

ANALYSIS OF LEARNING OBJECTS IN THE PROFEDEELE AND DELE AHORA REPOSITORIES FOR THE TEACHING/LEARNING OF SPANISH AS A FOREIGN LANGUAGE

ANÁLISE DE OBJETOS DE APRENDIZAGEM NOS REPOSITÓRIOS PROFEDEELE E DELE AHORA PARA O ENSINO/APRENDIZAGEM DE ESPANHOL COMO LÍNGUA ESTRANGEIRA

ANÁLISIS DE OBJETOS DE APRENDIZAJE EN LOS REPOSITARIOS PROFEDEELE E DELE AHORA PARA LA ENSEÑANZA/APRENDIZAJE DE ESPAÑOL COMO LENGUA EXTRANJERA



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ABSTRACT: Several resources were selected and mobilized to assist in the teaching of foreign languages and, over the years, several technologies were included in the processes. These attitudes required technological materials in classes that can be revealed in the use of Learning Objects and Open Educational Resources, digital tools capable of promoting learning. The objective of this work is to classify, describe, and analyze materials present in the *ProfeDeEle* and *DELE Ahora* portals, developed to help the teaching/learning of Spanish. To support our analyses, we started with the descriptions, which include categories such as instruction, interactivity, and practice of materials and we checked how they can help Brazilian students learn Spanish. The results show that the typology of activities can vary, but allows the evaluation and the reflection of learning, and can support teachers in technology-mediated classes.

KEYWORDS: Education technologies. Spanish teaching. Spanish learners.

RESUMO: *Diversos recursos foram selecionados e mobilizados para auxiliar no ensino de línguas estrangeiras e, ao longo dos anos, várias tecnologias foram incluídas nesses processos. Essas atitudes exigiram dos professores a inclusão de materiais tecnológicos nas aulas que podem se revelar no uso dos Objetos de Aprendizagem e dos Recursos Educacionais Abertos, ferramentas digitais capazes de promover a aprendizagem. O objetivo deste trabalho é classificar, descrever e analisar materiais presentes nos portais ProfeDeEle e DELE Ahora, desenvolvidos para auxiliar no ensino/aprendizagem de espanhol. Para apoiar nossas análises, partimos de descrições, que incluem categorias como instrução, interatividade e prática dos materiais e verificamos como podem auxiliar os alunos brasileiros aprendizes de espanhol. Os resultados mostram que a tipologia das atividades pode variar, mas possibilitam a avaliação e a reflexão da aprendizagem, com isso, podem apoiar os professores nas aulas mediadas por tecnologia.*

PALAVRAS-CHAVE: *Tecnologias educacionais. Ensino de espanhol. Aprendizes brasileiros.*

RESUMEN: *Distintos recursos fueron seleccionados y movilizados para auxiliar en la enseñanza de lenguas extranjeras y, a lo largo de los años, muchas tecnologías fueron incluidas en estos procesos. Esas actitudes exigieron a los profesores la inclusión de materiales tecnológicos en las clases que pueden revelarse en el uso de los Objetos de Aprendizaje y de los Recursos Educativos Abiertos, herramientas digitales que pueden apoyar el aprendizaje. El objetivo de esta investigación es clasificar, describir y analizar materiales de los portales ProfeDeEle y DELE Ahora, desarrollados para auxiliar en la enseñanza/aprendizaje de español. Para apoyar nuestros análisis, partimos de descripciones, que incluyen categorías como instrucción, interactividad y práctica de los materiales y verificamos cómo pueden auxiliar a los alumnos brasileños aprendientes de español. Los resultados muestran que la tipología de las actividades puede variar, pero posibilitan la evaluación y la reflexión del aprendizaje, con esto, pueden apoyar a los profesores en las clases mediadas por tecnologías.*

PALABRAS CLAVE: *Tecnologías educacionales. Enseñanza de español. Aprendices brasileños.*

Introduction

The transformations in education have been linked, among other issues, to technological changes. In this context, for a long time, the pencil, notebook, chalkboard, and book were the technologies used in classrooms. Later, with the phenomenon of globalization and the advent of Web 2.0, there emerged the possibility of integrating digital technologies into pedagogical practices.

Digital Information and Communication Technologies (hereinafter referred to as DICT), particularly since the 2000s, have become relevant tools in many activities and have become part of the daily lives of a large portion of society. According to Laurindo et al. (2020, p. 364), "digital technology is part of our daily lives, whether at home, at work, or at school. It is present in our routines, even in leisure activities," just like the internet, which "[...] has become a part of our lives, even if we often do not realize it" (p. 364, our translation).

Thus, it is evident that although this reality does not conform to that of many Brazilians, given that our country still has much diversity and inequality, there is a segment of the social body that maintains direct contact with technologies, whether through TV, computer, smartphone, or tablet. Therefore, with the everyday and massive use of DICT, there was also the possibility of including them in educational practices and foreign language classes, as they allow the use of authoring tools and access to authentic materials from various modalities and can accommodate individual learning characteristics.

Given this and based on the encouragement to use digital tools in language classes, in the discussions presented in the next section, we propose to perform an analysis on the pedagogical relevance of the '*ProfeDeEle*' and '*DELE Ahora*' platforms for teaching Spanish as a foreign language. We selected these two repositories because they provide diverse and targeted materials and information for teaching Spanish as a foreign language; they can be accessed for free on the Internet and serve as tools that aid student learning.

The content of both platforms is freely accessible on the web, and they provide a considerable amount of materials and exercises that can be utilized in classes. Based on this, we consider their use to be facilitated, as teachers can employ both their theoretical material and their activities, assisting pedagogical practices. However, it is important to evaluate the materials to ascertain their relevance and suitability for teaching, which is the focus of our work.

In this context, we aim to select four activities available in both repositories and observe how we can categorize them. Based on the proposed analyses, it will be possible to answer the following questions: a) How can we classify the selected materials?; b) How can we carry out their categorization?; and c) Can the activities assist and/or facilitate the understanding of content and help Brazilian learners of Spanish as a foreign language?

In this paper, we initially develop reflections on the role of DICT within the educational environment. To support our reflections, we rely on research conducted by Laurindo *et al.* (2020) and Médici, Tatto, and Leão (2020). Subsequently, we conceptualize and discuss the concepts of Learning Objects and Open Educational Resources, as their theoretical and methodological foundations will assist our analyses. We base our discussions on: Cardoso, Araújo, and Rodrigues (2021), Tarouco, Bulegon, and Ávila (2021), Mallmann, and Nobre (2015), and Wiley (2000). Following this, we describe the methodological approach, which includes an explanation of the nature of the research, the selection of materials for analysis, the manner in which we evaluate the platforms and categorize their contents, and how they can aid in student learning.

