Curriculum innovation with Universal Design for Learning

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Abstract
Universal Design for Learning (UDL) is one of the approaches that most effectively emphasize the concept of individual uniqueness, at international level: each of us perceives the world in a different way, acquires and processes information in different ways, has multiple intelligences and skills. The trend of contemporary teaching places the focus on the characteristics and needs of the learner, so it is essential to recognize and value each member belonging to the class, including pupils with disabilities and learning difficulties.
With the UDL it is possible to overcome the idea of modifying teaching activities at a later stage for those students who present difficulties, it starts from a design phase that already contemplates the differences between learners.
Moreover, the relationship between the UDL, Information and Communication Technologies and disability highlights that ICT can facilitate daily teaching practice, renewing it and promoting significant learning that promotes the educational success of each learner.
The conscious use of ICT is in fact one of the actions proposed by the UDL, in particular to achieve the flexibility sought in truly inclusive curricula.

Keywords: *Universal Design for Learning,* disability, accessibility, learning processes, Special Educational Needs

1. The change of perspective offered by the UDL

The important Italian legislative and ministerial provisions, combined with international jurisprudence, have made it possible to overturn the perspective on inclusion. In fact, several stages have gone through that have made the journey difficult, starting from the initial exclusion of disabled pupils from the school system to the current inclusion.

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That expected cultural leap has taken place which has allowed us to adopt a new paradigm of inclusion, starting from the world of education and training, with the aim of removing learning obstacles, facilitating participation, eliminating labels and barriers. The concept of disability has therefore changed, in the past stigmatized not only by attitudes and prejudices, but also by terms such as "handicap"; today, this concept is observed in a decidedly positive light, thanks to the adoption of the bio-psycho-social perspective emerged with the publication, by the World Health Organization, of the ICF - International Classification of functioning, disability and health, which took place in 2001. The UN Convention on the Rights of Persons with Disabilities of 2006, the first great treaty on human rights of the 21st century, clarifies that «disability is an evolving concept and that […] is the result of interaction between people with impairments and attitudinal and environmental barriers»[1].

The increased social sensitivity and the development of new information and communication technologies, combined with the complexity of contemporary society, have therefore led to arouse greater collective awareness about learning difficulties and the need to make school truly inclusive.

In this new orientation of respect and globalization of human rights, where diversity is seen as the uniqueness of the individual, one of the international orientations that deserves attention is the *UDL - Universal Design for Learning* (in Italian PUA - Progettazione Universale per l'Apprendimento). The UDL is an educational framework that can prove to be an excellent strategy for good school inclusion. In fact, it intends to face three major challenges: enhancing diversity, promoting inclusion in education and consciously using technology. This approach in fact calls for a vision of the world with methodological proposals oriented towards a revolution of thought centered on respect for human diversity-uniqueness, on flexibility, on real accessibility to learning processes, on the recognition and enhancement of the differences of each person, already in the initial planning of each training course, and therefore apt to eliminate, in a preliminary way, every possible label that, in fact, mortifies the very concept of inclusion (Savia, 2016, p.21).

School should be the one place where diversity is not simply tolerated, but understood, accepted and respected. Education has the aim of enhancing these diversities and, in an inclusive perspective, of taking all pupils into consideration, emphasizing the fairness of the nature of their educational needs. With the UDL we no longer speak of Special Educational Needs and, indeed, the educational interventions in this sense are projected, as Ianes would say, towards a "normal specialty" (Ianes, 2015). The needs of the individual are always "special" and there is no reason to catalog them as Special Educational

[1] Convenzione ONU sui Diritti delle Persone con Disabilità, 2006.

Needs or according to other labels. The UDL overturns the perspective adopted so far: abandoning the idea of disability as a characteristic that defines the individual, it simply starts from the concept of a person with their own educational needs, and then from the outset designs interventions capable of meeting the needs of all pupils, without distinctions in the learning-teaching processes.

