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Multisensory learning landscapes supporting reflective practicum development in English student-teachers

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ABSTRACT

This study examines the design and implementation of *Riding Didactic Challenges*, a digital Learning Landscape developed to support English student-teachers during their teaching practicum. Grounded in Universal Design for Learning, multisensory and multimodal learning, and Challenge-Based Learning, the landscape consisted of seventeen thematic routes structured around four recurring components: Exploration, Reading, Video, and Challenge. Its purpose was to provide a flexible, practice-oriented environment that strengthened pedagogical understanding, reflective skills, and instructional decision making. A qualitative descriptive design was used with ten English student-teachers enrolled in a practicum seminar. Participants engaged with the landscape weekly over a seventeen-week period. Data were collected through an online post-experience survey including Likert-scale items and open-ended reflections. Quantitative responses were summarized descriptively, while qualitative data were analyzed through inductive thematic analysis. Four themes were developed through the thematic analysis: (1) participants moved from initial unfamiliarity to clearly conceptualizing Learning Landscapes as structured multimodal learning pathways; (2) multisensory supports (color coding, videos, and optional audio) improved navigation, comprehension, and engagement while reducing cognitive load; (3) weekly challenges served as bridges between theory and practicum, enabling direct classroom application and increasing agency; and (4) the iterative route design strengthened reflective practice and emerging professional identity by encouraging critical examination of teaching decisions and alignment between course concepts and classroom realities. Findings suggest that Learning Landscapes can effectively connect coursework and practicum-based learning. Implications highlight the value of multisensory, challenge-oriented, and reflective digital designs in teacher education to foster autonomy, conceptual clarity, and sustained professional growth.

Keywords: learning landscapes, English teacher education, multisensory learning, challenge-based learning, reflective practice, practicum development

INTRODUCTION

The preparation of future English teachers requires learning experiences that are flexible, multisensory, and authentically connected to classroom realities. Current demands in English language teaching (ELT) highlight the need for teachers who can integrate pedagogical theory, reflective practice, and innovative instructional design while navigating increasingly diverse learning environments (British Council, 2021; Richards, 2017). Yet, traditional university coursework often struggles to support student-teachers in making the transition from theoretical understanding to pedagogical enactment, particularly during the practicum.

Learning Landscapes have emerged as an instructional design approach capable of addressing this gap. These environments organize learning into interconnected pathways that combine multimodal inputs, self-paced exploration, and performance-based challenges. Through this structure, learners can move iteratively between conceptual knowledge and pedagogical application, fostering autonomy, reflection, and engagement (Saborío-Taylor, 2025b). This perspective aligns with broader research on multimodal and technology-mediated learning environments, which highlights their potential to support flexible, inclusive, and student-centered learning experiences (CAST, 2023; Papadakis et al., 2024). When embedded in teacher education, Learning Landscapes may serve as bridges between coursework and school-based practice, modeling the inclusive, adaptive, and multisensory experiences that future teachers are expected to design (Sánchez-Martínez & Martínez-Sánchez, 2022).

Riding Didactic Challenges is a Learning Landscape developed specifically to accompany English student-teachers during their teaching practicum. The design consists of seventeen routes, each organized into four components—Exploration, Reading, Video, and Challenge—that scaffold

engagement with key areas of English language pedagogy, including learning theories, inclusion, multimodality, classroom management, voice and body language, technology integration, and reflective practice. The landscape is multisensory by design and intentionally structured to support connections between theoretical concepts and practicum experiences, enabling student-teachers to relate weekly content to their evolving classroom contexts.

This article presents the theoretical foundations, design principles, and implementation of Riding Didactic Challenges as part of a practicum seminar. The study examines how English student-teachers engaged with the Learning Landscape, how they perceived its role in supporting their conceptual and reflective development, and how its multisensory and challenge-based features were experienced in relation to their emerging pedagogical practice. This study was guided by the following research questions:

- How do English student-teachers perceive the clarity, usefulness, and multimodal design of the Learning Landscape during their practicum?
- How do student-teachers perceive the role of the Learning Landscape in supporting reflection and connections between theory and practice?

This study contributes to ongoing discussions on digital learning design in teacher education by providing an empirically grounded account of a multisensory, challenge-based Learning Landscape implemented in a practicum context. It offers insight into how such environments can support engagement, reflection, and perceived pedagogical development in practice-based settings.

LITERATURE REVIEW

Learning Landscapes in Education

Learning landscapes can be understood as structured yet flexible digital learning ecosystems designed to guide learners through interconnected routes that combine exploration, multimodal input, reflective prompts, and performance-based challenges. This type of design has been associated with increased learner autonomy and engagement by organizing learning into coherent, purposefully sequenced pathways (Saborío-Taylor, 2025a). Furthermore, multisensory elements within these pathways may foster self-directed engagement by allowing learners to interact with content through multiple representational channels, thus supporting more personalized learning trajectories (CAST, 2023; Saborío-Taylor, 2025b). Rather than functioning as linear modules or sessions, learning landscapes operate as narrative pathways, or what some authors describe as a pedagogical metaphor, in which learning unfolds as a journey across conceptual terrains that learners navigate at their own pace (Castro-Araya et al., 2025).

It is important to note that in educational design, a pedagogical metaphor functions as a conceptual and visual device that conveys the central meaning of the curriculum in a coherent, memorable, and emotionally resonant way (Díaz et al., 2008). More than a decorative feature, metaphors can orient navigation, unify diverse resources, and provide a stable frame of reference that supports learners' cognitive and affective engagement. Research suggests that metaphors may facilitate learning by simplifying complex or abstract content, fostering empathy, and improving retention, as they anchor new ideas in familiar experiential domains (Littlemore, 2024; Mansourian, 2024). In the context of a learning landscape, the pedagogical metaphor can become a guiding element for the overall design, shaping both the visual identity and the organization of learning experiences.

In addition, the architecture of a learning landscape integrates visual organization, intentional sequencing, and multimodal resources to support autonomy while maintaining pedagogical coherence, consistent with recent work on digital learning ecologies and multimodal learning environments (García, 2021). In this sense, a learning landscape can be understood not merely as a repository of materials, but as a designed learning experience that scaffolds cognitive, emotional, and creative processes, encouraging learners to build understanding through movement across spaces, nodes, and representational forms (Saborío-Taylor et al., 2025).

In practical terms, a learning landscape offers a pedagogical structure that can feel both guided and open, allowing learners to move through content as if following a curated journey rather than a strictly prescribed sequence. The metaphor of a landscape captures how learning may unfold across multiple points of entry, where students can revisit ideas, engage through different modalities, and develop personal connections with the material. Because each route combines exploration, reflection, and application, this type of design may support connections between theoretical understanding and lived teaching experience. For student-teachers, such environments can foster a sense of intellectual ownership, as they are not only completing tasks but actively shaping their learning trajectories. In this way, the landscape can become a space where autonomy, curiosity, and professional identity development intersect.

Learning landscapes have gained relevance in higher education because they combine structured progression with opportunities for learner autonomy. Their multimodal and interactive nature allows students to engage with curated content while making individual decisions about pace, depth, and connection to practice. Emerging research suggests that such environments can enhance active participation, critical engagement, and inclusive learning dynamics in teacher education (Castro-Araya et al., 2025; Papadakis et al., 2024). Other studies emphasize the importance of aligning aesthetic, didactic, and technological elements to create coherent multimodal pathways for learners (Saborío-Taylor, 2025a).

