

APPLIED TEACHING RESEARCH ON UDL AND AI: PERSONALIZATION, REFLECTIVE THINKING, AND INCLUSIVE STRATEGIES

RICERCA SULL'INSEGNAMENTO CON L'UDL E L'IA: PERSONALIZZAZIONE, PENSIERO RIFLESSIVO E STRATEGIE INCLUSIVE



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ABSTRACT

The article analyses a university-level teaching experience designed in alignment with the principles of Universal Design for Learning and incorporating the use of Artificial Intelligence. The data related to the perceptions of the participating students, collected through a self-administered questionnaire, show that the proposed activities created personalised and inclusive spaces for participation, reflection and the development of metacognitive awareness.

L'articolo analizza un percorso didattico universitario progettato in linea con i principi dell'Universal Design for Learning e che ha previsto anche l'uso dell'Intelligenza Artificiale. Dalle percezioni degli studenti che vi hanno partecipato e che sono state raccolte attraverso un questionario autocompilato, emerge che le attività proposte hanno creato spazi, personalizzati e inclusivi, per la partecipazione, la riflessione e lo sviluppo di consapevolezza metacognitiva.

KEYWORDS

Accessible learning environments, innovative teaching tools, equity in learning, teacher training, learning agency.

Ambienti di apprendimento accessibili, strumenti didattici innovativi, equità nell'apprendimento, formazione degli insegnanti, agency.

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Introduction

Accessibility is the fundamental driver of inclusion, particularly in education. It is difficult to imagine a future where the right to education is fully realized and genuinely supports learning for all, unless both the material and immaterial conditions are established (Baldacci, 2024). This aligns with a growing movement across Europe (EASNIE, 2022) aimed at ensuring that students encounter no obstacles in their learning journey. The challenge lies in identifying and removing barriers, especially cultural ones, that hinder everyone's participation (Booth & Ainscow, 2014). Additionally, it is crucial to implement varied resources and teaching methods, reflecting the diverse ways in which students learn and process knowledge. This approach should be embedded in inclusive learning environments that can meet the needs of everyone (Mangiatordi, 2017; Mitchell & Sutherland, 2022; Todino *et al.*, 2016).

1. Theoretical Framework

The principles of Universal Design for Learning - UDL (Meyer & Rose, 2014; Rose & Meyer, 2002) propose a framework that promotes multiple means of engagement, representation, action, and expression (CAST, 2024; Meyer & Rose, 2014). These constitute an effective and essential reference for defining curricula that become increasingly accessible and, as result, inclusive (Cottini, 2019). This approach aligns with CAST's profile of expert learners, which recognizes individual variability as a crucial element, in contrast to the "illusory criterion" of the average student (Meyer & Rose, 2014).

UDL theorists argue that it is the curricula that are "disabled", not the students (CAST, 2011). They advocate for an accessible educational design that is not merely a reactive adaptation to specific educational needs deemed "special". Instead, UDL emphasizes the creation of pathways that provide equal learning opportunities from the very beginning. As an inclusive framework for educational and teaching practices, UDL can adapt and transform as necessary. It is important to maintain focus on the learner, the "who" of learning, along with understanding the "why", "what", and "how" of the learning process. These aspects are foundational to the guiding principles of UDL, which have been developed by CAST (2011, 2024) based on neuroscientific evidence (Kandel *et al.*, 2000).

This framework, which supports the recognition, acceptance, and valorization of individual variability, brings clarity to the paradigm of full inclusion, despite opposition from some critics (Gordon-Gould & Hornby, 2023). It enables everyone, beyond differences and their differences, to coexist in shared spaces where we can learn together. These spaces foster an educational dialogue that thrives on interactions and mutual progress. A plural and flexible educational approach utilizes tools and resources with great inclusive potential, including essential technologies, which are necessary but sufficient for implementing educational pathways from a UDL perspective (Aiello *et al.*, 2014; Baldassarre & Sassanelli, 2021; Bray *et al.*, 2023; Mangiatordi, 2017; Musello, 2021; Pinnelli, 2015; Rose *et al.*, 2005). Overall, evidence from the literature on UDL supports this approach, showing a continuously growing trend in related research. The archive provided by CAST (2024) reflects this increasing interest. Recent publications reveal a diverse international landscape of contributions on the topic, including numerous systematic and scoping reviews as well as meta-analyses. These works explore the inclusive implications of adopting the UDL perspective in academic contexts and teacher training (Almeqdad *et al.*, 2023; Capodanno *et al.*, 2025; Cumming & Rose, 2021; de la Fuente-González, 2025; Dell'Anna *et al.*, 2024; Ewe & Galvin, 2023; Han & Lei, 2024; King-Sears *et al.*, 2023; Zhang *et al.*, 2024). This research also specifically addresses special education and students with disabilities (AlRawi & AlKahtani, 2022; Brandt & Szarkowski, 2023; Gundersun & Cumming, 2022; Reyes *et al.*, 2021). Common research themes have emerged, ranging from theoretical approaches that reflect on the principles underpinning UDL and the development of new models, to operational studies that investigate didactic implications in school and university contexts, as well as the effects on teacher training. In aggregate, these findings highlight a positive correlation between the implementation of the UDL approach in teaching and improved learning processes and student performance (Capp, 2017; Craig *et al.*, 2022). There is a call for further investigation into the effects of UDL application among younger students (Ewe & Galvin, 2023), while also noting that professional training aligned with UDL principles enhances teachers' ability to design more inclusive teaching pathways (Lee & Griffin, 2021; Morina *et al.*, 2025; Nin Piriz *et al.*, 2024; Rusconi & Squillaci, 2023; Savia, 2018). Emerging research lines focus on the integration of AI in teaching aligned with UDL principles (Lammert *et al.*, 2024; Saborío-Taylor & Rojas-Ramírez, 2024). This perspective goes beyond viewing technology merely as an assistive resource and recognizes its transformative potential in teaching and