The UDL was developed in the United States in the mid-1990s at the CAST - *Center for Applied Special Technology*, a non-profit research and development organization founded by Anne Meyer and David H. Rose who initially researched, through the use of technologies, innovative solutions for learning in students with disabilities. The term UDL was coined in the 1980s, starting with *Universal Design* which was used in the architectural and product development proposed by Ron Mace of North Carolina State University. This movement aimed to create physical environments and tools that can be used by the greatest number of people starting from the concept that it was more convenient to design buildings and objects thinking in advance of the differences that characterize individuals. An example of *Universal Design* is the sidewalk slide: initially it was designed for disabled people but over time it has been used by everyone.

What the UDL aims at is precisely this: making learning accessible to all, offering equal opportunities to be able to act and build knowledge. This great purpose can be implemented through the creation of flexible and adaptable curricula, and therefore through a careful analysis of objectives, methods, materials and evaluation that already during the design phase take into account the differences of all pupils, regardless of the presence of difficulty. The UDL therefore intends to enhance the different individualities and eliminate all the labels that flock to the classrooms daily (disabled pupil, pupil with DSA, etc.), and which often constitute the first barrier to be overcome to really make inclusion. The UDL is defined as a scientifically valid framework to guide educational practice which:

a) provides flexibility in the forms in which information is presented, in the ways in which students react or demonstrate their knowledge and skills, in the ways in which students are motivated and involved with their own learning;
b) reduces barriers in education, provides appropriate adaptations, supports and challenges, and maintains high performance expectations for all students (CAST, 2006, p.6 trad.it. 2015).

As a matter of fact, the CAST stresses that curricula are often built according to the *"one size fits all"* (CAST, 2006, p.4), concept, therefore according to a single size to which pupils must adapt; these curricula are consequently rigid and raise learning barriers. According to CAST, there is no homogeneous

category of students, since "in learning environments, such as schools or universities, individual variability is the norm, not the exception" (CAST, 2006). Consequently, students with learning difficulties, but also those with high skills or "in the norm", do not see their educational needs satisfied by curricula that, in fact, do not take into account their uniqueness. In effect, «they fail to provide all students with equal learning opportunities, because they exclude students with different skills, contexts and motivations that do not meet the illusory criterion of "average"» (CAST, 2006).

Teachers face challenges on a daily basis, first of all creating a positive and encouraging atmosphere, and motivating pupils fundamentally different from each other. These differences are of various types: cultural, linguistic, socio-economic; they can relate to disabilities and disorders that require a learning path based on these specificities. However, it is not necessary to talk about disabilities or cultural conditions to demonstrate how different each individual is. One of the most important discoveries that appeared in this field is the Theory of Multiple Intelligences, proposed by Howard Gardner in the book Formae Mentis, which surpasses the idea that intelligence is a construct measurable numerically as it is composed of many interdependent elements. This theory emphasizes that each individual has multiple intelligences, each assigned to a specific cognitive activity, which combine in different ways and which generate the different specific intellectual characteristics of each individual.

Research carried out over the years in the field of neuroscience and cognitive psychology therefore reveals enormous differences in the way each individual learns, «a variability not only from person to person, but even between the individual himself [...] who can respond differently in different moments in the same curriculum, depending on how he feels» (CAST, 2006).

Finally, the individual variability of learning does not only concern the individual cognitive structure but also the environmental and personal factors that influence it. These factors, as also indicated within the ICF, can hinder the functioning, and therefore the learning, of an individual, or on the contrary, greatly facilitate it.

Principles and objectives

As underlined in the CAST Guidelines, the approach proposed by the UDL is deeply rooted in the learning sciences with pedagogical, neuroscientific and practical bases. Starting from the studies of Jean Piaget (for genetic epistemology), Jerome Bruner (for cognitive psychology), Benjamin S. Bloom (for the taxonomy of educational objectives) and others, the CAST stresses that diversity, first of all that of the brain, and the variability of the learning

processes in each individual, are basic conditions, like DNA or fingerprints. Indeed:

Learners, regardless of their similarities or differences, take very unique and diverse paths to understanding and mastering knowledge. For example, siblings can learn in ways that are very different from each other even though they come from similar genetic and cultural backgrounds (Hartmann, 2015, p.57).

