

# Assessing video game narratives: Implications for the assessment of multimodal literacy in ESP

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## ABSTRACT

Research into the contribution of multimodality to language learning is gaining momentum. While most studies pave the way for new understandings of language teaching and learning, there is an increasing demand for comprehensive assessment practices, particularly within higher education contexts. A few studies have emphasized the importance of reflecting on and establishing criteria for the assessment of multimodal literacy. This is necessary to understand students' contributions in detail and to provide them with effective support in developing their multimodal skills. This study discusses the assessment of multimodal writing in English for Specific Purposes (ESP) contexts. It presents the design of an analytical tool for assessing multimodal texts and provided an example of its application. This tool covers assessment categories such as language use, content expression, interpersonal meaning, multimodality, and creativity and originality. As an example, we focus on the multimodal writing of a video game narrative, a genre that requires the integration of multiple modes of communication to convey meaning more effectively. Finally, this study offers pedagogical insights into the assessment of multimodal literacy in ESP.

## 1. Introduction

The increasing use of audiovisual and digital resources has a significant impact on how people communicate, leading to the transformation of traditional forms of expression and the emergence of diverse new multimodal texts. This evolution carries significant implications; not only does it change the way we navigate, construct, and convey information but also paves the way for innovative discursive practices within the digital era.

These evolving discursive practices have implications for English for Specific/Academic Purposes (ESP/EAP) contexts, where genres, defined as a set of communicative events shared within a discourse community (Swales, 1990), are typically addressed. In particular, it offers teachers opportunities to innovate in genre teaching (Hafner & Miller, 2019), encouraging reflection on pedagogical frameworks and exploration of new perspectives to address students' communicative needs.

One such perspective is multimodality, which recognizes the potential of interactions among communicative modes (e.g., visuals, images, speech) in the meaning-making process (Kress & van Leeuwen, 2001). Within the realm of education, multimodality has had a great impact, prompting researchers and teachers to consider ways of approaching diverse forms of literacy that respond to the communicative requirements of students (Cope & Kalantzis, 2015; Lim & Tan-Chia, 2022; The New London Group, 1996). In the specific domain of language teaching and learning, traditional literacy, primarily encompassing reading and writing, is often deeply

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rooted. While these skills remain crucial, the traditional view of literacy is being questioned by the drive to promote different literacy forms, with the aim of better preparing students for contemporary discourses (e.g., Beltrán-Palanques, 2023; Lim, 2018). Particularly, research points to the need to integrate multimodal literacy (Mills & Unsworth, 2018), centering on both its explicit teaching and assessment (Lim, Toh, & Nguyen, 2022), with the latter receiving relatively less attention.

The present study endeavors to explore the assessment of written texts from a multimodal perspective. It focuses on an ESP context at the university level, where the introduction of multimodality is gaining ground (Querol-Julián & Fortanet-Gómez, *in press*). In this study, we discuss and devise an analytical tool for assessing multimodal writing in ESP. The potential of the assessment tool is demonstrated through the analysis of a multimodal written assignment, particularly a video game narrative. Finally, we offer recommendations to support teachers in the assessment of multimodality in ESP.

## 2. Theoretical background

### 2.1. Multimodal literacy teaching

As new literacy practices become legitimized in pedagogy, and communication is increasingly characterized by the growing use of audio-visual, technological, and digital resources, a shift in the traditional approach to literacy is observed. This shift embraces more inclusive perspectives that recognize the diversity of forms of communication. Regarding this, the *New London Group (1996)* already challenged and extended the traditional notion of literacy by promoting a pedagogy based on multiliteracies (Cope & Kalantzis, 2015). A related concept is multimodal literacy (Mills & Unsworth, 2018), which originated in social semiotics. Broadly speaking, multimodal literacy emphasizes the idea that the meaning-making process takes place through the effective use and combination of diverse semiotic resources (van Leeuwen, 2017; Walsh, 2010).

In the specific context of language teaching and learning, multimodal literacy can be conceptualized as the skills students should develop to critically construct, navigate, and communicate through multimodal texts (Eisenlauer & Karatza, 2020; Lim, 2018). The growing emphasis on multimodal literacy has greatly influenced language teaching practices (e.g., Lim, Towndrow and Tan, 2021; Ruiz-Madrid & Valeiras-Jurado, 2020; Querol-Julián & Fortanet-Gómez, *in press*). This trend offers teachers valuable opportunities to foster these skills within the language classroom (Lim & Hung, 2016; Lim & Tan-Chia, 2022) and support students in achieving multimodal literacy (O'Halloran & Lim, 2011), which is critical in the contemporary communicative landscape.

As multimodality features centrally and its teaching gains ground in all levels of education, the introduction of multimodal assessment practices becomes increasingly critical (Hafner & Ho, 2020; Jiang, Yu, & Lee, 2022; Jones et al., 2020). In this regard, in a recent systematic review, Lim, Toh and Nguyen (2022) identified key themes related to multimodal pedagogies and literacy, emphasizing the need for explicit teaching and the implementation of multimodal assessment, which is the focus of this study.

### 2.2. Multimodal literacy assessment

The growing emphasis on the assessment of multimodal literacy is likely driven by the recognition of the diverse ways in which students comprehend information, navigate through different modes, and construct meaning. This recognition may result in an increased interest in providing students with comprehensive assessment opportunities aligned with their multimodal productions. Such a shift toward a multimodal view of assessment is necessary to adequately capture the complexity of multimodal tasks (Ross, Curwood, & Bell, 2020). In this regard, as discussed below, some existing research in the field of language teaching proposes assessment criteria and instruments aimed at deepening the multimodal component.

For instance, from a theory-based perspective, Campoy and Querol-Julián (2015) establish criteria for assessing non-verbal communication in multimodal listening comprehension and argue for training students in multimodal assessment procedures. More recently, Campoy and Querol-Julián (2021) further discuss the assessment of multimodal listening in ESP, aligning it with the descriptors outlined in the *Common European Framework of Reference for Languages (2018)*. The authors propose and provide examples of a set of revised descriptors tailored to better represent the multimodal characteristics of communication.

Jiang et al. (2022) argue that the assessment of digital multimodal composing (DMC) has generally been realized through either element-based rubrics focused on specific modes (Hung, Chiu, & Yeh, 2012), or process-oriented approaches aimed at facilitating the assessment of different stages involved in composition (Hafner & Ho, 2020). Jiang et al. (2022) highlight the role of genre in DMC assessment and develop a genre-based model to guide language teachers in the assessment of students' DMC. This model focuses on communicative purposes, audience orientation, and the use of diverse multimodal layers (i.e., purpose, base units, layout, navigation, and rhetoric). The authors discuss some of the challenges teachers encounter when assessing DMC, including the contrast between the assessment of printed (linguistic focus) and digital compositions (linguistic and non-linguistic focus). They also highlight the tension between individual writing assessment and collaborative assessment. Finally, the study acknowledges the difficulties teachers may experience in determining the knowledge and required indicators to assess multimodal assignments.

