

PUPILS CO-DESIGNING THE EDUCATIONAL-DIDACTIC CURRICULUM IN THE UNIVERSAL DESIGN FOR LEARNING PERSPECTIVE

ALUNNI/E CO-PROTAGONISTI DELLA CO-PROGETTAZIONE DEL CURRICOLO EDUCATIVO-DIDATTICO NELLA PROSPETTIVA DELL'UNIVERSAL DESIGN FOR LEARNING

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ABSTRACT

The Universal Design for Learning (UDL) (CAST, 2006; 2011; 2018) is an approach that focuses on the individual variable (Malaguti, Augenti & Pastor, 2023), with respect to which diversity is regarded as a value element that substantiates the uniqueness and originality of each person. The contribution proffers reflections on the significant contribution that UDL could have within the design of the school curriculum from an inclusive perspective (Straniero, 2023). The present study constitutes the initial phase of a research-education programme (Asquini, 2018), in which teachers and pupils of an inclusive institute collaboratively develop the design of teaching activities.

L'Universal Design for Learning, UDL (CAST, 2006; 2011; 2018) rappresenta un approccio che pone il focus sulla variabile individuale (Malaguti, Augenti & Pastor, 2023), rispetto alla quale la diversità è vista come un elemento valoriale che sostanzia l'unicità e l'originalità di ciascuna persona. Il contributo offre riflessioni in merito all'apporto significativo che l'UDL potrebbe avere all'interno della progettazione del curriculum scolastico in un'ottica inclusiva (Straniero, 2023). Viene presentata un'indagine esplorativa, la prima parte di una fase di una ricerca-formazione (Asquini, 2018) che vede co-protagonisti insegnanti e alunni di un istituto comprensivo nella co-costruzione della progettazione dell'attività didattica.

KEYWORDS

Educational-didactic curriculum; Universal Design for Learning; Inclusion; Research-training; Sharing.
Curricolo educativo-didattico Universal Design for Learning; Inclusione; Ricerca-formazione; Compartecipazione.

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Introduction

The educational-didactic curriculum is an expression of the freedom of teaching and school autonomy, and, concomitantly, it makes explicit the choices of the school community and the identity of the school (DM n. 254 of 2012).

The full implementation of the recognition and guarantee of freedom of teaching and equality (art. 2 and 3, Italian Constitution), respecting the differences of all and the identity of each, requires the commitment of the entire educational community in an inclusive dimension between school and territory to ensure that everyone can carry out, according to their own possibilities and choices, an activity or function that contributes to the material and spiritual progress of society (art. 4 Italian Constitution).

1. Co-designing the educational curriculum from an inclusive perspective

Schools are responsible for drawing up the Three-Year Educational Offer Plan, PTOF, as a result of their school autonomy (DPR n. 275 of 1999). This plan is considered the fundamental document constituting the cultural and planning identity of school institutions, as stated in the regulations in force. In the PTOF, the Formative Offer section is dedicated to the elaboration of the educational-didactic curriculum. The curriculum is the main tool of educational-didactic planning, and it is prepared by the professional community in compliance with the National Indications (DM n. 254 of 2012, revised in 2025) for the first cycle.

The criteria that school institutions are obliged to observe in order to formulate the curriculum are defined in the Autonomy Regulations (DPR n. 275 of 1999), which establish prescriptive references for the following aspects: a) the general objectives of the educational process; b) the specific learning objectives relating to pupils' competences; c) the disciplines and activities constituting the national quota of the curricula and the relative annual number of hours.

The curriculum is defined as the educational pathway that a student completes, from pre-school to secondary school, in which cognitive and relational processes are interwoven and merge.

The relational ones. The itinerary's unification ensures respect for the idiosyncrasies of the developmental stages, which are foundational to the learning process. It delineates a progression from learning by doing to the augmentation of reflection and formalisation of experience, through the reconstruction of cultural

instruments and the capacity to utilise these instruments consciously as keys to interpreting reality.