Therefore, these are elements that cannot be neglected in the educational sphere, just like the need to introduce gradual support structures in the curricula; the latter is deeply linked to concepts such as Lev S. Vygotskij's Proximal Development Zone and Jerome Bruner's Scaffolding.

Precisely on the basis of neuroscience, CAST has attempted to investigate the possibility of describing the functioning of the brain it learns to "define guidelines that are valid" for all brains "and to be implemented in design and teaching" (Mangiatordi, 2017, p.48). CAST identifies three different interconnected learning brain networks that make this process unique in each individual. These networks are the basis of the UDL: the neural recognition networks, or the "thing" of learning; strategic neural networks, or the "how" of learning; affective neural networks, or the "why" of learning. They provide the underlying structure for the three founding principles of the UDL:

- Principle I: Provide multiple means of representation of content (the "what" of learning). This principle, connected to the neural networks of recognition, underlines that individuals acquire information differently due to various variables (disabilities, cultural differences, cognitive styles, etc.). For this reason, there is no way of representation valid for all, and therefore during the transmission of information, it is necessary to use multiple representations exploiting all five senses, in order to give pupils different options for acquiring information.
- Principle II: Providing multiple means of action and expression (the "how" of learning). This principle, connected to strategic neural networks, emphasizes that individuals express knowledge in different ways, and this must be particularly taken into account when pupils with disabilities are present in a learning environment. In addition to the classic methods of expression (written and oral tests), different expressive actions should be allowed, which can also lead to surprisingly effective results; in fact there is no means of action and expression valid for all.
- Principle III: provide multiple means of involvement (the "why" of learning). This principle, connected to affective neural networks, underlines that affectivity, and in general emotionality, are the basis of the learning process. In fact, numerous researches highlight the link between motivation (extrinsic or intrinsic), positive climate and aptitude for learning. These elements significantly differentiate the involvement of the learner; these

differences are related both to personal factors, but also to cultural and even neurological factors. Some students are motivated by the novelty, others prefer the routine, others still work in a group, or on the contrary, alone. Consequently, there is no single way of involvement that applies to everyone and in all contexts.

As already highlighted in the previous paragraph, the main objective of the UDL is to offer equal learning opportunities. The identification of these three principles is essential to implement this great goal, which can only materialize, according to the UDL perspective, through the creation of inclusive curricula, another great goal pursued. CAST in fact repeatedly emphasizes the "disabilities" of those rigid curricula designed for a hypothetical "average" of students. These curricula cannot satisfy in any way the educational needs of a student, nor of learners with disabilities, learning disabilities or who present linguistic and cultural differences. And not only that, the guidelines also explain how curricula are considered "disabled", depending on several factors:

- Who are they for: the "disabled" curriculum is the one built not taking into account the individual variability present in a class and all types of students, especially those with difficulties or with high skills;
- What do they teach: the curriculum is "disabled" when it focuses solely on the transmission and evaluation of information and content, excluding from the teaching-learning process the strategies necessary for students to gain knowledge;
- How do they teach: the "disabled" curriculum is the one that presents the information necessary for learning but does not really teach it and, in addition to not differentiating the process according to the students, it fails to present fundamental skills, such as building competences, connecting the new knowledge to the old one, control the learning process and so on.

In order to avoid the presence of "disabled" curricula, CAST indicates that it is necessary to design flexible curricula from the start, to cope with all those individual differences present in a class, avoiding subsequent changes and adaptations that usually occur when students do not they reach the standard through traditional programs. The aim is therefore is to try to turn the perspective upside down, eliminating opinions such as "it is the disabled pupil who cannot follow the normal math program" (Dovigo, 2007) to ask instead "how suitable/adaptable the program is to the pupil" (Dovigo, 2007).

