

**Differentiated Instruction in Ecuadorian Higher Education: Adapting English Language Teaching to Learning Styles and Academic Majors.****Instrucción Diferenciada en la Educación Superior Ecuatoriana: Adaptación de la Enseñanza del Inglés a los Estilos de Aprendizaje y las Carreras Académicas.**

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**Resumen**

Este estudio analiza la implementación de la instrucción diferenciada (ID) como una estrategia pedagógica clave para responder a la diversidad del estudiantado en la educación superior ecuatoriana, particularmente en la enseñanza del inglés como lengua extranjera (EFL). Basada en la pedagogía constructivista, el Diseño Universal para el Aprendizaje (DUA) y las teorías de las inteligencias múltiples y los estilos de aprendizaje, la ID se presenta como un enfoque que permite adaptar el contenido, el proceso, el producto y el entorno de aprendizaje a las necesidades individuales del alumnado. El análisis se enmarca en las exigencias normativas del Reglamento de Régimen Académico, que establece como requisito alcanzar el nivel B1 en una lengua extranjera antes de completar el 60 % de una carrera universitaria. El estudio examina la aplicación práctica de la ID en la enseñanza del inglés en niveles A1–A2 dentro de un contexto universitario multilingüe y multidisciplinario. A partir de datos de aula y literatura especializada, se presentan diseños de lecciones adaptadas a los estilos de aprendizaje y carreras académicas de estudiantes de Medicina, Odontología, Enfermería, Derecho, Ingeniería y Arquitectura, usando el modelo VARK. Las actividades se alinean con los descriptores del MCER y el enfoque de Enseñanza Basada en Tareas (TBLT). Los resultados evidencian mejoras en la participación estudiantil, la competencia lingüística y la identidad académica. El artículo recomienda incorporar la ID en el diseño curricular, la formación docente y la política educativa, destacando también el valor de plataformas con IA para apoyar el aprendizaje personalizado.

**Palabras clave:** instrucción diferenciada; educación superior; Ecuador; inglés como lengua extranjera (EFL); estilos de aprendizaje; MCER; modelo VARK; pedagogía inclusiva.

**Abstract**

This paper explores the theoretical foundations, practical applications, and pedagogical implications of differentiated instruction (DI) within Ecuadorian higher education, with a specific focus on English as a Foreign Language (EFL) instruction. Amidst recent national reforms and rising expectations for student-centered pedagogy, Ecuadorian universities are challenged to address learner diversity while meeting standardized language proficiency benchmarks, such as the B1 certification mandated by the Reglamento de Régimen Académico. Drawing on established frameworks—including Bloom's Taxonomy, Gardner's Theory of Multiple Intelligences, and the VARK learning model—this study examines how DI can be used to align language teaching with students' cognitive profiles, academic majors, and readiness levels. Through a review of current literature and case-based analysis, the paper presents practical strategies for differentiating content, process, product, and learning environments in EFL courses. A classroom study involving A1–A2 learners from six academic fields (Medicine, Dentistry, Nursing, Engineering, Law, and Architecture) illustrates how differentiation by learning style and academic discipline enhances language acquisition, motivation, and engagement. Sample lesson designs demonstrate the integration of CEFR descriptors and Task-Based Language Teaching (TBLT) with DI practices. The paper concludes by advocating for teacher training in inclusive methodologies and the adoption of AI-assisted learning tools to support differentiated instruction in multilingual, multidisciplinary settings.

**Keywords:** differentiated instruction; higher education; Ecuador; EFL; learning styles; CEFR; VARK model; inclusive pedagogy.

## Introduction

In recent years, Ecuador's educational landscape has experienced profound transformations driven by national policy reforms, global competency frameworks, and a growing emphasis on inclusive pedagogy. These changes have heightened expectations for educators, who are now required not only to demonstrate subject-matter expertise, but also to respond effectively to the increasingly diverse needs of students across disciplines (Norman, 2020; Tomlinson & Moon, 2013). The push toward more equitable and student-centered instruction has made differentiated instruction a key pedagogical framework for addressing individual differences in learning readiness, interests, and cognitive profiles.

Differentiated instruction (DI) is grounded in the principle that educational equity requires teachers to adapt curriculum, instructional strategies, and assessment in response to learner variability (Pozas et al., 2021). As defined by Tomlinson and Moon (2013), DI is the deliberate design of varied approaches to teaching and learning in order to meet students at their level of readiness and challenge them to grow. Heacox (2012) echoes this idea, describing DI as a structured yet flexible response to students' interests, learning preferences, and abilities. More recently, Patel and Kim (2024) emphasized the relevance of DI in higher education, particularly in classrooms with students from mixed academic backgrounds, noting that differentiation promotes inclusion, engagement, and retention.