Hung et al. (2012) develop a theory-based rubric to assess whether students' use of semiotic modes (e.g., linguistic, gestural, auditory, visual, spatial) may enhance or limit the expression of meaning and multimodal cohesion in multimodal texts. In particular, the study focuses on the multimodal text production of presentation slides. Throughout this longitudinal study, this research proves that an element-based rubric can function as a tool to support students' multimodal literacy development through the application of formative assessment procedures. Hafner and Ho (2020) zoom in on the assessment of the genre of scientific documentaries in EAP. For this purpose, they adapted an existing rubric, originally designed to assess oral presentations, to assess DMC. This adapted rubric comprises three criteria: organization and contents, multimedia and visual effects, and language (also used in Li and Pham, 2022 in an

ESP context). The study discusses the relevance of incorporating both formative and summative assessment approaches and underscores the importance of considering the orchestration (or aptness (Kress, 2010)) of the selection of modes.

In addition to this, Querol-Julián and Beltrán-Palanques (2021) present a rubric for assessing oral production, which mainly addresses language issues, multimodal resources, and content expression. This rubric is intended to be used in the context of collaborative teaching between ESP and English language instruction (EMI) teachers. Specifically designed to assess PechaKucha presentations, the rubric covers several criteria, including content, language, format, visual aids, synchronisation of speech and visuals, and engagement.

As can be noted, important developments in the assessment of multimodality are taking place, highlighting the need to develop and establish assessment criteria to assess students for real-life communicative purposes. In language teaching environments, however, it is necessary not to lose sight of the linguistic component, even though it is acknowledged that each mode contributes to the full expression of meaning. Despite the research efforts, there is still a need to continue prioritizing the implementation of innovative assessment approaches that embrace multimodal literacy to provide students with a holistic view of their productions.

In this study, multimodal literacy assessment is defined as the process of critically examining the appropriateness of using various modes in the effective construction and transmission of meaning. The aim is to determine how the combination of different modes of communication contributes to a comprehensive understanding of the message. Through this holistic view, teachers can provide students with a global understanding of the construction of multimodal artifacts, while helping them to create a metalanguage for multimodal assessment (Hafner & Ho, 2020). In turn, this perspective may contribute to enhancing students' agency and thus empowering them to adopt more active roles in the creation and expression of meaning through multimodal artifacts.

### 3. Context

#### 3.1. The ESP course

For this study, we have selected an ESP course offered at Universitat Jaume I (Spain). The author of this article has been teaching this ESP subject since the 2014/2015 academic year. By the academic year 2016/2017, the author assumed sole responsibility for the course, enabling the design of the teaching materials, assignments, and evaluation tasks.

This ESP course is an integral part of the curriculum of the Bachelor's Degree in Video Game Design and Development. It is taught during the first term of the first academic course of the degree. The pedagogical objectives of this ESP course revolve around the development of students' linguistic competence and multimodal literacy. For this purpose, students engage in a range of activities and assignments designed to address their communicative needs, while exploring potentially related topics useful for their professional development in their field of specialization.

The chosen ESP course consists of theoretical and practical sessions, with the primary goal of preparing students for professional communication in their field of specialization. The course assessment comprises a final written exam (60 %) and continuous assessment (40 %). As for the written exam, the language skills of listening, reading, and writing are assessed. The continuous assessment involves students completing a series of assignments, including an Elevator Pitch presentation, a written and audiovisual video game review, and a video game narrative (the one chosen for the present study). All course activities and assignments focus on the field of video games, ensuring alignment with the subject matter of the field.

The course is anchored to the B2 level (CEFR, 2018), and therefore so are all the activities and tasks they perform during the course. Despite this level of proficiency, in some cases, some students may be above or below it. Even so, it is important to note that, in general, students tend to have an entry proficiency language level that enables them to complete the course.

Given that this ESP course is offered during the first year of the degree, students often have limited prior experience and knowledge regarding the design and development of video games and the game industry. While a few students may enter the university program after completing vocational courses in areas such as programming or game design, the majority come directly from secondary school education. The student cohort is characterized by diverse profiles: some students show a greater interest in software and computer science, whereas others are much more committed to artistic and audiovisual aspects. Nevertheless, most students attending the ESP course are generally familiar with technology, and the use of digital resources and are interested in the field of video games, which extends beyond gaming to encompass their design and development. Overall, students show a readiness to engage in activities that incorporate technology and digital and audiovisual resources.

Driven primarily by the synergy of students' professional and academic profiles, digital skills, and technological familiarity, this scenario offers optimal opportunities for students to engage in the exploration, navigation, and construction of multimodal texts related to video games. In this way, a conducive learning context is created for students to understand how communication and genres are multimodally configured within their largely digital and multimedia-rich communities of practice.

#### 3.2. The multimodal written assignment

This study focuses on the multimodal genre of written video game narratives. This genre is integrated into the ESP course given its growing relevance for professionals in the video game industry. The development of this professional document, which may require interdisciplinary collaboration among professionals (e.g., programmers, designers, artists) serves as a backdrop for conceptualizing entertainment software. Specifically, a video game narrative can be defined as "the method by which the story materials are communicated to the audience" (Dansky, 2021: 1). Often, the genre of video game narratives may be erroneously conceived as solely the story. While the story can serve as the starting point, it does not constitute the entirety of a narrative. The story can refer to the details and events that occur as driven by characters within a video game (Boon, 2021). In addition to the story, various elements

contribute to conforming the narrative of the videogame, playing a significant role in the overall gaming experience (Dansky, 2021). These include, for example, characters, settings, backstories, gameplay, and descriptions of the music and soundtracks. The purpose of a video game narrative is to tie together the various events of a game, such as the story, the characters, and the various multimedia elements that, together, can engage potential players (Dansky, 2021). The narrative of a video game is commonly used to offer meaning to the action players undertake within the game (Qin, Rau, & Salvendy, 2009). Therefore, the narrative of a video game seems to serve as a conduit for cohesion of different elements that potentially invite players to participate in the game and can also provide an immersive experience for them. Video game narratives differ from other forms of narratives in other storytelling media, primarily due to the involvement of players (Baker et al., 2017).

Commonly, video game narratives are categorized into two types: embedded and emergent (Jenkins, 2004; Salen & Zimmerman, 2004). Embedded narratives follow a traditional storytelling approach in which the developer serves as the author of the story. In this context, the main elements of the narrative are predetermined and static throughout the game, so the progression of the story remains the same (Baker et al., 2017). On the other hand, emergent narratives evolve dynamically as players interact with the video game, allowing for a more player-driven storytelling experience.

While the construction of a video game narrative might be more of a content-focused course than a language-oriented one, the inclusion of such an assignment in the ESP course here described is relevant. Particularly, this assignment is integrated into the syllabus of the course due to its potential to promote students' writing skills, creativity, critical thinking, and group work. In addition, it aims to enhance students' multimodal literacy, fostering their semiotic awareness (Towndrow, Nelson, & Yusuf, 2013), understood as "critical attention to relational, multimodal aspects of meaning design, without which meaningful assessment schemes can neither be conceived nor implemented" (p. 328). Similarly, involving students in such a writing task can serve to promote their ability to understand, construct, and represent disciplinary content through multimodal texts using an additional language for professional purposes. However, due to the nature of the course, the elaboration of this assignment does not include specific guidance for art design or the use of any software to create a video game. This could be considered if the ESP course were offered at more advanced levels of the degree program and involved the coordination between the ESP teacher and content teachers involved in the artistic and technical domains.

As for the written assignment, students work in groups of about 4/5 members. The completion of this document takes approximately 5/6 weeks. Groups are formed based on the students' gaming interests. That is, they typically group themselves according to their preferences for video game genres (e.g., adventure, visual novel, horror), or any other genre they are interested in or want to explore more. The final submission is in a PDF format. As aforementioned, this written activity is part of the continuous assessment of the course and the grade is 10 % out of 40 %.

