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ABSTRACT

This study explores the evolution of schools towards an inclusive perspective that recognises and values diversity as an integral part of normality. Technology, often overlooked, emerges as a crucial element in this context, becoming an ally in the implementation of innovative methodologies. Focusing on the Flipped Classroom, the crucial role of technology in creating an inclusive educational environment is highlighted. The Flipped Classroom, based on the conscious use of technology, aligns with the current trend towards 'conscious digitisation', overcoming techno-centric rhetoric.

Questo studio esplora l'evoluzione della scuola verso una prospettiva inclusiva che riconosce e valorizza la diversità come parte integrante della normalità. La tecnologia, spesso trascurata, emerge come un elemento cruciale in questo contesto, diventando un alleato nell'implementazione di metodologie innovative. Concentrandosi sulla Flipped Classroom, si evidenzia il ruolo cruciale della tecnologia nella creazione di un ambiente educativo inclusivo. La Flipped Classroom, basata sull'uso consapevole della tecnologia, si allinea con la tendenza attuale verso una "digitalizzazione consapevole", superando le retoriche tecno-centriche.

KEYWORDS

Flipped classroom, Active teaching, Inclusive teaching models
Flipped classroom, Didattica attiva, Modelli didattici inclusivi

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Introduction

Increasingly complex situations arise in classrooms. The widespread presence of pupils with certified disabilities at all educational levels, from pre-school to secondary school, has become a consolidated reality, unlike in the past. Alongside what is commonly defined as 'normality', more and more students with multiple challenges coexist: pupils certified by law 104/92, with special educational needs, specific learning disorders, emotional difficulties, complex family contexts, problematic or deviant behaviour, as well as different cultural backgrounds. Within the school environment, this scenario has generated fragmented classes plagued by serious relational difficulties. Pictures emerge in which ordinary classroom management is threatened, as ordinariness is no longer defined in unambiguous terms. Such situations are not isolated events, but represent the everyday life of the school. The entire educational community is called upon to strive to integrate such diversities, recognising that heterogeneity is true normality.

Today, the school not only takes care of the teaching-learning process, but also redefines itself according to individual needs, ensuring educational success by considering the particularities of each pupil. At every level of the school community, quality teaching becomes indispensable, promoting students' singularities and reworking social demands through the teaching disciplines. An inclusive school integrates each student, giving meaning to their presence in educational, relational and psychological terms.

This inclusion cannot ignore the individual 'special educational needs' of each individual, transforming them from occasional limitations to opportunities that redefine the educational process (Girelli, 2018). A genuinely inclusive school does not limit itself to theoretical training that is never implemented in the classroom, but rather embraces and places differences at the centre. In this perspective, technology emerges as an ally of inclusion, often neglected or even considered an adversary of teaching practice. Technology not only permeates everyday life, but is a vital element for digital native students.

In recent years, the vast technological landscape has produced various methodologies and software useful for general and special education. Among these, the Flipped Classroom is an extremely advantageous methodology for schools of all levels, adapting to the diversity of students' ages. This approach overturns the conventional method: instead of receiving information through lectures and

studying at home, one explores the topic at home and works in class, together with the teacher, in a new and different relational context from the canonical one.

This new educational approach, based on an open but critical interaction with technology, is a clear departure from technocentric rhetoric. Rather, it aligns with the current trend towards 'digitization awareness' (Ranieri, 2011). In recent years, the teaching staff's commitment to digitization and the evolution of technologies in the personal and social spheres has contributed to overcoming the ambivalent relationship between school and ICT, reaching a consensus on possible meeting points between the potential of technology and methodological quality (Bonaiuti, 2009). The 'Flipped Classroom' moves in this direction, moving beyond the traditional lesson model, allowing technology to take a back seat and ensuring personal educational success for all (Corona, 2017).

1. Active Learning and Inclusive Educational Models with Technology

The concept of inclusion is based on the principles of non-discrimination, equality and social equity, highlighting the role of the teacher in using technology to support the participation and acquisition of knowledge and skills of students with disabilities (Ianes, 2007; Chiappetta Cajola, 2012).

Schools and didactics cannot, therefore, fail to make the best use of technologies and digital technology, using them, sharing them, and proposing models with precise didactic objectives. Teachers are called upon, in fact, to design learning environments that are flexible and adapted to the characteristics of each student, proposing, consequently, technologies as tools and not as ends.