learning processes (Agrusti, 2023; Panciroli & Rivoltella, 2023; Ranieri, 2024). This aligns with the guidelines set forth by UNESCO (Miao & Holmes, 2023). Encouraged by the positive data supporting inclusive teaching models, we have decided to translate the Guidelines 3.0 into the practice of a university course. This initiative aims to test their application in the field, envisioning inclusion not just as an ultimate goal – always aspirational nature – but as a means through which the community can work towards building a more equitable and just society (Santi, 2019). In such a society, democratic values are not only proclaimed but actively enacted (Manno & Cataldo, 2024).

2. Teaching proposal

Considering the information presented in the previous paragraph, an educational path was developed and implemented for future pre- and primary schools' teachers enrolled in a university course on Special Education. The program offered them the opportunity to choose between two different methods of assessing learning. In addition to a traditional final assessment, consisting of a single test at the end of the course, a “continuous learning mode” was proposed. This study focuses on that approach, which aims to support learning processes, ensuring maximum participation from all students. Secondly, to allow future teachers to explore firsthand the implications of using a teaching model based on accessibility. This model aims not only to facilitate the acquisition and consolidation of knowledge but also to enhance metacognitive awareness.

The activities designed for the continuous learning mode were created based on the guidelines of UDL 3.0. The aim was to create a learning environment that encourages comfort, engagement, and both cognitive and emotional activation. Additionally, each activity featured different combinations of input structuring and output flexibility, taking into account the degree of choices available to students regarding the following parameters:

1. content;
2. operative phases;
3. activatable resources;
4. output tools;
5. time management.

The structure established by the didactic planning, which represents the boundaries set for each activity aimed at achieving specific educational goals, was

designed with an inclusive approach in mind. This approach is generative in nature: even when flexibility is limited, individuals still have the opportunity to exercise agency. Agency, in this context, refers to the critical and conscious ability to navigate the processes of learning and knowledge construction.

An effort was made to enhance agency by incorporating a collaborative aspect into the activities. Except for one individual activity conducted in person, the other three activities were structured to encourage students to organize themselves into groups of ten to fifteen. They worked on these tasks both in the classroom and at home, submitting their completed documents in a designated virtual space. The path was undoubtedly pluralistic, characterized by various types of activities. However, it did not provide the option for students to choose which activities to engage in or skip. Within this framework, the group dynamic was intentionally designed to play a significant role. When an individual student might encounter difficulties with a specific activity, the support and guidance offered through collaboration with peers were expected to help enhance the learning process.

Personalization was implemented in an inclusive manner, focusing on building common pathways while still allowing for variability to appreciate individual differences. By fostering collaboration and enhancing interdependence – an element that the UDL 3.0 guidelines emphasize – efforts were made to put into practice a vision of inclusion as the result of a systematic process and collective action.

Below are the four proposed activities described in chronological order, while Fig.1 illustrates their placement concerning structuring and flexibility dimensions based on the listed parameters.

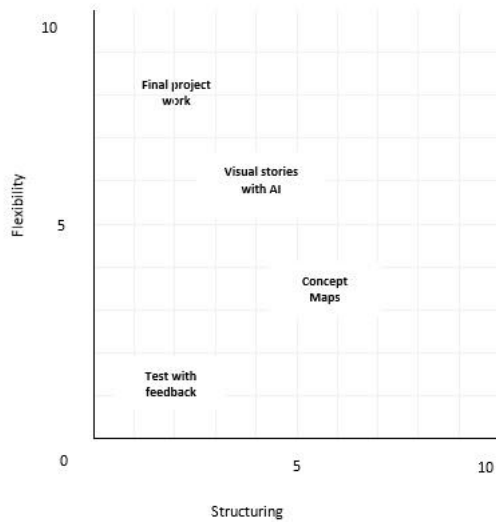


Fig. 1 Activity map by levels of structuring and flexibility

The *first activity* was divided into two group-based sub-tasks: *1.1. Studying and understanding using concept maps*, and *1.2. In the role of the “researcher”: the right questions*. In the first, students were required to identify the keywords from the chapters assigned by the teacher to build a concept map. They were to emphasize the connections and the references to the original text, while presenting the author's ideas in an original but coherent way. In the second, the students had to identify relevant issues within the chapters themselves and communicate them by highlighting problem areas in the form of multiple-choice test questions. Although students faced restrictions in selecting content and were limited in the type of output they could produce, they had the freedom to choose the resources they wanted to use, select applications, and determine the timescales for organizing their work, as long as they met the deadline for submission.