During the first in-class session, students are introduced to the genre of video game narratives. This introduction focuses primarily on content, communicative purpose, use of visual support, and structure. Moreover, students are also informed of the assessment



**2. NARRATIVE GENRE**

The embedded narrative was chosen because it can offer the player knowledge of the story and situation of the main character by the interaction with the scenery and different elements of it, as well as with different NPCs.

Additionally, adding the embedded narrative is also provided with references to characters of well-known pieces of horror fiction.

**3. GAME AND GAMEPLAY**

The game is in the first person, as the player has to see the world through the eyes of the character. The player's main goal is to survive as long as possible in a world where the player is also provided with references to characters of well-known pieces of horror fiction.

**1. TABLE OF CONTENTS**

**1. TABLE OF CONTENTS** 1

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7.1. OBJECTS 12

7.2. TEXTURES 14

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**4. STRUCTURE**

**4.1. LEVELS**

The game is structured in a story consisting of three levels, each one set in different parts of the character. As an example of the game, there is the table of a clock, change of color on the screen, and change in the music.

**LEVEL 1 (page 2):**

The first level is based on the massive amount of work and how overwhelming it is to us, as we are not used to it. The player has to survive in a world where the player is also provided with references to characters of well-known pieces of horror fiction.

**LEVEL 2 (page 2):**

The second level is based on the massive amount of work and how overwhelming it is to us, as we are not used to it. The player has to survive in a world where the player is also provided with references to characters of well-known pieces of horror fiction.

**LEVEL 3 (page 2):**

The third level is based on the massive amount of work and how overwhelming it is to us, as we are not used to it. The player has to survive in a world where the player is also provided with references to characters of well-known pieces of horror fiction.

**4.2. ABOUT GAME MECHANICS**

**LEVEL TRANSITIONS**

To finish each level, either by winning or dying (losing), the character will enter an elevator. There is only one elevator in each level, located at the end of the level. The player has to wait for the elevator to arrive. Once the elevator arrives, the player has to get on it. The elevator will take the player to the next level. The player has to wait for the elevator to arrive. Once the elevator arrives, the player has to get on it. The elevator will take the player to the next level.

**4.1. LEVELS**

The first level is based on the massive amount of work and how overwhelming it is to us, as we are not used to it. The player has to survive in a world where the player is also provided with references to characters of well-known pieces of horror fiction.

The second level is based on the massive amount of work and how overwhelming it is to us, as we are not used to it. The player has to survive in a world where the player is also provided with references to characters of well-known pieces of horror fiction.

The third level is based on the massive amount of work and how overwhelming it is to us, as we are not used to it. The player has to survive in a world where the player is also provided with references to characters of well-known pieces of horror fiction.

Fig. 1. Example of a video game narrative.

criteria. The assessment tool is used during the development process to support students' progression, but it is not explicitly used as a formative assessment.

Following this, each group starts brainstorming ideas for the video game narrative, considering aspects such as the plot, the gameplay, characters, and levels. As we aim for students to be as creative, innovative, and critical as possible, we refrain from sharing narratives made by other students in previous course iterations. Nonetheless, some examples are shown in class to support the understanding of the written task. We proceed this way to ensure they do not follow previous models strictly (Bell, Mladenovic, & Price, 2013).

During the course, some in-class practice sessions are devoted to the development of the video game narrative. This allows the teacher to supervise and monitor the students' work.

The written assignment should contain the following aspects, even though adaptations are welcome:

1. Cover and title page (title of the video game)
2. Table of contents
3. Justification
4. Description of the game and gameplay (genre, storytelling, player, levels, mechanics), the purpose of the game, audience
5. Description of characters and non-player characters
6. Description of objects (e.g., texture, background)
7. Ambient music and music (hyperlinks must be included in the text)
8. Reception (the player's experience)

The video game narrative should be original and based on the decisions taken within the group work. However, to facilitate the students' task, from the 2021/2022 academic year students are allowed to base their ideas on an existing video game. The video game narrative was first done during the 2017/2018 academic year and today the dataset consists of more than 30 assignments. Fig. 1 shows an example of a narrative.

The elaboration of the video game narrative can be challenging for students. They must conceive a novel concept for a video game and effectively convey relevant information related to their innovative idea. This requires them to thoughtfully consider various crucial aspects, such as linguistic choices, organization of information and presentation of content, the use and selection of visual support, the selection of music, the design of characters (optional), and the representation of interpersonal meaning. Furthermore, they also need to reflect on how to construct intersemiotic relationships among the diverse modes employed in their narrative. Within the context of their project, this primarily entails considering the potential synergy between the written mode and visual elements. In other words, students must explore how these two main modes interact and coexist to consistently enhance the overall meaning of their video game narrative.

#### 4. Assessing the multimodal written assignment: The case of video game narratives

##### 4.1. The analytical tool for multimodal assessment

The integration of multimodal writing tasks in language courses is widely accepted, but the challenge lies in how to assess them effectively (Yi, Shin, & Cimasko, 2020). The critical consideration of determining what and how to assess students' multimodal representations has become primordial, as in the case in point presented here.

In the realm of language teaching and learning, the use of rubrics for assessment purposes is well-established. As for the assessment of the video game narrative described above, we find it valuable to design an instructional rubric aligned with the students' guidelines. Instructional rubrics differ from conventional ones as they not only serve to assess students' performance but also facilitate learning throughout the writing process (Andrade, 2000). The use of an instructional rubric provides students with guidance as they work on their multimodal assignments. This supports their development and enhances their acquisition of new skills and knowledge (Jacobs, 2013).

In the assessment of a written assignment, such as a video game narrative, it is necessary to move beyond merely linguistic considerations. This is because students are involved in the creative process of a multimodal composition, in which diverse communicative modes come into play, especially written and visual elements (Hafner & Ho, 2020). While relying solely on a rubric based on linguistic items proves insufficient for capturing the multimodal nature of the assignment, employing one that acknowledges the potential of diverse modes of communication may serve as an effective method for assessing multimodal literacy (Hafner & Ho, 2020; Hung et al., 2012; Jiang et al., 2022; Querol-Julián & Beltrán-Palanques, 2021).

Designing and applying a rubric that recognizes the contribution of various modes in the meaning-making process can pose challenges. Teachers should establish clear assessment criteria that allow for an overall understanding of the structure and consistency of modes within multimodal compositions (Hafner & Ho, 2020; Jiang et al., 2022; Querol-Julián & Beltrán-Palanques, 2021). On the other hand, students can also encounter some difficulties as they are generally familiar with traditional assessment approaches that tend to prioritize language. Therefore, it can be useful for teachers to guide students regarding assessment criteria when multimodality is considered (Campoy & Querol-Julián, 2015; Hafner & Ho, 2020).

Considering the intrinsically multimodal essence of video game narratives, the assessment criteria require careful consideration. In addition to assessing language and the organizational structure of the text, it is also necessary to focus on the effective use and coherent integration of semiotic resources and how these can collectively enhance and represent meaning (Kress, 2003). Nevertheless, as this

writing task is framed within an ESP context, language remains a crucial aspect to be assessed. The proposed rubric, despite this emphasis, broadens its focus to allow a comprehensive assessment of the task. More generally, these criteria include attention to main semiotic choices and how they are interwoven to facilitate the coherent transmission of meaning. In addition, the rubric takes into account the expression of content and interpersonal meaning, adequacy of the task, usefulness and originality of the game, and the development of critical thinking.

