

ARAGal: An Automatic Readability Analyzer for Galician texts

Sandra Rodríguez Rey, Daniel Solla, Marcos Garcia and Alejandro Catala

CITIUS - Universidade de Santiago de Compostela, Rúa Jenaro de la Fuente Domínguez, 15782, Santiago de Compostela

Abstract

The Automatic Readability Analyzer for Galician (ARAGal) is a pilot platform that assesses text readability, identifies complex linguistic phenomena, and provides recommendations for adapting texts to specific levels of complexity. ARAGal is primarily intended for teachers, especially those teaching Galician as a foreign language, though it can also be useful for students and Galician speakers looking to improve their reading and writing skills. The platform includes an automatic text classifier that categorizes texts according to their complexity. ARAGal also provides yardsticks that offer a general overview of the lexical, syntactic, and structural complexity of texts. Additionally, it includes an annotator of complex linguistic features that highlights parts of texts that are potentially more difficult than expected. ARAGal also provides alert messages that explain why these parts are more difficult and offers suggestions for improving or adapting the text to a certain readability level.

Keywords

Automatic Readability Assessment, Galician, Textual Adaptation, Text Classification

1. Introduction

Reading and understanding written information are essential skills for education, professional development, and social inclusion. For educators, a major challenge is selecting or creating materials that match the specific reading level of their students and interests, while also avoiding materials intended for children and texts that have been adapted for educational purposes and seem artificial. This task is especially difficult for languages like Galician, which have historically lacked specialized digital tools for Automatic Readability Assessment. To address this gap, we present ARAGal (Automatic Readability Analyzer for Galician), a web-based pilot platform designed to evaluate text difficulty and support the adaptation of content.¹

The development of ARAGal was inspired by the iRead4Skills Intelligent Complexity Analyzer [1]. While the original framework was designed for other languages, ARAGal has been heavily modified to incorporate Galician-specific Natural Language Processing (NLP) models and unique linguistic features. The tool is part of a bilingual platform that includes both Galician and Spanish, specifically designed for users in the Autonomous Community of Galicia, where both languages are co-official.

The platform primarily targets teachers, especially those teaching Galician as a foreign language, though it also serves as a valuable resource for students, content developers, and native Galician speakers seeking to improve their reading or writing skills in the language. It goes beyond traditional readability formulas that only provide a numerical score. Instead, it offers an integrated system with three main types of feedback: a general classification of the text's level, a diagnostic overview through "yardsticks" (covering textual, lexical, and syntactic dimensions), and an interactive annotator.

A core innovation of ARAGal is its Complexity Analyzer. This module identifies those linguistic phenomena where readers might struggle by highlighting complex segments directly within the text editor. For each identified problem, the system provides "alert messages" that explain the difficulty and

SEPLN 2026: 42nd International Conference of the Spanish Society for Natural Language Processing, León, Spain, 22-25 September 2026.

✉ sandrarodriguez.rey@usc.gal (S. Rodríguez Rey); daniel.solla.villanueva@usc.gal (D. Solla); marcos.garcia.gonzalez@usc.gal (M. Garcia); alejandro.catala@usc.es (A. Catala)

🆔 0000-0002-4864-7255 (S. Rodríguez Rey); 0009-0003-6221-9200 (D. Solla); 0000-0002-6557-0210 (M. Garcia); 0000-0002-3677-672X (A. Catala)



© 2026 Copyright for this paper by its authors. Use permitted under Creative Commons License Attribution 4.0 International (CC BY 4.0).

¹The tool is available at <https://aragal.pages.citius.gal/demo/>.

“improvement recommendations” that offer practical suggestions for simplification. ARAGal provides a comprehensive solution for creating and adapting accessible educational materials in Galician. It combines automated analysis with user-friendly teaching advice.

In this paper, we first review the latest research on automatic tools that analyze readability in different languages, with a focus on the iRead4Skills Intelligent Complexity Analyzer. Next, we introduce a new bilingual demonstration for evaluating readability, with a focus on ARAGal, a recent tool developed for the Galician language. We describe its interface, the services it offers, and the development process. Lastly, we present our conclusions and future lines of work.