For our analyses, we present the classification that can be given to the activities from *ProfeDeEle* and *DELE Ahora*, i.e., whether they are characterized as Learning Objects or as Open Educational Resources, and we expose their properties and other descriptions, as they are our objects of description and investigation. To describe the platforms, we present their features and other relevant information, along with images intended to illustrate them. We analyze four activities collected from the repositories and specify their characteristics and categorization based on Gama (2007) and Battistella *et al.* (2009). Subsequently, we demonstrate the results obtained concerning the analyzed activities, and, finally, in the concluding remarks, we present the conclusions of our study on the materials found in *ProfeDeEle* and *DELE Ahora*.

The Use of DICT in Foreign Language Classes and the Role of the Teacher

The development of technology has enabled transformations in the way many people live and act and in the performance of their activities. Currently, a segment of society cannot perform certain tasks without the use of the internet, a smartphone, computers, or tablets. This segment of the globe communicates with individuals who are nearby or distant, makes

purchases, works, and all this occurs through the mediation of DICT. According to Lima and De Grande (2013), in recent decades, transformations in society and technologies have stemmed "[...] from a complex historical process, mainly stemming from the advent of the personal computer and Web 2.0 [...]" (Lima; De Grande, 2013, p. 37) and they "[...] indicate transformations in what it means to learn, know, and do things in contemporary times" (p. 37, our translation).

The development and expansion of the use of DICT have also facilitated certain changes in education and, within the scope of this work, in the teaching and learning of Spanish as a foreign language, since these tools can be used by teachers and students in a creative and open manner (Laurindo et al., 2020). They also allow for the development of learning autonomy and the selection of content according to user needs. Thus, the teacher can organize and combine different materials and, when possible, modify them, aiming for better student comprehension.

In this regard, we consider that the school environment should be the space where students learn to use technologies pedagogically, focusing on their learning and not just for their entertainment. In this aspect, the BNCC (*Base Nacional Comum Curricular*) includes the use of DICT as one of the general competencies of basic education. According to the document, it is necessary to "Understand, use, and create digital information and communication technologies in a critical, meaningful, reflective, and ethical way in various social practices (including school practices)" (Brasil, 2017, p. 9, our translation). According to the material, such use should occur so that students can "[...] communicate, access and disseminate information, produce knowledge, solve problems, and exercise protagonism and authorship in personal and collective life" (p. 9, our translation).

The Curricular Guidelines for High School (OCEM) also present the perspective of including DICT in the teaching of Foreign Languages (FL) and aim for the classes to "[...] introduce theories about language and new technologies (literacies, multiliteracies, multimodality, hypertext) and give suggestions on the practice of teaching Foreign Languages through these theories" (Brasil, 2006, p. 87, our translation). The material anticipates that in this teaching, "[...] the literacy project can be aligned with the proposal of digital and social inclusion and serve an educational purpose, as it enables the development of a sense of citizenship" (p. 98). Thus, we emphasize that teachers should include the use of digital materials in pedagogical practices, as their work can enable students to expand their

autonomy and world knowledge; develop competencies and skills in FL; receive help in searching for information, and reflect on their role in society.

In pedagogical practices, according to Cardoso, Araújo, and Rodrigues (2021, p. 7, our translation), "[...] DICT enable the development of cognition, as they have the potential to stimulate attention, creativity, curiosity, interaction, in order to achieve meaningful learning." It is valid to consider, however, that the intense use of cell phones, computers, or the internet can make the student less attentive and focused. Therefore, the inclusion of these tools should aim at teaching and understanding content, and the selected materials must also assist in retaining the subject matter and concentrating the students. However, the insertion of DICT does not always correspond to a specific purpose or include a critical reflection on the materials and activities to be used. In such situations, if there is not a suitable purpose for teaching content (lexical, morphosyntactic, or semantic-pragmatic), students may not be able to take advantage of the potential they offer, which ends up constituting conservative practices masked as innovation.

Barros and Junior (2005, p. 74) highlight that "[...] the new information and communication technologies surpass the human brain and the limits of the physical body, transforming into extensions of thought and the senses, thereby enhancing human actions." From this perspective, the Internet can facilitate the alignment of content with users, consequently simplifying access and knowledge construction, making language learning a co-participation process among the teacher, the student, and the digital component. The authors further note, "[...] in this new era of education, the computer represents a powerful tool to assist the student in the construction of knowledge in an enjoyable way" (Barros; Junior, 2005, p. 74, our translation).

Consequently, the Internet, computers, and other electronic devices can help students understand the contents discussed in language classes "[...] in a more visual and experiential manner [...]" (Laurindo et al., 2020, p. 366, our translation). These tools can also assist the teacher "[...] to embody much of what was only seen in theory or without major highlights as can now be seen using technology as an instrument" (p. 366, our translation). Educators, in this new setup, act as mediators in working with technology, facilitating knowledge construction.

They position themselves between the content and their students and strive not only to select information but also the digital resources and materials that will be used, while reflecting on the purpose of their use during classes. In this context, it is important to

emphasize that digital tools merely function as support in educational activities and do not replace the role of the teacher. The latter plays a crucial role in mediating, selecting, and presenting digital content, significantly contributing to the student's learning experience.

According to Melaré and Junior (2005),

In this technological and informational society, interactive technologies applied in education allow for a broadening of approaches, accommodate different learning styles, and thus facilitate the acquisition of knowledge, skills, and abilities (p. 74, our translation).

In the educational field, we observe an intense interaction with content, materials, and activities crafted and made available through digital technologies, which can be used in face-to-face or distance courses. Hence, computers, tablets, and smartphones have become tools that can provide various forms of interactivity that are not possible in traditional classes. The Internet provides information at all times, and students are intimately in contact with it; however, the educator needs to mediate knowledge as they can appropriate and select tools relevant to their work. Thus, we consider the employment of DICT in language classes valid, but first, it is necessary to reflect and critically analyze the aspects related to their presence and purpose.

In the following section, we present a description of components that offer the possibility of incorporating digital tools into classes, namely: Learning Objects and Open Educational Resources. We also discuss the concepts behind these terms, their properties, and other information we deem relevant for the analysis of these platforms.