This paper aims to offer a comprehensive overview of differentiated instruction as both a theoretical and practical construct. It begins by reviewing the fundamental principles of DI, including what is differentiated—content (Heacox, 2012), process (Glass, 2009), product (Heacox, 2012), and the learning environment (Tomlinson, 2003)—and how differentiation aligns with Bloom's Taxonomy (Anderson et al., 2001) and Gardner's Theory of Multiple Intelligences (Gardner, 1983, 1995). The discussion will also explore the role of assessment in differentiated instruction, including pre-assessment, formative feedback, and summative evaluation (Tomlinson

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& Moon, 2013; Norman, 2020), and how these assessment types inform instructional decision-making.

A secondary aim of this study is to examine the implementation of differentiated instruction within the Ecuadorian higher education system, particularly in light of new academic regulations outlined in the Reglamento de Régimen Académico (Consejo de Educación Superior [CES], 2023). This legal framework mandates that all students attain a B1-level international language certification, as defined by the Common European Framework of Reference for Languages (CEFR, 2001), before completing 60% of their degree programs. As a result, university language instructors must develop inclusive curricula capable of serving students from a wide array of academic disciplines in shared classrooms.

This paper also highlights the instructional challenges faced by language educators who are tasked with guiding learners from diverse majors through unified language courses. It advocates for a holistic, differentiated curriculum that aligns students' academic goals with their learning profiles (Tomlinson, 2001; Turner et al., 2017). The analysis includes an overview of the A1-level language descriptors (CEFR, 2001), as well as examples of how differentiated content, process, and product can be applied effectively to students in STEM, humanities, and social sciences programs in Ecuadorian universities.

By drawing from both established scholarship and recent research, this paper underscores the importance of differentiated instruction as a strategy for fostering student growth, equity, and engagement in multilingual and multidisciplinary university settings.

### **Background Information on Differentiated Instruction**

Differentiated instruction is grounded in several well-established learning theories. Rooted in constructivist principles, it reflects the view that learners build knowledge through active engagement and personal meaning-making (Bruner, 1966). Vygotsky's Sociocultural Theory,

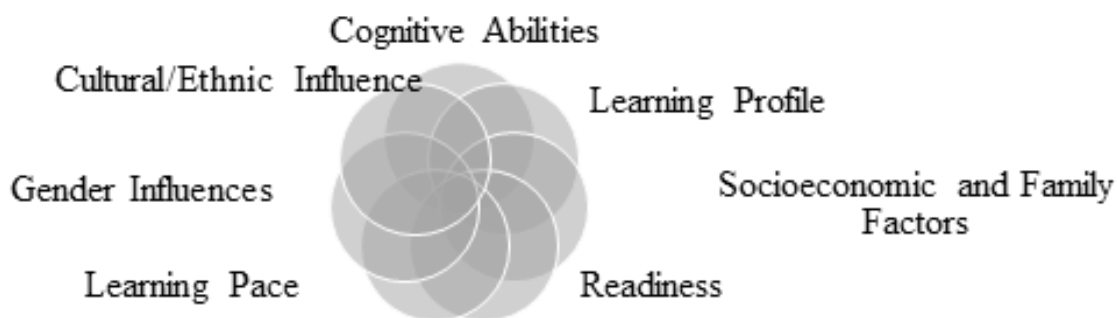
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particularly the Zone of Proximal Development (ZPD), supports the idea that learners benefit from tailored scaffolding and social interaction (Vygotsky, 1978). In addition, Universal Design for Learning (UDL), a framework developed by CAST (2018), advocates for proactive planning that accommodates all learners by offering multiple means of engagement, representation, and expression. These theories collectively support the rationale behind differentiated instruction and frame it not just as a method, but as a philosophy of inclusive, equitable teaching.

Differentiated instruction has gained considerable attention in recent decades as a response to the growing diversity of learners within classrooms. Heacox (2012) defines differentiated instruction as “changing the pace, level, or kind of instruction you provide in response to individual learners’ needs, styles or interests” (p. 5). Tomlinson and Moon (2013) describe it as instructional decision-making in which the teacher creates varied learning options to address students’ diverse readiness levels, interests, and learning preferences. Similarly, Wormeli (2006) characterizes differentiation as “doing what’s fair for students. It’s a collection of best practices strategically employed to maximize students’ learning at every turn... It requires us to do different things for different students... for them to learn when the general classroom approach does not meet [their] needs” (p. 3).