2. Related Work

The field of Automatic Readability Assessment has evolved from early formulas based on surface features, such as Flesch [2] and Gunning Fog [3], to more sophisticated systems that leverage NLP and machine learning. Currently, several open-access platforms exist to diagnose text complexity, though they vary in granularity and language support. Among the most prominent tools is Coh-Metrix [4], which has been adapted for Brazilian Portuguese [5] and Spanish [6] to provide cohesion and readability indices. Another significant contribution is MultiAzterTest [7], a multilingual analyzer that covers Spanish, English, and Basque, utilizing over 125 linguistic features. Other specialized tools include CLAVIS [8] and ALT [9] for Portuguese, and AMesure [10], which focuses on the analysis of French administrative texts. While these systems offer valuable diagnostic insights, they are often designed for standard readers or language learners and do not always address the needs of specific populations or low-resource languages.

iRead4Skills Intelligent Complexity Analyzer: A more recent and comprehensive tool is the iRead4Skills Intelligent Complexity Analyzer (ICA), an open-access multilingual platform designed to assess text readability in Portuguese, Spanish, and French [1]. Unlike traditional formulas, the ICA is specifically tailored for low-literacy adults, integrating psycholinguistic insights with state-of-the-art NLP models. The system categorizes texts into four levels —Very Easy, Easy, Plain, and +Complex— and introduces a diagnostic framework based on four yardsticks: textual structure, lexicon, syntax, and semantics. A key feature of this tool is its interactive writing assistant, which provides word-level annotations and actionable feedback to help educators adapt materials for their students.

Despite the advancements represented by these platforms, none of the tools mentioned above include support for the Galician language. To fill this significant gap in the digital resources for Galician, we developed ARAGal. This new tool was inspired by the iRead4Skills framework and meets the specific linguistic requirements of Galician, providing the first integrated platform for Automatic Readability Assessment and writing assistance in this language.

3. A New Demo Tool for Assessing Readability

This section describes the characteristics of the new bilingual prototype for assessing text readability. While the Spanish version of the tool is already part of the iRead4Skills Intelligent Complexity Analyzer, this version includes support for Spanish and Galician. These two demo tools are integrated into the same platform to support the needs of users from Galicia who may need to work with any of the co-official languages. ARAGal is introduced for the first time in this paper, with a focus on its development and the range of services it provides.

3.1. Graphical User Interface description

The ARAGal platform features a unified web interface where users can input a given text for analysis. This integrated GUI provides three types of feedback at the same time: a general classification of the text’s

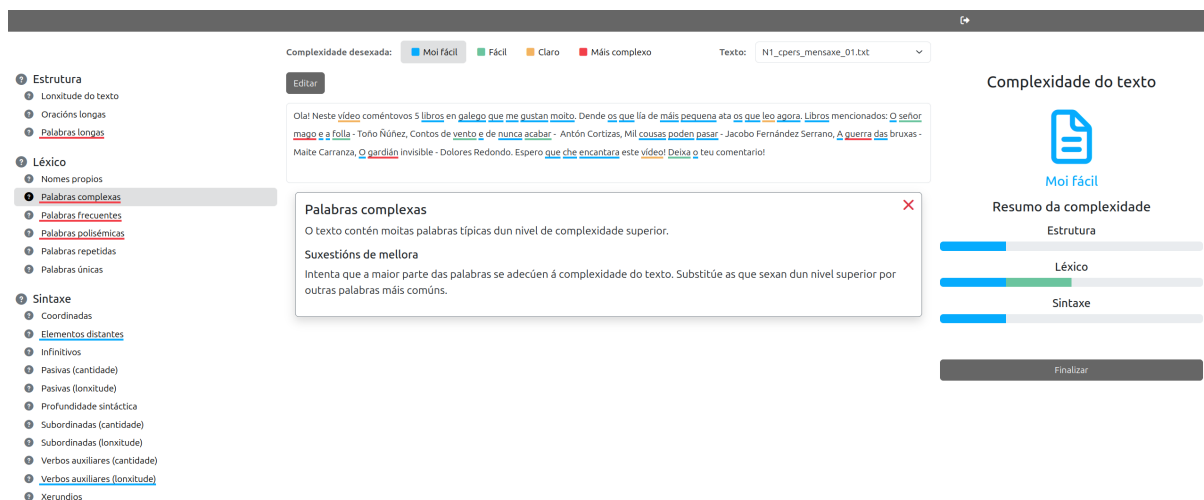


Figure 1: The ARAGal interface, with an example of an analyzed text. The text editor is in the center. Above the editor are the associated levels and colors. The linguistic features are displayed in the left-hand menu and are organized by domain: structure, lexicon, and syntax. The overall level assigned by the classifier and the yardsticks are shown in the right-hand menu.

level, an overview of its linguistic characteristics (yardsticks), and an interactive annotator or complexity analyzer that highlights complex linguistic phenomena in the text and provide recommendations for improvement.