**Table 1**  
Assessment rubric for written video game narratives.

Criteria	Level 1 Poor (2.5)	Level 2 Satisfactory (5)	Level 3 Good (7.5)	Level 4 Outstanding (10)
Adequacy of the task 5 %	Minimum content requirements are partially covered. Inadequate presentation.	Minimum content requirements are covered. Adequate presentation.	Content requirements are covered. Adequate presentation.	All content requirements are fully covered. Neat presentation and well-organized.
Knowledge command and knowledge transmission 10 %	Limited knowledge of the topic rarely supported by clear explanations. Limited ability to provide arguments and descriptions.	Sufficient knowledge of the topic sometimes supported by clear explanations. Sufficient ability to provide arguments and descriptions.	Good knowledge of the topic usually supported by clear explanations. Good ability to provide arguments and descriptions.	Full knowledge of the topic generally supported by clear explanations. High ability to fully develop relevant arguments and descriptions.
Critical thinking 10 %	Poor reflection is supported by flawed arguments.	Poor reflection is supported by valid arguments.	Good reflection from a critical perspective supported by strong arguments.	Deep reflection from a critical perspective is supported by strong arguments.
Elaboration and usefulness of the video game and originality of the game. 5 %	Limited explanations regarding the potentiality of the video game. (e.g., story, characters, structure of the game, setting, visual aids, objects, textures, and music). Limited justification of the potential of the video game regarding the target group and player experience. Basic development of the idea for the video game.	Sufficient explanations regarding the potentiality of the video game. (e.g., story, characters, structure of the game, setting, visual aids, objects, textures, and music). Sufficient justification of the potential of the video game regarding the target group and player experience. Sufficient development of an idea for the video game, but fails to be innovative.	Good explanations regarding the potentiality of the video game (e.g., story, characters, structure of the game, setting, visual aids, objects, textures, and music). Good justification of the potential of the video game regarding the target group and player experience. Good development of an innovative idea for the video game.	Excellent explanations regarding the potentiality of the video game (e.g., story, characters, structure of the game, setting, visual aids, objects, textures, and music). Excellent justification of the potential of the video game regarding the target group and player experience. Excellent development of an innovative idea for the video game.
Grammar and lexicon 10 %	Limited grammatical control of simple and complex forms. Limited range of specialized vocabulary. Errors that impede communication are observed.	Sufficient grammatical control of simple and complex forms. Sufficient range of specialized vocabulary. Some errors are observed but do not impede communication.	Good grammatical control of simple and complex forms. Good range of specialized vocabulary. Occasional errors are observed but do not impede communication.	High grammatical control of simple and complex forms. Wide range of specialized vocabulary. Errors are rarely observed but do not impede communication.
Cohesion and coherence 10 %	Limited control of basic cohesion and cohesive devices.	Sufficient control of basic cohesion and cohesive devices.	Good control of a range of cohesion and cohesive devices.	Excellent control of a range of cohesion and cohesive devices.
Interpersonal meaning (expressions of stance and engagement) 10 %	Limited control of stance (e.g., boosters, hedges) and engagement markers (e.g., reference to visuals, reader pronouns).	Sufficient control of stance (e.g., boosters, hedges) and engagement markers (e.g., reference to visuals, reader pronouns).	Good control of stance (e.g., boosters, hedges) and engagement markers (e.g., reference to visuals, reader pronouns).	Excellent control of stance (e.g., boosters, hedges) and engagement markers (e.g., reference to visuals, reader pronouns).
Visual support 10 %	Few of the visual elements are relevant to support the written text.	Some of the visual elements are relevant to support the written text.	Many of the visual elements are relevant to support the written text.	Most of all the visual elements are relevant to support the written text.
Music 5 %	Few of the pieces of music chosen are relevant and representative of the content of the game. The choice of music is not justified.	Some of the pieces of music chosen are relevant and representative of the content of the game. The choice of music is partially justified.	Many of the pieces of music chosen are relevant and representative of the content of the game. The choice of music is justified.	Most of the pieces of music chosen are relevant and representative of the content of the game. The choice of music is clearly justified.
Typography 5 %	Typography does not vary.	Typography varies, but these choices do little to organize the text and content and do not engage the reader.	Typography varies and these choices serve to organize the text and content and to engage the reader.	Typography varies and these choices serve to fully organize the text and content and to engage the reader.
Multimodal coherence and intersemiotic relationships 20 %	Modes are not orchestrated coherently. Intersemiotic relationships are not enhanced, thus failing to contribute to the overall communicative purpose.	Modes are fairly orchestrated into coherent multimodal constructions. Intersemiotic relationships are poorly enhanced, thus failing to contribute to the overall communicative purpose.	Modes are orchestrated into coherent multimodal constructions. Intersemiotic relationships are generally enhanced, thus contributing to the overall communicative purpose.	Modes are skillfully orchestrated into coherent multimodal constructions. Intersemiotic relationships are effectively enhanced, contributing meaningfully to the overall communicative purpose.

The design of our proposed rubric draws support from published rubrics, mainly those proposed by Hafner and Ho (2020) for the assessment of scientific documentaries as an example of DMC, and Querol-Julián and Beltrán-Palanques (2021) for the assessment of PechaKucha presentations. The proposed rubric considers the importance of addressing both text organization and content expression, a viewpoint also noted in Querol-Julián and Beltrán-Palanques (2021) and Hafner and Ho (2020). Moreover, it acknowledges the role of language, as valued by the before mentioned authors in their corresponding rubrics, thereby without losing sight of the language proficiency component (Yi, King, & Safriani, 2017). Additionally, the rubrics presented by Hafner and Ho (2020) and Querol-Julián and Beltrán-Palanques (2021) also emphasize the role of visual aids and multimedia resources, elements that are also identified as necessary for the assessment of video game narratives. Another key element considered for our proposed rubric is the expression of interpersonal meaning (Halliday, 1978), with a focus on stance and engagement (Hyland, 2005), the latter also being recognized by Querol-Julián and Beltrán-Palanques (2021). In addition, we also find it relevant to focus on the elaboration of the ideas, the usefulness of the video game, and its originality.

The rubric presented here has been deliberately tailored for assessing the specific written assignment outlined here. Nevertheless, it is expected to be sufficiently flexible to assess other written assignments. This adaptability is possible because certain rubric criteria can be valuable in potentially recognizing the holistic construction of other multimodal texts, especially in terms of how modes interact and skillfully orchestrate each other.

The assessment criteria involve four levels of mastery, Level 1 (poor), Level 2 (satisfactory), Level 3 (good), and Level 4 (outstanding). Table 1 shows the rubric for the assessment of video game narratives in ESP.

The rubric comprises multiple criteria intended to provide a comprehensive assessment of the written video game narrative. The first three categories, namely *adequacy of the task*, *knowledge command and knowledge transmission*, and *critical thinking*, are content-related (Querol-Julián & Beltrán-Palanques, 2021). The purpose is to assess whether students meet the task requirements, their mastery of the topic, and their effectiveness in transmitting information.