**Figure 1.**

*Diverse Classroom*



More recent research confirms and expands on these foundational views. Norman (2020), for instance, highlights the need for rigorous and flexible instructional planning, arguing that differentiated instruction must incorporate varied assessments and adaptive pathways to accommodate today's increasingly diverse student populations. Pozas et al. (2021) also reinforce that differentiated instruction not only improves academic outcomes but enhances students' well-being, motivation, and sense of inclusion.

These definitions and findings converge on a shared understanding of differentiated instruction as a fair and responsive pedagogical practice. It aims to meet students' needs, interests, and learning preferences by employing purposeful, rigorous, and adaptable strategies that foster individual achievement. Heacox (2012) emphasizes that effective differentiation must be rigorous, relevant, flexible, varied, and complex. She also provides examples of classroom diversity that help educators understand the array of characteristics they may encounter within a single group of learners. Identifying and addressing these differences is crucial when implementing differentiated instruction.

Heacox (2012) emphasizes that effective differentiation takes place in four primary areas: content, process, product, and the learning environment. These categories offer a structured approach for teachers to adjust instruction meaningfully in response to student variability.

### Content

Content refers to what students are expected to learn. Heacox (2012) explains that content differentiation involves the selection of essential concepts, skills, and processes aligned with national standards and institutional expectations. Educators must identify the most relevant knowledge within a unit and ensure accessibility to appropriate resources. Pre-assessment strategies are often used to tailor instructional materials to students' current knowledge and abilities, enabling them to engage with either foundational or advanced content as needed. Turner

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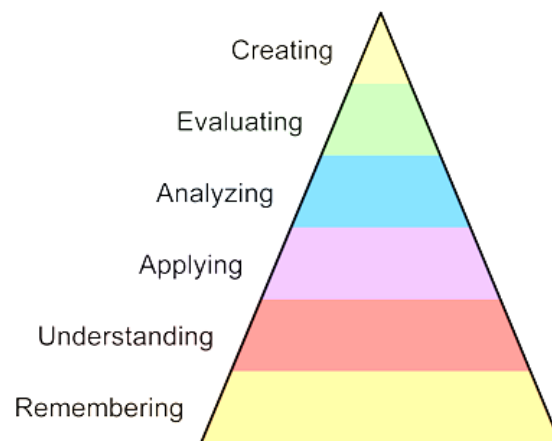
et al. (2017) emphasize that prioritizing essential content ensures clarity of learning goals, allowing students with different academic backgrounds to access core concepts equitably.

### Process

Process pertains to how students make sense of the content. It encompasses the learning activities and strategies employed during instruction. Glass (2009) describes the process as the way students assimilate and apply information, while Heacox (2012) connects it directly to individual learning profiles, such as visual, aural, read/write, and kinesthetic modalities (Fleming, 1995). Differentiation in this area can be guided by the revised version of Bloom's Taxonomy (Anderson et al., 2001), which outlines a hierarchy of cognitive processes that support the design of increasingly complex learning tasks. Recent insights by Patel and Kim (2024) suggest that process differentiation is especially critical in mixed-ability classrooms, where instructional variety helps ensure accessibility without compromising academic rigor.

**Figure 2.**

*Bloom's Taxonomy*



**Note:** Adapter from A taxonomy for learning, teaching, and assessing: A revision of bloom's taxonomy of educational objectives (Anderson et.al, 2011).

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## Product

The product refers to the evidence of student learning produced at the end of an instructional sequence. Heacox (2012) and Gardner (1983, 1995) emphasize that students should be offered diverse options to demonstrate their understanding, based on their intelligences—linguistic, logical-mathematical, musical, intrapersonal, interpersonal, bodily-kinesthetic, spatial, and naturalistic. Glass (2009) adds that the product reflects students' level of content mastery following the learning process and represents their contribution to the learning environment.

When aligned with students' strengths, as determined through pre-assessment, differentiated products can significantly improve both engagement and performance. Norman (2020) stresses that open-ended and performance-based tasks are especially effective in allowing students to express learning authentically across varied profiles.

## Learning Environment

Tomlinson (2003) notes that a supportive learning environment must be respectful, inclusive, hardworking, and fair. It must also promote student responsibility. Two key aspects shape the learning environment: the physical and the affective. The physical environment involves the organization of classroom elements such as layout, decorations, and culturally relevant materials, all of which influence students' comfort and engagement. The affective environment focuses on the emotional climate fostered by the teacher, including opportunities for dialogue, cultural inclusion, humor, community building, and the recognition of individual contributions. Pozas et al. (2021) found that classrooms structured around inclusive design and responsive teaching significantly contribute to students' emotional security and academic confidence.