In addition to providing a guide for the construction of curricula, the other important goal of the UDL is to help pupils become "experts" (CAST, 2006), that is, to help them master the entire learning process. According to UDL, the expert student is well informed and resourceful, he is strategic and goal-oriented, determined and motivated. This profile includes what is necessary to ensure that the learning process is managed independently with the necessary

support; therefore, it also indicates a type of metacognitive and creative learning through the activation of higher order processes. Indeed, the expert student is the one who knows how to use previous knowledge to assimilate new information and transform it into meaningful knowledge; creates strategies to optimize learning, organizes and manages resources; is aware of its strengths and weaknesses; it is intrinsically motivated, establishes objectives to be achieved and regulates those emotional responses that could affect learning.

The Guidelines

Starting from these principles and objectives, CAST develops nine Guidelines at the base of the UDL. These are organized according to three basic principles: representation, action and expression, and involvement; each principle is divided into three guidelines, which are in turn divided into different sub-categories. The Guidelines are not to be considered as a rigid prescription of rules or strategies to be applied and valid for every occasion, but as a strategy to circumvent the critical aspects of existing curricula, to build new inclusive paths and put innovation into practice. The Guidelines in fact offer ideas to teachers to improve curriculum flexibility and thus maximize learning opportunities.

The guidelines created from the first principle (to provide multiple means of representation) are: to offer different options for perception, for language, mathematical expressions and symbols, and for understanding.

Since in fact each individual perceives, and therefore understands, the information differently for various reasons, it is necessary to provide different options to "access" the information. The same information can be made accessible to everyone if presented through different channels and methods, thus respecting everyone's difficulties, learning and cognitive styles. Presenting information in different ways, thus taking advantage of different perceptual channels, is a useful strategy for breaking down learning barriers: think, for example, of classes with disabled pupils who need different perceptual channels (touch, hearing, sight etc.); or to the need of some pupils to customize the information presented (for example, enlarge the text characters, use images, graphics, and so on). Therefore, limiting oneself to the verbal code conveyed by a visual support only (such as the blackboard or the textbook) reduces the learning possibilities of pupils with difficulties; it also makes the lesson monotonous and boring, with negative consequences on motivation and degree of attention.

Not only that, the same information should be treated through different codes, using the mathematical or symbolic code, in order to help some pupils clarify abstract concepts. It is also advisable to pay attention to the lexicon used

when understandable for some pupils but not for others, providing vocabulary supports within a text (for example, footnotes with explanations, hyperlinks, etc.), highlight complex terms and so on. Finally, the same understanding of information should be highlighted through different means: it is necessary to support pupils in becoming "experts", to help them activate basic knowledge, to provide suggestions on what to pay attention to, to multiply the forms of access to content through films, documentaries and so on.

The guidelines created starting from the second principle (provide multiple means of action and expression) are: to offer options for physical action, for expression and communication, and for executive functions.

Each individual expresses their knowledge in a different way and has different ways to get in touch with information, with the learning context and with the manipulation of information. To avoid the creation of barriers in learning, it would be appropriate to provide different materials with which all students can interact, but also different methods of response and interaction. In fact, some pupils can excel in one mode of expression and not in another, others with disabilities need assistive technologies and supports in order to interact and produce knowledge. If you reflect on all the specificities present within a class, you realize that there is no "average" pupil for whom a learning path has been built, since each pupil is different from the other under multiple points of view.

With regard to the third principle (providing multiple means of involvement) the guidelines created are: to offer solutions to attract interest, to support effort and perseverance and for self-regulation.