The *second activity*, which was also a group project titled *Creating Visual Stories about Autism with AI*, involved several steps for the students: a) identify significant concepts drawn from the program's text regarding the inclusion of students with autism in schools; b) associate a metaphor with these concepts by referencing a cultural product (such as a fable, novel, or film) and provide reasoning for the chosen metaphor; c) formulate a prompt to ask a generative AI to create an image that represents the chosen concept in light of the associated metaphor; d) document the dialogue with the AI, including any reformulations of the prompt

aimed at improving or modifying the generated images, and critically analyze the results; e) construct a visual story by connecting the obtained images; f) reflect on and comment on the overall process.

In this activity, students enjoyed a higher level of flexibility in selecting content and applications. However, they also faced stricter guidelines, as the sequence of phases was designed to be followed in a specific order due to their cumulative and preparatory nature, even though each phase could be repeated if needed.

The *third activity*, proposed near the end of the course, was the most structured and least flexible. It was the only one that required individual work. This activity involved a test consisting of 16 multiple-choice questions, which was corrected collectively immediately after completion. This approach provided useful feedback to help monitor progress and guide targeted analysis in preparation for the final group activity.

The *fourth activity*, called Final project work, was undertaken by the students at the end of the course. This project was characterized by minimal structure and maximum flexibility. The groups were encouraged to create a thoughtful and meaningful synthesis of the entire course journey, starting from specific topics (which could be presented through literary, audiovisual, or journalistic “pretexts”) around which they could organize the other themes they encountered. Importantly, this synthesis did not need to follow the chronological order in which the topics were addressed. The multimedia project was then presented and discussed by all the group members during the final exam.

The overall structure of the course aimed to provide various means of involvement, representation, action, and expression. In this regard, all the UDL 3.0 guidelines were taken into account as a whole. However, for each activity, at least two main considerations can be identified, as illustrated in *Fig. 2*.

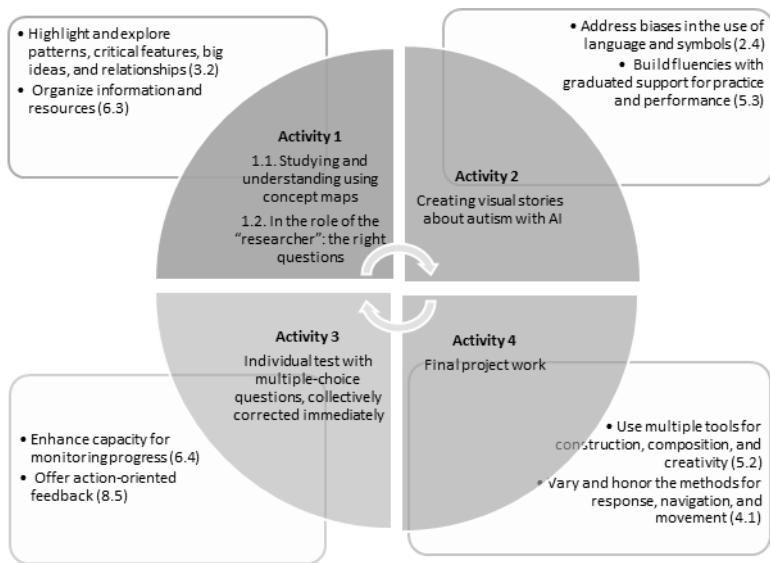


Fig. 2 Relationships between teaching activities and main considerations of the Guidelines 3.0

3. Method

To evaluate the results of the proposed training activity, a questionnaire was developed, which is divided into five sections as detailed in Tab.1. This questionnaire aims to explore the overall experiences of the students regarding continuous learning mode, with particular emphasis on the second activity involving AI. The self-administered questionnaire (Benvenuto, 2015; Trincherò, 2004) was completed anonymously by the students and consists of a total of 47 questions. Among these, 29 are closed questions that offer multiple-choice response options, including categorical variables and Likert scales. The remaining 18 questions are open and mostly optional, encouraging respondents to elaborate on or justify their preferences.

SECTION TITLE	ITEM TOPICS	ITEM N.	RESPONSE MODE
Section 1 – Personal Information	Age, gender, qualification.	3	Close
Section 2 – Using digital tools and applications in daily life	Knowledge, frequency, and method of use of a pre-formulated list of digital tools and digital applications, with reference to daily life.	2	Close
		1	Open, <i>optional</i>
Section 3 – Using digital tools and applications in school context	Knowledge, frequency, and method of use of a pre-formulated list of digital tools and digital applications, with reference to the school context.	8	Close
		5	Open, <i>optional</i>
Section 4 – The experience of the course with particular reference to the use of AI	Frequency and methods of use of AI in the previous university experience; impressions, perceptions, and suggestions related to the activity carried out with AI support; approaches followed in carrying out the path, methods of interaction with the chatbot; and development of metacognitive awareness processes.	12	Close
		9	Open, <i>optional</i>
		1	Open
Section 5 – Overall feedback on continuous learning mode	Opinions on the levels of motivation, participation, and engagement experienced; support and feedback interventions received; and sense of belonging to the group.	4	Close
		2	Open, <i>optional</i>