Figure 1 synthesizes the core dimensions that shape the structural design of a learning landscape, highlighting the relationship between its structural, multimodal, and pedagogical components. At the center, the landscape is conceptualized as a designed learning experience in which visual organization and coherence provide a stable foundation for navigation. From this core, five interconnected dimensions emerge. Visual organization encompasses the intentional use of layout, hierarchy, and graphic elements to support meaning-making. Intentional sequencing refers to how routes and activities are arranged to promote conceptual progression and iterative engagement rather than linear completion. Multimodal resources involve the integration of texts, videos,

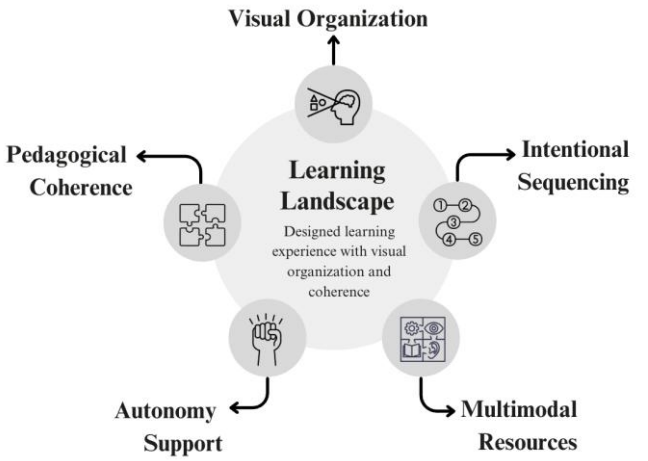

Figure 1. Dimensions of learning landscapes (Source: Authors' own elaboration, using Canva graphic design tools, based on Díaz et al., 2008; García, 2021; Littlemore, 2024; Mansourian, 2024; Saborío-Taylor et al., 2025)

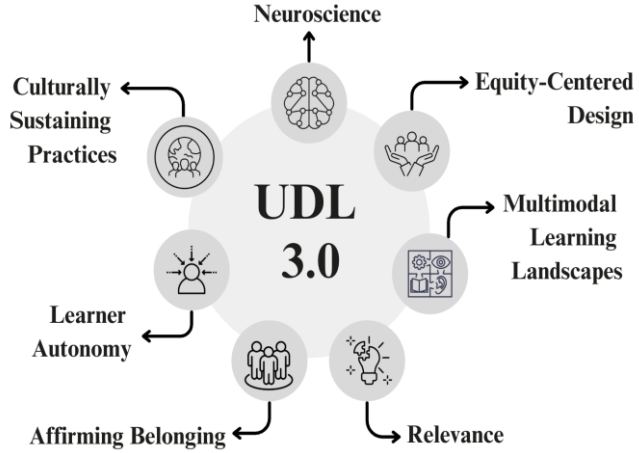

Figure 2. UDL 3.0 Integration (Source: Authors' own elaboration, using Canva's graphic design tools, based on the Universal Design for Learning Guidelines (CAST, 2023))

audio, diagrams, and interactive elements that offer multiple pathways for engagement. Autonomy support highlights design features that allow learners to navigate according to their needs, pace, and interests. Finally, pedagogical coherence ensures alignment between resources, challenges, and navigation structures with the underlying learning goals. Together, these dimensions portray the learning landscape as a holistic ecosystem in which visual, cognitive, and pedagogical elements interact dynamically.

Beyond their structural advantages, learning landscapes align with contemporary understandings of learning as non-linear and situated. For pre-service English teachers, this approach may help normalize uncertainty and exploration as part of the practicum process. Rather than positioning the practicum as a linear progression from "novice" to "competent," such designs can encourage engagement with conceptual detours, reflective loops, and varied modes of learning. In this sense, the landscape can be interpreted as a representation of professional growth that is dynamic, recursive, and personally meaningful.

A further contribution of learning landscapes lies in their potential to support emerging professional identities. Because each route blends theoretical grounding with reflective prompts and actionable tasks, student-teachers may be encouraged to articulate their beliefs, experiment pedagogically, and integrate new understandings over time. This process of incremental integration can contribute to their ability to make informed decisions as they transition into real classroom contexts.

Universal Design for Learning

Universal Design for Learning (UDL) offers a well-established framework for designing inclusive and accessible learning experiences. By emphasizing multiple means of representation, expression, and engagement, UDL encourages educators to anticipate learner variability rather than respond to it reactively. Research in higher education and L2 contexts suggests that UDL-informed materials can enhance participation, comprehension, and motivation across diverse student populations (Sharafutdinova, 2024). In teacher education, UDL can be understood as supporting the development of inclusive design as a core professional disposition, rather than merely a set of accommodations (Timuş et al., 2024).

As the framework has evolved, more recent conceptualizations have emphasized dimensions of identity, agency, and culturally responsive pedagogy—elements that were less visible in earlier versions. This expanded perspective, reflected in the UDL Guidelines 3.0, reframes learner variability as a universal human characteristic shaped by sociocultural experiences, linguistic repertoires, and individual histories (CAST, 2023). **Figure 2** presents a visualization of this expanded model, illustrating how UDL 3.0 integrates neuroscience, equity-centered design, and culturally sustaining practices. In the context of multimodal learning landscapes, these shifts highlight that inclusive design involves not only removing barriers, but also fostering belonging, relevance, and learner autonomy, which are principles that align closely with the navigational and reflective structure of the present study.

When UDL principles inform the design of a learning landscape, the environment itself can function as a model of inclusive instructional practice. Student-teachers engage with resources across multiple modalities, interact with tasks offering varied pathways, and learn within an adaptable structure that reflects the pedagogical flexibility expected in K–12 classrooms. In this sense, UDL not only supports learners within the landscape, but may also influence how student-teachers conceptualize and enact inclusive practices in their future ELT contexts.

Multisensory and Multimodal Learning

Multimodal learning, closely aligned with UDL, emphasizes meaning-making through multiple sensory and representational channels. In ELT, multimodality can support processes such as pronunciation modeling, comprehension scaffolding, and interactional clarity by enabling learners to draw on diverse semiotic resources to build and negotiate meaning. Multisensory inputs may help learners connect conceptual and embodied understanding, making abstract ideas more accessible. This perspective is particularly relevant

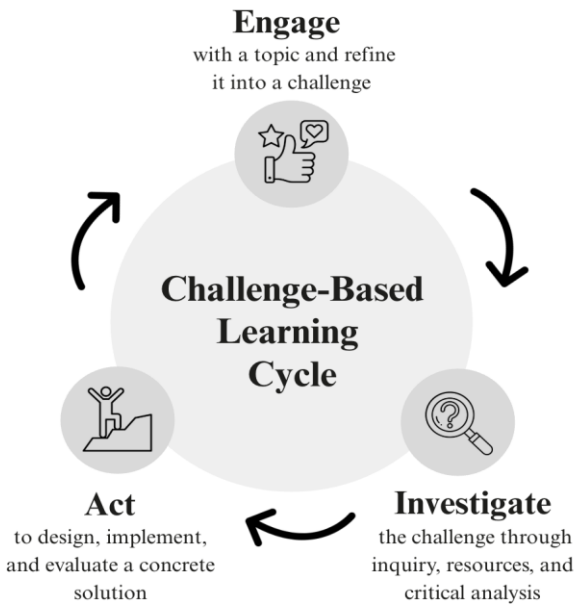

Figure 3. Challenge-based learning cycle (Source: Authors' own elaboration, using Canva's graphic design tools (2025), based on the Challenge-Based Learning Framework (The Challenge Institute, 2018))

in digital L2 environments, where multisensory pathways may contribute to learners' autonomy, comprehension, and sustained engagement (Saborío-Taylor, 2025b). Research on multimodal semiotics suggests that learning can be enriched when different modes converge to support meaning construction (Jewitt, 2016; Kress, 2010). This aligns with broader research on digital learning, which highlights the importance of navigating and integrating multiple modes in contemporary learning environments (Organisation for Economic Co-operation and Development [OECD], 2021).