Starting from the differences of the pupils it is possible to plan and propose new involvement activities. Motivation is the basis of learning, but it is an extremely subjective element, dependent on various factors: interest in the activity, extrinsic and intrinsic components, feeling comfortable with the surrounding environment, a sense of self-efficacy. For this reason, the UDL proposes to solicit not only the interest and the emotional skills of the pupils, but also to leverage the self-regulation ability, the self-evaluation, the reflection about their personal expectations and abilities, and their emotional reactions. Interest greatly affects cognitive functioning and affective involvement and, if the teacher implements an inclusive good practice, he is able to promote various teaching-learning opportunities that positively affect the climate in the classroom. Furthermore, the different response of pupils to circumstances and changes (first of all biological ones) must also be taken into consideration. The activities must therefore respond both to the different needs of the learners and be inserted within a highly significant context.

2. UDL, digital technologies and disabilities. The role of ICT

In the view of the UDL, offering equal learning opportunities must be the basis of the entire teaching design. One of the means that can meet the needs of teachers and students is the use of ICT - Information and Communication Technologies, which appear as tools to diversify, liven up and innovate teaching. As clarified in the previous paragraphs, the UDL in fact aims to create learning environments that offer the opportunity to become expert students.

The development and diffusion of tools and technical means has always found wide use in teaching, reflecting the evolution of different approaches and methods. Over the past few decades, ICT has had a great impact on everyone's daily life, from work to social life, to learning. Technological innovations have changed the educational landscape and continue to do so, proving to be valid allies for teachers and learners. The same National Digital School Plan, introduced by law 107 of 2015, underlines the importance of digital education.

ICT are excellent tools to work with thanks to the characteristic interactivity and therefore to the dynamic and engaging nature: integrated into the usual teaching activity, they make it more interactive and develop motivation, creativity and cognitive processes of the learners. What characterizes these tools is a type of systematic and interdisciplinary approach that integrates previous knowledge into a controlled system aimed at achieving specific training objectives; ICT can therefore facilitate teaching activities, allowing new ways of learning through the exploitation of multiple channels, which can support the education of learners and their needs, as underlined by the first principle of UDL.

Precisely because of the interactive nature and the ability to customize various types of activities in a practical and fast way, the UDL supports the use of ICT for the construction of inclusive curricula. ICT can therefore be introduced competently within the curricula in order to achieve the set objectives, enhance existing resources and adequately support pupils.

The UDL greatly enhances the concept of accessibility and sustainability of learning paths also through the use of digital technologies. As Mangiatordi clarifies, “the accessibility of teaching is a problem with which every teacher […] has to deal: making an object accessible basically means allowing it to be used by anyone, regardless of personal skills, health conditions or tools needed to use them” (Mangiatordi, 2017); the same law 4 of 2004, called the Stanca law, clarifies that accessibility is «the ability of IT systems [...] to provide services and provide usable information, without discrimination, even by those who due to disabilities need technologies assistive or special configurations»[2].

[2] Legge 9 gennaio 2004, n. 4, “Disposizioni per favorire l’accesso dei soggetti disabili agli strumenti informatici”, art. 2.

The sustainability of the intervention, on the other hand, is linked to the need to rationalize existing resources and contain costs. Accessibility and sustainability do not only concern traditional tools and means, but also and above all digital ones.

Often schools are not well equipped and do not have the necessary resources to deal with ICT management: their use constitutes an additional workload that needs to be monitored and managed within the normal daily teaching practice; moreover the teachers, and sometimes the pupils themselves, do not always have a level of computer literacy that can be used without particular difficulties. In fact, the availability of expensive software or technological tools does not matter if you do not have the needs or the skills to use them; rather it would be advisable that the use of ICT could take place without difficulty.

In addition to this, there is also an important problem related to the usability and accessibility of tools and software by students with Special Educational Needs. It is above all essential to select those resources that are useful in the classroom and suitable for the needs of the pupils, especially those with learning difficulties. Bringing ICT to school takes time, skills and resources. Often the new instruments follow one after the other even before having actually learned to use them, with the risk of chasing a cognitive overload or, on the contrary, in technological hypertrophy, so that the technologies could lead to the weakening of the functions cognitive instead of developing them. Overall, there is a great difficulty for teachers to use innovative tools because they often fear being outclassed by technology:

Between education and technology there are numerous obstacles and misunderstandings […] little familiarity with scientific-technological devices for those coming from a humanistic background; cultural residues […] which lead to contrasting spiritual and practical activities with little consideration for the latter; fear of reductions and mechanisms; ascertainment of failures of past technological experiences […]; fear of dehumanization, disintegration, fragmentation in the face of the pervasiveness of the media (Calvani, 2004).

