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Differentiated Instruction – A Theoretical Essay

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Abstract: Discussing differentiated instruction at a theoretical level is relevant because it clarifies the principles that provide a conceptual basis for planning, implementing, and researching inclusive teaching practices. This article critically analyses the theoretical foundations, principles, and pedagogical implications of differentiated instruction, highlighting its role as a student-centred approach that addresses diverse learning needs through flexible methodologies. Theoretically, differentiation offers a coherent response to learner variance, rejecting a one-size-fits-all curriculum and instead assuming that classroom diversity is the norm. The model of differentiated instruction, which addresses diverse learning paces and styles in the classroom, combines “common sense pedagogy” with theories rooted in pedagogy, psychology, and human development. Differentiated instruction relies on a teaching approach that involves active teacher planning, focuses on each student's unique needs, and appreciates the diversity within the classroom. Differentiated instruction also refers to the methodologies and teaching strategies teachers use to tailor educational experiences to each student's needs. It is not a new concept! Diligent and attentive teachers have always recognised the diverse needs of their students, adjusting their teaching approaches to accommodate this diversity. However, two significant factors prompted us to write this article. First, implementing differentiated instruction in the classroom is challenging and time-consuming for teachers during the planning process. Second, with the proliferation of information available on teaching and learning, it becomes vital to re-examine the teaching approach of differentiated instruction. Our starting point is the socio-constructivist learning paradigm, in which differentiated instruction aims to improve students' learning by recognising them as the primary agents of their intellectual growth. Through one-to-

one tutorial sessions, small-group activities, lessons on specific content, collective projects, and other approaches, teachers can address the diverse levels of development among their students, recognising interests, strengths, and weaknesses, while also meeting curriculum objectives.

Keywords: Differentiated instruction, Teaching and learning, Assessment, Planning, Mediation.

Introduction

Differentiated instruction is a dynamic teaching approach that addresses the diverse needs of students by tailoring instructional methods, content, and assessment strategies to individual learning profiles, interests, and readiness levels (Langelaan, 2024). Central to this framework is the recognition that a one-size-fits-all instructional model cannot maximise learning outcomes for all students; instead, differentiation strives to create equitable opportunities for engagement and achievement by adapting classroom practices.

While differentiated instruction has gained widespread acceptance as a means of fostering inclusivity and responsiveness in education, its implementation is not without challenges (Gaitas & Martins, 2016). Critics argue that the complexity of planning and executing differentiated lessons can overwhelm teachers, especially in large or resource-limited classrooms (Lindner & Schwab, 2020). Additionally, there is ongoing debate about the efficacy of differentiation for improving student outcomes, with some research indicating positive effects on engagement and achievement, while other studies highlight inconsistencies in the quality and impact of classroom adaptations (Reiser, 2002; Su, 2012). Effective differentiation requires substantial teacher training, collaborative planning, and institutional support to address these challenges and ensure adaptation occurs with intentionality and purpose.

Differentiated instruction embodies the pursuit of educational equity by actively responding to student diversity (Ferreira, 2017). However, its success depends on careful design, teacher skill, and systematic support to realise its full potential in contemporary classrooms. Differentiated instruction remains essential in modern education to address the diverse needs and backgrounds of students, but recent research highlights several persistent gaps in its effective implementation (Sri Chitra & Khairul Azhar, 2025). Relevant articles on the theme continue to be valued due to ongoing challenges in practical adoption, professional development, and systemic support (Ferreira & Reis-Jorge, 2025; Dhakal, 2024). Differentiated instruction addresses crucial needs and remains a fertile area for research—especially regarding systemic barriers, teacher training, and scalable models that support diverse student success. The following sections will highlight the role of differentiated instruction as a student-centred approach that addresses diverse learning needs through flexible teaching and learning methodologies.