3.2. Automatic Readability Assessment

The assessment of text readability is estimated through an automatic readability classifier into four levels.

Readability Levels: ARAGal classifies texts into four levels: Level 1 (Very Easy), Level 2 (Easy), Level 3 (Plain), and Level 4 (+Complex). These levels are based on the original levels from the iRead4Skills project [11] but have been specifically adapted for the Galician language [12]. This adaptation mainly uses linguistic descriptors that align with both the Common European Framework of Reference for Languages and Celga, the official proficiency certification system for Galician.

The Galician Readability Classifier: To determine the readability level, the platform allows for the integration of different types of models, including those based on linguistic features and fine-tuned Transformer models that are specifically trained for the task. The different types of models were trained on Galician or multilingual data derived from the iRead4Skills Dataset 1 [13, 14] and partially from a Galician readability corpus [12, 15], and were evaluated on a test extracted from the Galician readability corpus.

Yardsticks: ARAGal provides a general diagnostic of the text through three main yardsticks: structure, lexicon and syntax. Each yardstick uses representative specific metrics to calculate complexity through a selection of features (see below, section 3.3.1):

- **Structure Yardstick:** This focuses on surface properties of the text. It uses two main features: the average length of words and the average number of words per sentence.
- **Lexicon Yardstick:** This measures vocabulary difficulty through three indicators: lexical complexity, percentage of repeated words and mean of lexical frequency level.
- **Syntax Yardstick:** This analyzes the complexity of the grammar and sentence structure by tracking the amount of passive voice constructions, measuring how many levels the syntactic tree of a sentence has, and measuring the length of subordinate clauses.

Table 1

Complete list of features available in the Galician Complexity Analyzer.

Complexity dimension	Feature	Button name	Calculation level
Structure	Number of words	Text length	Document
	Word length in characters (average)	Long words	Document
	Sentence length in words (average)	Long sentences	Document
Lexicon	Number of unique lemmas	Unique words	Document
	Repeated words (%)	Repeated words	Document
	Number of proper nouns	Proper nouns	Document
	A1, A2, B1 and C1 words	Complex words	Token
	Lexical frequency	Frequent words	Token
	Polysemous words (%)	Polysemous words	Document
Syntax	Coordination	Coordinate clauses	Document
	Subordination	Subordinate clauses (length)	Sentence
	Subordination	Subordinate clauses (quantity)	Document
	Passive voice	Passive sentences (length)	Sentence
	Passive voice	Passive sentences (quantity)	Document
	Auxiliary verbs	Auxiliary verbs (quantity)	Document
	Auxiliary verbs	Auxiliary verbs (length)	Sentence
	Gerund verbs (%)	Gerunds	Document
	Infinitive verbs (%)	Infinitives	Document
	Distance of syntactic dependencies (average)	Distant elements	Document
	Syntax tree depth	Syntactic depth	Sentence

3.3. The Galician Complexity Analyzer

A core part of the system is the Complexity Analyzer, which provides word-level and sentence-level annotations to help identify exactly where a reader might struggle. Unlike traditional tools that only give a score, ARAGal's Complexity Analyzer highlights difficult segments and provide alert messages and improvement recommendations. The Complexity Analyzer helps users improve their texts by highlighting specific difficult features that exceed established thresholds (see section 3.3.2). If the established limits are exceeded, these messages show up to explain why a specific part of the text might be too complex for the target level and to offer improvement recommendations to help the user simplify the content.

3.3.1. Features

The annotator includes 20 features, classified into three main dimensions: structure, lexicon and syntax features. The selection of linguistic features was based on previous research identifying key indicators of text complexity. These features were identified by extracting statistical values from a corpus of texts that were classified by an expert according to complexity levels and by applying Spearman's correlation to those statistics [12]. This research utilized statistical data from the same Galician corpus used to evaluate the system's automatic classifiers [15]. Additionally, because Spanish is a closely related language with a much larger volume of available data, some insights from the statistical and qualitative analysis of the Spanish iRead4Skills dataset were incorporated [16]. The final set of features also considers the original design of the iRead4Skills Intelligent Complexity Analyzer and includes valuable feedback from numerous teachers who tested that platform in real educational settings.