Within this learning landscape, multimodality is reflected in resources such as visual schematics that organize key concepts, video demonstrations that model classroom presence and voice, color-coded elements that highlight pedagogical principles, optional audio supports accompanying readings, and interactive challenges that involve movement, voice, or digital creation. These multimodal forms create varied entry points into each route, allowing student-teachers to engage with content in different ways and to observe how intentional design choices may influence comprehension, engagement, and pedagogical interpretation.

In this context, multimodal design can invite student-teachers to observe, analyze, and experiment with the use of modes such as voice, gesture, visual layout, and digital enhancement. This iterative exposure may support their understanding of how meaning is constructed across modes in contemporary ELT classrooms. At the same time, engaging with multimodal experiences can contribute to the development of a more intentional and expressive teaching presence, influencing not only instructional practices but also how student-teachers begin to position themselves as educators.

Challenge-Based Learning

Challenge-Based Learning (CBL) is an action-oriented framework that positions learners as collaborators who investigate meaningful challenges and design solutions with real-world relevance. The model is structured around the cyclical process of Engage → Investigate → Act, emphasizing inquiry-driven exploration, interdisciplinary thinking, and purposeful application (The Challenge Institute, 2018).

Figure 3 illustrates this iterative cycle, showing how learners move from identifying a meaningful challenge to designing and implementing an actionable response. In the Engage phase, learners connect with a broad topic and refine it into a contextually relevant challenge. The Investigate phase involves guided inquiry, consultation of diverse resources, and critical exploration of possible approaches. Finally, the Act phase focuses on designing, implementing, and reflecting on a concrete solution. Together, these phases form a dynamic learning arc that can foster curiosity, critical thinking, and agency, aligning with the core principles of CBL as an iterative and student-centered approach to problem solving.

Research on CBL implementations suggests that this approach can support deeper engagement, learner autonomy, and collaborative problem solving by positioning students within authentic, socially grounded challenges (Johnson & Adams, 2011; The Challenge Institute, 2018). More recent developments within the CBL community emphasize collective action, iterative design, and the importance of framing challenges that are feasible, contextualized, and human-centered (The Challenge Institute, 2018). In this sense, CBL aligns with learning landscapes, where learners navigate multimodal routes, explore conceptual questions, and engage in performance-based challenges that reflect iterative inquiry processes.

Within a learning landscape, these principles can function as pedagogical anchor points that connect theoretical exploration with practice-oriented reflection. Each challenge may invite student-teachers to justify instructional decisions, experiment with strategies, and reflect on classroom experiences. This recurring pattern can support the development of pedagogical reasoning and a sense of ownership over their learning processes. In this way, the landscape can be understood as a structured yet flexible environment where theory is explored, adapted, and interpreted in relation to evolving teaching practices.

Reflective Practice and Professional Identity Formation

Reflection is widely recognized as a central component of teacher development, as it enables novice educators to interpret experience, question assumptions, and refine their instructional beliefs in response to real classroom events. Contemporary perspectives in ELT conceptualize reflective practice as a deliberate, dialogic, and inquiry-oriented process through which teachers examine their actions, explore alternatives, and make more informed pedagogical decisions (Mann & Walsh, 2017).

This process of introspection is also closely linked to the development of teacher identity, as student-teachers begin to articulate who they are becoming as professionals, negotiate instructional choices, and recognize the evolving values that

guide their work in the classroom. Recent research suggests that reflective engagement may support the consolidation of professional judgment and the development of greater autonomy in pedagogical decision-making (Farrell, 2022).

Within a learning landscape, reflective opportunities can be intentionally embedded throughout the design. Each route may begin with prompts that activate prior experiences, followed by conceptual framing that encourages student-teachers to expand or reconsider their pedagogical reasoning, and conclude with challenges that invite them to articulate and justify instructional decisions. By distributing opportunities for reflection across multiple touchpoints, the landscape can facilitate identity development as an ongoing and iterative process. In this sense, reflection is not treated as an isolated activity but as a recurring practice integrated into exploration, analysis, and action, allowing student-teachers to trace their development and gradually construct a more coherent professional identity.

METHODOLOGY

Research Design

This study employed a qualitative descriptive design, an approach widely recognized for presenting participants' experiences in a clear, accessible, and minimally theorized form. Foundational methodological work describes qualitative description as a way to remain close to participants' own words and meanings while producing coherent thematic accounts of their experiences (Sandelowski, 2000). More recent discussions highlight that this design is especially appropriate when the aim is to generate practical, experience-near insights without imposing complex theoretical abstraction (Colorafi & Evans, 2016). In this study, the goal was to explore how English student-teachers experienced a structured and multisensory Learning Landscape during their teaching practicum and how they perceived its relevance to their pedagogical development.

Although the study incorporated descriptive quantitative items in a post-experience survey, its primary orientation remained qualitative. The quantitative data served a complementary role by providing contextual indicators of general perceptions, whereas the qualitative reflections constituted the main source for understanding how student-teachers experienced and interpreted the Learning Landscape.

The study also incorporated design-oriented features, as it focused on the development, implementation, and evaluation of an instructional innovation situated in an authentic educational context. Design-based research has been described as emphasizing cyclical refinement, collaboration with stakeholders, and the study of learning processes in real settings (Wang & Hannafin, 2005). However, the present study did not follow multiple iterative cycles of redesign and reimplementation. Rather, it examined a single implementation of a specifically designed Learning Landscape within a practicum seminar.

From this perspective, the study is better understood as a qualitative descriptive evaluation of a design-oriented pedagogical intervention, informed by principles of educational design research (McKenney & Reeves, 2019). Instead of testing a predetermined hypothesis, it sought to document how student-teachers engaged with the digital learning environment and how they perceived its relevance for reflection, engagement, and perceived connections between theory and practice. This methodological orientation privileges ecological validity and context-sensitive interpretation while acknowledging the situated nature of the evidence generated.

Participants

The participants were ten English student-teachers enrolled in the final teaching practicum of a bachelor's program in English teaching at a public university in Costa Rica. The practicum comprised two interconnected components: a weekly four-hour Seminar, dedicated to theoretical exploration, guided reflection, and collaborative professional development, and a School-Based Practicum, through which students completed a minimum of 50 hours of supervised teaching in different secondary schools. The Learning Landscape examined in this study was implemented within the Seminar and functioned as a pedagogical structure to support connections between course content and practicum experiences.

Although all ten student-teachers engaged with the Learning Landscape throughout the semester, nine completed the post-experience survey used for data collection. Participation in the research component was voluntary, and informed consent was obtained from all participants. Given that the study was conducted within a naturally occurring course context, the sample corresponds to the full cohort enrolled in the seminar. In qualitative research, sample size is not determined by numerical representativeness but by the information power of the sample in relation to the study aim (Malterud et al., 2016).

It is important to note that the first author was also the course instructor. To address potential bias, data were collected after course completion, participation was voluntary and did not affect course evaluation, and responses were anonymized prior to analysis. The group varied in age, practicum placement, and prior experience with digital learning environments, offering diverse perspectives on how the Learning Landscape was experienced in relation to their developing pedagogical practice.

Research Stages

The study unfolded across three interconnected stages: Design, Implementation, and Evaluation. These stages reflect a design-oriented approach in which an instructional innovation was developed, enacted within its natural context, and examined based on participants' experiences.