However, within this complex panorama, the use of ICT is well suited to be associated with the curriculum built according to the UDL perspective. In addition to being able to make teaching more effective, many technological tools are used daily as a support and a means of involvement.

Many students use pervasive technologies every day, in particular mobile ones (such as smartphones, tablets, PCs), which are increasingly powerful and accessible; the smartphone is today much more than a simple tool for making calls and, if configured with the installation of certain apps and software, it promotes communication to all and for all. This concept of universal planning is exactly the same as the basis of the UDL. But the vision is even wider: some students use assistive technologies daily (such as special aids, cochlear

implants, wheelchairs, etc.) which are essential for being able to "physically" access information, even at school for activities for which other students do not need technological support.

As CAST clarifies, «learning and demonstrating effective use of technology in oneself is an important educational achievement [...] Currently, every student at school needs to develop a variety of wider skills which depend on our everchanging culture» (CAST, 2006). Although the use of technology does not automatically improve the learning process, it favors the personalization and flexibility that the UDL aims at to build learning curricula, avoiding the waste of time and energy. Just think, for example, of how much a visually impaired pupil with difficulty in reading can be facilitated by using the digitized text; he will have the opportunity to customize the formatting (font, size, color) and to access an oral synthesis.

Compared to the three basic principles of the UDL, technology can play an important role within teaching practice. With reference to the principle of representation, which emphasizes that each individual acquires information differently, it is necessary to use different channels, and this can be done thanks to the use of ICT.

A valid aid in the implementation of strategies of this type can come from the figures of the Digital Animators, established within the National Plan for the Digital School: they would be configured "as real managers of technological innovation" (Mangiatordi, 2017), with the task of preparing digital spaces, implement internal training for teachers and involve the entire school community. The digital animator must therefore take into account the variability present in the school context and try to find adequate and creative solutions to different problems. Also in this sense, the use of technologies as "facilitators" plays an important role, according to the bio-psycho-social perspective of disability; to use technology in the classroom with fluidity, it is necessary to create an adequate space for the use of ICT. In a perspective that seeks to make the introduction of technology into teaching practice universal, a useful suggestion comes from Mangiatordi, who suggests an attempt divided into phases:

1. digitization, the preliminary phase, to convert analogue material into digital through the use of scanners, cameras and hardware devices;
2. organization, the management and archiving phase of digital documents through hardware and online solutions;
3. support for the action, the operational phase, through the use of generic tools and software (free, online, paid) or assistive technologies to create concept maps, presentations and so on.

The UDL approach presupposes universal design of the curricula from the outset, aimed at accessibility for all learners. However, CAST himself

underlines the fact that access to information is something other than access to learning, and above all it is the real goal of the UDL: «simply using technology in the classroom should not be considered as the realization of the UDL […] and the technology itself is not automatically synonymous with UDL but plays an important role in its implementation and conceptualization» (CAST, 2006).

UDL and disability

As it has been observed in the previous chapters and paragraphs, the UDL is a reference framework that allows you to see the teaching-learning dynamic from a different perspective: to optimize the curricula to meet the needs of learners. The key concept behind UDL is variability, which is now the norm in school: pupils differ in interests, skills, emotional experiences, cognitive and learning mechanisms. It often happens that this variability is seen as a problem of the learner, who must adapt to the ways and times of updating the curricula. However, it is precisely this variability that can "challenge" teachers and professionals in wondering how a disabled pupil can actually and qualitatively participate in learning.