The subsequent criterion is related to creativity and originality (Hafner & Ho, 2020; Ross et al., 2020) and aims to assess the potential of the *elaboration and usefulness of the video game* and the *originality of the game* (adapted from Shively, Stith & Rubenstein, 2018). In this context, elaboration refers to how detailed the ideas are, usefulness focuses on how practical the ideas are for the game, and originality implies how unique the ideas are. These three elements can be considered relevant for the assessment of creativity as they help to determine the degree of innovation and development of a concept or idea, in this case, for a video game. The assessment of creativity can be somewhat subjective, which may present some challenges for teachers. Nevertheless, the included descriptors are intended to guide in assessing creativity by focusing on aspects such as the explanation, justification, and development of ideas for the video game.

The language criteria remain an essential component of an ESP course. In this case, the two criteria are *grammar and lexicon* and *cohesion and coherence*. These two criteria and corresponding descriptors (Querol-Julián and Beltrán-Palanques, 2021) serve to assess the language proficiency of students at the B2 level (CEFR), which aligns with the level of the ESP course. More generally, students are assessed based on their ability to demonstrate their language skills within these two established criteria. These criteria aim to assess the effectiveness and clarity of written communication.

Another criterion focuses on *interpersonal meaning*, emphasizing the expression of stance and engagement. This criterion is considered because writers have a range of mechanisms at their disposal that enable them to foster a particular textual voice, show their position within texts, and interact with the audience (Hyland, 2005). Concerning this, we acknowledge that in their written narratives, students can convey their perspective on their video game through devices such as boosters and hedges. They may also employ interpersonal strategies to engage and establish rapport (e.g., inclusive *we*, referential *you*) with the audience. The expression of interpersonal meaning can also be achieved through the interconnections of various modes, for example by effectively orchestrating written and visual resources.

Given the inherent characteristics of the video game narrative, the utilization of various semiotic modes comes to the fore. This is the case of *visual support*, including, for example, images, textures, and layout, which become crucial for successfully conveying the content. Other salient aspects to consider encompass choices regarding *music*, such as the selection of music for specific levels and the soundtrack. In addition, the students' decisions about the *typography* (e.g., font, size, spaces) can become relevant, potentially serving as tools for organizing information and presenting content probably in a visually engaging and easily comprehensible manner. Overall, the skillful selection and use of visual support, music, and typography can contribute to enhancing the effective expression of the intended meaning.

To gain a holistic understanding of how different modes of communication interact and shape the expression of meaning, we include the criterion of *multimodal coherence and intersemiotic relationships*. Multimodal coherence, often described as the "interplay between modes" (Jewitt, 2014, p. 27), is defined within the context of this study as how modes are coherently organized into multimodal ensembles to effectively serve the intended communicative purpose (Kress, 2010). That is, it refers to how effectively the entire text conveys a clear and understandable message through a diverse array of communicative modes. A related concept is that of intersemiotic relations, which refers to how modes of communication cooperate and are orchestrated within a communicative event to convey the intended meaning (Royce, 1998). These relationships reflect the intricate interplay of modes in the construction of multimodal representations (Lim, 2019) and how these modes are purposely used to enhance the expression of meaning (Lim, 2019; Lindenberg, 2023).

Overall, the proposed rubric is designed to facilitate a holistic assessment process in a way that is conducive to exploring the intricate forms in which video game narratives are constructed, communicated, and enriched. This rubric includes aspects related to language, such as attention to language use and expression of interpersonal meaning. In addition, the rubric also covers assessment criteria related to the construction and transmission of content, as well as the creativity and originality of the proposed video game.

Finally, this rubric focuses on the meaningful effective interaction and orchestration in the construction and expression of meaning.

The adoption of this holistic approach in the assessment procedure is intended to empower ESP teachers to help students develop a deeper understanding of multimodal constructs. In addition, the use of this instructional rubric during the development of the video game narrative can also serve to promote students' agency, offering them the opportunity to empower themselves and take a more active role in navigating, making decisions, creating, and expressing meaning through multimodal artifacts.

#### 4.2. The application of the analytical tool

This section offers an exemplification of how the proposed analytical tool can be applied to assess video game narratives. To illustrate its effectiveness, we have chosen a video game narrative created by a team of six students who received a good qualification. The assessment of this video game narrative was conducted through a holistic approach, thereby considering the expression of content, language usage, interpersonal meaning, creativity and originality, and the use and integration of diverse communicative modes beyond language. The software Atlas.ti. was used to annotate the following: linguistic strategies the writers used to express interpersonal meaning, visual support, hyperlinks for music, and typography variations. The use of this software allowed for a more systematic analysis and presentation of results. However, it should be noted that this software is not used in regular classroom assessment practice.

The title of the chosen video game narrative is "*Dimensio: Universe of Chaos*" (Fig. 2 shows the cover page). As described by the students, this is a Massively Multiplayer Online Role-Playing Game (MMORPG). In this type of video game, there is a particular emphasis on players' interaction experiences in online contexts.

Following this introduction, we proceed with the exemplification of the application of the analytical tool to assess the above-presented video game narrative. To facilitate the assessment process and to provide a clear rationale for the assessment, some criteria are grouped.

An overall analysis of the video game narrative reveals that the students met the requirements of the task, both in terms of form and content. In particular, the adequacy of the task can be categorized at Level 4. This is because the written assignment contains the necessary sections to present the content of the narrative, and each section seems to be thoughtfully structured and organized (Fig. 3).

As for knowledge command, the students presented comprehensive explanations and descriptions for all the aspects covered in their proposal. These encompassed accurate descriptions of the setting, characters, non-playable characters, the level of difficulty, the achievement of the game, and the various goals within the game. Additionally, in some cases, the content was also enriched by visual support (discussed in the visual support criterion). The visual elements played a role in establishing intersemiotic relationships between the written and visual modes, reinforcing the expression of content (Lim, 2019). Furthermore, the students consistently showed a strong command of the disciplinary knowledge of the field of video games, especially concerning the chosen topic and genre. Regarding knowledge transmission, the students demonstrated their ability to generally expand on their arguments and descriptions. They were able to develop and explain the different aspects of the video game's narrative while presenting a well-structured and coherent text. The students' work is best illustrated in the example shown in Figs. 4–6. Taking all this into consideration, the criterion for knowledge command and transmission can be placed at Level 4.

Concerning critical thinking, the students displayed their ability to critically approach their ideas with a critical mindset,

## *Dimensio: Universe of Chaos*



Fig. 2. The selected video game narrative.



1.- Table of Contents

1.- Table of Contents	1
2.- Justification of choice	3
3.- Description of the game	3
4.- Structure of the game	5
5.- Characters	8
6.- Non-playable Characters or NPC's	12
7.- Objects	13
8.- Ambient sound and music	15
9.- Reception	16

Fig. 3. Table of contents of *Dimensio: Universe of Chaos*.

**Machiins**

Self-sufficient and autonomous artificial intelligence that evolved from previous intelligence developed by another extinct race. Machiins, are friendly (at first sight) robots able to shape-shift thanks to the enhancements they developed over time. Machiins are also known for their duality of forms, they developed a repose form and the attack form. They also depend on photovoltaic energy since their planet, Machian, orbits three suns. Their hair ends in little ports which can be used to connect to many electronic devices. One of their main abilities is to hack electronic systems. Their weapons are extensions of their mechanic system, installed instantly as they are obtained. They have advantage over Aeko and Koun.

Fig. 4. Description of a character.