Design stage

The design stage focused on creating a structured yet flexible digital learning landscape using the Genially platform, organizing the practicum Seminar into seventeen interconnected routes. These routes represented the full pedagogical arc of the semester and supported a gradual progression from foundational concepts to reflective consolidation. As shown in **Figure 4**, the complete set of routes was visually mapped to help student-teachers

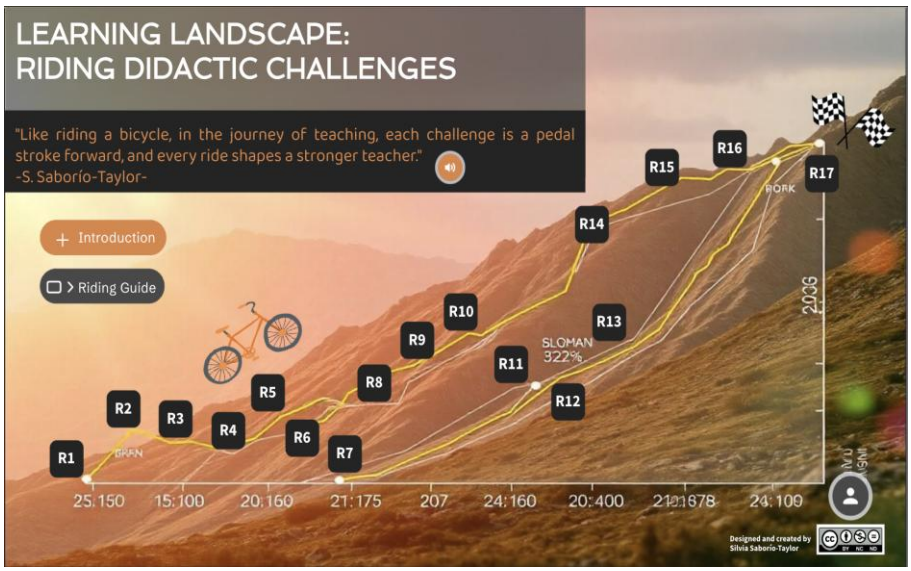

Figure 4. Overview of the seventeen routes that structure the Riding Didactic Challenges learning landscape (Source: Genially resource Riding Didactic Challenges (Saborío-Taylor, 2025c))

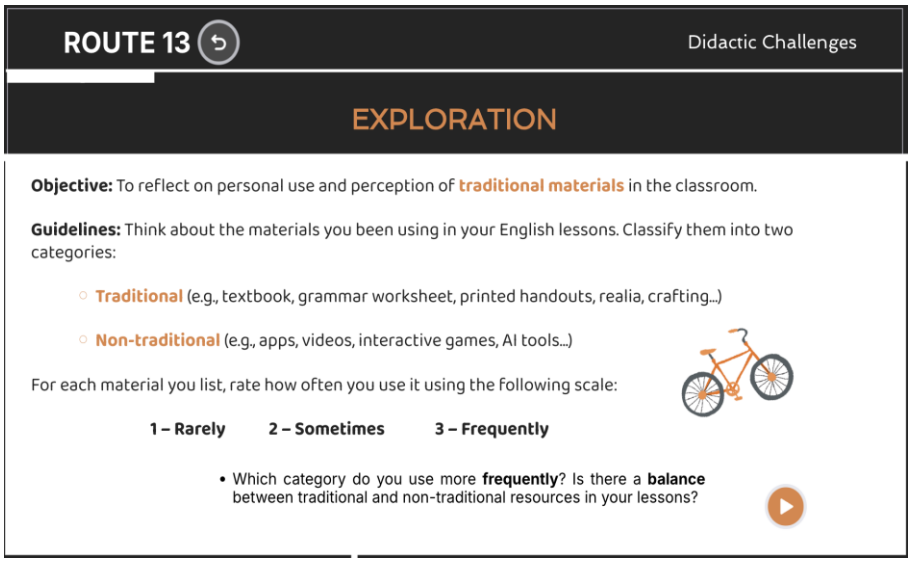

Figure 5. The bicycle as the central element of the pedagogical metaphor in the Riding Didactic Challenges landscape (Saborío-Taylor, 2025c)

understand the overall trajectory of their learning journey and how each thematic cluster related to the others.

A central feature of the design was the pedagogical metaphor of a bicycle journey, which framed learning as a process requiring balance, direction, and sustained momentum. This metaphor guided not only the visual identity of the landscape but also the conceptual coherence of the learning experience. The bicycle, visible throughout the interface and expressly represented in **Figure 5**, served as the anchoring symbol for movement, agency, and ongoing professional growth.

Each route followed a consistent and predictable four-part structure—Exploration, Reading, Video, and Challenge—designed to scaffold understanding through multimodal inputs and guided application. This internal architecture, illustrated in **Figure 6**, ensured that student-teachers would encounter theoretical content, reflective prompts, and applied tasks in a sequence that reinforced comprehension and supported iterative learning.

Finally, the design aligned with UDL 3.0 and multisensory principles by incorporating color-coded text, images, videos, and audio supports to enhance clarity and accessibility. As shown in **Figure 7**, this multisensory approach aimed to support clarity, engagement, and accessibility by enabling student-teachers to interact with content through varied representational modes, particularly valuable in multilingual, multimodal practicum settings.

Implementation stage: Engaging with the landscape in the seminar

The implementation took place during the weekly four-hour Seminar component of the teaching practicum, which extended across the full seventeen weeks of the course. Student-teachers interacted with the landscape each week, engaging with its materials, completing challenges, and

Figure 6. Four-part structure of each route: Exploration, reading, video, and challenge (Source: From Genially resource Riding Didactic Challenges (Saborío-Taylor, 2025c))

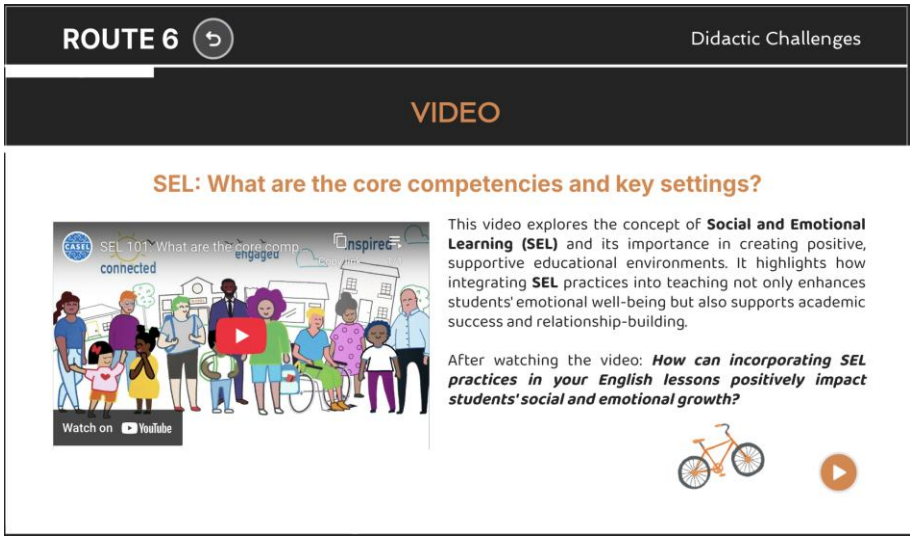

Figure 7. Multisensory and color-coded design elements supporting UDL-aligned navigation and comprehension (Source: From Genially resource Riding Didactic Challenges (Saborío-Taylor, 2025c). Visual and interactive components include a YouTube-embedded video (CASEL, 2021))

discussing insights during guided reflection. This sustained, semester-long engagement allowed them to repeatedly connect landscape content with evolving classroom experiences and to progressively refine their pedagogical decision-making.

The landscape functioned as a multisensory instructional scaffold intended to support:

- engagement with theoretical concepts,
- development of pedagogical reasoning,
- reflection on practicum experiences,
- connections between seminar learning and classroom practice.

As student-teachers completed their 50 hours of school-based practicum, they were encouraged to draw on ideas from the routes (such as board management, body language, UDL strategies, or minimizing L1 use) when reflecting on instructional decisions. This iterative movement between Seminar tasks and practicum experiences positioned the landscape as a potential bridge between theory and practice.

