecture of Ioannina)
- 8 Gymnasiums (3 in the Prefecture of Attica, 2 in the Prefecture of Thessaloniki, 1 in the Prefecture of Rodopi, 1 in the Prefecture of Ioannina, 1 in the Prefecture of Kozani)
- 5 Lyceums: (1 in the Prefecture of Attica, 2 in the Prefecture of Thessaloniki, 1 in the Prefecture of Rodopi, 1 in the Prefecture of Kozani which is characterized as "Lyceum Classes" since classes are not completed in all three years of study)

For the last 20 years, Greek educational policy has been evolving, following the examples of major countries in the western world, while implementing new educational policies with the ultimate goal of integrating immigrants into society. According to Christidou-Lionaraki (2002), Greece has adopted in practice many measures for the entry of immigrant and expatriate children into the Greek education system, such as reception classes, tuition departments and special schools. After 1996, the Special Secretariat for Expatriate Education and Intercultural Education was established, in the same year Law 2413/96 for the establishment of Intercultural Schools was passed, and finally programs were created for the education of expatriates and children from minority groups. All these approaches aimed at better framing a new reality, with the ultimate goal of optimal management and smooth integration of foreign students.

2. RESEARCH PURPOSE

The aim of this article is to examine the views of secondary school teachers of inclusive, multicultural schools in the Prefecture of Preveza on distance education during the pandemic, but also to assess with their own eyes the willingness and level of technological ability.

The research questions that arise from the purpose of the dissertation are the following:

1. What is the technological capacity of secondary school teachers for distance education?
2. What is the attitude of secondary school teachers towards distance education?

3. How do secondary school teachers perceive their attitude towards distance education?
4. What are the subjective rules for secondary school teachers in distance education?
5. To what extent do demographic characteristics affect the technological ability, willingness and attitude of secondary school teachers in distance education?

3. METHODOLOGY

Primary research was used to collect research data. The primary research is the one that examines the attitudes and views of the population that interests us (Petrakis, 2006) and is divided into two categories, quantitative and qualitative research.

For the needs of this research and the collection of primary data, a quantitative study was selected that provides clarity and ease in identifying all the variables related to the subject, a defined procedure that must be largely followed in the field, due to controlled research conditions. (Matveev, 2002).

The target population of this study were secondary school teachers of inclusive, multicultural schools in the prefecture of Preveza. Due to limited time and resources, an unlikely convenience sampling technique was used. The sample was a convenience sample (Bryman, 2017) and avalanche sampling was used. So between March and April 2021, we launched an online survey through Google Forms to assess teacher readiness for online teaching worldwide in response to the Covid-19 pandemic. The questionnaire was distributed via email. Participants were fully informed of the research intentions before giving tacit consent (by clicking on the questionnaire) to include their data in the study. All data were identified before analysis. On April 10, 2021, the data set included 108 teachers, so the data collection ended.

The questionnaires, which were used as a research tool, offered the advantage of easy and cost-effective management in a large population and provided quantitative data (Borg, 1998). Specifically, we measured teachers' readiness for online teaching using the HBL Teacher Readiness Scale (Mansor et al, 2021). Specifically, four aspects of teacher readiness have been examined, namely ICT self-efficacy, ICT attitudes, perceptual behavior control and subjective rules. These four dimensions were adapted by the creators of scale based on Theory of Planned Behavior (Ajzen, 1991) and social cognitive theory (Bandura, 1986).

This scale consists of 26 statements, where participants were asked to state their agreement using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Respondents had to think about their current situation during the pandemic.

As the questionnaire was translated by the researcher and its validity has not been checked in the Greek population, a pilot survey was conducted on 15 teachers. The data of the pilot survey were used to check the reliability of the questionnaires. The reliability indices of all scales ranged above 0.7, so the questionnaires were deemed suitable for conducting the survey. We also checked Cronbach's alpha for all the questions and the factor was found to be 0.802> 0.7, so the questionnaire is reliable.

4. RESULTS AND DISCUSSION

Regarding the self-efficacy of secondary school teachers of inclusive, multicultural schools for distance learning, it also seemed that there is a high level of readiness of teachers in the prefecture of Preveza, while the attitudes of the participants towards distance education are positive. Where there appeared to be lower percentages was in the perceived behavioral control of secondary school teachers towards distance learning, while the dimension of the subjective rules of secondary education teachers towards distance learning had particularly low percentages.

Regarding the fifth research question and whether demographic characteristics affect the technological competence, attitude, perceptual control and subjective rules of secondary school teachers towards distance learning, it seemed that there is a significant correlation in most cases, which agrees with previous studies.

Specifically, in terms of the influence of age, Veenhof, Clermont and Sciadas (2005) in their study in Canada noted that older workers have fewer ICT skills and that this may lead to a deterioration in their workforce. They add that a "generation gap" in relation to exposure to computers and other ICTs may explain a reduced chance of acquiring ICT skills. They also reported that young workers aged 25 and under are much more likely to grow up with a computer at home than those aged 25 and over. They concluded that there is a significant reduction in the use of ICT after the age of 45 in several areas of the workforce. Similarly, the attitude towards ICT becomes much more perceptible to teachers with years of service than the attitude towards ICT of younger colleagues. Hawthorn (2000) noted that the effects of age are felt from the mid-1940s onwards, so that the elderly are not just another minority group but a significant portion of the population. This could also be the case among teachers and hence the need for empirical data on the effect of teachers' age on ICT readiness. These results are confirmed by the present study.