1 – Curriculum and differentiated instruction

Etymologically, the word 'curriculum' derives from the Latin term 'currere', which means path, journey, trajectory, or course to follow. Zabalza (1992) states that the curriculum is the set of initial assumptions, the goals to be achieved, and the steps taken to reach them; it is the collection of knowledge, skills, and attitudes considered important to be worked on annually in the school. Traditional definitions of curriculum focus on the intentionally designed educational activities that transmit knowledge, values, and attitudes. From this perspective, the curriculum can be understood as the list of subjects to be taught, including study plans, subject programmes, and the methodologies and strategies to be implemented (Su, 2012). Machado and Gonçalves (1991) note that the curriculum encompasses all educational activities planned by the school, whether these activities take place in the classroom, outside the school premises, or

in external activities such as conferences, theatrical performances, sporting events, study trips, group activities, and other events.

Roldão (1999) considers the curriculum as a set of socially recognised learnings that are regarded as essential, including scientific, pragmatic, humanist, civic, interpersonal, and other types. There is often discussion about the new role of the school and the teacher, highlighting the need to make curricula more flexible under the contexts in which they are applied (Ali et al., 2023). However, in practice, we still see the curriculum primarily as a programme that must be followed. It seems clear to us that applying a uniform approach to students with different developmental needs has only deepened social inequalities and contributed to the failure of the so-called “inclusive school” (Goyibova et al., 2025).

Nowadays, it is essential to take students' prior experiences, interests, and expectations into account in teaching. From this perspective, the concept of curriculum flexibility arises. Curriculum flexibility focuses on the application and adaptation of the curriculum to accommodate the diversity of students and the various situations encountered in the daily routines of an educational institution (Ferreira, 2017). The school's approach to diversity involves differentiated instruction, which cannot rely on segregation or false inclusion of students who learn more slowly than their peers (Fajariyah et al., 2023). Differentiated instruction is founded on adapting strategies, content, and assessments to suit each student's characteristics, without neglecting the national curriculum (Rodrigues, 2006).

The curriculum ought to be an open and adaptable process, built on shared national curricular foundations, while allowing schools the freedom to develop their own curricular projects tailored to their specific contexts (Ali et al., 2023). A school that does not differentiate its curriculum certainly does not adopt inclusive models and necessarily fails to activate equal opportunities among its students. Correia and Rodrigues (1999) state that the response to certain specific aspects of some Special Educational Needs (SEN) may require small cuts, additions, or changes to the curriculum, bearing in mind, however, that supplementary activities or support should be organised and managed in a way that does not impact the student's continuation in the regular curriculum. Thus, flexibility and curricular adaptation are, on the one hand, necessary tools to effectively and coherently accommodate the formal curriculum to the needs and particularities of each school and, on the other hand, the basis for structuring and organising the objectives/content and didactic guidelines of different curricular aspects, mainly for students with Specific Needs.

Referring to the implementation of practices of flexibility and curricular adaptation, we believe that there should be: 1. A positive attitude from the school towards diversifying and flexibility in the teaching-learning process, to meet students' differences; 2. Identification of SEN to underpin the prioritisation of resources and means favourable to their education; 3. Adoption of open curriculum and diversified curricular proposals, instead of a uniform curriculum; 4. Flexibility regarding the organisation and functioning of the school to accommodate the increasing diversity of students; 5. Inclusion of specialised teachers, therapists, and support services to assist the pedagogical process.

Only a planned curriculum, partly developed at school, that is flexible and open can be suitable for the current diversity of students (Brennan, 2021). We must consider the group of students, respect their origins and value their knowledge, cultures, and differences. At school, we should witness a reconstruction of the curriculum as a specific school project, where everyone (teachers, technicians, students, families, community, and local authorities) can, together and in an articulated manner, provide an effective response to all students, preparing them for an active and responsible life in society.

2 - Intentional teaching

Intentional teaching arises from the reflective process of observing, planning, acting, and evaluating. Intentional teaching is based on the principles of worldview, humanity, and knowledge intended to be developed within the school community (El-Amin, 2023). What kind of person do we want to shape? For what kind of world? What is the profile of the society and the educational community in which we operate? What are the major questions present in the daily life of this community? The answers to these questions help us clarify the skills, attitudes, and values that the educational process should facilitate. They also help us understand what, when, and how to teach.