Tab 1. Structure of the self-administered questionnaire

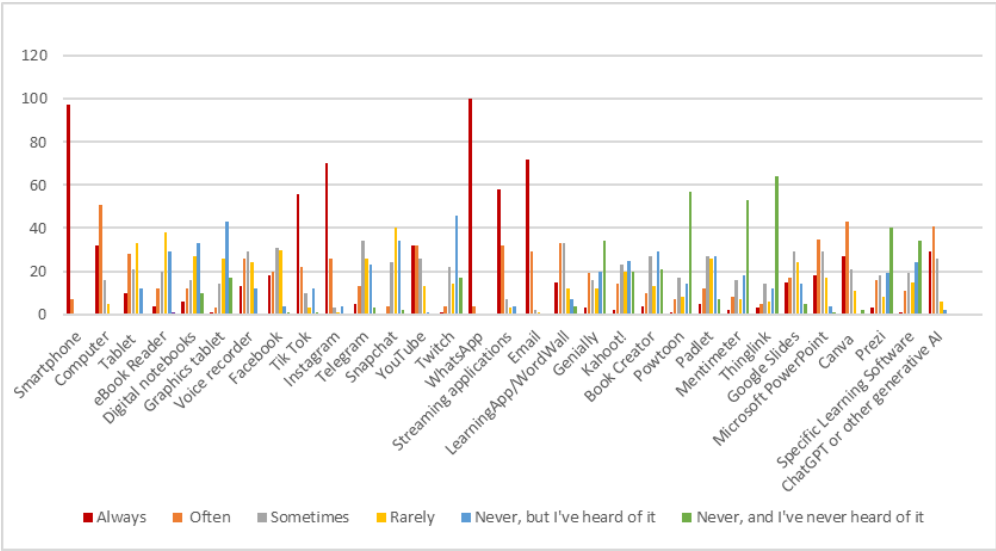
4. Results

A total of 104 were collected, representing 42.6% of the student population involved in the activity. Although this sample size is not statistically ideal, it yields a

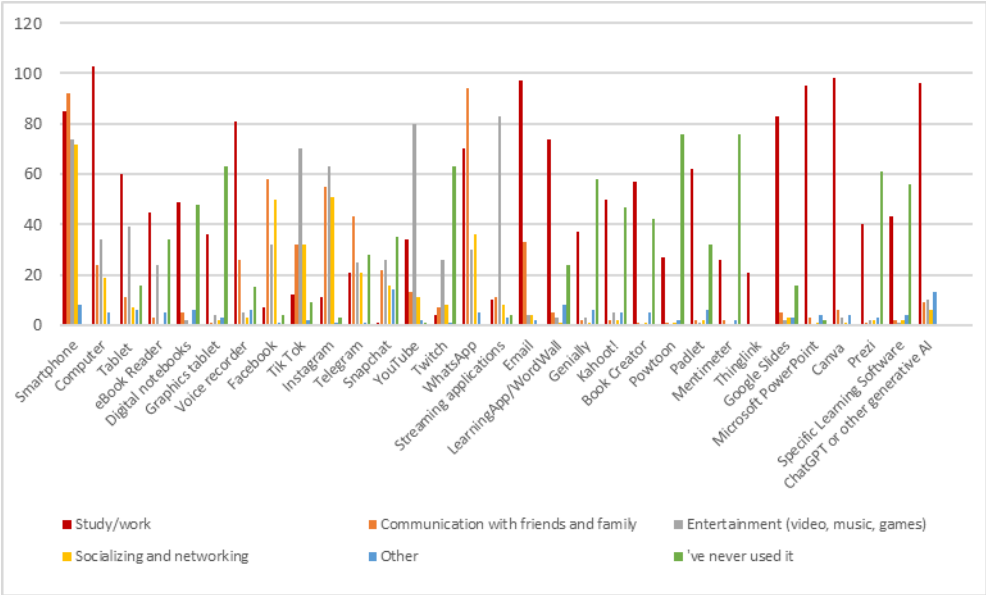
margin of error of $\pm 7.2\%$ with a 95% confidence level, providing good representativeness for the exploratory analysis intended for presentation.

The majority of respondents identify as female (96.2%) and are within the 23-25 age range (78.8%). They predominantly prefer smartphones and WhatsApp for digital devices, software, and applications (see *Graph. 1*). While slightly lower, significant numbers also indicate preferences for computers and apps like Instagram, TikTok, and streaming services. Notably, many respondents showed a lack of familiarity with apps such as Thinkling, Mentimeter, or Powtoon. However, all respondents reported being aware of generative artificial intelligence, with usage frequency categorized as “often” (39.4%), “always” (27.8%), or “sometimes” (25%).

The usage patterns of devices, software, and apps are generally tied to their specific functions. However, smartphones are an exception, exhibiting similar usage frequencies – ranging from 70% to 90% – across various activities such as studying or working, communicating with friends and family, entertainment, socialization, and networking (*Graph. 2*). In response to a related optional question, 21 respondents confirmed that, in addition to using their devices for leisure activities like listening to music, they found platforms such as TikTok, Youtube, and ChatGPT helpful for addressing questions and satisfying personal curiosities. They also mentioned using Telegram for sharing files without size limitations and Pinterest for generating ideas and inspiration for their creative projects.