Digital teaching strategies are based on the assumption that the learner should play an active role in learning and not simply receive notions, but "co-construct" knowledge in a given context and in collaboration with others (Lockey et al., 2020). This type of approach encourages the creation of dynamic and inclusive learning environments, aims to offer technologies to support teaching for everyone, not just for some, so as to enhance the abilities of all and ensure their educational success.

Amongst these methodologies, to name a few, we find the Flipped Classroom, i.e. the flipped classroom; Cooperative Learning, based on cooperative learning, the interdependence of subjects within the group, and the promotion of social skills (Johnson, & Smith, K. A., 2014); Peer Education, i.e. a kind of peer tutoring, involves an intense relationship between the tutor, the more experienced pupil and the 'tutee', i.e. the pupil called upon to learn (Topping, 1992). Central to this methodology is the absolute protagonist of the students who learn from each other while the teacher, as already mentioned, assumes the role of guide and mediator.

Digital Storytelling, i.e. storytelling through digital tools that allow the story to be integrated with images, sounds, animations (Robin, 2008). PBL, Project Based Learning, is a methodology based on teaching/learning that actively involves students, organized in groups, to research, collaborate, design, solve problems, re-creating situations very similar to real life (Thomas, 2000).

2. Flipped Classroom

The Flipped Classroom, or 'flipped classroom', revolutionises the traditional teaching approach. Typically, the teacher introduces new topics into the classroom, with students in a passive role, listening and absorbing the information.

Afterwards, at home, students study and do their homework and then face tests or lessons later in the classroom. The Flipped Classroom reverses this sequence: study takes place outside the classroom, while in the classroom information is processed, compared and discussed (Bergmann, Sams, 2016). This approach exploits a “blended” mode, using technology to provide students with resources to consult at home once they return from the classroom. Students access a wide range of information through various resources, sharing, editing or creating material through technological devices. The Flipped Classroom, although recent, draws on pedagogical concepts from the past. John Dewey, in the early 1900s, advocated the importance of learning through experience and “Learning by doing”. He pointed out that learning through experience is more effective than lectures or textbooks. Schools, according to Dewey, should prepare students for real life by stimulating their needs and interests, developing creativity and motivating learning (Dewey, 1916). At the same time, Maria Montessori emphasised the importance of natural learning and the pupil's freedom to explore and learn. The 'natural method' aimed to stimulate the child's curiosity by allowing active interaction with the environment through the “Children's House” (Montessori 1909; AA.VV., 2016). This approach recalls the methodology of Situated Learning Episodes (EAS). Time and the home-school relationship are undergoing a transformation, encouraging a technology-mediated approach to study, ensuring inclusion through digital devices that allow students to learn at their own pace, especially in the most familiar place, the home.

According to Rivoltella's summary in “Fare didattica con gli EAS”, the idea of a “flipped” methodology emerged in the 1990s, aiming to explain the role of the computer in the learning process. Over time, the concept of 'flipped learning'

evolved towards the use of technology to provide students with materials to work on before engaging with the teacher.

This allows students to freely explore a variety of materials pre-selected by the teacher and then discuss them in class with the support of the teacher. The teacher's expert knowledge is enhanced when solicited by students, involved in problem-solving, and asked to contribute to a case discussion (Rivoltella, 2013).

In practice, the Flipped Classroom overturns the traditional method: studying begins at home (teach at home) while in the classroom doubts are addressed and knowledge is assimilated through practical and shared exercises (learn at school) (Rivoltella, 2015). According to Pier Cesare Rivoltella and his proposal of 'Situated Learning Episodes', the methodology is divided into three moments:

- Home Preparation: Students, after viewing multimedia resources provided by the lecturer, prepare themselves in advance for the topic, ensuring an initial understanding.
- Classroom activities: Students carry out tasks in groups or individually, following collaborative learning principles. They present work to the class and create multimedia products for external sharing.
- Reflection and Evaluation: Students reflect on their home and classroom activities, while the teacher guides critical reflection and evaluates the products. The aim is learning based on practical experience.

The teacher, in this context, becomes a guide or tutor. He or she moves from being the holder of knowledge to a facilitator, promoting interpersonal relationships and harmony in the classroom. The teacher organises resources, encourages personal research and conducts group work methodologies. Careful preparation is essential to guide students and support autonomy, allowing them to respect individual needs. Improvisation has no place in this methodology, requiring the teacher to plan each step carefully.

3.

The Flipped Classroom for Effective Inclusion

Why choose to operate according to the Flipped Classroom methodology?