## Assessment, Grading, and Differentiation

Grading remains one of the most influential elements in education, as it reflects instructional effectiveness and institutional quality. However, when assessment lacks a clear

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methodology or purpose, it can demotivate learners. Effective grading, by contrast, provides meaningful information to students, families, and educators. According to Tomlinson and Moon (2013), teachers must serve as informed decision-makers who interpret assessment data to enhance student learning and curriculum design.

Assessment is defined as “the process of collecting, synthesizing, and interpreting information in a classroom for the purpose of aiding teachers’ decision making” (Tomlinson & Moon, 2013, p. 18). This process must be purposeful, continuous, and informed by a solid understanding of instructional goals. Through appropriate assessment, teachers can offer valid feedback, make instructional adjustments, and respond to the needs of diverse learners.

#### Pre-assessment

Pre-assessment helps determine students’ entry points by evaluating their prior knowledge, critical vocabulary, and foundational skills. Tomlinson and Moon (2013) emphasize the importance of assessing three main areas: readiness, interests, and learning profiles. Readiness assessments help identify misconceptions and knowledge gaps, as well as students who may already master the upcoming content. Interest assessments reveal student preferences and passions, allowing teachers to create more relevant and engaging lessons. Learning profile assessments uncover how students learn best, guiding teachers toward strategies that support differentiated learning pathways. Patel and Kim (2024) found that pre-assessment is especially helpful in special education contexts where academic profiles are often highly varied. Cognitive science research supports these practices, affirming that individuals learn in distinct ways (Committee on Development in the Science of Learning, 2004).

#### Ongoing Assessment

Ongoing assessment, or formative assessment, serves both students and teachers. For students, it provides continuous feedback to support growth. For teachers, it offers data to

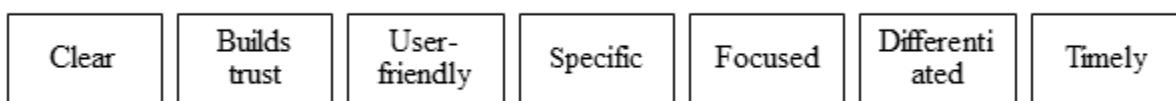
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evaluate instruction and address learning challenges in real time. According to Tomlinson and Moon (2013), formative assessment fosters reflection on the effectiveness of instructional approaches, the achievement of goals, and the resolution of misunderstandings. Unlike summative assessments, which assign scores, formative assessments emphasize feedback as a tool for skill mastery. Recent studies (Pozas et al., 2021; Norman, 2020) reaffirm the importance of formative feedback in fostering a growth mindset and metacognitive awareness in diverse classrooms.

**Figure 3.**

*Effective Feedback Characteristics*



**Note:** Adapted from Differentiation and students success in a differentiated classroom. (Tomlinson and Moon, 2013).

#### Summative Assessment

Summative assessment focuses on the evaluation of outcomes. According to Tomlinson and Moon (2013), it is typically formal and results in a grade or score. Quality summative assessment must be valid, reliable, and aligned with instructional goals. These assessments inform stakeholders about student achievement and allow schools to report academic progress responsibly. Turner et al. (2017) argue that when summative tools are aligned with differentiated learning goals, they serve as accurate measures of student mastery across varied learning paths.

#### Differentiation by Learning Profiles

A learning profile refers to a student's preferred way of learning. Differentiating instruction according to learning profiles involves understanding how each student learns best and providing

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tasks that align with those preferences (Tomlinson, 2001). Tomlinson differentiates between learning-style preferences, which relate to environmental and personal conditions, and intelligence preferences, which are brain-based predispositions (pp. 60–61). By recognizing and addressing these factors, teachers create a learning environment where all students can thrive. Patel and Kim (2024) further stress that recognizing these differences is crucial for inclusive education, particularly in large, multi-level classrooms.

### **Learning Styles and Their Relationship to University Majors**

Learning styles refer to the preferred ways individuals process and assimilate information. The VARK model—comprising Visual, Aural, Read/Write, and Kinesthetic modalities—remains a widely used framework for understanding these preferences (Fleming & Mills, 1992). While some recent studies question the efficacy of tailoring instruction strictly to learning styles (Newton & Miah, 2017), understanding students' preferences can still inform instructional design.