2.1 From student knowledge to teaching planning

Effective differentiated instruction becomes a daily practice rooted in intentional teaching, thoughtful lesson planning, and a strong teacher-student relationship (Dhakal, 2024). This approach should be adopted by the entire school and go beyond just planning, considering the organisation of physical space, human and material resources, teaching methods, and assessment procedures. The nature of differentiated instruction varies across learning environments, influenced by the school and community setting, students, teachers, and curriculum. According to Dodge (2005), a practice of differentiated instruction always involves a closer look at the following factors: knowledge of students; understanding of the curriculum; supporting different learning pathways; sharing responsibility with students; and selecting a flexible, reflective pedagogical approach.

A teacher aiming to explore differentiated instruction must start by gathering information about their students. This understanding should extend beyond individual details to include how students function collectively as a learning community (Yengkopiong, 2023). It is important to intentionally create opportunities to learn about students' interests, preferences, learning styles, strengths, and weaknesses. It is also relevant to understand their previous educational journeys and the sociocultural context of the educational community. These factors greatly influence how students engage with each other, their approach to learning, and their school expectations (Heacox, 2002).

Intentional, timely, and tailored planning for all students transforms the teacher into an excellent 'instructor', capable of going beyond their practices and giving meaning to students' learning. This teacher needs to reflect on their practices, renew their methodologies and teaching strategies, and be unafraid of making mistakes (Ferreira, 2025). Gregory (2005) indicates that a teacher who intends for all their students to achieve academic success must try to answer the following questions: 1. What are the main notions/concepts of the curriculum? 2. What are the implications of these learning outcomes for the student's development? 3. What skills and processes are essential to achieve these outcomes? 4. What is the logical order/sequencing of teaching to attain these results? At which level/levels will students need support? 5. How do these outcomes relate to the students' different school experiences and previous life experiences? 6. What can motivate and facilitate students' engagement in tasks? 7. How can I help students build their processes of understanding, conceptual organisation, and skill development?

Answering these questions helps tailor teaching to the diversity of students, shaping the content and providing opportunities for differentiated learning at different paces. The teacher will be more accessible to tailor learning expectations for each student and to create learning moments individually, in small groups, or large groups with or without adult support. This differentiation strengthens and commits the teacher to routines of differentiated instruction, adding relevance to students' learning and participation (El-Amin, 2023; Yengkopiong, 2023).

2.2 Multiple pathways for learning, collaboration and responsibility

Differentiated instruction mainly relies on the teacher's knowledge of various teaching methodologies and strategies in the classroom (Ferreira, 2017). In this teaching approach, students must have varied and multiple opportunities to learn and demonstrate their learning. The activities proposed by the teacher should be sufficiently flexible to accommodate different levels of contribution, from the simplest to the most complex, and adapt to students' varying ability levels (Lawrence-Brown, 2004). This creates conditions for students to display different levels of knowledge and skills, providing tasks with varying complexity that engage and challenge all learners. Planning these tasks with varying levels of complexity not only aims to include all students in learning but also allows them to observe and collaborate with peers who have greater potential (Langelaan et al., 2024).

The learning pathway requires diverse moments and contexts. The teacher should create opportunities for individual, paired, small-group, and large-group work (Dodge, 2005). The contexts and organisational forms of these groups are an essential component of differentiated instruction. The organisation of these groups should evolve and be based on criteria such as students' interests, capacities, learning pace, and social preferences.

According to Gregory and Chapman (2002), teachers who align with this shared responsibility model tend to adopt the following strategies and attitudes: a) Planning activities by levels of increasing complexity, using the methodology called instruction by stages, so that all students can experience success; b) Organising the teaching and learning process based on students' interests and abilities to increase motivation; c) Creating opportunities for autonomous learning and decision-making behaviours by students; d) Supporting students in developing strategies to capture, memorise, and organise information; e) Promoting discussion times to organise ideas and thoughts and to develop clear communication; f) Creating frequent opportunities for students to set personal goals, reflect on their academic journey, and develop self-monitoring and self-assessment skills.