The variability of all learners must be perceived as a wealth capable of adding value to daily teaching; in particular, students with disabilities must be considered "valued members of any learning environment" (Hartmann, 2015). This is especially true for pupils with severe disabilities, too often subject to low expectations and wrong assumptions about their abilities: for example, teachers assume that pupils with serious disabilities do not have the means to access standard curricula or that they need support and huge help like those used for personal autonomy, movement and so on.

Each student can become, according to the UDL perspective, an expert in spite of the condition of his disability, whatever it is. Being an expert student does not mean having a thorough knowledge of a topic but being determined, resourceful and knowing how to exploit daily experiences as a learning opportunity. A flexible curriculum allows everyone to participate as it creates multiple and viable ways towards knowledge. The teachers who support all learners, especially those with disabilities, even serious ones, must have a deep knowledge of how the individual lives, how he perceives life, and how he expresses himself; «all learners with severe disabilities are able to become expert learners, because all individuals are knowledgeable, strategic, and purposeful» (Hartmann, 2015, p.62). If the teachers are the first to not understand the functioning of an individual and not to accept his disability, if they consider it socially inadequate and not insertable within the classroom context, they will never be able to enhance the residual aspect of that

functioning, nor will they channel the potential of that pupil, labeling him as unfit to learn.

Often, the inclusion of pupils with disabilities is generally focused on being present in the classroom rather than being significantly included in teaching experiences. The UDL supports inclusion as it offers learning that is meaningful for everyone; through multiple paths of representation, action, expression and involvement, teaching can guarantee everyone a positive response to different needs. This means that, for students with disabilities, "this shift of attitude could promote stronger inclusive classroom experiences leading to better academic, social, and behavioral outcomes" (Lowrey *et al.*, 2017).

The UDL approach can therefore meet the needs of all learners, considering the diversity, or rather, the uniqueness of each in an extremely positive key. This is the characteristic that should push each teacher one step further, to observe and analyze the students, to ask themselves how to really include them all in the teaching activity and therefore to overcome the idea that they should adapt to different curricula and styles of teaching. This change of perspective is fundamental and required today, since only in this way can students with disabilities, even serious ones, be recognized the rights of equality, social integration and learning. Being significantly included in school life is indispensable also and above all for the purpose of the recovery of the person; being able to learn according to one's ability is a right that must be guaranteed to anyone.

School is, according to the Italian constitutional principles, the one place open to all: it contributes to the development and growth of the person in all dimensions, through the acquisition and development of knowledge, skills and abilities, and teaches awareness and to enhance the identity of each. Talking about specificity means proposing teaching-learning experiences in a plural, universal way, in order to be able to meet the different ways of acquiring information, processing it and expressing what has been learned.

3. Conclusions

In light of what has been described, it is possible to assert that the UDL contributes to reducing the barriers in the world of education, reversing the perspective of teachers and pupils on diversity in the learning environment. The UDL framework proposes an inclusive approach with regard to education and training: understanding, doing and involving are the actions proposed to build flexible and accessible learning environments, namely the field of action for teachers who will be able to do so, from the earliest stages, design to support and customize activities according to different learners. If applied, it manages

to achieve inclusive education, giving each learner the opportunity to become an active and socially recognized member of the class. The creation and implementation of curricula designed from a "universal" perspective can improve the learning outcomes of all pupils, including those who present difficulties, disabilities or, conversely, high skills.

The type of teaching-learning proposed by the UDL is a challenge for teachers, who must recognize the uniqueness of each learner: uniqueness that is reflected in interests, learning methods, previous knowledge, cultural background. It is therefore desirable that in the classroom there will be a climate of mutual respect where everyone is appreciated as an individual and actively involved.

If the teachers recognize this uniqueness, they will then be able to activate inclusive curricula, differentiating the content, the process and the product of the lessons to satisfy the different interests, learning styles and levels of involvement of the learners. It will thus be possible to improve the general quality of the pupils' educational experience.

UDL is a relatively new approach to teaching-learning; however, it presents excellent conditions for the development and improvement of the education system, as it is able to grasp diversity in the most positive sense.

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