Evaluation stage: Post-experience reflection and survey

After completing all 17 routes, student-teachers participated in a post-experience survey designed to evaluate their perceptions of the landscape's clarity, usefulness, multimodality, and relevance to their practicum. The evaluation stage focused on understanding:

- how student-teachers perceived the landscape in relation to their professional development;
- which components they found most meaningful;
- how they experienced the weekly challenges;
- how they perceived connections between seminar learning and classroom contexts.

Both Likert-scale items and open-ended responses were collected, allowing for a descriptive account of participants' perceptions of the learning landscape in relation to

Table 1. Structure of the post-experience survey

Section	Focus	Item Type
General Understanding	Prior knowledge and overall understanding	Likert-scale (1-5)
Multimodal Experience	Use of visual, audio, and interactive resources	Likert-scale (6-8)
Pedagogical Metaphor and Structure	Role of metaphor in meaning-making	Likert-scale (9-11)
Use of Audio	Perceived usefulness of audio resources	Likert-scale (12-15)
Reflective Engagement	Reflection and connections to teaching practice	Liker-scale (16-17) and Open-ended
Overall Impact and Suggestions	Satisfaction, perceived impact, and improvements	Liker-scale (16-17) and Open-ended

Table 2. Overview of themes derived from thematic analysis

Theme	Description
From Not Knowing to Clearly Conceptualizing Learning Landscapes	Participants' progression from initial unfamiliarity to a clearer understanding of learning landscapes as structured and meaningful learning environments
Multisensory and Metaphorical Design as Drivers of Engagement	Role of multisensory resources and pedagogical metaphor in shaping engagement, comprehension, and meaning-making
Connecting the Landscape to Practicum Realities and Future Teaching	Perceived connections between the learning landscape, practicum experiences, and future teaching practices
Suggestions for Refinement and Enhancement	Participant-identified improvements related to navigation, interactivity, and resource design

engagement, reflection, and emerging teacher identity. As shown in **Table 1**, the survey was organized into six sections: General Understanding, Multimodal Experience, Pedagogical Metaphor and Structure, Use of Audio, Reflective Engagement, and Overall Impact and Suggestions. Each section focused on a different aspect of participants' experiences with the learning landscape, combining multiple-choice items with opportunities for qualitative reflection. This structure enabled the study to combine structured perception data with more nuanced reflections, providing a more comprehensive understanding of how the learning landscape was experienced. The full instrument is provided in **Appendix A**.

Data Collection and Analysis

Data were collected through a post-experience instrument named Learning Landscape Post-Experience Survey, administered online via Google Forms during the final week of the seventeen-week practicum. The survey included a combination of multiple-choice items and open-ended prompts designed to elicit participants' perceptions of the learning landscape in relation to its structure, multimodal design, and perceived relevance to their practicum experience. While the instrument incorporated a small set of descriptive quantitative items, these served only as contextual indicators. The study's analytic focus remained qualitative, prioritizing participants' written responses as the primary source for understanding how they experienced and interpreted the learning landscape.

For the quantitative section, descriptive statistics were used to summarize general perceptions of the digital learning environment. The qualitative component was analyzed using an inductive, reflexive thematic analysis following Braun and Clarke's (2021) approach. This process involved generating initial codes, identifying patterns of meaning, and constructing themes that represented participants' experiences across the seventeen-week engagement. Through this iterative analysis, the researchers developed a coherent thematic structure that captured both the practical and reflective dimensions of student-teachers' engagement with the landscape, offering a nuanced and grounded understanding of how the environment functioned as a pedagogical tool and contributed to emerging teacher identity.

Descriptive statistics were used to summarize patterns in participants' responses to the multiple-choice items. The qualitative data were analyzed using an inductive, reflexive thematic analysis following Braun and Clarke (2021). The analysis was conducted by both authors and involved several iterative phases. First, all responses were read multiple times to achieve familiarity with the data. Initial codes were then generated inductively, focusing on meaningful segments related to participants' perceptions and experiences. These codes were subsequently reviewed and grouped into broader patterns of meaning, which were then developed into candidate themes.

Themes were refined through an iterative process of comparison across responses, ensuring coherence within themes and distinction between them. Throughout the process, attention was given to identifying both recurring patterns and less frequent or divergent perspectives. The resulting thematic structure provides an interpretive account of how participants described their engagement with the learning landscape, particularly in relation to reflection, multimodal interaction, and perceived connections between theory and practice. The themes derived from this process are summarized in **Table 2**.

RESULTS

Overview of Data and Analytical Process

Nine student-teachers completed the Learning Landscape Post-Experience Survey. Their responses included a combination of multiple-choice items and open-ended reflections related to their understanding of the concept of a learning landscape, the perceived usefulness of the design, the role of multisensory and metaphorical elements, and the perceived relevance of the experience to their practicum and emerging professional identity.

Descriptive results reflected generally positive perceptions. Before the course, eight of the nine participants

reported that they did not know what a learning landscape was, and one was unsure. After the experience, all nine described having a clear understanding of the concept. Most participants reported that the structure of the landscape helped them follow and understand course content "definitely," and all expressed high levels of satisfaction with the experience (eight "very satisfied," one "satisfied"). In addition, all nine participants indicated that they perceived the format as contributing significantly to the development of their skills as future teachers.

The open-ended responses were analyzed using an inductive, reflexive thematic analysis (Braun & Clarke, 2022). Repeated readings and coding of the qualitative data informed the development of the four themes: (1) From not knowing to clearly conceptualizing learning landscapes; (2) Multisensory and metaphorical design as drivers of engagement; (3) Connecting the landscape to practicum realities and future teaching; and (4) Suggestions for refinement and enhancement. These themes are presented below with illustrative excerpts from participants' reflections (P1–P9).

Theme 1: From not knowing to clearly conceptualizing learning landscapes

At the beginning of the course, learning landscapes were an unfamiliar concept for almost all participants. Eight out of nine reported having no prior knowledge, and one indicated being unsure. By the end of the semester, however, all nine participants described having a clear understanding of the concept, and their written definitions revealed a shared view of the learning landscape as both a pedagogical tool and a structured learning pathway.

Participants consistently described the landscape as an organized route system that enabled them to access, sequence, and monitor course content. One student-teacher defined it as *"a tool in which students can access for completing different routes"* (P1), while another highlighted its function as a way to *"have a track of what we are learning"* (P9). These descriptions suggest that the landscape supported not only content navigation but also a sense of progression and continuity throughout the practicum experience.

Other responses emphasized its role as an ongoing companion in the learning process. One participant compared it to life itself, noting that *"if you do not pedal, you do not move"* (P2), explicitly connecting the concept to the pedagogical metaphor. This indicates that participants were not only understanding the structure of the landscape but also internalizing its underlying logic as a representation of sustained effort and professional growth.

Participants also associated the learning landscape with clarity, concision, and focus. One student-teacher described it as *"understandable, summarized… straight to the point, not overwhelming"* (P4), while another referred to it as *"a great tool to complement my learning experience"* that made the practicum "more enjoyable and rewarding" (P5). These perceptions point to the role of design in reducing cognitive overload and enhancing engagement with course content.

Overall, this theme reflects a clear progression from initial unfamiliarity to an experience-based conceptualization of learning landscapes as structured, interactive, and pedagogically meaningful environments. Rather than remaining an abstract concept, the learning landscape became understood as a functional and transferable model for organizing teaching and learning processes.