The itineraries of education, which are aimed at linguistic-literary, historical-geographical-social, mathematical-scientific-technological, artistic-creative literacy, are inseparably interconnected with those of relationships, which concern emotional-affective interaction, social communication and the experiences of values that are generated in school life.

The curriculum has been described as a 'mosaic' with a unitary yet articulated design, the result of the integration of the needs that each school manages to bring out in the dialogue with its own reality, and of the requests that, through regulatory documents, the national community expresses.

In this overview, the professional community, through the Teachers' Board and the Institute Council, is jointly responsible for the design and implementation of a sustainable and inclusive educational-didactic curriculum. The purpose of this curriculum is to guarantee each pupil the right to study, the development of the personality in its entirety, and educational success.

In relation to this final statement, a significant objective of the curriculum is to cultivate the development of pupils' autonomy, thereby equipping them with the capacity to navigate and address complex situations, employ effective problem-solving methodologies, articulate their own perspectives and heed those of others, seek assistance when necessary, recognise personal limitations, and provide competent assistance. The development of autonomy is relevant to all dimensions of the individual, and the degree of autonomy is related to the level of competence possessed.

Specifically, the school headmaster and teachers, in addition to the students and their families (through representatives in the collegiate bodies) in the second cycle of education, are called upon to share spaces for dialogue and sharing and to take on significant project responsibilities aimed at competence development (New European Competences, 2018).

Collaboration is a key factor in the establishment of a professional and educational community, within which cultural freedom is respected and valued. The work of analysing and reworking educational teaching practices is subject to constant review, with the aim of outlining a meaningful vision imbued with inclusive values. Curricular planning is a complex operation that involves all the factors connected with the

The educational process encompasses a comprehensive range of factors, including the content of instruction, the desired educational outcomes, the mode of implementation, and constraints imposed by socio-environmental circumstances.

The process of constructing the curriculum cannot disregard a critical reconsideration of the essential elements of the educational relationship. It implies considering the school institution as a place of research and a space for experimentation, in dialectic relationship with the instances coming from the scientific community and the social community that characterise the horizon of shared values.

2. Universal Design for Learning an inclusive approach to curriculum design

The Universal Design for Learning (UDL) approach is rooted in Universal Design (UD), a term coined in the 1980s by architect Ron L. Mace (North Carolina State University) to identify a model aimed at designing environments, products and objects from a sustainable perspective. This model is substantiated by the valorisation of the characteristics (physical, cognitive and emotional) and differences inherent in each individual, regardless of age, abilities or personal conditions (CAST, 2011). The fundamental principle underpinning Universal Design (UD) is the assurance of equitable access to environments and products for all individuals, unencumbered by any impediments, thus promoting the principle of equal opportunity (Sen, 1980).

A seminal development in the field was the emergence of regulatory interventions aimed at guaranteeing more rights to disabled people *by reasonably accommodating* facilities to meet their physical, cognitive and communication needs (Ghedin & Mazzocut, 2017).

This consideration has declined in the social and cultural context, resulting in a re-orientation of sustainable design. The objective of this re-orientation is to reduce or eliminate barriers and facilitate access to any environment, structure, infrastructure, or use of products or objects.

The principles of Universal Design (UD) were introduced into the pedagogical and educational sphere by the Centre for Applied Special Technology (CAST, 2011) in 1995. CAST developed Universal Design for Learning (UDL), a model for the design of materials, methods and instructional strategies (Ghedin & Mazzocut, 2017) aimed at facilitating learning and promoting the participation of all pupils/students. The model is grounded in studies and research conducted within the neuroscientific domain, with a focus on the identification of variations in learning styles among pupils/students. It asserts the necessity and significance of adopting diversified methodological strategies, techniques and tools that are tailored to the distinctive characteristics and particularities of each individual. Accordingly, as posited by UDL,

diversity is posited as a fundamental prerequisite, as evidenced by neuroscientific research (Immordino-Yang & Fischer, 2009), encompassing both overt and more subtle variations.