Learning Objects (LO): Definition, Characteristics, and Categories

Educational changes related to the processes of teaching and learning foreign languages, driven by the extensive use of Digital Information and Communication Technologies (DICT) and the Internet, have introduced new concepts and tools that assist students. In this context, we focus on the use of Learning Objects (LO), which are considered advantageous for teaching, student learning, and content review (Aguar; Flôres, 2014).

According to the National Network for Teaching and Research (2017, online), LOs are defined as "resources, digital or otherwise, with educational purposes. They usually contain video, text, images, and other media synchronized together, forming a multimedia application." Thus, LOs are classified as "any digital resource that can be reused to support

learning" (Wiley, 2000, p. 23, our translation). These elements may or may not be digital and are known by other terms, such as virtual learning objects (VLO), digital educational resources (DER), or digital learning objects (DLO). However, in this paper, we use only the term Learning Objects and consider them as digital, as the repositories we analyze are in this format.

From the descriptions provided about the concept of LOs, we highlight that these tools can be simple or complex. Simple LOs are those that contain only one support medium for presenting content, which can be an image, audio, text, or slides; complex LOs, on the other hand, are characterized as multimedia supports, as they include various media such as animations, videos, hypertexts, etc (Mercado, 2008 apud Rebouças; Maia; Scaico, 2021). In terms of the type of LO most suitable for use in a foreign language class, it is appropriate for the teacher to select it, as given the complexity of certain contents, it is valid to choose the typology that best fits the profile of the students and the content addressed.

Regarding the structure and operability of LOs, according to Mendes (2004 apud Aguiar; Flôres, 2014), their characteristics and elements include: reusability, which determines whether the LO can be reused in different contexts; adaptability, the characteristic of an object being adaptable in different teaching environments; granularity³, corresponding to the size of the LO, which can be larger (small objects) or smaller (those combining images, texts, and other resources); accessibility, the possibility of accessing the object on the internet; durability, the opportunity to use the LO even with changes in technology; interoperability, "[...] the ability to operate through a variety of hardware, operating systems, and browsers [...]" (p. 16, our translation), and the presence of metadata, whether the LO has information presenting a description of its properties, such as title, date, and objective(s) of the activity(ies).

Digital Learning Objects (DLOs) can also be divided into categories based on their use in education. According to Gama (2007), we can find objects aimed at: a) **instruction**, DLOs used to support learning and content delivery, which may combine images, videos, texts, and exercises; b) **collaboration**, used for communication and interaction among people in collaborative learning environments; c) **practice**, objects intended for self-learning and with high interaction for testing ideas such as software or hardware simulation; and d) assessment,

³ **Granularity** refers to the "size" of an object. A Digital Learning Object (DLO) with greater granularity is considered small, or in a "raw" state, such as an image of the Mona Lisa, a text, or an audio fragment. A DLO with lesser granularity might be an entire web page, which combines texts, images, and videos, for example (Aguiar; Flôres, 2014, p. 15).

aimed at aiding in the observation of knowledge levels, where these DLOs provide feedback with an analysis of responses and user performance.

Battistella *et al.* (2009) present other categories for DLOs and divide them into six types, namely: i) **non-interactive**, objects composed of static media (text, images, hypertexts); ii) **multimedia**, those that use more than one medium in their composition, such as video and sound; iii) **interactive**, which require the user to execute and utilize the activities; iv) **evaluative**, these types of objects provide feedback to learners (questionnaires) based on the responses presented, which can contribute to the assessment of content understanding; v) **exploratory**, allowing the interaction of the learner, enabling them to perform actions and obtain information (games, concept maps); and vi) **collaborative**, enabling use by multiple users simultaneously (chat, forum).

Given these categorizations, we highlight that the same DLO may fall into more than one category. In this regard, there are activities that blend instruction, practice, and assessment and may be either interactive or multimedia since it is possible to present images, videos, or interactive maps. Materials may focus on explaining the content and include games and/or activities that assess students' understanding and provide feedback to help them monitor their performance. Thus, we consider that activities categorized in more than one type can expand and aid in learning specific content in a foreign language and develop student autonomy. However, there are cases where such combinations cannot occur because the properties of the resource make such action difficult or are not suitable for combination (Rebouças; Maia; Scaico, 2021).

Regarding exploratory DLOs, Rebouças, Maia, and Scaico (2021, online) note that "some digital games can be classified as DLOs in the form of educational software, for example. What characterizes them as games are features such as narratives, soundtracks, challenges, or scoring systems." When included as evaluative activities, **games** provide learners with a kind of reward through feedback, and those who respond correctly receive positive reinforcements. Thus, according to the authors, by using games, "the student is more stimulated to explore and learn, to solve problems, something that makes them more active in the learning process" and prompts them to propose solutions when responding to activities. With this, the learner receives theoretical content information and attempts to put their knowledge into practice.

In this way, we observe that teaching through Digital Learning Objects (DLOs) can become more suitable, as students may understand the content through playful activities that

promote reasoning, interaction with the teacher, and decision-making. Another relevant factor is the ease of access to these tools, as they are generally available on the internet for free and can be quickly found online, whether by the teacher or the student. This characteristic also allows multiple people to use the materials simultaneously.

Consequently, the use of DLOs in classes can enable teachers to incorporate different teaching methods, as they present content through videos, slides, interactive images, or games. Thus, it is possible to "[...] quickly, dynamically, and contemporaneously adapt pedagogical situations to the expectations of a different generation of students, centered in the dynamics of the 21st century" (Rebouças; Maia; Scaico, 2021, our translation). Furthermore, with these objects, learning situations can be more centered on the students' abilities, because they can, with the help or selection of the educator, choose the resources that best facilitate their learning process.

Rebouças, Maia, and Scaico (2021, our translation) further highlight that this development has allowed teachers "[...] to shift their efforts in material production to other aspects of the pedagogical process, since they do not need to produce each material from scratch every time, that is, there is more time to dedicate to planning the pedagogical situation." In this sense, we see that these tools, if well-developed, can contribute to the teaching and learning processes of foreign languages.

Another feature that we consider relevant refers to the repositories of Learning Objects. Tarouco, Bulegon, and Ávila (2021) explain that currently, DLOs have spread, and as a result, there has been the development of repositories and authoring tools that can support the creation of the objects and host them. According to Rebouças, Maia, and Scaico (2021), the repositories are generally free and can be accessed online. They are characterized as spaces where various DLOs are available, which can be used by both teachers and students. *ProfeDeEle* and *DELE Ahora* can be classified as repositories, as they compile a variety of digital materials for teaching Spanish. These resources are available for free on the internet for public access.