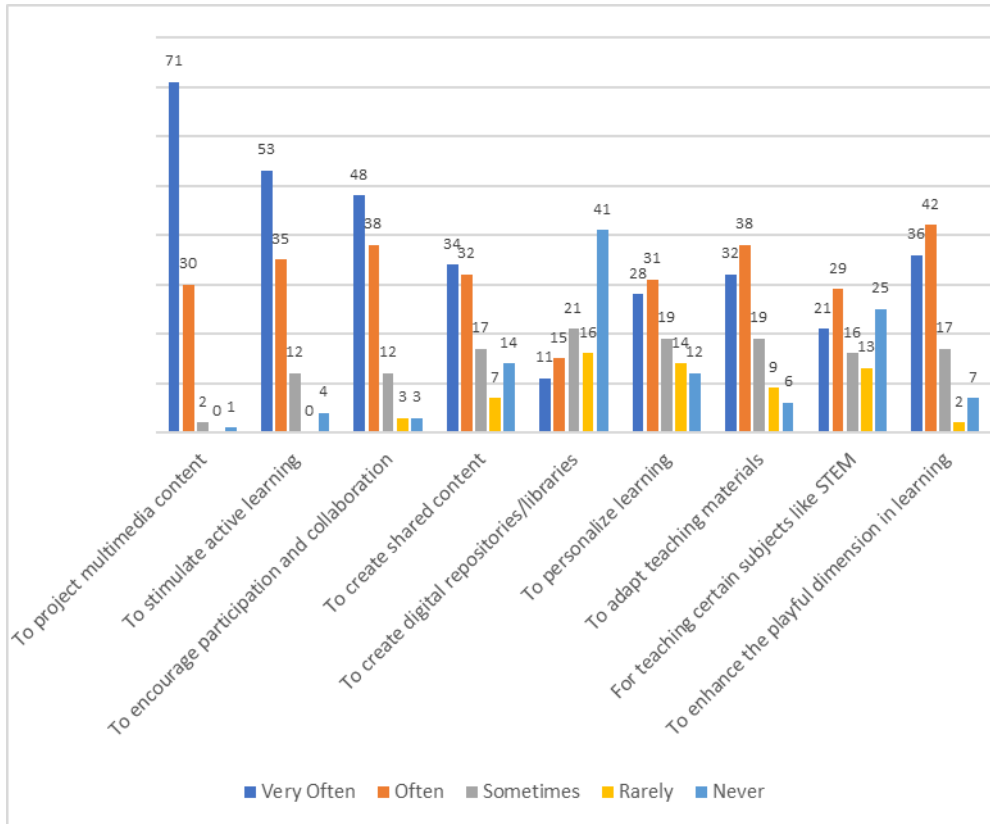
Graph 1. Frequency of use of digital devices, software and applications in daily life



Graph 2. Purposes of using digital devices, software, and applications in daily life

Based on the experiences from teaching internships in primary schools, and in some cases, from direct teaching experience (26%), primarily in the Campania region (77.8%), respondents reported that the IWB is frequently used for teaching purposes, along with computers and applications like YouTube and Canva. In

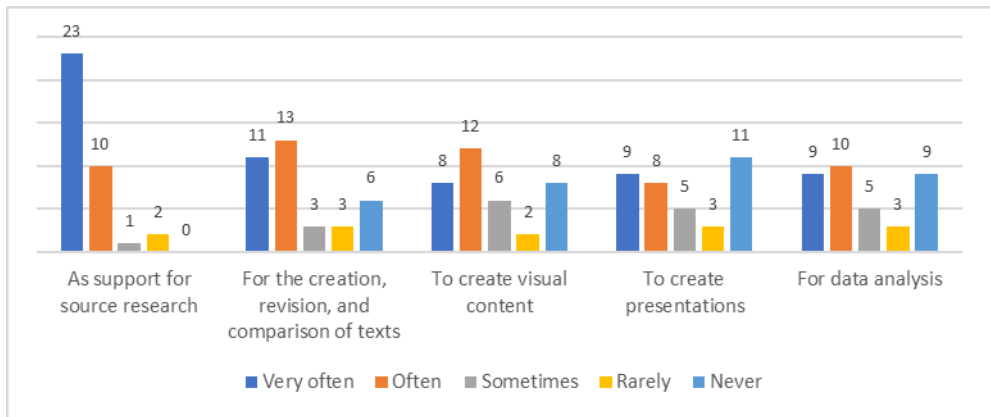
contrast, the use of 3D printers is almost nonexistent, and educational robotics tools are only present in very limited capacity. Further details on the most common applications are shown in *Graph 3*.



Graph 3. Purposes of using digital devices, software, and applications in the school context