The UDL framework draws inspiration from research in developmental and cognitive psychology (CAST, 2006, 2011; Meyer, Rose & Gordon, 2014; Rose & Gravel, 2010), with a focus on the variability of learning processes across individuals.

In relation to the latter, the UDL identifies three primary interconnected neural networks (CAST, 2018) in the learning process (Rose & Meyer, 2002): the *affective networks*, the 'why' in learning, located in the central part of the brain, relating to the personal meaning that the subject ascribes to the

The processing of information is comprised of two distinct networks: the *recognition networks* and the 'what' in learning, relating to the perceptual component, and the acquisition of information and its processing; and the *strategic networks*, the 'how' in learning, relating to the organisation and application of knowledge.

The UDL model is characterised by a structure articulated in Principle - Guideline - Verification Point.

The model is grounded in three fundamental Principles, which are further subdivided into three Guidelines. These guidelines are then organised according to the fundamental principles of UDL (CAST, 2011; 2018). For each of these guidelines, verification points are assigned (CAST, 2018). The following presentation will provide a comprehensive overview of the subject.

The first Principle, the *Provide multiple means of engagement*, is comprised of the following *Guidelines*: a) *Provide solutions to attract interest. Verification Point: 7.1 Optimize individual choice and autonomy; 7.2 Optimize persistence, value, authenticity; 7.3 Minimize threats and distractions.* b) *Provide options to maintain engagement and persistence. Verification Point: 8.1 Reinforce the importance of goals and objectives; 8.2 Vary questions and resources to optimize challenge; 8.3 Promote collaboration and teamwork; 8.4 Increase mastery-oriented feedback.* c) *Provide options for self-regulation. Verification Point: 9.1 Promote expectations and beliefs that optimize motivation; 9.2 Facilitate personal coping strategies and skills; 9.3 Develop self-assessment and reflection.*

The second Principle, entitled *Providing Multiple Means of Representation*, comprises the following set of *Guidelines*: a) *Offer different modes of perception. Verification Point: 1.1 Offer different ways to personalize the presentation of information; 1.2 Offer alternatives for auditory information; 1.3 Offer alternatives for visual information.* b) *Provide options for language, mathematical expressions*

and symbols. Verification Point: 2.1 Clarify vocabulary and symbols; 2.2 Clarify syntax and structure; 2.3 Facilitate decoding of text, mathematical notes, and symbols; 2.4 Foster comprehension between different languages; 2.5 Illustrate main ideas through multiple means. c) Provide options for comprehension. Verification Point: 3.1 Activate or provide prior knowledge; 3.2 Highlight patterns, features, main ideas, and relationships; 3.3 Guide information processing, visualization, and management; 3.4 Maximize transfer and generalization.

The third Principle, entitled *Provide multiple means of action and expression*, is comprised of the following Guidelines: *a) Provide options for physical interaction. Verification Point: 4.1 Vary methods of responding and conducting; 4.2 Optimize access to supporting tools and technologies. b) Provide options for expression and communication. Verification Point: 5.1 Use multiple means for communication; 5.2 Use multiple tools for construction and composition; 5.3 Build skills with graduated levels of support practice and presentation. c) Provide options for executive functions. Verification Point: 6.1 Guide the choice of appropriate goals; 6.2 Help planning and strategy development; 6.3 Facilitate information and resource management; 6.4 Develop the ability to monitor progress.*

The Guidelines should not be interpreted as "prescriptive", but rather as a series of strategies to be employed in the design of the curriculum (Malaguti, Augenti & Pastor, 2023). These strategies are intended to facilitate the organisation of programming and planning of objectives, methodological strategies, verification tools and assessment methods (Savia, 2016), with the aim of ensuring accessibility for all.

The value element of the UDL model is predicated on inclusivity, as evidenced by the flexibility that characterises it and the attention to the valorisation of the diversity inherent in each pupil/student's learning process.

It is evident that pupils and students vary in terms of their interests, learning styles and the manner in which they express their knowledge, contingent on their developmental stage and the stimuli present within the school and extracurricular contexts. Indeed, each pupil/student learns content according to their own mechanisms, processes information at different times, and communicates knowledge in different ways.