**Zalrey**

The leader deity of the Nakdy (baddies) who in the past betrayed the Gon'mar (goodies). He will be the one who will give the power to Darya in exchange of human knowledge. This was hard to accomplish due to his selfish character formed by his enormous power. Fire is his main element and he commands an empire of creatures.

Fig. 5. Description of a non-playable character.

In terms of levels, the length is not clear. You live in an open world connected with plenty of dimensions. The player can travel to these dimensions through the laboratory, a kind of overworld that unites them all.

As an open-world, you can go wherever you like and take as many quests as you want. Be cautious, however, as your level may not be high enough to defeat foes in the area you have traveled to and may find yourself surrounded by powerful enemies.



Fig. 6. Description of the levels.

supporting them with compelling arguments throughout the narrative. Somehow, the students were able to reflect on and establish meaningful connections between disciplinary knowledge in a way that enhanced their arguments. That is, the students moved beyond the presentation of information. Instead, they considered the implications of the information provided and applied their knowledge of the subject matter to detail clearly and concisely the specific aspects covered in the video game narrative. Fig. 7 exemplifies how students justified their game. The criterion of critical thinking is found to be within Level 3.

In addition to this, this rubric is intended to assess creativity, by drawing on the elaboration, usefulness, and originality of the video game. As for the elaboration and usefulness of the video game, the students provided detailed explanations about the potential of the

## 2.- Justification of choice

Our decision to choose MMORPG video games comes from the wide variety of opportunities provided by this genre, such as cooperation between players, making the player feel like they are part of a community by customizing their own characters and choosing a group, race or clan to which they belong; the narrative that MMORPG games can give is immense, being able to be expanded and complemented with ideas that may arise in the future. In our opinion, what made us choose MMORPG games was their infinite possibilities and the creativity required to create these type of games that hook so many people on.

Fig. 7. Justification of the video game genre.

video game, especially when justifying its concept, commenting on its structure, and describing the characters. Nonetheless, the justification of the target audience would have benefitted from additional detail and more comprehensive arguments. Another indicator of the usefulness of the video game was found when addressing the player reception, providing valuable insights into how players might experience the video game. Specifically, the students made a deliberate effort to connect with players on an emotional level, fostering a sense of achievement and boosting their self-esteem. The following examples may serve to illustrate this.

### Example 1. Reception section.

[...] when designing the game's narrative, it was clear the main goal was to make the player feel like what they're experimenting is actually happening.

### Example 2. Reception section.

And finally, but also most importantly the feeling of accomplishment while overcoming obstacles and certain enemies. The same as in sport and other competitive activities, it requires a high level of coordination, experience and persistence to be able to defeat each boss. Therefore, we can tell experience and self-esteem progress in parallel as advancing through the game grant both at the same time. This is why participants end up with greater confidence levels than when they started playing.

In terms of originality, they seemed to introduce an innovative concept for a video game that may align well with the intended target audience, namely, young people. In other words, the students sought to bring to their video game concept a sense of originality and uniqueness that could be appropriately tailored to their audience. Within this context, the criterion would fall under Level 3. This is so because the explanations regarding the potentiality of the game were accurate but could be improved, in both the idea for the video game and the game concept itself.

Regarding language, we established two criteria: *grammar and lexicon* and *cohesion and coherence*. As noted, the course is designed to align with the B2 level (CEFR), and as such, the rubric descriptors are devised to suit this proficiency level. Overall, both criteria were determined to meet Level 3 standards. The written text demonstrated that the students exhibited appropriate grammatical control of simple and complex forms with a wide range of vocabulary related to the topic chosen, as expected in the B2 level. The text, in general, contained few errors, and when errors did arise, they did not hinder comprehension or communication. The text appeared to exhibit good organization, presented coherent ideas, and made appropriate use of cohesion mechanisms.

Another criterion of the rubric is the expression of interpersonal meaning, which has been proven to be essential for establishing effective relations with the audience (Hyland, 2005). The analysis of the written narrative showed that the students consistently used a variety of interpersonal strategies to express their stance and engage the audience. This is particularly interesting since they seemed to reflect on how to connect with the audience, showing a pragmatic understanding of interpersonal communication. Consequently, this criterion can be classified within Level 4.

As for the specific results of the analysis, it should be considered that despite the students' proficiency level (generally B2), the use of interpersonal strategies throughout the written narrative was particularly good both quantitatively and qualitatively. The Atlas.ti software was used to systematically explore the use of interpersonal strategies. To summarize the findings concerning stance, results show that in the case of hedges ( $n = 96$ ), the most recurrent were "will" ( $n = 34$ ), "can" ( $n = 19$ ), and the adjective "main" ( $n = 15$ ). Besides these salient hedges, the written assignment contains other forms, such as the verb "feel" ( $n = 5$ ), the modal verb "may" ( $n = 5$ ), and adjectives such as "little" ( $n = 2$ ) and "typical" ( $n = 2$ ). Boosters ( $n = 32$ ) were less frequently used as compared to hedges. Recurrent forms were, for example, "complete" ( $n = 8$ ), certain ( $n = 3$ ), clear ( $n = 3$ ), found ( $n = 2$ ), or really ( $n = 2$ ). Moreover, self-mentions ( $n = 6$ ) with the pronoun *I* were also observed. Regarding engagement markers ( $n = 85$ ), the analysis revealed the use of referential *you* ( $n = 47$ ), references to players ( $n = 27$ ), and mentions with the inclusive pronoun *we* ( $n = 11$ ). The following examples serve to illustrate the use of interpersonal strategies.

### Example 3. Hedge.

Depending on choices taken during gameplay we will end up being part of Followers of Vodka [...]

Example 4. Hedge.

Besides there will be skins available so you can change the default skin [...]

Example 5. Booster.

In every dimension the player will find different missions given by NPCs [...]

Example 6. Booster.

Obviously, the quests are unlocked by players' experience [...]

Example 7. Engagement marker.

[...] as your level may not be high enough to defeat foes in the area [...]

Example 8. Engagement markers.

All of this is due to the devotedly invested work behind the scenes of our passionate crew who come up with extraordinary ideas [...]

In addition to this, we conducted a quantitative and qualitative analysis of the students' selections of visual support, music, and typography. To systematically identify each of these semiotic resources, we resorted to the qualitative software Atlas.ti, which

5- Characters

As an entity born by the portal of light, the player will be able to choose their appearance as well as their origin in this universe. For that matter, at the beginning of the game the player customize their character with detailed physical aspects depending on the chosen race, which also has an impact on gameplay.



Example of character's customization menu

Humans

A more evolved version of humans like yourself. They have feelings, and highly developed weapons that are able to counter the power of the mineral. As well as conventional, their weapons are powerful and a threat for other races. They prefer long-distance combat, therefore they have the advantage over Machiins. However, humans also count on magic to keep distances between them and the enemies.

Machiins

Self-sufficient and autonomous artificial intelligence that evolved from previous intelligence developed by another extinct race. Machiins, are friendly (at first sight) robots able to shape-shift thanks to the enhancements they developed over time. Machiins are also known for their duality of forms, they developed a repose form and the attack form. They also depend on photovoltaic energy since their planet, Machian, orbits three suns. Their hair ends in little ports which can be used to connect to many electronic devices. One of their main abilities is to hack electronic systems. Their weapons are extensions of their mechanic system, installed instantly as they are obtained. They have advantage over Aeko and Koun.