The nature of student involvement in this shared responsibility will depend on their age, level of development, and curriculum requirements. However, we believe that implementing this type of strategy in the classroom should be done gradually, as early as possible (Gaitas & Alves Martins, 2017). Putting this philosophy into practice requires a high level of intentional teaching and proactive planning, in which the teacher identifies, from the outset, diverse rhythms and different pathways for students to achieve objectives, rather than a single route that all students must fit into. It becomes essential for the teacher to plan with flexible thinking, always showing willingness to, if necessary, reorient the task, change the strategy, alter the timing and space of execution, etc.; if flexibility allows responding as much as possible to students' needs or the interests that emerge from the content explored.

2.3 Planning as a support for differentiated instruction

In a teaching approach of differentiated instruction, we must consider, beyond the elements of content, emphasising process and product, and understand how these elements intersect with contexts, experiences, skills, capacities, and learning expectations of students (Gay, 2010). The starting point will be the question that any teacher should ask at the beginning of their lesson: "What do I need to do so that all students achieve the expected results?" Through an effective planning process, the teacher will have the opportunity to reflect on their teaching and learning practices, applying their beliefs and attitudes regarding teaching and learning, and reflecting on their role as an instructor and co-creator of knowledge and experiences.

According to Ramsay and Shields-Ramsay (2006), planning for differentiated instruction can begin with answering the following questions: 1. What do you think about the individual and specific needs of

students? 2. What do you learn from your students? 3. What skills, interests, and attitudes do you observe in your students? 4. What are the sociocultural contexts in which the educational community is embedded? 5. What skills, concepts, values, and attitudes are reflected in the curriculum? 6. What are your competencies, interests, and attitudes as a teacher? How do they condition or facilitate your relationship with your students and the curriculum?

As decisions are made about the structure and organisation of the teaching process, we must consider how these decisions affect the overall effectiveness of teaching and learning, as well as the specific needs of each student (Langelaan et al., 2024). A relevant teaching and learning practice involves emphasising expectations, curriculum, and outcomes within a meaningful and purposeful learning environment. These environments are fostered when students have opportunities to develop a deep and individual understanding of the content, enabling them to apply this new knowledge to other contexts and to question and enhance their processes of critical reflection.

A planning process should also consider the different levels of difficulty presented by the curriculum; the materials and activities necessary to support various interests, attitudes, and skills; the levels of support needed at each stage to facilitate student learning; and different forms and criteria of assessment (Erickson, 2002). To respect each student's learning pace, time, space, and activity, there should be enough flexibility to suit different learning abilities (Dodge, 2005).

In a differentiated instruction model, the teacher's thinking should never stray from the concept of flexibility. The planning process must involve continuous assessment, reflection, and adaptation. It should be centred on the assumption that the pedagogical approach must be diverse and flexible for both teachers and students. The successful implementation of this model necessarily involves including a wide range of learning situations. The planning process is, therefore, cyclical and should consider key curriculum elements as subject to realignment and/or revisiting as the teaching and learning process unfolds (Gay, 2018).

2.4 Assessment and differentiated instruction

Formative and continuous assessment are fundamental tools in classrooms that emphasise differentiated instruction. Formative assessment in the planning process will help the teacher make more effective decisions regarding the specific needs of each student (Pozas et al, 2020). In this way, the alignment between the teacher's expectations, students' expectations, teaching strategies, and tasks becomes simpler, certainly enhancing a better fit between the triad Teacher – Curriculum – Student. This alignment will pedagogically adjust the various stages and learning experiences, enabling daily planning centred on the group's needs and interests, and on each student's needs and interests in particular.

Formative and continuous assessment will help to understand students' prior knowledge of essential learning (Suprayogi et al, 2017). What do they need to learn? How can the teacher support them in their learning? How are students responding to the teaching process the teacher uses? Answers to these questions will help the teacher determine whether the assessment tools are suitable for the group and whether they can be used as motivators to promote new learning (Blaz, 2008). The teacher should also involve students in these assessment processes, facilitating individual and group self-assessment processes and developing mechanisms for self-monitoring so that students can verify their academic progress (Tomlinson, 2005). Students can use this personalised information to reflect on their progress, better understand the learning process, set goals, outline plans, and make choices.