In consideration of the aforementioned factors, the UDL facilitates the planning of project pathways that are aligned with inclusive practices (Booth & Ainscow, 2014). These practices ensure a high degree of flexibility in the delineation of objectives, the selection of methodological approaches, and the instruments employed for the clarification of educational and didactic endeavours. Additionally, they enable the adaptation of temporal frameworks for the execution of these activities.

As has been previously established, the aforementioned affirmation is to be considered in the context of inclusive policies (Ibidem). This is evident in the design and implementation of a flexible educational-didactic curriculum, with consideration for the cognitive styles of pupils/students in the perspective of personalisation (Baldacci, 2005), and in relation to the transversal elements of the disciplines from an interdisciplinary perspective.

In relation to the aforementioned illustration, the UDL model would guarantee every pupil/student/s the right to study, personality development, and formative and educational success. This is because it would allow, thanks to their active participation, a prevention and/or reduction of potential barriers, obstacles to fully guarantee the right to education. The focus on flexibility and diversity, in terms of personalisation and interdisciplinarity, has the potential to enhance the academic, behavioural and psychological outcomes of all pupils, students and learners, including those facing challenges. This approach is predicated on the premise that it will engender improved achievement, commitment, motivation, self-efficacy and self-esteem.

In this regard, school leaders and teachers bear the responsibility, through the Teachers' Board and the School Council, to design and implement an educational-didactic curriculum imbued with inclusive values in order to pay attention to the diversity of all individuals (Tomlinson, & McTighe, 2006).

In the context of the preceding discourse, it can be posited that there is a substantial corpus of research in the scientific literature pertaining to the implementation of UDL principles in educational practices and teacher training (Savia, 2018; Ghedin & Mazzocut, 2017; Montesano, Carchidi & Valenti, 2019).

In this regard, the exploratory survey is presented below, involving the pupils/teachers of two third-grade elementary school classes of an inclusive institute. This initiative constitutes the initial phase of a research-training course, R-F (Asquini, 2018), which is poised to engage educators in the process of revising the educational-didactic curriculum of the comprehensive institute.

The investigation considers the point of view of the main actors, such as the pupils, who are called upon to experiment/develop skills for the initiation and, subsequently, the consolidation to/of the study of anthropological disciplines. The objective is to provide a rationale for the significance of cultivating autonomy and co-responsibility in academic pursuits.

The initial segment of the R-F expedition prompts a reflection on the significance of "giving voice" to students, student voice (Grion & Dettori, 2015), emphasising the value of their reflections and considerations in the pursuit of co-constructing an

environment characterised by co-responsibility and co-participation among all constituents within the educational community.

3. Methodology

In view of the foregoing, an exploratory survey was conducted in a.s. 2024-2025, forming part of a phase of the research-training pathway, R-F, entitled *Curriculum in the Vertical*. The objective of this phase is the revision of an educational-didactic curriculum at a comprehensive institute.

The objective of this study is to provide a reflexive analysis of the alignment between the UDL principles and the curriculum, with a particular focus on the educational and didactic aspects of planning. The analysis will involve a critical evaluation of the suitability of certain activities in the curriculum for alignment with the UDL principles, leading to a consideration of the potential necessity for adjustments to the educational and didactic planning proposals relevant to these principles.

The survey employs a mixed-method approach (Trinchero & Robasto, 2019), which comprises two distinct phases. In the initial phase, pupils will be administered a *questionnaire*, while in the subsequent phase, teachers of two elementary school third grades will participate in *focus groups*.

In terms of the participation of pupils, the third grade elementary school classes were selected because at this stage of the school career they are engaged in initiating teaching-learning processes that have as their focus the initiation and consolidation of anthropological disciplines, such as history, geography, and science.