The annotator internally evaluates complexity by calculating specific linguistic features at the document, sentence, and token levels. Most of these features are computed as averages or ratios relative to the total number of tokens or specific Parts Of Speech (POS) tags. To extract these features, the system utilizes the NLP library Stanza [17]. For multi-token phenomena, such as subordinate clauses, auxiliary verb chains, and other non-adjacent phenomena identified through syntactic dependencies, the system employs the BIO (Beginning, Inside, Outside) tagging format to ensure accurate identification (see section 3.4 below). The complete list of features is shown in Table 1.

3.3.2. Thresholds

To determine if a text is “too difficult” for a specific level, threshold values for each feature were established. These thresholds were primarily calculated using the 75th percentile of the statistics extracted from a comprehensive Galician reference corpus [12]. However, because this Galician corpus is small, some features yielded inconclusive data (such as values of zero). In these cases, the thresholds defined for Spanish were adopted as a reference, given the linguistic proximity between the two languages.

Although the 75th percentile and existing Spanish thresholds offered a statistical basis, several values were manually adjusted to ensure clear distinctions among the four complexity levels and to avoid values that could be acceptable in most categories. The thresholds for features where linguistic theory and expert criteria provide clear guidelines were manually adjusted. A key example of this approach is the length of auxiliary verb chains. Thresholds for this feature were manually adjusted after an expert review. The final values ensure that, as soon as a verbal structure exceeds the permitted size for a given level, the Complexity Analyzer will identify it as potentially too complex and trigger the corresponding alert and recommendation.

While most features use an upper bound (where higher values indicate higher complexity), some features work inversely. For example, the percentage of infinitive verbs and repeated words typically decrease as a text becomes more complex. Therefore, these features use lower-bound thresholds to trigger alerts when their frequency is unexpectedly low.

3.3.3. Lexicon Development

The system relies on three external lexicons created specifically for this tool to analyze polysemy, lexical frequency, and lexical complexity.²

Polysemy Lexicon: This lexicon identifies words that may cause confusion due to having multiple meanings. It consists of lemmas extracted from the Galician version of WordNet[18], accompanied by the number of “supersenses” for each word. For the purposes of this tool, any word with more than two supersenses is considered as polysemous. Supersenses were chosen because a very fine distinction between meanings is made by WordNet, which could result in an excessively large—and uninformative—number of polysemous words if synsets were used.

Frequency Lexicon: This resource was built using the high-quality partition of the CorpusNÓS [19]. The methodology involved several stages:

- **Normalization:** Converting text to UTF-8, changing all characters to lowercase, and removing non-linguistic material such as URLs, numbers, and symbols.
- **Tokenization and Lemmatization with Stanza:** Breaking the text into tokens and converting them into their canonical forms (e.g., “fomos” becomes “ir”).
- **Filtering and Counting:** Nouns, verbs, adjectives, and adverbs were specifically included. Finally, the system recorded the frequency of each lemma to determine how common or rare it is in real-world usage.

Complexity Lexicon: This lexicon was developed by analyzing various Galician teaching manuals for foreigners. We used a semi-automatic process where vocabulary was manually extracted from these resources and assigned to one of the following levels, as defined by the Common European Framework of Reference for Languages: A1, A2, B1 or C1. After automatic tokenization and POS tagging with Stanza, the words were merged into a single database. If a word appeared at different levels across different manuals, the lowest level was prioritized.

²The lexicons are available at <https://aragal.pages.citius.gal/demo/>.

3.4. Complexity Analyzer Elements and Annotation Methodology

The ARAGal annotation module identifies specific linguistic features that contribute to reading difficulties and provides interactive feedback to the user. This module acts as a Complexity Analyzer by comparing the input text against established thresholds and specialized lexicons described in the previous sections (3.3.2, 3.3.3).

Annotator Feedback Elements: When the system detects a linguistic phenomenon that exceeds the complexity threshold for a chosen level, it provides feedback through four main elements:

- **Highlighted Text:** The system underlines the specific tokens, phrases, or full sentences that are identified as complex. For example, long sentences or complex words are highlighted directly in the editor.
- **Definitions:** When a user hovers over the question mark icon next to a feature's name, a pop-up window appears with a linguistic description of that feature.
- **Alert Messages:** These notifications explain why a specific part of the text is considered too difficult for the target level. For instance, an alert might state that the text contains too many passive voices or subordinate clauses.
- **Improvement Recommendations:** The platform offers predefined suggestions on how to simplify the text. Examples include suggesting that the user split a long sentence into two or replace a passive construction with an active one.