In an individualised assessment process, the teacher can include various elements to support students' learning. The teacher should use assessment mechanisms that focus on metacognition, encouraging students to reflect on their learning processes and preferences, and on how to transfer and

generalise knowledge and skills (Ferreira, 2017). Questioning by the teacher is central to most assessments, making it essential that the teacher be skilled at asking good questions. These questions should focus on topics where the teacher needs information to adjust pedagogical practices or on themes/content that require students to reflect. It is vital to give students time to respond to questions, as this time reflects the teacher's expectation that all students respond.

Assessment activities should be diverse, allowing students to demonstrate their learning through writing, demonstrating, constructing, or speaking. Within each of these four assessment modalities, there are various ways of expression and production. Implementing diverse assessment activities will give the teacher a more accurate view of each student's learning profile (Chapman & King, 2005). A teacher can go further in this assessment process by delegating some assessment mechanisms to students, thereby promoting motivation and students' responsibility for their learning. Providing feedback that is not only corrective but also informative is a valuable tool for supporting and guiding student development. To be most effective, this feedback should be given at the right time, indicate learning outcomes, be specific, and motivate the use of appropriate learning strategies that promote deep, meaningful study.

3 - Differentiated learning experiences

In the classroom, a single teaching method will never be able to encompass and be pedagogically effective for all students. Diversified teaching and learning pathways are necessary for everyone to achieve the objectives (Heacox, 2002). Developing differentiated learning experiences requires the teacher to be proactive in ensuring that all students, without exception, are involved in meaningful and distinctive contexts and activities. In a flexible classroom, the teacher's role should focus on designing and selecting learning opportunities for students, guiding them and working with them to assess their academic progress. Students' role should be to value not only factual and declarative knowledge but also processes of autonomy, motivation, and confidence.

3.1 Meaningful activities – Implementation and best practices

We can characterise meaningful learning activities as all activities tailored to the learning potential of the group of students, relating to relevant, authentic, engaging life experiences, and suitable for all students. Meaningful activities are conceptually designed from a perspective that involves a shared understanding between the student and pedagogical practice (Ferreira, 2017). Activities should actively and continuously involve students in processes of exploration, questioning, application, and reflection on content and skills. These activities may include opportunities to: identify similarities and differences; summarise and take notes; use and construct visual representations; generate and test hypotheses; utilise data, questions, and organisers of information to make sense of learning (Strickland, 2009).

The decisions made by the teacher regarding the organisation and implementation of activities meaningful to students should be based on the perspective that the tasks to be implemented are tailored to the group and to each student. As this is not an easy task, Kingore (2005) highlights some strategies that can facilitate this process of individualisation: a) Explicitly discuss the objective and importance of the activity with students; b) Provide clear information about what is expected from the activity and give precise instructions for its completion, reducing uncertainties, surprises, and dissatisfaction; c) Challenge all students to work motivated, regardless of their potential; d) Use previously gathered information about students to tailor the activity and resources to their interests, prior experiences, and preferences; e) Anticipate challenges and difficulties that are likely to occur during the activity and be prepared to provide the necessary support to overcome difficulties; f) Share and/or develop assessment tools with students (criteria, rules, examples) to clarify expectations; g) Provide the necessary resources for students to carry out the activity, making them accessible, engaging, and understandable; h) Plan for effective teaching to

create a moment of confidence and energy centred on learning; i) Evaluate and improve the activity to maximise learning.

The best practices are, in most cases, associated with meaningful learning activities. In our view, learning activities centred on a conception of differentiated instruction should include a diverse range of materials and means. For example, when sharing ideas and information with students, visual information, personal narratives, objects, music, and poetry can be utilised. Providing students with multiple sources of information for their projects and activities will allow teaching to be adapted to different approaches to learning and various cognitive skills.