Before presenting the classification of materials available on platforms, we describe in the next section the characteristics of Open Educational Resources, which are also digital resources developed to assist learning processes. Firstly, we highlight their concept, and subsequently, we present the principles and characteristics that encompass these resources and how we can differentiate them from DLOs.

Open Educational Resources (OERs): Adaptable Components

Open Educational Resources are tools that offer possibilities for sharing and reuse (Costa, 2014). From this perspective, although we consider DLOs as digital resources available for educational purposes, there is a distinction between them and Open Educational Resources (hereafter referred to as OER). Based on the concept presented by the National Network for Teaching and Research (2017, online), defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO), Open Educational Resources (OER) are characterized as "[...] any media-supported material that is in the public domain or under an open license that can be used and adapted by others." Thus, to classify these materials as OER, they must be capable of being "retained, reused, revised, remixed, and redistributed, without the need to pay copyright fees or obtain additional authorization from the authors" (Rede Nacional de Ensino e Pesquisa, 2017, our translation).

Consequently, we classify a digital educational resource as an OER only if it is editable and has open access, which is the main difference between these materials and DLOs. This is because OERs are in the public domain. Thus, they only include materials that can be accessed and edited without requiring someone to authorize the use or request payment of copyright fees or license fees. With this in mind, these materials allow teachers and students to use them at school or at home, to update them, and/or share them. DLOs, on the other hand, are materials that do not allow editing or updating by users, as they are ready-made content that depends on the copyright of their creators.

Mallmann and Nobre (2015, p. 623, our translation) explain that "[...] an educational resource is a didactic material that is organized, intentional, systematic, and of a formal nature to support the teaching-learning process." From this perspective, Open Educational Resources (OERs) can be created by teachers and students, edited, or simply reused in learning. Furniel, Mendonça, and Silva (2020) highlight that they emerged "to support the transformation of education" (p. 7), since "[...] their transformative power comes from the ease with which such resources, when digitized, can be shared via the Internet" (p. 7). Thus, to create or use an OER, the teacher or student can organize the content based on the subject to be studied, their own difficulties, or according to the intended use, subject matter, and objectives of the lesson.

OERs are characterized as flexible and easily adaptable resources, available online in the form of courses, textbooks, maps, and other tools geared towards teaching and learning. According to Furniel, Mendonça, and Silva (2020), "the most important reason for adopting

OERs is that educational materials under open licenses can contribute greatly to improving the quality and effectiveness of education" (p. 10). We notice that the use of these materials can be favorable to foreign language teaching, as, by using them, the educator can adapt the content based on the profile of their target audience, the characteristics of the educational environment, and the lessons.

Regarding the function of OERs, we consider them to be always specific since they depend on the curriculum requirements and can relate to the reality of the school, city, or classroom. When a teacher encounters OERs, according to Costa (2014, p. 34), they move "[...] from being a receiver of selected, edited, and packaged contents and materials for consumption to becoming an active agent in the process of research, selection, editing, and creation of their material." Furthermore, by making it openly available online, they can receive assistance from other teachers, which may improve the material, its content, or its presentation form.

In relation to the principles of OERs, we highlight that they can be reused, adapted, and freely distributed, potentially promoting "[...] the creation of derivative versions of the initial ideas based on their expansion, reformatting, and recombination with other sources" (Mallmann; Nobre, 2015, p. 629, our translation). Moreover, it is pertinent to present, according to the authors, the five rights related to OERs to be defined as open content, which are:

- Retain - the right to make and keep one's own copies of the content (for example, to download, duplicate, store, and manage);
- Reuse - the right to use the content in various ways (for example, in a classroom, in a study group, on a website, in a video);
- Revise - the right to adapt, adjust, modify, or alter the content itself (for example, to translate the content into another language);
- Remix - the right to combine the original or revised content with other open content to create something new (for example, to incorporate the content into personalized creations);
- Redistribute - the right to share copies of the original content, its revisions, or its remixes with others (for example, to give a copy of the content to a friend) (Mallmann; Nobre, 2015, p. 629, our translation).

From this, we note that OERs allow teachers to create, combine, or archive educational content; utilize and reuse these tools in various learning contexts; make necessary adaptations or those best suited to the profile of the class, and share materials with third

parties. Thus, with these resources, educators have the flexibility to modify and distribute materials to their students, focusing the activities on their specific characteristics and needs.

This can facilitate the teaching work, as the teacher will already have the file but can refine it to meet the specific needs of their class. Thus, having laid out the theoretical framework that underpins our work, we describe, in the following section, the methodological approach used to conduct this research.

Methodology

Our research is qualitative and descriptive, focusing primarily on analyzing and describing the content and activities present in the *ProfeDeEle* and *DELE Ahora* repositories. We chose these two portals because both provide free access and a considerable amount of materials and activities; they offer interactive resources, which can assist both teachers and students of Spanish as a foreign language, and they explore various types of media, such as sound, video, music, text, images, among other resources.

To facilitate the development of our analyses, we selected these two repositories and determined whether their contents could be classified as Learning Objects or Open Educational Resources. From this, activities that can be retained, remixed, or redistributed are classified as OERs (Mallmann; Nobre, 2015). On the other hand, if they can only be reused, accessed over the internet across various hardware, browsers, or operating systems, we must classify them as DLOs (Mendes, 2004 apud Aguiar; Flôres, 2014).

Thus, after classifying the materials available on the platforms, we deemed it pertinent to select four targeted activities, according to the Common European Framework of Reference for Languages, for learning levels A1/A2 and B1/B2⁴. We chose two exercises in the *ProfeDeEle* repository and two in *DELE Ahora*, both requiring students to apply their knowledge of grammatical and lexical content and their ability to interpret and understand texts in the Spanish language.

Through our analyses, we have examined how we can carry out the categorization and classification of activities based on their type, content, and presentation form, that is, whether they serve instruction or collaboration; whether they assist in practice or assessment; whether

⁴ “The Common European Framework of Reference for Languages is an internationally recognized standard for describing proficiency in a language” (British Council, 2022). According to the British Council (2023), the letter A corresponds to the Basic level and is divided into A1 (beginner) and A2 (elementary), the letter B corresponds to the Independent level (B1 – intermediate and B2 – independent user), and the letter C corresponds to the Proficient level, which is divided into C1 (effective operational proficiency) and C2 (mastery).

they are interactive, non-interactive, or multimedia; and whether they have an exploratory nature. For this, we relied on the categorizations presented by Gama (2007) and Battistella et al. (2009), as they highlight the elements and information that can be observed in digital activities.