Aeko/Koun

The result of evolution of some races from Earth. Both races coexist at war in the same world, nevertheless they decide to join and fight together against a greater threat in common. They are quick and agile. Aeko attack by barking and biting the enemy, running on all fours although they can stand on both feet as well. Koun are stealthier, attack with their claws and can turn invisible. They have advantage over humans as they are able to evade their attacks, but less efficient against Machiins. Due to their developed senses, they can overcome Sválfs in combat but not with great advantage.

Sválf

Race of the white nordic elfs that remain on an everlasting war against the dark elves in Svártsheim (Land of the elfs). This conflict consists on mastering the light that provides the power for its whole especies, such as magic spells for attacking and defending. They come from the dimension of death, from where they can summon souls which fight alongside them. Sválfs are efficient against humans because their weapons are less effective when used on ghosts.



Fig. 8. Visual representation of the characters.

facilitated the annotation of the number of instances for typography ( $n = 33$ ), visual support ( $n = 19$ ), and hyperlinks for music ( $n = 3$ ).

The incorporation of visual support in the form of images served to enhance and complement the communicative event. The students seemed to have made informed decisions concerning the selection and presentation of visual resources that contributed to successfully supporting the construction of meaning. The deliberate use and selection of visual support greatly enhanced the effectiveness of the message, demonstrating that the students made thoughtful choices in this regard. Furthermore, changes in typography (i.e., fonts, color, and style) occurred frequently. These changes likely served both organizational and decorative functions, contributing to a more engaging reading experience for the audience (van Leeuwen, 2006) and potentially facilitating the comprehension of information. Finally, concerning ambient music and soundtrack, hyperlinks were embedded into the text so that the audience could access them and explore the music choices for the video game. While the music choices were generally pertinent and representative of the storyline of the proposed video game, no precise justification for their musical choices was provided. Therefore, the score for visual support and typography would fall within Level 4, whereas for music, it would be Level 3.

The three previously mentioned criteria are closely related to the last criterion, which considers multimodal coherence and the establishment of intersemiotic relationships. This criterion was considered to be within Level 4. The exploration of the video game narrative revealed that modes of communication were generally coherently organized. This harmonious integration contributed to enhancing the overall expression of the meaning, potentially influencing the audience's experience of the video game narrative. The skillful and diverse inclusion of different communicative modes, including visual support, written information, typography modifications, and hyperlinks for the music, played a role in shaping a more comprehensive and engaging message. As for the establishment of intersemiotic relations, the analysis showed an existing relationship between each of the modes, primarily in the case of written and visual support. These intersemiotic relationships, especially those that intertwine textual and visual elements, played a critical role in enriching the expression of content within the video game narrative. While the written mode provided adequate information about the narrative, the visual support went beyond the mere complementation. That is, it not only accompanied the explanations but introduced nuanced details, thus strengthening and broadening the overall message. Changes in typographical mode were also relevant, although to a lesser extent than the use of visual aids. These typographical changes seemed to serve not only to provide additional information related to the content but also to make it more fluent, comprehensible, and engaging for readers. They also contributed to organizing information and guiding readers throughout the text. Broadly, the combination and integration of modes of communication within the narrative contributed to creating new layers of meanings (Hafner & Ho, 2020), through which intersemiotic relations were fostered, supporting the expression of content (Lim, 2019; Lindenberg, 2023).

Fig. 8 illustrates the written description of the characters through a multilayered intersemiotic relationship. This includes written information, visual representation of the characters, concept art, and typographical modifications. A similar intersemiotic relationship can be observed in Fig. 9, where the students described specific textures that were visually represented, allowing readers to envision their appearance. Variations in terms of typography are shown in Fig. 10.

These two examples effectively illustrate the establishment of intersemiotic relationships. As observed, each of the modes mutually reinforced each other (Jones & Hafner, 2021), resulting in the formation of a unique unit (Royce, 1998), from which new layers of meanings emerged (O'Halloran, 2005; Lim, 2019). This, in turn, contributed to enriching readers' understanding and strengthening their engagement. In addition, as shown in Fig. 10, variations in typography may potentially reveal the students' intent to convey specific meanings. In this example, these variations can serve to enhance textual design and the audience's comprehension (van Leeuwen, 2006).

## TEXTURES

The look of the game varies across dimensions. Because of that, textures are very varied and will range from realistic looking to more cartoony.

The dimension of death will have dark colours, realistic textures and a foggy background, which will blend with crooked trees and mysterious buildings. Light will never shine too bright and ghosts will lurk around.



The dimension of clouds has classic-like building and clouds all over the place. The background shows how far do the clouds go and give a sensation of isolation in this dimension. Textures are very detailed as this point in the universe is very important.



Fig. 9. Visual representation of textures.

## ITEMS

Items are a big part on your journey. Through the journey, the player will be rewarded with different kinds of useful items that will help them achieve many goals. Some of these are the following:





- Life potions:**  Heals 20% of the life bar . For humans only.
- Ultra-hiper-extra-maxi life potion:**  Heals completely the life bar of the human race.  
Not so effective on others
- Energy potion:** It fuels the Machiíns. Very oily.
- TUNA:**  It feeds the Aeko and the Kouns. Smelly.
- BEER:**  Heals the Svälíf race. Tastes like garbage (to humans).
- Cloth:** For humans. Our typical casual clothes, it is not the optimum gear for a full defense but it enables humans to be flexible and fast.
- Leather:** For Svälfs. It provides medium defense to the elf breed.
- Mana potion:** In order to recover the magical fuel of the Svälfs.
- SKINS:** These do not modify the skills of the character at all but they make the experience more customizable and fun. Example: Machiín on a wedding dress.
- Weapons:** Depending on the race, there are different weapons available in order to defend yourself or attack enemies. For example, as the Machiíns are robots, they can literally produce

Fig. 10. Topographical variations.

Examining multimodal coherence and intersemiotic relationships within the video game narrative revealed how modes of communication worked together to convey meaning. In particular, this comprehensive approach helped to broaden our understanding of how the content and the intended meaning were effectively expressed through the orchestration of modes within a video game narrative. That is, the rubric facilitated the assessment of the contribution of the diverse communicative modes in an integrative manner (Hafner & Ho, 2020). It allowed for the exploration of how modes were orchestrated to convey meaning, serving not only to complement information (Jones & Hafner, 2021) but also to offer an enhanced and richer reading experience.

As exemplified, a thorough understanding of video game narratives requires departing from conventional assessment criteria focused exclusively on language (Hafner & Ho, 2020; Jiang et al., 2022). By broadening the scope to include other assessment criteria, the rubric provided presents a more holistic, comprehensive, and nuanced approach to assessing students' performance. This rubric served to shed light on various elements that would otherwise not be considered, allowing teachers to focus on the various layers essential to achieving overall communicative purposes (Jiang, Yu, & Lee, 2022; Querol-Julián & Beltrán-Palanques, 2021).

Overall, such an approach allows for a more accurate and effective assessment of students' ability to construct multimodal texts and enables teachers to provide opportunities for students to develop multimodal literacy skills, which are essential in contemporary communication (Lim, 2018). Through the use of such a holistic rubric, teachers may help students create a metalanguage for multimodal constructs, as well as foster awareness of the affordability of modes to construct multimodal artifacts (Hafner & Ho, 2020). Moreover, the adoption of this assessment perspective has the potential to reinforce students' agency, empowering them to assume more proactive roles in the creation and expression of meaning through multimodal artifacts. This can be particularly achieved by offering students guidance while working on their multimodal text (Jacobs, 2013), even when the rubric is not used for formative assessment procedures.