Ferreira (2017) present an inventory of basic formalities for implementing meaningful learning activities in a classroom context: a) Encourage students to reflect on and monitor their academic progress; b) Create opportunities for students to apply acquired knowledge in non-school contexts; c) Create individual, small group, and large group (class) learning tasks so that students can solve problems like those faced by professionals in their workplaces; d) Offer activities with different levels of complexity, so that all students can fit into one of the activity's achievement levels; e) Present different ways of organising information and proposing future activities (charts, tables, diagrams, etc.); f) Provide support for memorising and synthesising information, such as guidelines for writing summaries, organising study, and managing time; g) Identify thematic opportunities within the curriculum so that each academic year, all students take on the role of "expert", to increase self-confidence and promote the concept of a learning community; h) Regularly invite other professionals to discuss topics and share knowledge, so that knowledge is shared and meaningful.

Implementing these items creates new opportunities for learning and human development, supporting students to expand their knowledge and develop skills tailored to their needs, interests, and preferences. It also promotes positive peer relationships and a stable, meaningful educational environment.

3.2 Scaffolding learning – elements and strategies

Learning always progresses from the known to the new. Meaningful teaching recognises this direction and creates opportunities for differentiated learning along this path, that is, with varying levels of complexity and achievement. These levels are the engagement the teacher creates, the pedagogical support, the processes, and the language that guide the student in approaching and completing the task, developing the skills necessary to accomplish it. The elements of scaffolding learning recognise that students need: to learn in diverse contexts; to be involved in concrete, challenging activities appropriate to their development; to construct meanings based on previous learning experiences and knowledge; and to be supported in learning what they cannot achieve alone (Reiser, 2002). This kind of learning support stems from what Vygotsky (1986) called the zone of proximal development, the learning area between what students can do on their own and what they can achieve with the help of an adult or a peer.

Effective scaffolding learning strategies encourage students to increase their knowledge and develop their skills to a level slightly above their current achievement (Taber, 2018). The process of scaffolding learning then becomes continuous and cyclical. As levels with varying degrees of complexity emerge, students are motivated to continue attaining new knowledge. Implementing this learning model emphasises students' ability to recognise, process, and utilise the information they collect. It also involves providing options for individual and group learning and creating opportunities to develop skills relevant to completing tasks. Furthermore, it includes building multiple chances and choices for students to use, process, and apply the information they are working with.

The range of proposed activities should reflect tasks in which students can learn with the support of adults, peers, and the environment / pedagogical involvement. Instruction across levels beyond individual interactions is currently understood as a process of instructional interaction that involves learning and the development of new skills and includes objects, materials, and the environment where learning takes place (Strickland, 2009). These tools can also include technology and peer interaction, enabling more complex and enriching learning environments. It is common to organise and carry out tasks in large groups, facilitating peer interaction and self-monitoring of activities, thereby promoting autonomy and independence.

This teaching and learning approach is based on the perspective that the level and intensity of interaction between teacher and student continually change to adapt to the ongoing changes in students' learning needs. Planning across multiple levels, as a principle, considers the existence of various levels of understanding, interests, and learning preferences within a classroom, and incorporates key elements of continuous assessment while highlighting diverse levels of support (Lindner & Schwab, 2020).

Best teaching practices propose sharing learning objectives to motivate students. This sharing should be carried out between teachers and students. Students should look beyond the instructions provided by the teacher regarding the task, enabling them within the group to develop varied levels of support and facilitating the organisation of small student groups where discussion and discovery are prioritised, thereby fostering a genuine learning community (Kagan, 1994).

The teacher should recognise and consider students' diverse cultural backgrounds and prior learning experiences, creating structured opportunities to link previous knowledge with new learning. (Brennan, 2021). Equally valued in this model is the opportunity for students to develop decision-making skills and leadership competencies in various situations. Often, the teacher must resort to activities such as visualisation, role-play, analogies and comparisons, graphic organisers, etc., to make explicit the processes and content they wish to develop.

3.3 Mediation and differentiated instruction

Mediation is based on a relationship where the teacher (mediator) interacts with the student (mediated individual) to select, modify, expand, or interpret stimuli, using strategies focused on verbal mediation to create meaning beyond the immediate needs of the situation (Flavian, 2019). In mediation, the teacher's goal is not only to facilitate experience and learning through a particular situation but also to create conditions in which the student actively engages with the proposed tasks, thereby valuing the process and developing their cognitive structures. We recognise that the teacher should equip the student with tools to help understand the world, establishing conditions that transform the student's declarative, procedural, and metacognitive knowledge, as well as their affective-relational domain (Ferreira, 2017).