In the next section, therefore, we first present whether we can classify the materials from *ProfeDeEle* and *DELE Ahora* as DLOs or OERs. Subsequently, we highlight the characteristics and information about each of the repositories, and finally, we present the analyses of the four selected activities.

ProfeDeEle and DELE Ahora: Analysis of the Repositories and Their Materials

In this section, we present our analyses, describe the classification of the repositories, and the characteristics of each; the site overview; the team of editors or coordinators; the structure and components; and the way they include materials that will assist the teaching and learning processes of the foreign language. Next, we analyze the types of materials collected along with their categorizations. Finally, we display a table that brings together the categories and our observations on their possible relevance for teachers and Brazilian students learning Spanish.

Based on the characteristics of the repositories and from the theoretical survey conducted in this research, we consider that both *ProfeDeEle* and *DELE Ahora* contain only materials that we can classify as Learning Objects, as we characterize them as digital resources that can be used and reused for teaching (Wiley, 2000). Both feature licensed content, that is, they are not in the public domain, and their activities are not open for editing (National Network for Teaching and Research, 2017). Therefore, they do not allow users to make adaptations, adjustments, or remix the content or structures of their materials (Mallmann; Nobre, 2015). From this, we find that we cannot classify them as Open Educational Resources (Furniel; Mendonça; Silva, 2020).

Additionally, we verified that *ProfeDeEle* does not allow the downloading of its materials, thus, they can only be accessed online via its website. *DELE Ahora*, on the other hand, allows the downloading of certain files, but only in PDF format, thus permitting the sharing, storage, and duplication of materials. However, these remain closed files that do not allow for adaptation or editing of the contents.

Characterizing the Learning Objects and the *ProfeDeEle* Repository

ProfeDeEle is a repository that provides Learning Objects to teachers and students of the Spanish language, and its content, structure, and information belong to *ProfeDeEle* itself. In the section titled "Nuestro equipo," we find the names and roles of the collaborators who make up the repository's team. The coordination and portal are owned by Daniel Hernández Ruiz; Enara Villán Mirás (translator and teacher) is involved in editing, creating, and coordinating content; Federico Escudero Álvares is part of the editorial team and creator of didactic units; and Aitor Pisos Prado (translation student and Spanish teacher) is a member of the editorial group and responsible for *ProfeDeEle's* YouTube channel. The team is not only formed by these individuals, as the coordinators emphasize at the end of the description that there are others responsible for collecting and presenting information.

The portal allows users free online⁵ access to various digital materials and activities developed to assist in teaching and learning Spanish, presented in the form of videos, games, infographics, podcasts, and other activities that can be performed directly on the site. In the repository, we can find linguistic content that aids in learning the Spanish language's grammar, spelling, and vocabulary. There are lessons that help with literacy, expressing oneself in Spanish, and information and activities about Hispanic culture. It also contains topics with models of proficiency exam papers for Spanish – *DELE (Diplomas de Español Lengua Extranjera)* and *SIELE (Servicio Internacional de Evaluación de la Lengua Española)*.

In Figure 1, we present a snapshot of the portal's content page. Through it, we find toolbars on the sides and, in the center, the header of the activity with the image and its metadata (subject matter, learning level, creation date, objective, and content description).

⁵ The *ProfedeELE* blog, as the portal is identified, can be accessed through the website <https://www.profedeele.es>.

Figure 1 – Snapshot from the ProfeDeEle portal



Source: ProfeDeEle (2023).

From Figure 1, we note that the platform offers the possibility to access content divided according to the six proficiency levels proposed by the Common European Framework of Reference for Languages (CEFR), namely: A1, A2, B1, B2, C1, and C2. Additionally, teachers or students can choose content from categories such as: Grammar, Vocabulary, Functions, Exams, Culture, and Spelling. In the section labeled "Formats," we find divisions for: songs, presentation of grammatical content, interactive activities, podcasts, and evaluative tests. Lastly, in the "Themes" section, we encounter materials divided by current topics, Hispanic countries, mental health, social values, and Spanish for specific purposes and for children.

The website design allows users to quickly find the topic they want to work on, as the various tabs facilitate this search. The images that contextualize the discussed themes are colorful and humorous, providing a playful presentation of the content. Based on the observation of activities in the repository, we can find both simple and compound Learning Objects (LOs), as some only have one support to present the content, while others are multimedia (Mercado, 2008 apud Rebouças; Maia; Scaico, 2021).

Regarding the structure and operability of the LOs from *ProfeDeEle*, we find that they can be: adaptable to other teaching environments; reusable by teachers and students; accessible in various places, as they are available on the website; accessible via computers, tablets, or mobile phones; and operable on various operating systems and browsers. Additionally, the materials include metadata and present objects with greater and lesser granularity (Mendes, 2004 apud Aguiar; Flôres, 2014).

Characterizing the DELE Ahora Repository

*DELE Ahora*⁶ is also a free repository of Learning Objects that can be accessed via the Internet, as well as through the *DELE Ahora* app, available for Android or IOS operating systems. The platform's name refers to the Diplomas de Español Lengua Extranjera (DELE), an exam administered by the Instituto Cervantes that certifies the degree of competence and mastery of the Spanish language. However, despite the reference to the exam, according to the developers of the repository, there is no association between the portal and the institute that administers the tests.

Regarding the authorship of the repository, it is noted that Copyright is reserved for Ediciones Fluo. We observe that the same publisher is described in the grammar and vocabulary books that the portal offers for sale. According to information from the repository, "DELE Ahora is a space to learn Spanish with a wide diversity of resources, activities, and various materials for teachers and students of Spanish as a foreign language"⁷ (DELE Ahora, 2023).

From this, we highlight that the activities are developed and directed both towards teachers and learners of the Spanish language, and both can search for materials based on the theme and type of activity. Teachers find in the repository LOs that aid in explaining content about grammar, vocabulary, or culture, as well as activities aimed at listening comprehension, text interpretation, and written expression. There are also games available, and users can undertake exams developed based on the questions and formulation of the DELE exams. The contents available in the repository can be shared and reused across different browsers, as they are digital and thus can support the explanation and learning of students during classes.