While the VARK model by Fleming and Mills (1992) has gained widespread popularity in educational settings, its scientific validity has been increasingly scrutinized. Newton and Miah (2017) argue that although students may express preferences, there is limited empirical evidence that matching instruction to these styles improves learning outcomes. However, proponents of VARK maintain that awareness of learning preferences can enhance student engagement, self-reflection, and motivation (Newton, 2022). Rather than using VARK to prescribe instruction rigidly, it can be leveraged to diversify teaching strategies, ensuring that lessons include visual, auditory, kinesthetic, and textual components that benefit all learners.

#### **School of Dentistry**

A systematic review by Ferrer-Valdivia et al. (2025) analyzed the learning styles of undergraduate dentistry students. The study found a tendency for multimodal, divergent, and reflective learning styles to increase among clinical students, unlike initial and preclinical dentistry

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students who leaned towards unimodal, convergent, and theoretical learning styles. This suggests that incorporating diverse teaching methods, including visual aids and hands-on activities, could enhance learning outcomes for dental students.

#### School of Law

Research on law students' learning styles remains limited. However, a study by Boyle and Dunn (1998) indicated a preference for auditory learning among law students. Given the nature of legal education, which often involves lectures and discussions, this preference aligns with the demands of the discipline. Additionally, strategies such as attending office hours and participating in study groups can benefit auditory learners in law school.

#### School of Nursing

A study by Pehlivan (2022) investigated the learning styles of nursing students and found that students mainly have a visual learning style, although other studies indicate a predominance of kinesthetic learning styles among nursing students. Another study by BMC Medical Education (2023) found that the predominant learning styles among nursing students were divergent (31.2%), and the least common was convergent (18.4%). The overall clinical competency score was  $77.25 \pm 12.65$ , and there was a significant relationship between learning styles and clinical competency. These findings suggest that nursing education programs should incorporate diverse teaching methods, including textual materials and interactive activities, to cater to various learning preferences.

#### School of Architecture

Architectural education requires a blend of creative and technical skills. Schon (1987) introduced the concept of "reflective practice," emphasizing learning through doing and reflection. This aligns with kinesthetic learning preferences, where students benefit from hands-on experiences and real-world applications. A study by El-Sayed et al. (2023) found that architectural

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students prefer the reflector learning style, highlighting the need for inspiring personal spaces in architectural education.

#### School of Engineering

Felder and Silverman (1988) identified that engineering students often prefer active and visual learning styles. A study by Jansen and Bowe (1999) at the United States Air Force Academy supported this, showing that incorporating hands-on activities improved learning outcomes for engineering students. These findings suggest that engineering curricula should include practical applications and visual aids to support student learning. Additionally, a study by Rivera Publications (2023) indicated that engineering students demonstrate a strong preference for at least two learning styles, and the learning styles differ between male and female students.

#### School of Medicine

Recent studies continue to explore medical students' learning preferences. A study by BMC Medical Education (2023) found that medical students have different learning styles, and faculty members must pay attention to this issue and use different and innovative teaching methods. Another study by The Professional Medical Journal (2023) found that a majority of medical students preferred kinesthetic learning styles, followed by auditory and visual preferences. This indicates that medical education programs should incorporate simulations, practical sessions, and interactive lectures to accommodate these preferences..

### **Applying Differentiated Instruction in the Ecuadorian EFL Classroom**

Over the past decade, Ecuador's educational system has undergone significant transformation, largely driven by reforms in education, health, and infrastructure initiated by recent governments. These reforms have had a direct impact on both basic and higher education. In particular, two laws—Ley Orgánica de Educación Intercultural (Asamblea Nacional del Ecuador, 2011) and Ley Orgánica de Educación Superior (Asamblea Nacional del Ecuador, 2010)—have

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laid the groundwork for an inclusive, competency-based educational model. Building on these legal frameworks, the Reglamento de Régimen Académico (Consejo de Educación Superior [CES], 2013) introduced specific requirements aimed at standardizing curriculum development across Ecuadorian universities.

One of the most relevant mandates under Article 30 of the Reglamento de Régimen Académico is the requirement for all students to demonstrate B1 proficiency in a foreign language, certified by an international examination, before completing 60% of their university studies. In response, universities have been tasked with designing six-level English language programs aligned to the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001). While students are permitted to pursue language education either within or outside their institutions, each university remains responsible for enabling students to meet this requirement.

Despite these institutional efforts, English proficiency in Ecuador remains low, with the country ranked in the low-proficiency band in the latest EF English Proficiency Index (EF EPI, 2023). As a result, there is an urgent need to redesign language instruction to accommodate not only proficiency goals but also the diverse backgrounds and needs of university learners. One effective pedagogical approach to address this diversity is differentiated instruction.