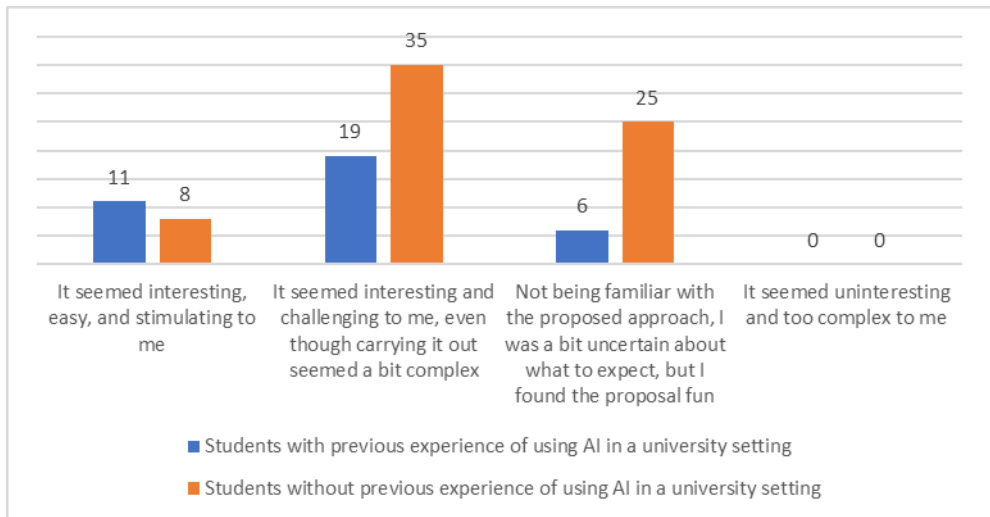
In examining the use of artificial intelligence in educational settings, it is found that over half of the respondents (50.9%) have never encountered AI in a school context. Additionally, 13.4% reported seeing it used “rarely”, 13.3% “sometimes”, while only a small fraction noted that AI was used “always” (4.81%) or “often” (15.3%). Similar trends, albeit at slightly lower rates, were observed regarding participants’ direct experiences with AI during their internships or teaching experiences.

In the university context, data from Section 4 show that before the course, only 36 students had previously used generative artificial intelligence for the purposes outlined in *Graph 4*.



Graph 4. Frequency and purpose of AI use in the university context

This prior experience appears to have helped reduce uncertainty when approaching an activity that was perceived as familiar. *Graph 5* illustrates how the second group activity – creating visual stories through AI-generated images – was received, with responses varying according to the students’ previous experience with AI.



Graph 5. First impression in relation to the second activity

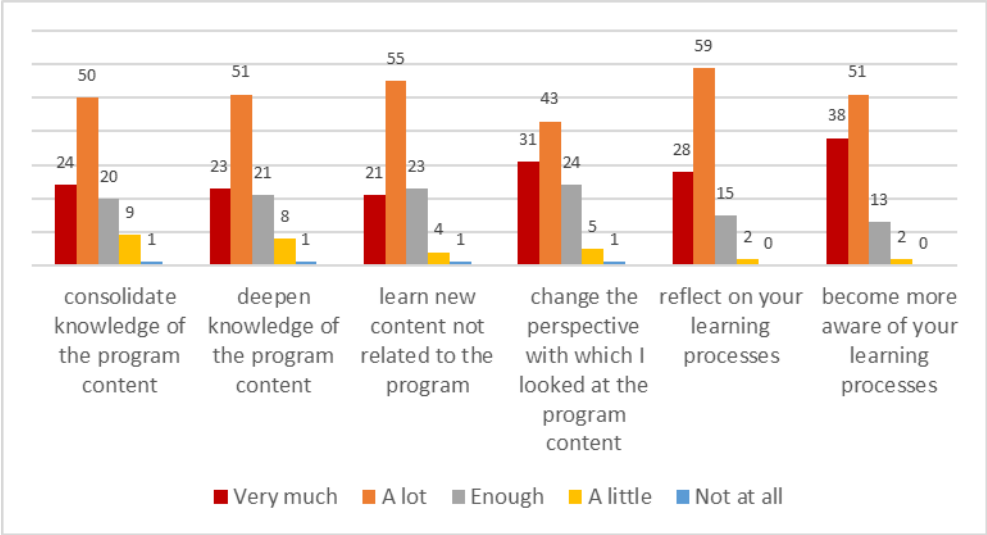
Of the 31 participants who commented on this final answer, 24 were from the group of 68 who stated that they had never used AI in a university setting before. Their comments highlighted initial fears but also revealed an unexpected discovery

of a tool that, particularly in an academic context, is still often regarded as taboo. Other feedback emphasized the creative aspect of the activity, which was an enjoyable experience. Participants noted the enhanced engagement and involvement due to the collaborative nature of the work, as well as the perceived support for deep learning of the content. Even the 7 comments from those who had previously experimented with AI in a university setting focused on the innovative aspect of interacting with AI and leveraging images to strengthen the learning of specific contents. When examining the questions designed to explore different aspects of the activity, the first notable finding was the frequency with which students modified their initial prompts. In 92.3% of cases, students made revisions to the original text, while 6.7% invited the AI to explain the reasoning behind the generated images. Only one participant rewrote their prompt completely. Additionally, 7.7% of students modified their prompts more than five times, and 1.9% did not make any changes at all. The majority revised their prompts three times (39.4%) or four times (16.3%). Participants reported that their objective was to make the images increasingly aligned with the key concept they wanted to express by refining the clarity and detail of the prompt. This effort aimed to reduce the likelihood of AI hallucinations and direct the technology toward producing the desired image.

Through this activity, 103 out of 104 students reported that they learned to write more effective prompts. 54 indicated they learned “*enough*”, while 49 stated they learned “*a lot*”. They recognized the importance of clear, precise, non-redundant, and contextualized phrasing to enable the AI to reach its full potential as a dialogic partner.

According to the students’ perception, the interaction with the AI had noticeably positive effects on the learning process. It not only helped consolidate and deepen the program content but also introduced new related concepts. Additionally, it fostered metacognitive awareness and encouraged critical thinking, prompting students to view the material from different and more personal perspectives.