A teaching-learning process with insufficient teacher mediation often leads students to perceive information in a scattered, fragmented manner, risking poor integration. Weak mediation tends to restrict the cognitive development of children and young people, resulting in unsystematic, episodic cognitive behaviours rather than well-developed, precise, and well-adjusted ones. If interaction between parents and children in the family environment, or between teachers and students in schools, lacks mediation, children and young people tend to become more disorganised, impulsive, and less reflective, that is, less adapted to situations, less suited to their contexts, and less prepared for future learning (Flavian, 2019). Inadequate mediation leads to cognitive impairments that disrupt the acquisition of school knowledge, resulting in learning difficulties, a lack of motivation, behavioural issues, and more (Fonseca, 2001). Common cognitive dysfunctions in childhood and adolescence include: attention deficits; memory problems; impulsive and unsystematic exploratory behaviour; use of inappropriate verbal tools; difficulty in distinguishing the

relevance of available information; trouble in deducing and connecting data; responses based on trial and error; and difficulty in projecting virtual relationships (Fonseca, 2001).

Through mediation, new processes of shared attention, novel memorisation techniques, differentiated strategies for processing information and solving problems, and enhanced symbolic and conceptual capacities develop. These mediations, carried out by older and more experienced individuals, help children and young people realise that events, objects, and people carry meanings beyond themselves, that the surrounding world has a structured nature, and understanding this structure allows for better knowledge of what to do in future situations, fostering the capacity for anticipation and predictability (Ferreira, 2017).

Developing cognitive and metacognitive skills involves promoting structured activities that organise mental operations, including: identifying, comparing, relating, representing, applying, encoding, reporting, searching, collecting, completing, classifying, creating, observing, analysing, synthesising, inferring, selecting, discriminating, transferring, evaluating, becoming aware, and naming. In this pedagogical relationship, the teacher helps the student create conditions or explanatory models of their experiences, facilitating the systematisation of observations, hypothesis testing, and application of rules across diverse circumstances. Through intentional and supportive interaction, the teacher provides the student with cognitive tools (both non-verbal and verbal, symbolic and non-symbolic) that enable them to understand their experiences and realities more accurately and meaningfully (Vygotsky, 1978).

The mechanisms of mediated pedagogy are particularly valuable in helping students acquire essential cognitive processes. The most commonly utilised by teachers include: 1. questioning processes; 2. knowledge transfer processes; 3. generalisation processes; 4. provoking or requesting justifications; 5. emphasising the order and sequence of actions; 6. promoting the predictability of actions; 7. facilitating organisation and systematisation of information; 8. employing cognitive strategies that enhance attention, memory, and problem-solving skills (Fonseca, 2001; Sternberg, 2002).

Interpersonal relationships, assertive behaviour, cognitive processes inherent to learning, motivation, task completion, independent work, persistence, intrinsic reinforcement in tasks, etc., are essential processes of human development and cannot be overlooked in the classroom (Vagos & Pereira, 2016). Mediated learning experiences thus serve as facilitators of differentiated instruction, emphasising students' educational needs, valuing individual learning processes, and structuring thought. This relationship between mediation and differentiated instruction enhances learning capacity, promotes the systematic use of reflective and introspective reasoning, and fosters work habits and autonomy (Ferreira, 2017).

The daily life of the school and the class provides a multitude of opportunities that teachers can utilise to develop many of the ideas mentioned above: conflicts among students, divergent interests between students and teachers, decision-making with repercussions at the class level, legitimacy of school rules, evaluation standards, etc.; the aim is to develop social interaction skills, cooperation, and cognitive-verbal facilitation: knowing how to listen, waiting for one's turn, paraphrasing, knowing how to argue, etc. The experiences each student undergoes are analysed (such as feelings of achievement, competence, and affectivity), fostering awareness of the problems and difficulties faced, exploring solutions, and recognising both positive and negative behavioural aspects. The process emphasises divergent thinking, cognitive dissonance, logical reasoning, and inferential thinking.