Theme 2: Multisensory and metaphorical design as drivers of engagement

A second central theme concerns how multisensory and metaphorical design elements shaped participants' engagement with the course. Multisensory supports (including color-coded text, icons, images, videos, and audio recordings) were consistently perceived as meaningful contributors to understanding and interaction. In the multiple-choice responses, color-coded text appeared in nearly all selections related to helpful strategies, and most participants indicated that the multisensory approach made the content both more understandable and more enjoyable. When asked about the most effective types of support, participants frequently selected combinations of visual, auditory, and kinesthetic elements, with visual supports (colors, icons, and charts) present in almost all combinations.

Qualitative responses further illuminate how these elements functioned in practice. Participants emphasized that visual organization and color coding facilitated quick identification of key ideas and clarified expectations within each route. Several noted that this contributed to a more dynamic and less monotonous learning experience, suggesting that multisensory design supported sustained attention and reduced cognitive effort. The audio recordings, while used with varying frequency—four "frequently," three "occasionally," and two not at all—were described as particularly valuable for pronunciation, listening comprehension, and maintaining engagement. One participant explained that audio allowed them to follow content without relying exclusively on reading (P4), while another highlighted its usefulness for *"get[ting] the proper pronunciation of certain words"* (P5). These accounts suggest that auditory supports expanded access to content and accommodated different engagement preferences.

The pedagogical metaphor of the bicycle journey also emerged as a significant driver of engagement and meaning-making. Eight out of nine participants reported that the metaphor supported their reflection on the practicum "a lot," and all nine agreed that it helped them make sense of their learning journey. When asked to identify with specific stages of the metaphorical journey (Basecamp, Ascent, Midway Plateau, Climb, as shown in **Figure 8**), participants distributed their responses across all options, indicating that they situated themselves at different points in their professional development. For some, the metaphor provided a language to describe preparation and planning; for others, it captured the experience of confronting challenges or pausing to reflect and recalibrate.

Taken together, these findings suggest that multisensory design and metaphor operated not only as aesthetic or motivational enhancements, but as integrated cognitive and reflective supports. They enabled student-teachers to navigate the learning environment more effectively, sustain engagement across the semester, and interpret both the intellectual and emotional dimensions of their practicum experience.

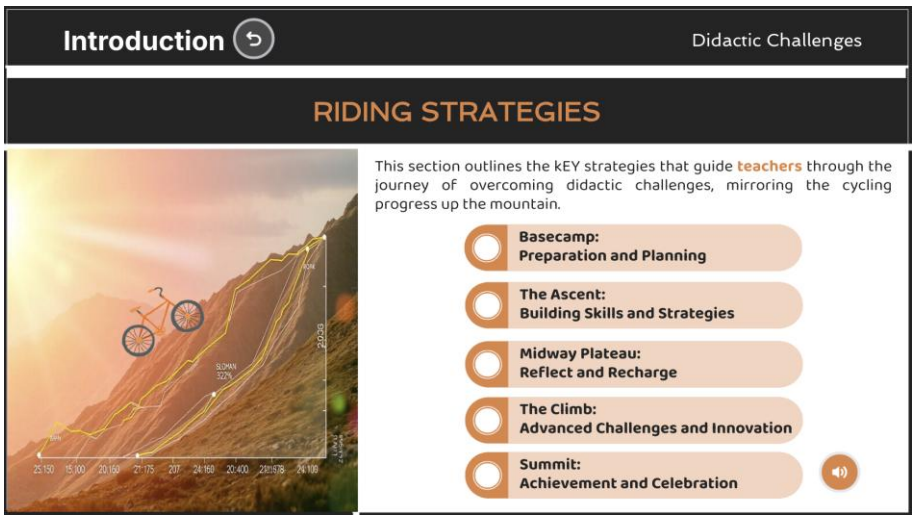

Figure 8. Stages of the metaphorical journey in the learning landscape (Source: From Genially resource Riding Didactic Challenges (Saborío-Taylor, 2025c))

Theme 3: Connecting the landscape to practicum realities and future teaching

A third theme highlights how the learning landscape supported meaningful connections between course content, practicum experiences, and future teaching practice. In the closed items, all nine student-teachers indicated that the landscape significantly contributed to the development of their skills as future teachers. Their open-ended reflections provide further insight into how this support was experienced.

Participants frequently described the landscape as a bridge between theory and practice, particularly through the structure of weekly routes and the inclusion of applied challenges. One student-teacher noted that the landscape *"helped me to understand the topics, find the readings in an easier way and organize my own ideas"* (P6), suggesting that the design supported both conceptual understanding and pedagogical planning. Another participant explained that it kept them *"engaged with each route"* and helped them see *"how I could apply a similar approach with my own students someday"* (P8), indicating that the landscape functioned not only as a learning tool but also as a model for instructional design transferable to future teaching contexts.

Other responses emphasized the influence of the landscape on the practicum experience itself. One participant noted that the format *"helped me a lot in my learning process,"* highlighting that *"having a landscape was a great help... It was really organized"* (P1). Another explained that it offered *"a new way to teach a topic or a whole unit"* (P2), explicitly recognizing its potential as a pedagogical strategy beyond the course. These reflections suggest that the landscape supported student-teachers in moving from understanding content to envisioning how to design and implement learning experiences in their own classrooms.

Importantly, participants often combined references to their experiences as learners (e.g., clarity, organization, engagement) with emerging perspectives as teachers in training. This dual positioning indicates that the landscape fostered not only knowledge acquisition but also pedagogical reasoning and professional projection. In this sense, engagement with the landscape contributed to the development of a more integrated professional identity, where learning and teaching roles were continuously negotiated.

Overall, this theme shows that student-teachers did not experience the learning landscape as a standalone digital resource, but as an embedded component of their practicum. It functioned as a mediating space where theory was interpreted, practice was reflected upon, and future teaching possibilities were imagined, reinforcing its role as a bridge between academic learning and professional action.

Theme 4: Suggestions for refinement and enhancement

Despite the overall positive perceptions, participants also offered constructive suggestions aimed at refining and enhancing future iterations of the learning landscape. Rather than indicating major limitations, these comments point to opportunities for optimizing usability, interactivity, and clarity within an already well-functioning design.

Several suggestions focused on navigation and progress tracking. One participant proposed adding *"a line in which we can see the progress... when we are completing any route"* (P1), highlighting the need for more explicit visual indicators of completion and advancement. Another noted initial difficulty in locating the correct route and suggested incorporating clearer visual cues (e.g., color changes) to signal progression within the sequence (P2). These comments suggest that, while the structure was valued, additional scaffolding for orientation could further enhance the user experience, particularly in the early stages of engagement.

Other participants highlighted opportunities to strengthen interactivity and streamline textual content. One student-teacher suggested including *"some games or more interactive activities"* and clearer signals when tasks were completed (P6), pointing to a desire for more dynamic engagement and feedback. Another recommended that readings be more *"straight to the point"* and less dense (P7), indicating the importance of balancing depth with accessibility. A small number of responses also addressed technical aspects, such as ensuring that all links function correctly and resolving isolated issues within specific routes (P8, P9).

Table 3. Summary of analytical themes and representative participant excerpts

Theme	Description	Representative Voices
1. From Not Knowing to Clearly Conceptualizing Learning Landscapes	Students gained clarity on what a learning landscape is and how its structure supported their learning.	"A tool that organizes information in a clear, progressive way" (P3); "A path that guides our reflection and challenges us to grow each week" (P8).
2. Multisensory and Metaphorical Design as Drivers of Engagement	The bicycle metaphor, visuals, color-coding, videos, and audio enhanced navigation, reduced cognitive overload, and increased motivation.	"Audio helped when the text felt long" (P4); "I used it to get proper pronunciation" (P5); "The design kept me focused" (P2).
3. Connecting the Landscape to Practicum Realities and Future Teaching	Weekly challenges supported reflection-in-practice and transfer of ideas to classroom contexts.	"I applied the challenge directly in my class" (P7); "It helped me think of how to improve my teaching every week" (P1).
4. Suggestions for Refinement and Enhancement	Participants provided actionable recommendations for improving guidance, examples, or workload distribution.	"Reduce reading slightly" (P6); "More classroom examples would help" (P9).