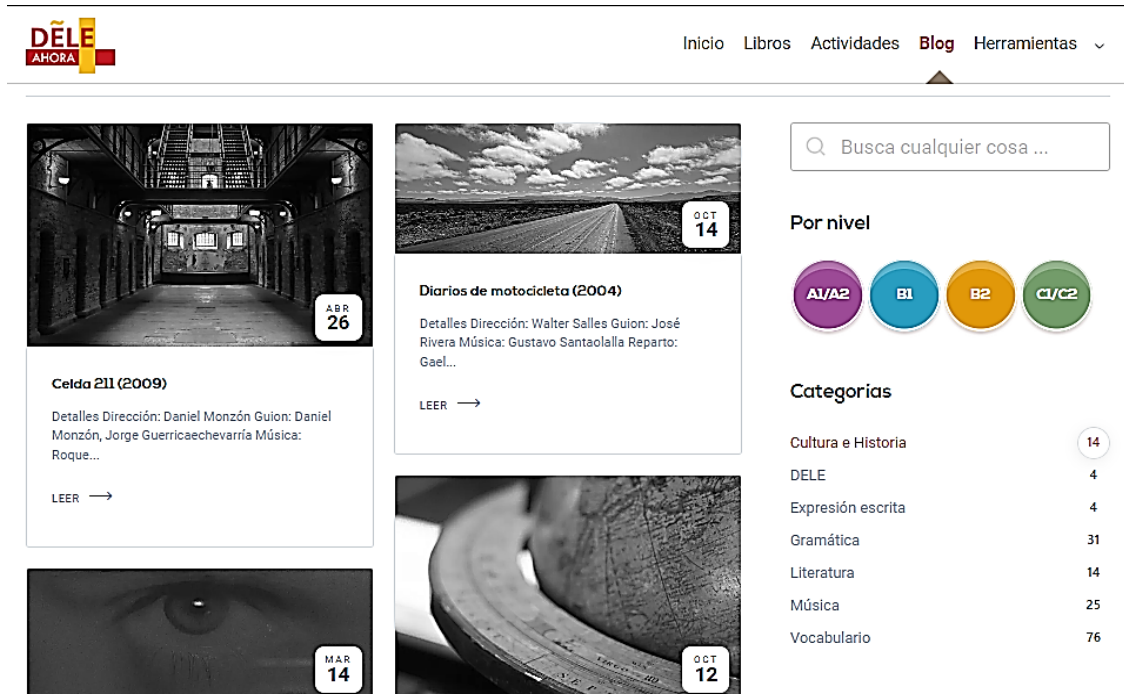
⁶ The *DELE Ahora* platform can be accessed free of charge at the following address <https://deleahora.com/blog>.

⁷ "DELE Ahora es un espacio para aprender español con una amplia diversidad de recursos, actividades y materiales diversos para profesores y estudiantes de español como lengua extranjera" (DELE Ahora, 2023).

DELE Ahora enables its users, in addition to using the materials, to share and store them. For this, however, they must accept the Privacy Policy of the portal. It is important to note that since the activities and materials are not in the public domain, they can only be altered and updated by their authors, as they hold exclusive rights over all the content presented on the site.

In light of the above, in Figure 2, we display a snapshot of one of the pages of the *DELE Ahora* repository, where we can find activities divided based on the title and topic addressed. Moreover, on the right side of the page, there are options to search for LOs, which can be done through the quick search bar, where the user needs to type in words related to the searched theme; by selecting the proficiency level in the language according to the Common European Framework (A1/A2, B1/B2, C1/C2); or by specifying the categories that express the type of content presented (Listening Comprehension, Reading Comprehension, Written Expression, Exams, Grammar, and Vocabulary). Regarding these, the repository also informs the number of activities found on the portal based on the themes' divisions.

Figure 2 – Snapshot from the *DELE Ahora* repository



Source: DELE Ahora (2023).

In Figure 2, we observe that the contents available on the portal include a section titled "*Libros*," where grammar and vocabulary books developed by the publisher are sold. The

theoretical content, in turn, is gathered in the "Blog" section, which contains materials on lexicon, grammar, written expression, literature, music, culture, history, and information about the DELE and SIELE Spanish exams. In "*Actividades*," we find materials focused on the practice and assessment of grammatical and lexical content in Spanish. Lastly, in "*Herramientas*," it is possible to search for verb conjugations and definitions of words in Spanish. We consider that the website interface (Figure 2) enables quick access to the contents, as it offers various search methods.

The LOs that support language learning on *DELE Ahora* are available in the form of images, texts, and videos and can be accessed on the website or on YouTube. When grouped, they appear with images in black and white; however, upon opening them, the images become colored, which may serve as a way to attract users' attention. Another feature of the portal relates to the learning levels of the activities, as these are divided by color, allowing teachers or students to identify the complexity of the exercises and choose those that best suit their profile and needs.

In the repository, we generally find compound LOs, as their content groups texts, sounds, images, and videos into a single material. Conversely, in LOs where practical activities, assessments, or content involving text comprehension and written productions are carried out, the presence of simpler types is more common (Mercado, 2008 apud Rebouças; Maia; Scaico, 2021).

Regarding the structure and operability of the LOs, we note that they are adaptable and reusable, as we can use them during classes, at home, in digital or paper format, because the repository allows the printing and downloading of files for free. Access to the repository can occur via computers, mobile phones, or tablets, and through various operating systems and browsers. Concerning metadata, LOs always present it, as each header includes the title, posting date, type, and purpose of the contents. The granularity of the materials varies from greater to lesser, as some have only one format while others combine image, text, sound, etc (Mendes, 2004 apud Aguiar; Flôres, 2014).

Analysis of Activities Collected from the ProfeDeEle and DELE Ahora Repositories

Due to space limitations, we selected only two Learning Objects from each repository, totaling four activities. We used the numerations 1 to 4 to define the sequence of the analyses and named the contents, respectively, as Learning Object 1, 2, 3, and 4. Consequently, Learning Objects 1 and 2 belong to *ProfeDeEle*, and 3 and 4 to *DELE Ahora*.

Learning Object 1 (Figure 3) was selected for its focus on levels A1/A2. It integrates information on grammatical and lexical content with fill-in-the-blank exercises based on auditory comprehension.

Figure 3 - Example of activity from the ProfeDeELE portal

Source: ProfeDeELE (2023).