Annotation Implementation: The highlighting logic is applied at different levels depending on the nature of the feature:

- **Token-level:** The system highlights individual words. This is used for features like long words, gerunds, infinitives, or complex words. In the case of lexical complexity, the system specifically highlights words that are categorized at the same or a higher level than the one selected for the text (e.g., highlighting level 3 words in a level 1 text).
- **Sentence-level:** The system highlights entire segments. This approach is used for long sentences or those with excessive syntactic depth.
- **Relational and Chain-level:** The annotator identifies and highlights groups of related tokens. For distant elements, the two related words are underlined. For coordination, both the conjunction and the coordinated elements are highlighted. Similarly, for passive voices and auxiliary verb chains, the system highlights the entire sequence of tokens forming the structure.

This multi-level approach ensures that the user can easily identify whether a difficulty arises from a single word, a specific grammatical construction, or the overall structure of a sentence.

3.5. Customization Options

The ARAGal platform offers all of the aforementioned services by default. However, it can be adapted for specific educational or experimental purposes. It offers high flexibility by allowing authorized users to customize the interface and hide or show any of its elements. The interface is organized into three primary sections, which can be enabled or disabled: the general readability level indicator, the visual yardstick bars (structure, lexicon and syntax), and the Complexity Analyzer. It is possible to choose exactly which components are visible. For example, the general level indicator can be hidden, and the yardstick bars can be displayed all at once, individually, or not at all. Additionally, the annotator can be configured to track all available linguistic features or only a specific selection relevant to the user's goals. The feedback system is modular. Specific types of messages, such as definitions, complexity alerts, and improvement recommendations, can be enabled or disabled. Moreover, the option to enable or disable text editing is available, along with the choice to provide pre-loaded texts for analysis.

These customization features allow the tool to be adapted for various purposes, ranging from scientific research to classroom activities:

Configuraciones
Textos

Configuraciones / Configuración / Editar Full assistant Galician - with pre-defined texts

Editar configuración

Nombre

Full assistant Galician - with pre-defined texts

☒ Habilitada
☒ Permitir edición
☒ Mostrar código de participación

Idioma

Gallego

Textos

N1_cpers_mensaje_01.txt
N1_cpofs_web_01.txt
N2_ll_ficcion_poesa_02.txt
N2_ll_noficcion_dianovaxe_02.txt
N3_cpers_blog_04.txt
N3_cpofs_notaprensa_03.txt

Predictor de complejidad

☒ Complejidad general
☒ Complejidad de estructura
☒ Complejidad léxica
☒ Complejidad de sintaxis

Asistente de escritura

☒ Estructura

☒ Lonxitude do texto
☒ Alerta
☒ Definición
☒ Sugerencia de mejora

☒ Palabras longas

☒ Alerta
☒ Definición
☒ Sugerencia de mejora

☒ Léxico

☒ Nomes propios
☒ Alerta
☒ Definición
☒ Sugerencia de mejora

☒ Palabras únicas

☒ Alerta
☒ Definición
☒ Sugerencia de mejora

☒ Sintaxis

☒ Pasivas (lonxitude)
☒ Alerta
☒ Definición
☒ Sugerencia de mejora

☒ Pasivas (cantidade)

☒ Alerta
☒ Definición
☒ Sugerencia de mejora

Figure 2: The ARAGal customization options. The administrator can configure which widgets and functionalities are visible in specific contexts, such as controlled user experiments or classroom tasks.

Experimental use: To support scientific research, the tool assists in preparing experimental settings for running user studies. Each experimental condition created consists of a set of texts as stimuli while controlling for the specific feedback and tooling displayed to the user. This experimental facility relies on pre-generated, unique participant tokens and participation links, which facilitate integration with commonly used external questionnaire platforms (such as Qualtrics). This allows researchers to conduct user experiments with specific instructions and ensures data quality by registering all user interactions, such as clicks and text edits, that can also be analyzed later.

Educational use: In a pedagogical context, these features enable teachers to design specific language exercises. For example, a teacher could ask students to find specific syntactic structures within a text, such as passive voices, subordinate clauses, or gerunds, to test their recognition skills. Students could also be tasked with transforming a text —such as changing active sentences into passive ones or replacing infinitives with gerunds— to practice complex verbal structures. By reviewing the interaction logs, the teacher can confirm if the student’s changes were intentional and if they correctly understood the linguistic phenomena.