Interestingly, several participants used this space not to propose changes but to reaffirm their positive experience, describing the landscape as *"very well-developed"* (P3) and *"appropriate"* for the course (P5). This pattern reinforces the overall perception of effectiveness while situating the suggestions within a context of satisfaction rather than critique.

Overall, this theme suggests that participants' feedback was oriented toward fine-tuning rather than redesign. The proposed enhancements, such as clearer progress tracking, occasional simplification of content, and increased interactivity, reflect user-informed adjustments that could further strengthen the learning landscape's usability and pedagogical impact.

DISCUSSION

Overview of Key Findings

The findings from this study indicate that the *Riding Didactic Challenges* learning landscape supported English student-teachers' professional development in four interconnected ways. First, participants moved from an initial lack of familiarity with learning landscapes to a clearer conceptual understanding of how structured digital pathways can guide reflection, exploration, and action. Second, the multisensory and metaphorical design of the landscape, particularly the bicycle metaphor, the four-part route structure, and the integration of audio-visual supports, enhanced engagement while reducing perceived cognitive load, enabling student-teachers to navigate content more intentionally. Third, participants emphasized that weekly challenges facilitated the transfer of ideas from the Seminar to their practicum settings, strengthening the connection between theory and practice. Finally, participants identified areas for refinement, such as reducing reading load or incorporating more real-classroom examples, highlighting the iterative nature of design-oriented instructional innovation.

Taken together, these findings suggest that a well-designed learning landscape can function not only as a digital learning environment but also as a pedagogical model that embodies principles of inclusivity, multimodality, and reflective practice. In this sense, the landscape operates as more than a repository of resources; it becomes a structured pedagogical narrative through which student-teachers develop conceptual clarity, strengthen professional identity, and cultivate transferable teaching practices. To synthesize these insights and provide a consolidated view of the qualitative patterns, **Table 3** presents the four themes alongside representative participant voices.

Interpretation of Findings in Relation to Literature

Conceptual clarity and navigation

The first theme—*From Not Knowing to Clearly Conceptualizing Learning Landscapes*—connects closely with the theoretical foundations outlined in the literature. Learning landscapes are described as structured yet flexible learning ecosystems that integrate multimodal inputs, sequenced pathways, and reflective prompts to support autonomy and meaning-making (García, 2021; Saborío-Taylor, 2025a). Participants' descriptions of the landscape as *"a path that guides reflection"* (P8) or a *"clear, progressive tool"* (P3) suggest that the design did not remain abstract, but became tangible through use, offering a coherent experience rather than a set of disconnected tasks.

This finding also resonates with literature on reflective practice and teacher identity. As Mann and Walsh (2017) and Farrell (2022) argue, novice teachers need structured opportunities to externalize their thinking, question their assumptions, and make sense of their classroom experiences. The recurring cycles of exploration, reading, and challenge within the landscape created these moments in a sustained way across the practicum.

In this sense, the clarity reported by participants goes beyond simply understanding course content. It reflects how structure and navigation can support the gradual development of pedagogical thinking, allowing student-teachers to not only follow a learning path, but to begin making sense of how such paths can be designed for others. This shift, from understanding to envisioning practice, becomes a key step in the construction of their professional identity.

Multisensory and metaphorical engagement

The second theme—*Multisensory and Metaphorical Design as Drivers of Engagement*—highlights how the landscape's multisensory design and pedagogical metaphor enhanced engagement and reduced cognitive load, aligning closely with the UDL Guidelines 3.0 (CAST, 2023). Participants' reports of using audio to manage long readings, relying on color-coded

text for clarity, and engaging with visual and video resources show how varied modalities supported comprehension and sustained attention. These findings resonate with research on multimodality, which emphasizes how different semiotic modes expand learners' access to meaning and support deeper engagement with content (Jewitt, 2016; Kress, 2010).

The results also suggest that multisensory elements, particularly the integration of color cues, audio scaffolds, and visual supports, can enhance engagement and support autonomy in digital learning environments for second language (L2) learners (Saborío-Taylor, 2025b). In a related study, Saborío-Taylor et al. (2025) argue that multimodality not only diversifies access points to content but also fosters emotional engagement and reduces barriers to participation, a pattern reflected in participants' descriptions of the landscape as "motivating," "easy to navigate," and "helpful for staying focused."

The pedagogical metaphor of the bicycle also played a central role in shaping how participants experienced and navigated the landscape. Rather than functioning solely as an aesthetic device, the metaphor acted as a conceptual anchor that supported orientation, progress awareness, and emotional engagement. This aligns with perspectives on multimodal and narrative design, where metaphors contribute to coherence and help learners make sense of complex learning environments (Jewitt, 2016). In this study, student-teachers explicitly connected the metaphor to feelings of movement, effort, and growth, suggesting that it supported not only understanding but also motivation and persistence.

Practicum relevance and transfer

The third theme—*Connecting the Landscape to Practicum Realities and Future Teaching*—centers on the landscape's ability to bridge Seminar sessions and the practicum experience, an aspect that resonates with the principles of Challenge-Based Learning (CBL). The Engage → Investigate → Act cycle (The Challenge Institute, 2018) emphasizes movement from understanding to action in authentic contexts, which is reflected in how student-teachers described applying ideas in their classrooms. In this study, participants reported that weekly challenges prompted them to test ideas directly in their classrooms, reflect on outcomes, and reconsider instructional decisions. This pattern suggests that the landscape functioned as a sustained structure for connecting theory with practice, rather than as a set of isolated or disconnected tasks.

This finding also aligns with literature on design-oriented research, which highlights that learning environments that are iterative, contextualized, and problem-centered are more likely to support transfer to real classroom settings (Wang & Hannafin, 2005; McKenney & Reeves, 2019). Participants' reflections—such as applying classroom management strategies, experimenting with voice modulation, or integrating Social and Emotional Learning (SEL) activities—illustrate how the landscape operated as a scaffold for practical enactment.

These experiences point to a shift from knowing to doing. Student-teachers were not only engaging with pedagogical concepts at a theoretical level, but also beginning to appropriate them as part of their own teaching practice. In this sense, the landscape supported the development of a situated pedagogical repertoire, where ideas were tested, adapted, and reinterpreted in response to real classroom dynamics. This process also contributes to how student-teachers begin to see themselves as decision-makers in the classroom, reinforcing the link between experience, reflection, and emerging professional identity.

Suggested improvements and iterative design

The final theme—*Suggestions for Refinement and Enhancement*—relates to student-teachers' recommendations for improving the learning landscape, particularly in terms of workload management and the inclusion of more concrete classroom examples. These suggestions align with design-based research perspectives, which understand instructional innovation as an iterative and responsive process shaped by user experience (McKenney & Reeves, 2019). Rather than pointing to weaknesses in the design, participants' comments reflect authentic learning needs and highlight opportunities for refinement grounded in practice.

This feedback also connects with the principles of UDL, particularly the emphasis on optimizing relevance and reducing barriers to engagement (CAST, 2023). While the multisensory supports were perceived as effective, participants' suggestions indicate that aspects such as pacing, clarity of examples, and task signaling could be further adjusted to enhance accessibility and usability.

Overall, the presence of this type of feedback can be interpreted as an indicator of meaningful engagement. By articulating specific suggestions, student-teachers positioned themselves not only as users of the learning environment, but as active contributors to its ongoing improvement. In this sense, the landscape fostered a space where reflection extended beyond learning content to include the evaluation and rethinking of pedagogical design itself.