Learning should be shared and co-constructed, active and dynamic, discussed and responsible, global and solidaristic; that is, a dynamic process involving all our senses and affections, a creative construction of meanings and concepts, valuing an active student and an engaged teacher (Ferreira, 2017; Gay, 2018; Langelaan et al., 2024). Differentiated instruction practices and mediated learning experiences encompass

common values: a classroom where teaching and learning situations are differentiated, where all students work consistently with suitable and challenging proposals and activities, and a space where students and teachers collaborate within the learning process.

Conclusions

Currently, it is impossible to ignore the diversity of the school population, which results in different interests, experiences, backgrounds, and cognitive styles, among others, that intersect within school contexts and should be addressed through individualised interventions and appropriate educational support (El-Amin, 2023; Brennan, 2021). Today's schools face significant social and cultural heterogeneity. This reality requires a different conception of school organisation that goes beyond uniformity and recognises difference, thus considering diversity as an enriching aspect of the community itself.

Inclusion is closely connected to the ideas of educational diversity and differentiated instruction. As a principle of positive discrimination, it ensures that all students have equal access to education and learning. Inclusion, as a school-centred process, emphasises the need to restructure the curriculum to meet the needs of all children and young people (Gaitas & Alves Martins, 2017). This idea is rooted in the pedagogical concept that everyone has a right to education and that their history and characteristics entitle them to achieve educational success.

Implementing differentiated instruction in the classroom involves reorganising activities and interactions so that each student encounters enriching pedagogical situations, taking into account their characteristics and needs (Ferreira & Reis-Jorge, 2025). It includes planning and acting with a diverse group of people with varying rhythms and learning styles. It is about learning within and with the group in a truly cooperative, responsible, and accountable learning process.

A summary of this theoretical essay must emphasise: Flexible grouping and the use of varied materials support targeted instruction, increasing engagement and improving outcomes across a spectrum of learners (Reis & Renzulli, 2018). Deliberate adaptations—such as modifying task complexity, pace, and instructional approach are crucial and must be informed by ongoing formative assessment and knowledge of student readiness, interests, and learning profiles (Brennan, 2021). Teacher training and system-wide support are vital for implementing differentiation beyond individual or classroom-level practices, fostering inclusion and reducing achievement gaps (Ferreira, 2022). Differentiation benefits all learners: students with disabilities report improved outcomes and engagement, while gifted students are better challenged and encouraged to pursue advanced learning (Bannister, 2016).

Differentiated instruction is a teacher's daily challenge, a path with no return; once embedded in our minds, it will never abandon us... Our journey as teachers becomes pedagogically meaningful, where each student is the epicentre of our intellectual and emotional action... Because teaching must be flexible and dynamic, and the school should be a generator of learning rather than a repetition of words.

Suggestions for future research

Empirical research on differentiated instruction has demonstrated its positive effects on diverse student groups, although challenges persist in implementing and sustaining it over the long term across various settings. Effective research methods include controlled studies, mixed-methods approaches, and focused analysis of teacher training and pedagogical tools such as scaffolding and formative assessment.

Cross-context investigations reveal that differentiated instruction is operationalised differently across educational settings and subject areas. Comparative research is needed to identify the most effective adaptation strategies and address inclusion in varied environments (Jufrianto et al., 2025).

Empirical research consistently identifies teacher training as a factor influencing the successful implementation of differentiated instruction. Adequate training is strongly linked to improved differentiation skills; however, studies frequently reveal a gap between theoretical understanding and classroom practice (Ferreira et al., 2024). Mixed-methods studies that combine surveys and classroom observations are especially effective in uncovering discrepancies between teacher perceptions and actual implementation, and research should recognise the value of these approaches.

Intentional support tailored to student readiness and formative assessment is empirically validated for fostering grade-level readiness and personalising learning experiences (Chapman & King, 2005; Taber, 2018). These mechanisms enable teachers to adjust learning pathways and environments, thereby supporting a range of student abilities and emotional needs. Research that includes focused analyses of mechanisms such as scaffolding and formative assessment can add value in assessing the implementation and impact of differentiated instruction.

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