### **The A1 Standard and Linguistic Expectations**

Given the current levels of English proficiency observed among first-year students, this study focuses on instructional strategies aligned with the A1 level, defined as "Breakthrough" in the CEFR. At this level, learners are expected to:

- Understand and use familiar everyday expressions and very basic phrases.
  - Introduce themselves and others and ask and answer questions about personal details.
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- Interact in a simple way, provided the interlocutor speaks slowly and clearly and is willing to help (Council of Europe, 2001, pp. 24, 31).

The following table summarizes the four core language skills and their corresponding A1-level descriptors.

**Table 1.**

*A1 Level Goals and Skills (Adapted from Council of Europe, 2001)*

Skill	Goals
Listening	Can follow very slow and carefully articulated speech with long pauses; can understand short, simple directions (p. 66–67).
Reading	Can understand short texts phrase by phrase; can recognize familiar names, words, and basic notices with visual support (p. 69–70).
Speaking	Can produce simple phrases about people and places; can describe self and surroundings in rehearsed statements (p. 58–59).
Writing	Can write short, simple sentences about familiar topics and daily life (p. 61–62).

### Integrating CEFR and Task-Based Language Teaching

The implementation of differentiated instruction in the EFL classroom must be aligned with international standards such as the CEFR. At the A1 level, communicative competence is developed through real-world, meaningful interactions. These goals align with Task-Based Language Teaching (TBLT), which emphasizes learning through authentic tasks such as role-plays, interviews, and problem-solving (Ellis, 2003). Integrating TBLT with differentiated instruction means adjusting task complexity, format, and scaffolding based on students' readiness, interests, and learning profiles. For instance, a visual learner might complete a vocabulary-based infographic task, while a kinesthetic learner might engage in a role-play using

new expressions. This hybrid approach supports both language acquisition and learner motivation.

### Student Population and Learning Profile Distribution

The students taught in this project were first- and second-level learners (A1–A2) at Universidad Católica de Cuenca. Their academic background was highly diverse: 60% were enrolled in the School of Medicine, 10% in Dentistry, 10% in Engineering, 10% in Law, 5% in Architecture, and 5% in Nursing. Based on personal classroom observations and existing literature, it became evident that students' learning styles correlated with their academic majors.

**Table 2.**

*Relationship Between Academic Majors and Learning Styles (Based on Fleming, 1995; see also Section A)*

Academic Major Learning Style	
School of Dentistry	Visual
School of Law	Aural
School of Nursing	Read and Write
School of Architecture	Kinesthetic
School of Engineering	Kinesthetic
School of Medicine,	Kinesthetic

Although these distinctions were not absolute and multimodal learners were excluded from this framework, understanding the dominant preference of each academic group allowed for effective instructional planning using differentiated content, process, product, and environment, as outlined by Tomlinson (2003) and Heacox (2012).

### Sample Lesson Design: Differentiation by Language Skill and Learning Style

#### Listening and Speaking

Content

Each activity was developed around the theme of personal and professional information, contextualized to match the students' field of study.

**Visual learners (Dentistry):** Listened to a conversation between dentists; supported with a comic strip summarizing the dialogue.

**Aural learners (Law):** Listened to a police interview; no visual aids were provided to focus on auditory processing.

**Read/Write learners (Nursing):** Engaged with a written transcript while listening to a patient-doctor interaction.

**Kinesthetic learners (Architecture, Engineering, Medicine):** Participated in jigsaw listening, assembling information through movement and discussion.

#### Process

Activities were aligned with Bloom's Taxonomy to promote comprehension and application.

**Visual:** Completed pictograms with case information.

**Aural:** Took structured notes on post-its and reconstructed the dialogue.

**Read/Write:** Composed newspaper-style headlines summarizing the events.

**Kinesthetic:** Participated in pair work discussions about the most relevant elements of the dialogue.

#### Product

Learners demonstrated understanding through multimodal tasks.

**Visual:** Designed a poster including the character's information and later replaced it with their own.

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**Aural:** Recorded a podcast simulation of a legal hearing with scripted dialogue.