CONCLUSIONS AND IMPLICATIONS

The findings of this study demonstrate that the *Riding Didactic Challenges* learning landscape supported English student-teachers in developing conceptual clarity, reflective awareness, and practical pedagogical skills during their teaching practicum. Rather than functioning as a static repository, the landscape operated as a structured pedagogical narrative that guided learners through sequenced exploration, multimodal input, reflective interpretation, and real-world application. Digital learning environments designed with coherent sequences and embedded tasks have been recognized as catalysts for learner engagement and agency (Holmes et al., 2022), a pattern reflected in participants' descriptions of their journey through the landscape.

The results also highlight the value of multimodal and UDL-informed design in teacher education. Participants' appreciation of audio, color-coded text, videos, and other sensory supports aligns with broader evidence that multimodal learning can enhance comprehension and respond to diverse learner needs (Lim & Polio, 2020). Through their experience in the landscape, student-teachers began to recognize how inclusive and accessible design practices can be

translated into their own teaching, aligning with calls for pedagogical models grounded in flexibility, accessibility, and learner-centered design (Holmes et al., 2022).

The weekly challenge structure further strengthened the connection between coursework and practicum. Challenge-based and design-oriented approaches emphasize the importance of engaging learners in authentic tasks that promote reflection and transfer (Taconis & Bekker, 2023). Participants' reports of applying concepts directly in their classrooms suggest that the landscape functioned as a sustained mechanism for bridging theory and practice, supporting the development of informed and context-responsive pedagogical decision-making.

At the same time, this study has several limitations. The small sample size (ten student-teachers from a single program) and the reliance on self-reported post-experience data limit the transferability of the findings. The absence of longitudinal follow-up or classroom observation data constrains the ability to examine how deeply and durably these practices were sustained over time. In addition, the dual role of the researcher as both landscape designer and instructor may introduce interpretive bias, despite efforts to maintain analytic rigor.

Future research could build on these findings through longitudinal or mixed-methods designs that incorporate classroom observations, teaching artifacts, or interviews to better understand how learning landscapes influence teacher identity formation and instructional practice over time. Comparative studies may also explore how variations in metaphor, route structure, or multimodal design influence engagement and transfer. Additionally, further research on the integration of adaptive technologies or Artificial Intelligence (AI)-supported feedback mechanisms into learning landscapes appears promising, particularly in light of emerging work on AI in teacher education (Holmes et al., 2022).

Author notes: This study was conducted during the first academic term of 2025, when the first author (Silvia Saborío-Taylor) served as the course instructor. The second author (Alejandra Álvarez-Chaves) assisted with research-related processes.

Author contributions: SS-T: conceptualization, methodology, investigation, writing – original draft, writing – review & editing; **AÁ-C:** data curation, resources, writing – original draft, writing – review & editing. All authors approved the final version of the article.

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Ethics declaration: The authors stated that this study corresponds to a systematization of a pedagogical experience developed within a regular university course during the first academic term of 2025. The study involved student-teachers enrolled in the course Didactic Challenges in the Supervised Practicum in the English Teaching Program at Universidad Nacional, Costa Rica. The authors further stated that participation in the post-experience survey was voluntary, and participants were informed about the purpose of the study and the use of anonymized responses for research and publication purposes. To protect confidentiality, no identifying information or personal data were disclosed, and responses were coded using participant identifiers (P1–P9). Because the study involved minimal risk and focused on the reflective evaluation of a pedagogical experience conducted within the normal context of the course, formal ethics committee approval was not required according to institutional guidelines applicable to this type of educational research.

AI statement: The authors stated that they used AI tools exclusively for non-substantive language support during manuscript preparation. Assistance was limited to grammar correction, paraphrasing, and stylistic refinement to improve clarity and readability, particularly given that English is not the authors' first language. No text, data, analyses, or research findings were generated by AI. All intellectual content reflects the authors' original work.

Declaration of interest: The authors declared no competing interest.

Availability of data and materials: All data generated or analyzed during this study are available for sharing when appropriate request is directed to corresponding author.

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APPENDIX A

Post-Experience Survey

Exploring Your Experience with Learning Landscapes

Thank you for participating in the Learning Landscape experience during your practicum process. This form is intended to collect your feedback on how the structure, resources, and strategies of the Learning Landscape supported your professional growth. Your responses will help us assess the effectiveness of this pedagogical approach and guide improvements for future implementations.
Your answers may also contribute to future academic research and publications related to this experience. Please note that your name or personal identification will not be included or distributed in any research results. We encourage you to respond with sincerity. There are no right or wrong answers, only your valuable perspective.

Name and ID:
_____

I. General Understanding

1. Before engaging with this course, did you know what a Learning Landscape was?
   - Yes
   - No
   - Not sure

2. After using this Learning Landscape, how would you describe your level of understanding of what a Learning Landscape is?
   - Clear understanding
   - Somewhat clear
   - Still not clear

3. Did the Learning Landscape structure help you follow and understand the course content more effectively?
   - Yes, definitely
   - Yes, to some extent
   - No
   - Not sure

4. Would you recommend the use of Learning Landscapes in other courses?
   - Yes
   - Maybe
   - No

5. After working with this Learning Landscape, how would you define it in your own words?
_____

II. Multisensory Experience

6. Which of the following multisensory strategies helped you engage with the content? (Select all that apply)
   - Color-coded text (e.g., using different colors to highlight key words, instructions, or grammar points)
   - Images or illustrations
   - Audio recordings
   - Interactive tools (e.g., Padlet, Lino.it, checklists)
   - Metaphors and visual analogies (e.g., the bicycle journey)
   - None of the above

7. The multisensory approach of this Learning Landscape… (Select all that apply)
- Made the content more understandable
- Made the experience more enjoyable
- Did not impact my learning
- Was confusing or distracting

8. Which type of multisensory support did you find most effective for your learning process? (Select all that apply)
- Visual (colors, icons, charts)
- Auditory (recorded text, pronunciation support)
- Kinesthetic (cut-paste, map-based, interactive challenges)
- None of them

III. Pedagogical Metaphor & Structure

9. Did the metaphor of a bike journey help you reflect on your practicum process?
- Yes, it helped a lot
- Somewhat
- Not really
- I did not notice the metaphor

10. Which part of the metaphorical journey did you identify with the most?
- Basecamp: Preparation and Planning
- The Ascent: Building Skills and Strategies
- Midway Plateau: Reflect and Recharge
- The Climb: Advanced Challenges and Innovation
- Summit: Achievement and Celebration

11. Did this metaphor help you make meaning of your own learning journey?
- Yes
- A little
- Not at all

IV. Use of Audio

12. Did you use the audio recordings included in the Learning Landscape?
- Yes, frequently
- Yes, occasionally
- No, I did not use them

13. The audio recordings helped me with the following aspects: (Select all that apply)
- Recognizing and improving pronunciation
- Recognizing rhythm and intonation
- Improving listening comprehension
- Reading aloud or modeling speech
- Staying engaged with the content
- None of the above

14. Overall, how useful were the audio recordings for your English learning? *
- Very useful
- Somewhat useful
- Not useful
- I did not use them

15. (Optional) If you used the audio, describe one way it supported—or did not support—your learning. You may give an example, like words by which you improve pronunciation.

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V. Overall Impact and Suggestions

16. After completing the full Learning Landscape, how would you rate your level of satisfaction with the experience?
- Very satisfied
- Satisfied
- Neutral
- Dissatisfied

17. Do you believe this format (Learning Landscape) helped develop your skills as a future teacher?
- Yes, significantly
- Yes, somewhat
- Not really
- Not at all

18. Mention one change or improvement you would suggest for future Learning Landscapes.

_____

19. In one sentence, summarize how the Learning Landscape impacted your course experience.

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