The objective of the exploratory survey is threefold: firstly, to ascertain whether pupils enjoy studying; secondly, to determine the functionality of the approaches (reading, reading and underlining, reading and summarising, reading and producing maps) that have been explained and used during the course of the year; and thirdly, to identify the most sustainable approach for acquiring and consolidating knowledge. The survey will also solicit feedback on how to improve the explication of these approaches, for example through the support of videos specially selected on some specific content.

The unit of analysis thus consists of two third-grade elementary school classes from a comprehensive school in the city of Rome. These classes represent the non-probabilistic reasoned-choice sample (Corbetta, 1999), and the total number of pupils is forty.

The selection of the two classes was informed by a number of common criteria, including: the initial distribution of learning strategies at the commencement of the academic year; a demonstrated interest in Universal Design for Learning (UDL)-related topics; prior involvement in initiatives that sought to implement UDL principles; the extent of engagement in promoting specific training activities focused on UDL.

The survey was conducted using a short semi-structured questionnaire, comprising both closed and open-ended questions. The study was inspired by the UDL Guidelines, referenced above, and the following questions were presented:

The question is posed as to whether the subject enjoys the process of studying.

1) *Do you like to study?*

<i>Yes</i>	<i>No</i>	<i>In Part</i>

If the answer is Yes or No or In Part explain Why?

2) *What study approaches were presented and explained by the teachers?*
(You can choose multiple answers.)

<i>Read</i>	<i>Read Emphasize</i>	<i>Read Summarize</i>	<i>Read realize Maps</i>

3) *What study approaches do you prefer?*
(You can choose multiple answers.)

<i>Read</i>	<i>Read Emphasize</i>	<i>Read Summarize</i>	<i>Read Making Maps</i>

For each answer explain Why?

4) *What are the ways through which you make explicit the approaches you have chosen?*
(You can choose multiple answers.)

<i>Underline with different colors</i>	<i>Use images within the maps</i>	<i>Deepen with specially selected videos from specific sites</i>

<i>Repeat alone</i>	<i>Repeat first alone and then with a partner</i>

For each answer explain Why?

As previously stated, the questions have been inspired by two fundamental principles. Firstly, the 1st Principle, specifically Guideline *a) Provide solutions to attract interest* and Verification Point 7.1 *Optimize individual choice and autonomy*; the 2nd Principle, specifically Guideline *c) Provide options for understanding* and Verification Points 3.2 *Highlighting patterns, features, main ideas, and relationships* and 3.3 *Guiding information processing, visualization, and management*; to the 3rd Principle, particularly at Guideline *a) Providing options for physical interaction* and at Verification Point 4.1 *Varying methods of responding and conducting* and 4.2 *Optimizing access to supporting tools and technologies*. At Guideline *b) Provide options for expression and communication* and at Verification Point 5.1 *Use multiple means for communication* and 5.2 *Use multiple tools for construction and composition*. Finally at Guideline *c) Provide options for executive functions* and Verification Point 6.1 *Guide the selection of appropriate goals* and 6.2 *Help plan and develop strategies*.

The selection of the aforementioned Principles and Guidelines, in conjunction with the Verification Points, is substantiated by the outcomes emanating from the pupils' responses, as elucidated in the subsequent paragraph.

In accordance with the first principle of the UDL, the objectives of the exploratory survey, and thus the questionnaire, were communicated to the pupil(s) with the intention of fostering comprehension regarding the significance of their feedback in relation to the course of study, which was initiated at the commencement of the school year. The rationale behind the communication was to emphasise the relevance and value of their participation in the questionnaire, thereby encouraging them to become co-participants and co-responsible in a reflective process concerning the entire design.

4. Main results

The exploratory survey proved to be of significant interest, as it illuminated the potential for personalising the teaching-learning processes of each pupil. Moreover, it highlighted the challenges that necessitate reflection, with the objective of revising and reorienting the planning of educational-didactic activities. This is undertaken with a view to self-evaluation of the activities presented.

In response to the first question, which inquired about the level of enjoyment derived from the act of studying, a significant proportion of the student body expressed a positive sentiment.