**Read/Write:** Completed a medical report for the patient described.

**Kinesthetic:** Introduced themselves in character, representing a professional (e.g., architect, engineer, doctor).

## Reading and Writing

### Content

**Visual:** Read about a dentist's daily routine, rotating in reading roles.

**Aural:** Watched a short video about a police officer presenting a criminal case.

**Read/Write:** Received a printed text describing patients and identified symptoms and conditions.

**Kinesthetic:** Assigned short reading texts to specific professions through group analysis.

### Process

**Visual:** Created a tri-fold visual timeline of the dentist's workday.

**Aural:** Annotated key facts with post-its.

**Read/Write:** Wrote a summary to communicate diagnosis to the family.

**Kinesthetic:** Role-played professional actions for classmates to guess the occupation.

### Product

**Visual:** Created a comic strip of a professional's routine using a digital tool.

**Aural:** Wrote and delivered a defense letter for the criminal character.

**Read/Write:** Completed a clinical discharge report.

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**Kinesthetic:** Wrote a journal entry as if working a day in their chosen field.

### **Creating a Responsive Learning Environment**

In alignment with Universal Design for Learning (UDL) principles (CAST, 2018), the learning environment included personalized, multimodal, and community-driven elements. A shared classroom board displayed a weekly calendar, rotating news, and interesting facts related to each academic major. Students brought new materials weekly to reflect their field. Group activities were regularly facilitated and monitored by the instructor, who also provided individualized feedback and celebrated participation. These strategies fostered a sense of ownership, motivation, and academic identity among students from varied academic disciplines.

### **Discussion and Implications**

The findings and instructional design strategies presented in this paper offer practical implications for curriculum designers, teacher educators, and policymakers in Ecuador and other multilingual contexts. First, the Reglamento de Régimen Académico requires universities to prepare students for international certification aligned with CEFR levels. This demand places pressure on language departments to move beyond one-size-fits-all methods. Differentiated instruction offers a sustainable solution by accommodating diverse student profiles within a single classroom while maintaining accountability to external standards.

Second, teacher training programs should incorporate differentiation strategies into pre-service and in-service workshops, particularly those that emphasize learning profiles, adaptive task design, and assessment alternatives. Many university instructors have deep content knowledge but lack pedagogical training in inclusive instruction. Introducing them to constructivist strategies, reflective practice, and UDL principles could significantly enhance teaching quality.

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Lastly, integrating AI-supported adaptive learning platforms, such as Speakable, Quizizz, or Nearpod, could further individualize instruction while easing the teacher's workload. These tools can offer formative feedback, track learner progress, and adjust task complexity based on student performance, making them valuable allies in the differentiated classroom.

## References

- Alkhasawneh, I. M., Mrayyan, M. T., Docherty, C., Alashram, S., & Yousef, H. Y. (2008). Problem-based learning (PBL): Assessing students' learning preferences using VARK. *Nurse Education Today*, 28(5), 572–579. <https://doi.org/10.1016/j.nedt.2007.09.012>
- Asamblea Nacional del Ecuador. (2010). Ley orgánica de educación superior. <https://www.asesoresenlinea.com.ec>
- Asamblea Nacional del Ecuador. (2011). Ley orgánica de educación intercultural. <https://educacion.gob.ec>
- Baykan, Z., & Nacar, M. (2007). Learning styles of first-year medical students attending Erciyes University in Kayseri, Turkey. *Advances in Physiology Education*, 31(2), 158–160. <https://doi.org/10.1152/advan.00043.2006>
- Boyle, R. A., & Dunn, R. (1998). Teaching law students through individual learning styles. *Albany Law Review*, 62, 213–255.
- Bruner, J. S. (1966). *Toward a theory of instruction*. Harvard University Press.
- CAST. (2018). Universal design for learning guidelines version 2.2. <http://udlguidelines.cast.org>
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge University Press.
- Council of Europe. (2020). *Common European framework of reference for languages: Learning, teaching, assessment – Companion volume*. Council of Europe Publishing. <https://rm.coe.int/common-european-framework-of-reference-for-languages-learning-teaching/16809ea0d4>
- Consejo de Educación Superior. (2013). Reglamento de régimen académico. <https://www.ces.gob.ec>
- Education First. (2023). EF English proficiency index: A ranking of 113 countries and regions by English skills. <https://www.ef.com/wwen/epi/>
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.
- Felder, R. M., & Silverman, L. K. (1988). Learning and teaching styles in engineering education. *Engineering Education*, 78(7), 674–681.
- Fleming, N. D. (1995). I'm different; not dumb: Modes of presentation (VARK) in the tertiary classroom. In A. Zelmer (Ed.), *Research and development in higher education* (Vol. 18, pp. 308–313).
- Fleming, N. D. (2020). VARK learning styles. VARK Learn. <https://vark-learn.com>
- Fleming, N. D., & Mills, C. (1992). Not another inventory, rather a catalyst for reflection. *To Improve the Academy*, 11, 137–155.
-

- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. Basic Books.
- Gardner, H. (1995). *Intelligence reframed: Multiple intelligences for the 21st century*. Basic Books.
- Glass, K. T. (2009). *Differentiated instruction: A guide for middle and high school teachers*. Eye On Education.
- Heacox, D. (2012). *Differentiating instruction in the regular classroom: How to reach and teach all learners* (Updated 2nd ed.). Free Spirit Publishing.
- Hughes, J. M., Fallis, D. W., Peel, J. L., & Murchison, D. F. (2009). Learning styles of orthodontic residents. *American Journal of Orthodontics and Dentofacial Orthopedics*, 136(6), 819–826. <https://doi.org/10.1016/j.ajodo.2008.06.026>
- Jansen, D. G., & Bowe, B. D. (1999). Hands-on learning in engineering education: A study at the United States Air Force Academy. *Journal of Engineering Education*, 88(2), 123–128. <https://doi.org/10.1002/j.2168-9830.1999.tb00424.x>
- Kurniawan, A. (2023). Differentiated instruction in ESL and EFL classrooms: A content analysis. *STAIRS*, 5(2), 210–225. <https://journal.unj.ac.id/unj/index.php/stairs/article/view/53330>
- Lujan, H. L., & DiCarlo, S. E. (2006). First-year medical students prefer multiple learning styles. *Advances in Physiology Education*, 30(1), 13–16. <https://doi.org/10.1152/advan.00045.2005>
- Murphy, R. J., Gray, S. A., Straja, S. R., & Bogert, M. C. (2004). Student learning preferences and teaching implications. *Journal of Dental Education*, 68(8), 859–866. <https://doi.org/10.1002/j.0022-0337.2004.68.8.tb03842.x>
- Newton, P. M., & Miah, M. (2017). Evidence-based higher education – Is the learning styles “myth” important? *Frontiers in Psychology*, 8, 444. <https://doi.org/10.3389/fpsyg.2017.00444>
- Nugroho, A. (2023). Differentiated instruction: Challenges and opportunities in EFL classrooms. *Journal of English Language Teaching and Linguistics*, 8(2), 123–135. <https://jeltl.org/index.php/jeltl/article/view/1022>
- Nuzhat, A., Salem, R. O., Quadri, M. S., & Al-Hamdan, N. (2011). Learning style preferences of medical students: A single-institute experience from Saudi Arabia. *International Journal of Medical Education*, 2, 70–73. <https://doi.org/10.5116/ijme.4e36.d31c>
- Rahmawati, R. (2023). VARK learning styles and social media usage in EFL classrooms: A study of tertiary-level students. *English Review: Journal of English Education*, 11(1), 45–56. <https://journal.uniku.ac.id/index.php/ERJEE/article/view/10783>
-

- Roe, J., Perkins, M., & Furze, L. (2025). From assessment to practice: Implementing the AIAS framework in EFL teaching and learning. arXiv preprint. <https://arxiv.org/abs/2501.00964>
- Sari, D. P., & Rachmawati, D. (2023). Investigating the differentiated instruction of international EFL classrooms: A qualitative study. *SAGE Open*, 13(4), 1–12.  
<https://doi.org/10.1177/21582440231333685>
- Sellier, N., & An, P. (2020). How peripheral interactive systems can support teachers with differentiated instruction: Using FireFlies as a probe. arXiv preprint.  
<https://arxiv.org/abs/2005.03739>
- Siregar, M. (2023). EFL teachers' voices in differentiated instruction. *International Journal of Curriculum and Science Education*, 5(1), 78–90.  
<https://journals.eduped.org/index.php/ijcse/article/download/780/668>
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). ASCD.
- Tomlinson, C. A. (2003). *Fulfilling the promise of the differentiated classroom: Strategies and tools for responsive teaching*. ASCD.
- Tomlinson, C. A., & Moon, T. R. (2013). *Assessment and student success in a differentiated classroom*. ASCD.
- Turner, D., Solis, O., & Kincade, D. (2017). Best practices in differentiated instruction: An exploration of teacher beliefs and practices. *The Journal of Educational Research*, 110(5), 483–494. <https://doi.org/10.1080/00220671.2015.1134426>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Yuliana, D., & Pratiwi, A. (2024). Effect of differentiated instruction on primary EFL students' writing performance and their perception towards the instruction. *Journal of English Language Teaching and Linguistics*, 9(1), 58–70.  
<https://www.sciencedirect.com/science/article/pii/S2590291124004273>.
-