Such an approach could outline an inclusive educational environment that preserves the leading role of the teacher, promoting active, constructive and cooperative learning. In adopting the flipped mode, student protagonism could be emphasised through an inversion of priorities between teacher and student actions, encouraging the latter to carry out activities autonomously (Rivoltella, 2013).

This methodology could allow students to experiment their role within a group, stimulating creative thinking and comparing different perspectives. Such an approach would foster interculturalism and inclusion, enhancing diversity in the classroom, not only of a cultural nature, but also through differentiated teaching methodologies respecting individual learning times and styles.

The Flipped Classroom represents a methodology aimed, par excellence, at inclusive teaching. The concept of inclusion, as we well know, refers to principles of non-discrimination, equal dignity and social equity, with ideal profiles of life and society: in this context, the role and use of technologies to support the participation and acquisition of knowledge and skills by disabled students is relevant (Ianes, 2007; Chiappetta Cajola, 2012). In fact, the Flipped Classroom allows each pupil with special needs (and not) to pace his or her own learning, establishing a common path for all, but one that still takes into account the times, characteristics and needs of each and every one. In class, the work done at home is discussed, only after everyone, in his or her own private space, has made it their own in the way that suits them best. In this way, teaching is applied that adapts to the student and not vice versa.

The merit that must be given to this methodology is that it fulfils several functions: from the basic enabling functions for the learning experience, which otherwise could not be performed by students with disabilities, to those supporting advanced educational planning for the whole class, thanks to the support of technologies (Ferlino, 2009). Technologies, in this sense, represent tools that support, supplement and enhance student autonomy and, in the case of some students with disabilities, support their basic skills, such as reading, writing, calculating.

With the use of this methodology, interactions between pupils are improved and more time is dedicated by the teacher, especially to those students who need more support. The student is an active player in the entire process, as well as being more stimulated, more involved and also more involved in his or her own assessment. Evaluation, in fact, not only accompanies all the moments of this innovative

methodology but, above all, assesses the notions acquired and the skills that students possess and put into practice. Moreover, the Flipped Classroom encourages self-assessment by students, and can be proposed to students by the teacher with a checklist listing expected knowledge and skills. Self-assessment is one of the skills that cooperation helps to develop and is a valuable moment to motivate students to continuously improve, without subjecting them to the performance anxiety that traditional verification classically brings. Just as in real life, reflecting on what one is doing is an indispensable awareness in order to move forward, improve oneself and, if necessary, correct one's path. This type of assessment, defined as "authentic", considers not what the student learns, but what the student knows how to do with what he knows, thus not reproducing knowledge but constructing knowledge. Learning, thus, becomes meaningful. The learner can link the new information to his or her prior knowledge, also by virtue of the personal motivation required to proceed to a personal reworking of meaning (Ausubel, 2004). What is taken into consideration is the entire pathway that each individual constructs according to his or her individual characteristics, not a standard pathway for everyone. In this way, therefore, each individual will identify his or her own strengths and weaknesses, so as to supplement or correct the course of his or her learning pathway (Fiore, Pedrizzi, 2012).

The Flipped Classroom, finally, constitutes exactly what the school needs: good teaching practices that can adapt to the abilities of each individual, exactly as the National Indications state "the school is called upon to create educational pathways that are increasingly responsive to the personal inclinations of students, with a view to enhancing the particular aspects of the personality of each individual" and to "(. ... to know how to accept the challenge that diversity poses: first of all in the classroom, where the different individual situations must be recognised and valued, preventing difference from turning into inequality; also in the country, so that situations of social, economic and cultural disadvantage do not prevent the achievement of the essential quality objectives that must be guaranteed." (www.miur.it)

Conclusions

In the light of the considerations expressed, it is plausible to believe that the flipped lesson can foster an inclusive educational environment that preserves the guiding role of the teacher while promoting active, constructive and cooperative learning.

In adopting the flipped mode, student protagonism can be emphasised through an inversion of priorities between the teacher's actions and the student's actions, encouraging the latter to carry out activities autonomously (Rivoltella, 2013).

Students are given the opportunity to experiment with their role within a group, stimulating creative thinking and comparing different perspectives. This approach fosters interculturality and inclusion, enhancing the diversity present in the classroom, not only of a cultural nature, but also through differentiated teaching methodologies respecting individual learning times and styles.

In-depth research on the flipped classroom in diverse and multicultural school contexts can contribute to creating learning environments in which learning is situated and meaningful. This could foster an optimisation of the school's socio-cultural atonement to the everyday reality of students (Rivoltella, 2013), promoting inclusion and making the school an environment more responsive to the needs of today's generations of students.

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