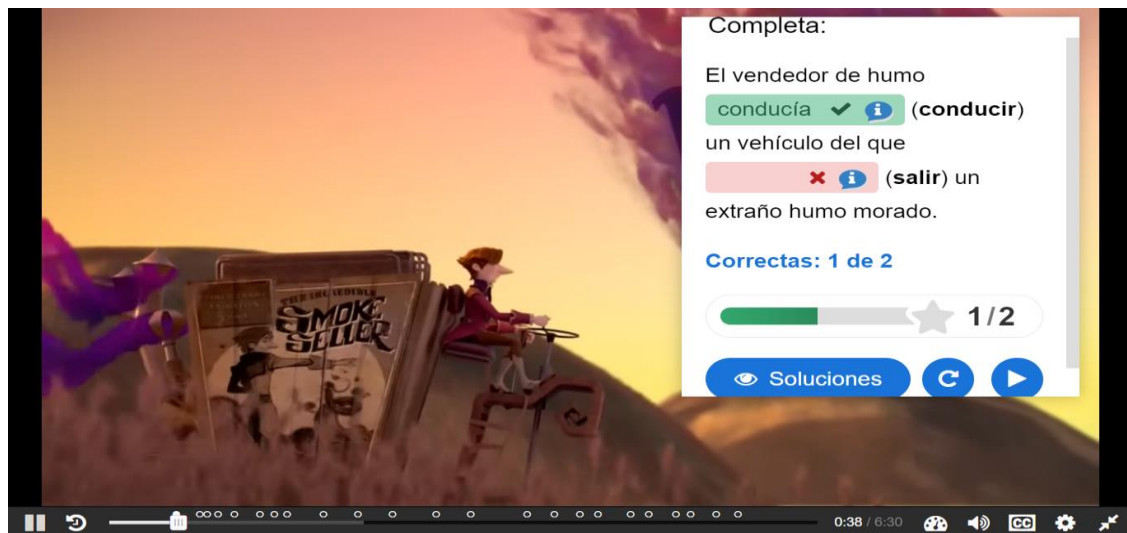
From Figure 3, we observe that the content can be classified as belonging to the composite type of LO (Mercado, 2008 cited by Rebouças; Maia; Scaico, 2021), because it incorporates image, audio, and text. Learners can initially obtain information about Veronica's preferences, view the information in the image about the expressions “*Odio*”, “*No me gusta*”, “*Me gusta*” and “*Me encanta*” and their complements. Subsequently, they can listen to the audio of the text, follow it by reading, and simultaneously fill in the blanks.

Regarding the categories that we can find in the object, according to Gama (2007), instruction, practice, and assessment are present. Instruction occurs through the information that aids in carrying out the activity and the image that conveys the explanatory content on

constructing sentences with '*gustar*,' serving as support for learning the content in Spanish. Practice and assessment are carried out from the content in the audio, which allows the student to practice understanding what they hear and try to apply their knowledge by filling in the blanks in the text. Feedback is obtained automatically, enabling the learner, along with the teacher, to analyze their responses and performance (Rebouças; Maia; Scaico, 2021). According to Battistella *et al.* (2009), the LO can be classified as non-interactive (having only static media) and multimedia because it uses text, sound, and image, and requires the user to perform tasks, i.e., fill in the text blanks, thus being interactive (Battistella et al., 2009).

In Learning Object 2 (Figure 4), we selected material that includes a YouTube video narrating the story "*El vendedor de Humo*," where activities focus on filling in the verbs of the text in the past indefinite or imperfect past tense. It is targeted at level B1 of learning and includes grammatical content and text comprehension.

Figure 4 - Example of activity from the *ProfeDeELE* portal



Source: *ProfeDeELE* (2023).

In Figure 4, we examine how the activity can be carried out. This activity develops through the inclusion of the narrative and the questions within the video. As the story progresses and there is a need to include verbs in the past tense in Spanish, the video automatically pauses, and the user must fill in the blanks. Afterwards, feedback on the responses can be received by clicking on "*Comprobar*". We see that if the answer is correct, the frame turns green, and if it is incorrect, it turns red (feedback). If the user correctly fills in

the blanks on the screen, they receive a star as a form of positive reinforcement, and then the video narration continues.

In this LO, therefore, we find categories of instruction, practice, and assessment (Gama, 2007). Learning support is provided with content given before the video, using tables with verb conjugation. The practice and assessment occur subsequently, with the filling of the blanks, obtaining the analysis of the responses, and the opportunity to prove one's performance in relation to verb conjugation and the selection of the tense (*preterite perfecto* or *imperfecto*).

Regarding the characteristics of the object, we see that it is multimedia, as it combines video and text; interactive, because the user must respond to the blanks to continue the story; exploratory, as it allows the learner to interact, perform actions, and obtain information from the narrative; evaluative, as it also allows attempting answers through trial and error, and the feedback provides verification of positive or negative outcomes (Battistella *et al.*, 2009). Thus, the LO can contribute to the student's learning, as it prompts reflection on the specific uses of verb endings in number and person, and the tense that must be used and filled in each blank. Additionally, balloons with the letter 'i' provide clues about the verb tense that can be used based on the situation in the narrative, allowing the student to put their reasoning into practice.

Learning Object 3, shown in Figure 5, was taken from the *DELE Ahora* repository. It falls under the category of reading comprehension exercises, is aimed at beginner levels of learning (A1/A2), and includes grammatical content, identification, and text interpretation. We find that in this category, all activities are presented in the same format and structure (text and exercise). The "*PDF imprimible*" and "*Soluciones*" fields allow users to print, download, and obtain the answers to the activities.

Figure 5 - Example of an LO from DELE Ahora

¡Qué bien! 1 _____ viernes que viene voy a ir al Museo del Prado con 2 _____ escuela. Estoy muy contenta porque a mí 3 _____ mucho el arte y este museo es uno de los más famosos del mundo.

Mis maestras dicen que va a ser una visita muy interesante porque vamos a ver obras 4 _____ y vamos a aprender muchas cosas. Además, vamos a tener un guía que nos 5 _____ a explicar algunos datos importantes. Lo que más me interesa es ver los cuadros de Velázquez, especialmente Las Meninas. ¡Tengo muchas ganas! Seguro que va a ser un día muy importante 6 _____ nosotros.

1 a La El
 2 mía mi la mía

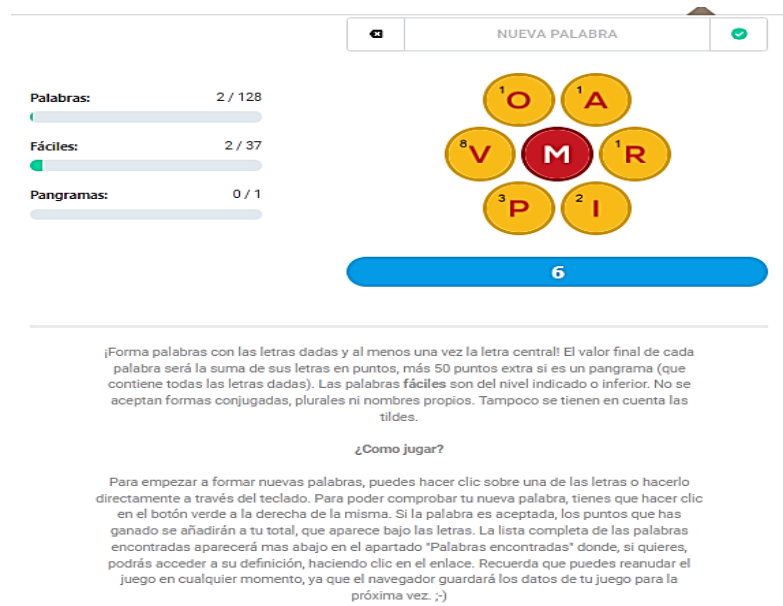
Source: *DELE Ahora* (2023).