Regarding the effect of gender on teachers' readiness and perceptions of the use of ICT in education, Shapka and Ferrari (2003) in their research noted that men are more interested in ICT than women. Volman and Eck (2001) further found that female teachers tend to be more anxious, less experienced and less confident in their ICT skills and less likely to use computers for a variety of teaching and learning purposes. However, according to Veenhof et al, (2005), the findings on ICT use by gender are mixed. The findings showed that in European countries, for example in Italy, Norway and Switzerland, there were clear gender differences, but there was no such gap in North America. Similarly, Markauskaite (2006) explored gender differences in self-reported ICT experience and technological literacy among teachers. The study revealed significant differences between men and women in ICT technical capabilities, and status and sustainability over time. The results in men were higher. However, according to Kuhlemeier and Hemker (2007), it was difficult to pinpoint exactly what caused the differences between the sexes, but the difference could affect a person's technological literacy. These mixed results are confirmed by our research, as in some dimensions women prevailed and in some men.

Also, regarding the influence of teachers' ability to use ICT on their readiness and attitudes, the data of previous surveys show that the majority of teachers who reported a negative or neutral attitude towards the integration of ICT in teaching and learning processes did not have knowledge. and skills that would enable them to make an "informed decision" (Al-Oteawi, 2002, p. 253, as cited in Bordbar, 2010). In a qualitative survey of multiple case studies on primary school competence and the level of confidence in the use of ICT in teaching practice conducted in five European countries, Peralta and Costa (2007) found that technical competence influenced the use of Italian ICT teachers in teaching. However, teachers cited pedagogical and teaching skills as important factors in whether effective and efficient educational interventions are likely to be implemented. According to Jones (2004), teachers feel reluctant to use a computer if they are not confident. "Fear of failure" and "lack of ICT knowledge" (Balanskat et al, 2007) have been cited as some of the reasons for teachers' lack of confidence in the adoption and integration of ICT in their teaching. Similarly, in a survey conducted by (Becta, 2004), about 21% of teachers surveyed said that lack of trust affects the use of computers in their classrooms. Becta (2004) stated that many teachers who do not consider themselves well-

trained in the use of ICT feel anxious about using them in front of a class of children who may know more than they do. All this is confirmed by the present research which proves that the possession of ICT certification and the knowledge of teachers affect their views on their use in education.

5. CONCLUSIONS

From the findings, it was found that the readiness of teachers to use ICT depends on age. Specifically, we observe that the ages 41-45 have a higher average in terms of postures and the ages up to 30 years have a higher average in the perceived control.

It also appeared that the readiness to use ICT in teaching depends on the gender of the teacher. Respondents reported that female teachers were not opposed to ICT, and although male teachers were quick to adopt the latest ICT development, female teachers were less willing to use ICT in teaching due to a lack of time due to other commitments. Respondents suggested the use of ICT in most school curricula, the need for in-service ICT training, the need to encourage and provide equal opportunities for both sexes and the need to help teachers of both sexes acquire personal computers.

The findings also showed that teachers have a positive attitude towards the use of ICT in teaching, which is particularly important.

Computer training has also been shown to affect teachers' readiness to teach. Analyzing these correlations, we see that men have a higher average in self-efficacy, while women have a higher average in perceptual control and subjective rules. Specifically, we saw that participants without any certification have a higher average in their attitudes towards ICT, while B2 level certification holders have a higher average in perceived control and subjective rules. Also, those participants who stated that they have a good knowledge of computers have a higher average in self-efficacy and attitudes towards ICT, while those who stated that they have moderate knowledge of computers have a higher average in subjective rules.

The transformation of teaching and learning into an online operation has received enormous acceptance from students - teachers who are examining this pandemic situation. Due to the urgent adoption of the internet operation, the students were not prepared mentally, financially, socially, technically, and even the teachers faced difficulties due to their familiarity with the technological pedagogical approaches. This study revealed that there is an urgent need for education for both students and teachers to familiarize them with digital knowledge and skills. The digital divide in our country was highlighted by this study, which seeks government attention to enable all students to access e-learning. Preparing for online learning will continue to strengthen our education system to meet any such challenges in the future. In order for e-learning to be more successful, it is suggested that teachers be trained to improve pedagogical approaches to the online delivery of lessons, to reduce students 'fears and anxieties, and to reduce students' feelings of isolation. What can be achieved on a personal level by encouraging peer learning, at an institutional level by creating an e-learning portal and e-library and by promoting research on online learning and parental support to provide a suitable in-home learning environment for online learning. Without a doubt, the collective effort will make the dream of digitizing education a reality.

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Investigando nuevos paradigmas en Educación / Researching New Educational Paradigms

Uno de los vectores que más contribuyen al desarrollo de las comunidades humanas es la Educación. En sus más diversas y variadas acepciones y niveles, desde educación infantil y hasta educación superior y el máximo nivel de titulación y especialización, el Doctorado, la Educación es la llave que abre todas las puertas.

No sólo se trata de acceder a los datos, a la información, antes bien, ello, tan sacralizado en la actualidad (minerías de datos, *big data*, musculatura informática, grandes dotaciones en "maquinaria" e implementos informáticos, e incluso enormes inversiones y algún que otro engaño para conseguir datos personales y procesarlos comercial y aviesamente), sólo es uno de los puertos de partida. Lo esencial, el puerto de arribada debe ser contribuir a dotar a las personas de las potencias del conocimiento que les permita transformar la mera, si bien precisa, información, en precioso conocimiento.

En este contexto genérico, este libro trata 4 coordenadas fundamentales en investigación educativa en las que se aprecian actualmente cambios de paradigma:

1. La investigación educativa para enfrentar y superar (o, al menos, paliar) el azote de la pandemia de la COVID-19.
2. La investigación en Tecnología Educativa.
3. La investigación educativa en Educación Inclusiva.
4. La investigación educativa en Ciencias del Deporte y de la Actividad Física.

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