Specifically to question 1) *Do you enjoy studying?* a conspicuous number of pupils/children responded positively with respect to studying:

Yes	No	In Part
37		3

The pleasure toward initiation and, subsequently, consolidation to study is also confirmed by the 37 responses of the pupils following the question *If the answer is Yes or No or Partly explains Why.*

The following are some statements:

It gives me better opportunities for example because of the many new knowledge and insights from the ones I already know.

Studying allows me to improve my reasoning.

It frees my imagination and I can make so many connections.

I am eager to learn new things all the time because it allows me to increase my intelligence better.

When I study I feel free and think of the many possibilities I will have if I learn well.

Statements pertaining to the response, *In Part* and *Yes*, both in terms of its partiality and contextual nuances, have been identified. Two notable challenges have been delineated: the reconciliation of personal and familial obligations with the organisation of academic pursuits; and the acknowledgement of academic endeavours as being of paramount significance in the acquisition and consolidation of learning processes.

In reference to the initial challenge concerning the interplay between academic obligations and extracurricular commitments, moments of engagement with families (e.g., during interclass collegiate body meetings) have been optimised to address various facets of planning, including the distribution of homework assignments throughout the week, as opposed to the exclusive focus on weekend commitments.

In relation to the second issue concerning the significance of academic study, a greater proportion of the discussion was dedicated to engaging in discourse with individual families of pupils who exhibited uncertainties regarding commitment and motivation. The objective of these discussions was to explore and devise strategies that would most effectively encourage commitment and participation.

The responses attributed to question 2) *What are the study approaches that were presented and explained by the teachers?* highlight the recognition by all/pupils of the different approaches presented and implemented by the teachers.

Read	Read Emphasize	Read Summarize	Read Realize Maps
40	40	40	40

It is asserted in the Guideline Providing *Solutions to Attract Interest* that the teaching-learning process is to be substantiated by two significant actions. Firstly, there is to be the sharing of the objectives of the educational-didactic activity. Secondly, there is to be the presentation of different ways of approaching activity relationships.

With regard to the initial action, the disclosure of learning objectives and the purpose of the activities serves to mitigate the perceived "distance" in the teacher-pupil relationship, thereby facilitating an appreciation of the significance and value of the educational-didactic activities to be undertaken. Specifically, pupils can be involved in the articulation of the different phases of the same activities, in the choice of how to carry out the tasks and in reflection regarding the results achieved. This perspective is conducive to the establishment of a welcoming and inclusive classroom climate, within which all individuals are able to express themselves freely and perceive themselves as listened to and active participants in their teaching process.

In this sense, for the learning process to be meaningful, it is essential for the teacher to devote time to understanding the unique characteristics of each student in the class. This can be achieved by employing educational and didactic methodological

strategies focused on collaboration, such as cooperative learning (Johnson, Johnson, & Holubec, 2015), peer tutoring (Malaguti & Augenti, 2022), or innovative settings, such as the creation of work corners, relaxation corners, laboratory and play corners (Sandri & Marcarini, 2019).

The affective component is given further consideration in this study, as it plays a key role in teaching-learning processes. The affective component would be responsible for perceiving oneself involved in learning (Meyer, Rose & Gordon, 2014) and would be a significant element of motivation, self-esteem, self-efficacy and self-regulation.

With regard to the second action, as previously referenced, the presentation and implementation of differing modes of approach in relation to educational-didactic activities offers the opportunity to select the activities (e.g. essay, video, slides), the manner of performance (e.g. oral or written presentation), and the manner of sharing (e.g. individual, peer, or group) (CAST, 2018).

As posited by the aforementioned theorists, the notion of active protagonism in the learning process pertains to the cultivation of autonomy, self-awareness, and the discernment of one's intellectual, practical, and personal capabilities. This concept encompasses the acknowledgement of personal constraints and areas of proficiency, alongside a heightened consciousness of the progression of one's own endeavours from a self-assessment vantage point.