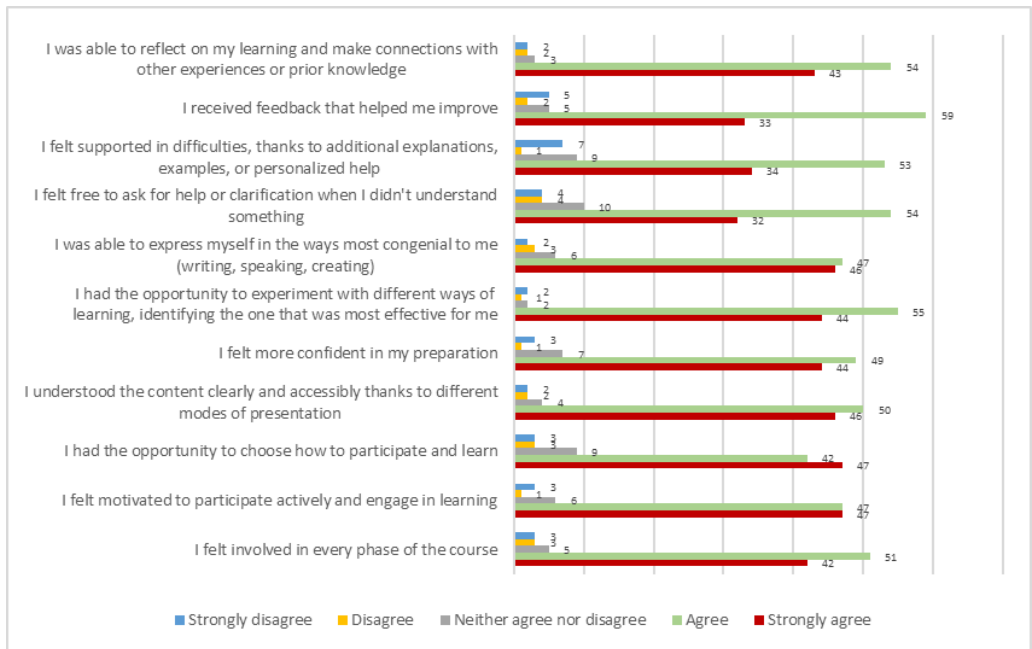
These findings, detailed in *Graph 6*, are further supported by student comments that elaborate on their responses. Many students expressed a strong awareness that generative AI can be a valuable tool, but only if the interaction is guided by a solid understanding of the content. This understanding can then be critically examined and enriched through the interaction.



Graph 6. Perception of the usefulness of ChatGpt in carrying out the activity

The overall feedback on the activity is quite positive, with students describing it as challenging (90.4%), demanding (71.2%), and fun (59.6%), while also acknowledging its complexity (35.6%). Notably, none found it boring, difficult, or unstimulating. Out of 104 students, 103 reported feeling better prepared to use AI in educational and training contexts. They gained familiarity and confidence with a tool that is still underutilized in formal learning environments. Looking toward their professional futures, 53.8% of students expressed support for integrating AI into teaching practices, seeing it as a potentially valuable resource. However, there are some dissenting voices expressing concerns about the potential overuse of AI, fearing an apocalyptic scenario where human involvement is replaced and human cognitive abilities diminish.

The data from the last section indicate that 34.6% of students felt they could better express their potential during this second assignment. While this figure is lower than the 39.4% who preferred the fourth assignment, it still reflects a significant impact. The first and the third activities received fewer preferences, with only 19.2% and 6.7% respectively. Nonetheless, the continuous learning mode aspect encouraged students to experience high levels of engagement, a sense of support for their efforts, motivation, perceptive and expressive flexibility, and a greater awareness of their learning processes, as illustrated in *Graph. 7*.



Graph 7. Evaluation of the experience lived through the continuous learning mode

The experience of group work was largely positive. A significant 68.3% of participants reported no obstacles and felt fully engaged. Among those who faced challenges, especially in larger groups or when working with people they had never met before, 18.3% were able to easily overcome these obstacles, while 10.6% managed to handle them without much difficulty. Even in the small percentage (2.9%) of cases where greater difficulties were reported, the challenges did not negatively affect active participation. In fact, only one participant stated they had been passively involved, merely listening to others. The majority, 76.9%, felt they had made a significant contribution throughout the work, while 22.1% recognized that they had participated actively but acknowledged that they could have done more at times.

5. Discussions

Although the data refer only to the students' perceptions of a teaching experience that was limited in time and lacked both initial and final assessment phases, they were collected from a sample still considered representative of the reference population. Therefore, in light of the results presented, we can reasonably state

that the objectives have been achieved. The continuous learning mode was evaluated very positively by the students, particularly with reference to the dimensions that are central to the UDL 3.0 guidelines (see, *Graph 7*): they felt deeply engaged in the learning process, supported in their commitment, free to express themselves in the ways they found most congenial and/or to explore new ones. This resulted not only from the different modes of action and expression offered but also from the positive interdependence that developed among group members. Although the group size was occasionally a challenge for some, the overall didactic structure – characterised by diversity, accessibility and flexibility – enabled students to address difficulties constructively creating space for metacognitive reflection and renewed confidence in their own abilities.