The assessment criteria for the rubric were aligned with the guidelines, making it an ad hoc instrument for the assessment of the written video game narrative. However, this instrument is not limited only to its original purpose, it is intended to be flexible and adaptable to other written assignments. This flexibility allows for the use of the rubric, or some of the assessment criteria, in a variety of contexts where a broader, more inclusive, and comprehensive assessment of written assignments is required.

## 5. Implications for teacher training

This study has implications for the assessment of multimodal literacy in ESP contexts. It sheds light on the design of an analytical tool that encompasses a wide range of criteria, unlike assessment practices that focus primarily on language. This is because it adopts a broader and more comprehensive approach to assessing students' multimodal written assignments that allows for the exploration of a variety of elements, including language use, content expression, interpersonal meaning, multimodality, creativity, and originality. This study also provides an example of the application of the rubric, showing the variety of elements (e.g., semiotic choices, textual organization, critical creative processes involved) that contribute to the expression of meaning.

A comprehensive analysis of multimodal written compositions, as outlined in this study, requires careful consideration of various components. Within the context of ESP, the linguistic component becomes a key element and cannot be overlooked, yet it can be decentered to allow other components to take prominence.

As for the linguistic component, as detailed in proposed the rubric, it entails a focus on the organization of texts, adherence to genre conventions, and language-related aspects, such as grammar and lexicon, structure, coherence, and cohesion. Additionally, it should be relevant to draw attention to the expression of interpersonal meaning, emphasizing how writers take a stance and engage with their audiences (Hyland, 2005). This aligns with other rubrics that similarly prioritize actions directed toward the audience (Hafner & Ho, 2020; Querol-Julián & Beltrán-Palanques, 2021).

In addition to language components, language teachers may also find it relevant to draw attention to content delivery through knowledge transmission and command. Moreover, exploring the expression of content can allow teachers to also center on the assessment of students' critical thinking and creativity. This focus may help to identify how students develop these skills to construct and transmit content. In this way, teachers can be said to be trying to prepare students for a variety of real-life communicative situations while enabling them to navigate the complexities of effective content expression.

Regarding the criteria of multimodality, language teachers should reflect on the primary modes that students may employ to create their texts. This is crucial because the deliberate selection and application of modes of communication that extend beyond language can equally contribute to conveying meaning. It should be noted, however, that while the choice and use of semiotic elements are essential, it is particularly important to ensure that they are used coherently (Hafner & Ho, 2020) and to consider how they contribute to creating new layers of meaning. This refers to how meaning emerges and enhances the construction of meaning (Lim, 2019; Lindenbergh, 2023), as well as how modes operate to establish intersemiotic relationships (Lim, 2019).

The adoption of assessment practices with holistic and inclusive perspectives can enable teachers to engage in deeper self-reflection, which can lead to a better understanding of the multimodal texts produced by students. For this purpose, it is critical to raise teachers' awareness of the variety of elements that become intertwined in creating multimodal artifacts. Likewise, to ensure the successful application of assessment procedures, the provision of effective training for teachers is primordial (Hafner & Ho, 2020).

Well-prepared ESP teachers for the assessment of multimodal literacy can bridge language teaching with the demands of contemporary communication, providing students with valuable support for their professional development. That is, ESP teachers with the expertise in assessing multimodal literacy can gain a deeper understanding of students' multimodal productions, and, therefore, offer students more valuable and meaningful feedback.

## 6. Conclusion

This study represents an endeavor to contribute to the ongoing discussion on the assessment of multimodality within the language classroom, specifically in an ESP context. It offers the design and an exemplification of how to assess multimodal literacy, focusing on written compositions, with particular emphasis on the genre of video game narratives.

Producing multimodal texts, such as video game narratives, entails utilizing diverse modes of communication that collectively enrich the overall transmission of meaning, as well as a creative process. This written assignment has been included in the ESP course not only due to its relevance to the student's field of expertise but also because it promotes their creativity, critical thinking skills, collaborative work, and multimodal literacy. Given the pedagogical objectives of this project and its complexity in terms of decision-making, creative process, and production, it seems that an assessment tool based solely on linguistic aspects would be insufficient.

For this purpose, we devised an analytical tool that considers not only linguistic aspects but also the expression of content and interpersonal meaning, the usefulness and originality of the video game, the use of multimodal resources (beyond language), and how multimodal resources are coherently integrated and combined to enhance the overall meaning. More generally, the criteria included in this rubric are intended to holistically capture the creation of a multimodal composition by focusing on the way students express their ideas drawing on a variety of modes while also developing their critical thinking skills. This rubric adopts an instructional perspective, making its use suitable not only for assessing students' final products but also for guiding the process of elaboration. This rubric should be seen as an example of how teachers can approach multimodal compositions. It can serve as a starting point for the development of other analytical tools for assessing multimodal writing assignments.

In addition, this study also provides a practical example of how the rubric can be applied to assess a video game narrative collaboratively created by a group of ESP students. This multimodal composition featured mainly written and visual elements, and to a

lesser extent typography and hyperlinks for the music component. These modes, especially the written and visual modes were intricately intertwined creating new layers of meaning. These layers of meaning showed a high degree of multimodal coherence, which considerably enhanced the overall expression of meaning throughout the video game narrative. The intersemiotic relationships among each of the modes were found to be thoughtfully built. Overall, these relationships were adequately established to improve the organization and expression of content. Particularly notable were the relationships forged between written language and visual support. This suggests that the students were engaged in critical reflection on how the written and visual modes would interact to successfully convey the intended meaning. Furthermore, such a process of critical thinking was also an opportunity for the students to enhance their agency as creators.

This study serves to inform other teachers how to conduct an assessment of multimodal literacy by providing them with a rubric and an example of its use. In doing so, it aims to promote reflective practice on how to approach the assessment of multimodal literacy. This is necessary because there is a growing need to engage students in navigating dynamic and diverse multimodal texts that mirror the communicative challenges they will encounter in the 21st century.

In a much broader sense, the study acknowledges the evolving nature of communication and the wide range of modes and elements that constitute multimodal texts. It emphasises the need to go beyond traditional textual forms and the value of including a variety of modes, such as visual and multimedia resources. In addition, the study highlights the importance of valuing creativity and the creative process when constructing multimodal texts.

This study is not without limitations. The main limitation is that this represents a preliminary study that exemplifies the use of the analytical tool, and therefore, it should be applied to a richer variety of texts. This will permit ascertaining its effectiveness and validity for other contexts, also highlighting its strengths and weaknesses. Thus, further research is needed to shed some light on the improvement of the theoretical and methodological decisions that underpinned the development of the analytical tool presented in this study. Furthermore, it should be noted that while the rubric presented here may be useful in providing information about the construction of a video game narrative, the assessment of multimodal literacy is likely to require more attention. As outlined, this rubric was designed to be used from an instructional perspective (Andrade, 2000) to support students during the development of the video game narrative (Jacobs, 2013), however, there was no explicit formative assessment. The explicit use of formative assessment to explore multimodal literacy development (Hafner & Ho, 2020; Hung et al., 2012) may be useful to better guide the students' learning process; thus, the assessment would not only focus on the final product, but also on the process.

## Data availability

The data that has been used is confidential.

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