From this standpoint, the responsibility of the teacher is to facilitate the establishment of environments that are conducive to the cultivation of curiosity, the pursuit of experimentation in the acquisition of new knowledge, and the fostering of a perpetual desire to learn. Ultimately, the objective is to nurture critical and reflective thinking.

The answers attributed to question 3) *What study approaches do you prefer? (You can choose multiple answers.)* highlight a preference for reading and map production.

Read	Read Emphasize	Read Summarize	Read Making Maps
	32	28	40

The preference for making maps is also confirmed by the 40 responses of the pupils following the question *For each response explain Why.*

The following are some statements:

sometimes I underline and summarize (when mom tells me to) sometimes I make maps, I prefer maps because they allow me to make connections with other knowledge even from other disciplines

I prefer maps because it opens my imagination and I create my own routes

I choose maps because they allow me to better remember what I have learned before

I make maps because I highlight the most important information and remember it better

maps allow me to think about connections, first and next, cause and effect

As asserted by Pastor (2018) Not all students learn in the same way, nor is there a methodology that is applicable to all (p. 123). Indeed, as previously mentioned, students differ in their respective learning styles and modes of knowledge expression.

The Guideline *Providing Options for Understanding* encourages the reader to consider the significance of the various alternatives that would enable each pupil to select the educational-didactic activities most suited to their individual needs and circumstances, and the modalities best suited to their aptitudes.

As indicated by the respondents, the creation of geographical representations would facilitate the retrieval of prior knowledge, as well as the more efficient access to information, thereby enhancing comprehension and the internalisation of the curriculum. Furthermore, the integration of geographical representations within the context of daily life would render the curriculum more meaningful.

The answers attributed to question 4) *What are the ways through which you make explicit the approaches you have chosen? (You can choose more than one answer.)* put the importance of offering a choice of different modes of strategies and types of tools.

Underline with different colors	Use images within the maps	Deepen with specially selected videos from specific sites
40	40	40

Repeat alone	Repeat first alone and then with a partner
	40

The preference for making maps is also confirmed by the 40 responses of pupils for each option following the question *For each response explain Why?*

The following are some statements:

I learned to **use different colors based on the differences in the information**
images **make content colorful** and **help me remember links**
videos allow me to **remember information better and get more information**
In repeating together I feel **more confident**
My partner and I when we repeat **we self-correct together**
With my partner I feel **more comfortable repeating**
I like to help in repetition

In relation to the Guidelines *a) Providing options for physical interaction, b) Providing options for expression and communication, c) Providing options for executive functions*, it is important to pay attention to the way in which pupils express their knowledge by offering them the opportunity to express themselves through different communicative channels (e.g., writing, oral exposition, graphic representation).

This approach facilitates the solicitation of strategic networks that intervene in planning, management and execution processes in learning processes; guide self-regulation of behaviour; and act, in conjunction with recognition networks, in cognitive and emotional activity (Rose & Meyer, 2002).

Conclusions

In view of the aforementioned points, the joint construction of an educational-didactic curriculum oriented according to the Principles of Universal Design for Learning would contribute to the enhancement of human development by proposing concrete implementation guidelines to guide teachers' practice. These guidelines would then act as a catalyst for change within educational and training systems with a view to improvement and innovation.

The significance of the UDL framework is further emphasised by the policies of educational institutions outlined in Departmental Decree n. 479 (MIUR, 2018), which characterises the Guidelines as instrumental in plural instructional design, abundant in strategies for learning at its various stages.

The interpretation of the data, which emerged from the exploratory survey, shows that pupils like to study and experiment with different approaches to learning, with some specific approaches being preferred.

The opportunity to select from a range of alternatives is predicated on the capacity to articulate one's interests and aptitudes, engage in educational activities, and enhance skills, optimise resources, and respect individual paces and temporalities. The objective of promoting inclusive education that is characterised by values and meaningful elements, and enhancing the UDL framework, is potentially sustainable and requires the entire educational community to experiment with quality pathways, juxtaposed with research-action and research-training, within which the instances of the school community and those of the scientific community are contaminated.

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