It was a positive learning experience that is consistent with the inclusive orientation of the pedagogical proposal (cfr. Ghedin, 2017) – inspired by the CAST motto *Until learning has no limits* – which aims precisely to extend the students' autonomy and agency spaces in order to make the learning process more meaningful.

Such inclusive didactic design must have among its resources the possibility of exploiting the potential of digital technologies, which, as highlighted above, makes it easier to give concrete form to the principles of UDL. In this sense, the everyday use of these tools by students, deeply integrated into personal, educational, and relational practices, may have contributed positively to the achievement of the objectives.

Artificial Intelligence deserves a distinct discussion: despite its long history and its silent diffusion in many everyday technologies, it represents a frontier still to be explored, but already capable of influencing the ways of learning and, therefore, of teaching. As in the case of the old so-called “new technologies”, it is not just a matter of incorporating additional tools, but of thoroughly rethinking the architecture of the entire educational system to enhance the languages and logics of the digital (Agrusti, 2023). It is the inclusive direction that requires overcoming a merely *additive* vision that tends to juxtapose *old* and *new*, *analog* and *digital*, *normal* and *special*, in favor of a *relational*, multiplicative vision that, moving beyond dichotomies, can support the process of systemic transformation (Manno, 2019).

With regard to the second activity of the continuous learning mode, the students' responses highlight how interacting with AI through the formulation and editing of prompts supported the progression of learning, fostering self-regulation and iterative improvement (see, *Graph 6*). This not only promoted the acquisition of

technical skills but also the development of critical thinking skills and metacognitive awareness, in line with the principles of AI literacy (Panciroli & Rivoltella, 2023; Ranieri *et al.*, 2024). Moreover, this experience of education on and with AI, which for many students was their first at university, was perceived as challenging, engaging, and capable of enhancing knowledge in an active and meaningful way. The comments collected in the open-ended questions testify to a heightened awareness of the use of AI, as well as a genuine interest in critical dialogue with the tool, which was not perceived as an extraneous or merely functional object, but rather as a resource capable of stimulating critical thinking, autonomy, awareness, and metacognition. In addition, many students reported that they found the interaction with the AI, “*divertente*” (= fun, amusing, enjoyable). The Italian word “*divertente*” is etymologically derived from the Latin word *divertĕre*, meaning “to turn aside”, which is the same root from which the verb “to divert” also comes, although the two words have evolved to carry different meanings in modern usage. In Italian, “*divertente*” refers to something that brings pleasure, even temporarily, by distracting one from something else, from something routine. From this perspective, the dimension of “*divertimento*” (=amusement, entertainment), that is the dimension in which something “*divertente*” is experienced, should not be underestimated. It has the potential to “liberate” learning processes from the pressure of mere performance, and thus make them more accessible, not least because they become more desirable. At the same time, the practice of “*divertimento*” can be seen as an exercise in inclusive thinking, a form of thinking that knows how to look beyond, to look differently, and to look creatively. However, there is still room for improvement in the distribution of activities within the limited timeframe of the teaching months. This includes considering the sequencing of activities based on the principles of propaedeuticity, progressively increasing levels of operational flexibility, and refining evaluation methods. In this experience, the activities were evaluated based on several factors, including the type of activity, the degree of alignment with the input provided, the scientific relevance of the proposed content, the depth of the material, the quality of the arguments presented, and the logical connections made throughout. Feedback was provided to support learning and promote continuous improvement. Additionally, the levels of satisfaction reported by students throughout the process may be considered indicators supporting the formative approach to evaluation that was adopted. Regarding the fourth activity, the final project work, which students reported as the one through which they felt they could best express their potential,

it can nevertheless be observed that the diversity of outputs in terms of type, along with the intra-group differences that emerged more clearly during the oral presentation (provided only for this activity), made evaluation particularly challenging. Going forward, it would be beneficial to more closely follow the recommendations provided by CAST (2020) for evaluation within a UDL framework, considering that (a) in contexts where flexibility increases, as was the case with the fourth activity, clarity of objectives must also increase to ensure that evaluations remain flexible; (b) specific tools should be designed to assess both student engagement and content knowledge.

Conclusions

Inclusive education should not be seen as a collection of extra-ordinary practices but rather as a direction for developing curricula that meet the needs of all students in a mainstream classroom setting. The need is to continue to pursue, with greater awareness, the principles of accessibility and flexibility as proposed by Universal Design for Learning (UDL). The success of inclusion hinges on embracing the diversity of learning paths, ensuring the cognitive and emotional well-being of students, and implementing flexible evaluation methods. Nowadays, the game is lost from the outset if we exclude from classroom – both school and university – the multiplicity of expressive channels, languages, and new modes of interaction enabled by digital technologies, and which now find new vitality in AI. This multiplicity needs to be embodied in every teaching practice that aims to make learning possible, without limits and beyond limits, through continuous reinvention. From this perspective, the teaching experience described here may have contributed not only to enhancing knowledge and skills in the field of special education but also to offering future teachers a theoretical and methodological framework centered on accessibility that – *this is the hope!* – will enable them to play a meaningful role in creating ever more inclusive schools.

Author contribution

Although the article is the result of a common reflection by the authors, the paragraphs are assigned as follow: Daniela Manno §2 and §5; Diana Cataldo Introduction, §1 and Conclusion; Aleandra Abbate and Marika Aracri §3 and §4.

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