According to Figure 5, we observe how the text comprehension activities in the repository are structured. This LO is of the simple type, as it is presented solely in the format of text production. Therefore, the user, upon reading the text, checks the possibilities for filling in the blanks based on the numbers and selects the alternative they believe to be correct. After all alternatives have been selected, they can verify their answers. We note that this format resembles the model of written comprehension activity found in the *DELE* and *SIELE* exams.

Based on the presented theory, we infer that the LO from Figure 5 can be classified solely as evaluative because it is characterized as an exercise that explores text comprehension and the appropriateness of its lexical content. It does not provide instruction, and its feature is practice (Gama, 2007). The LO is not interactive, as it consists of a static media object, nor is it multimedia, because there are only text and alternatives (Battistella *et al.*, 2009). *DELE Ahora* also provides feedback on the activities, but they do not contain animations and are only available when the user clicks on the "Comprovar" field.

Learning Object 4 (Figure 6) is called "*Girapalabras*" and features an activity that involves forming words from the combination of proposed letters. We consider that this activity requires more reasoning, is aimed at the B2 level of learning, and corresponds to the lexical repository knowledge that the user has of the Spanish language.

Figure 6 - Example of an activity model present in *DELE Ahora*



Source: *DELE Ahora* (2023).

Figure 6 demonstrates a type of composite LO, as it includes an image and requires the completion of words. This can be characterized as a multimedia resource; it has an instructional component, given that below the activity, there is explanatory content that supports its execution. Additionally, there is potential for collaboration, especially if used in a classroom setting. By projecting the screen for the students, the teacher can encourage interaction among them and explore methods to collectively formulate the words (Gama, 2007).

The object relates to practice because it includes self-learning and can enable interaction among students, allowing them to test ideas. Ultimately, it serves for assessment, as it can be used by the teacher to test the learners' lexical knowledge level. As a final element of analysis, we find that the LO is interactive and requires users to formulate the words; it is multimedia as it mixes image and text, and it has an exploratory nature (allows the learner to perform interactions to successfully form the words) (Battistella *et al.*, 2009). In order to synthesize the results obtained from the analyses, we present Table 1, based on the categories of LOs proposed by Gama (2007) and Battistella *et al.* (2009).

Table 1 - Comparing the categories of analyzed LOs from *ProfeDeEle* and *DELE Ahora*

Categories	Learning Objects analyzed			
	OA 1	OA 2	OA 3	OA 4
a) Instruction	X	X		
b) Collaboration				X
c) Practice	X	X		X
d) Evaluation	X	X	X	X
e) Interactive	X	X		X
f) Non-interactive	X		X	
g) Multimedia	X	X		X
h) Exploratory		X		X

Source: Produced by the authors.

Based on the observations made on the four LOs from both repositories, we consider that there is a mix between types of activities and categories. Some focus on content that supports instruction, including theoretical material and activities, while others may be multimedia, blending various contents, and some are static. There are LOs that feature exploratory content, requiring user interaction, and that may enable collaboration. Moreover, we note that all the analyzed objects include evaluative activities and continually provide feedback aimed at motivating and guiding the students.

Final considerations

Our objective in this work was to analyze four LOs available from *ProfeDeEle* and *DELE Ahora*. Both repositories are available online for free and provide explanations and activities in Spanish. Thus, we classified such materials and contemplated their pedagogical potential for Brazilian learners of Spanish as a foreign language.

Initially, we observed that the *ProfeDeEle* and *DELE Ahora* repositories contain materials that can be classified as Learning Objects, and not as Open Educational Resources, because, although they are available on the internet and can be accessed for free, they do not allow users to make updates, changes, or remixes. It is only possible to select the theme or activity one wishes to work on, which seems most suitable, and reuse it during the class. The theoretical information, as well as the activities from both repositories, are under the rights of their developers, are not in the public domain, and therefore cannot be (re)created or modified.

From the analysis of four LOs and their categorizations, we find that the two LOs analyzed from *ProfeDeEle* have a design that may enable greater interactivity between

teacher, student, and content. There is the presence of data that explain and instruct the activity, and both integrate different media; they have theoretical content, the presence of practice and assessment, the latter allowing the acquisition of feedback, and the verification of learning of the taught content. The LOs analyzed at *DELE Ahora*, on the other hand, are presented in just one format type, without a blend of various media. Therefore, the repository does not offer the same level of interactivity that occurs in *ProfeDeEle*, since the contents were predominantly presented in the form of texts.

We consider that both repositories possess materials that can be deemed valid for pedagogical use, as they are engaging, interactive, and integrate multimedia resources. Therefore, they serve as tools that can capture the attention of students and be utilized in Spanish as a foreign language classes.

We note that both platforms include feedback in their assessment processes, assisting teachers and students in observing their understanding of the content, as well as the retention and reproduction of the idea. Lastly, a distinguishing feature of *DELE Ahora* is the possibility for users to save or print the activities. Consequently, teachers can also transport the content to in-person classes, using paper support, which cannot be done with the materials from *ProfeDeEle*, as these are solely digital and must be used directly on the website.

We find, however, that although the repositories have different characteristics, presentation styles, and feasibilities, their materials can serve as Learning Objects that contribute to knowledge construction. They can enrich Spanish as a foreign language class and assist teachers in presenting content as they offer materials relevant to learning, whether through their interactivity, assessments, or the feedback provided. Learners, therefore, can learn, verify, and reinforce the study of content taught in an interactive manner through the materials available in the repositories, making the learning process satisfying and autonomous.

However, it is necessary for teachers to mediate technology integration into the classroom and promote the alignment of theoretical content and activities, transforming them into tools that support their practice. They must assess the pedagogical relevance of the materials and establish objectives that are consistent with the student's profiles and the purpose of the classes. In this way, these platforms can be fully leveraged and will assist the students.

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