4. Conclusion and Future Work

This paper has introduced ARAGal, the first integrated platform for Automatic Readability Assessment in Galician. By combining state-of-the-art readability classifiers with linguistically grounded thresholds, the platform offers a comprehensive tool for diagnostic analysis and actionable pedagogical guidance. Unlike traditional formulas, ARAGal provides a multifaceted diagnostic through its three main modules: a four-level classifier, visual yardsticks, and an interactive Complexity Analyzer that offers highlights, alerts, and improvement recommendations.

The tool’s high degree of customization makes it suitable for both scientific research and classroom activities. It allows users to identify exactly where a reader might struggle by highlighting specific linguistic phenomena, providing a practical solution for the creation and adaptation of accessible educational materials in Galician. This diagnostic approach facilitates the simplification of content

through actionable recommendations and feedback that guide the adaptation process.

For future work, we plan to conduct extensive user testing with teachers and students to evaluate the pedagogical effectiveness of each of the features of the platform and the clarity of its recommendations. We also aim to expand the classification levels to capture the nuances of high-proficiency texts more accurately. Specifically, we intend to redefine the current Level 4 (+Complex) into multiple, more granular levels. This expansion will involve incorporating new linguistic features and adapting alert messages to better reflect the specific structural and lexical challenges found in advanced academic or technical texts, ensuring the tool remains effective across all stages of language learning.

Acknowledgments

This work was supported by the European Commission (Project: iRead4Skills, Grant number: 1010094837, Topic: HORIZON-CL2-2022-TRANSFORMATIONS-01-07, DOI: 10.3030/101094837), by MCIU/AEI/10.13039/501100011033 (grants with references PID2021-128811OA-I00, CNS2024-154902, PID2024-161928OB-I00, and AIA2025-163322-C62), and by the Galician Government (ERDF 2024-2027: Call ED431G 2023/04, and ED431B 2025/16).

Declaration on Generative AI

During the preparation of this work, the authors used Gemini Notebook in order to: translate text, check grammar and spelling, and paraphrase content. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the publication's content.

References

- [1] W. Aissa, R. Amaro, D. Antunes, T. Bañeras-Roux, J. Baptista, A. Catala, L. Correia, T. François, M. Garcia, M. Izquierdo-Álvarez, N. Mamede, V. Martins, M. Neves, E. Ribeiro, S. Rodríguez Rey, E. Vanzeveren, The iRead4Skills intelligent complexity analyzer, in: I. Habernal, P. Schulam, J. Tiedemann (Eds.), *Proceedings of the 2025 Conference on Empirical Methods in Natural Language Processing: System Demonstrations*, Association for Computational Linguistics, Suzhou, China, 2025, pp. 73–84. URL: <https://aclanthology.org/2025.emnlp-demos.6/>. doi:10.18653/v1/2025.emnlp-demos.6.
- [2] R. Flesch, A readability formula in practice, *Elementary English* 25 (1948) 344–351.
- [3] R. Gunning, *The technique of clear writing*, McGraw-Hill, New York, 1952.
- [4] A. Graesser, D. McNamara, M. Louwerse, Z. Cai, Coh-metrix: Analysis of text on cohesion and language, *Behavior research methods, instruments, & computers : a journal of the Psychonomic Society, Inc* 36 (2004) 193–202. doi:10.3758/BF03195564.
- [5] C. E. Scarton, S. M. Aluísio, Análise da inteligibilidade de textos via ferramentas de processamento de língua natural: adaptando as métricas do coh-metrix para o português, *Linguamática* 2 (2010) 45–61. URL: <https://www.linguamatica.com/index.php/linguamatica/article/view/44>.
- [6] A. Quispesaravia, W. Perez, M. Sobrevilla Cabezudo, F. Alva-Manchego, Coh-Metrix-Esp: A complexity analysis tool for documents written in Spanish, in: *Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC'16)*, European Language Resources Association (ELRA), Portorož, Slovenia, 2016, pp. 4694–4698. URL: <https://aclanthology.org/L16-1745>.
- [7] K. Bengoetxea, I. Gonzalez-Dios, Multiaztertest: a multilingual analyzer on multiple levels of language for readability assessment, 2021. doi:10.48550/arXiv.2109.04870.
- [8] P. Curto, N. Mamede, J. Baptista, Automatic Text Difficulty Classifier, in: *Proceedings of the 7th International Conference on Computer Supported Education*, volume 1, 2015, pp. 36–44.
- [9] G. C. d. L. Moreno, M. P. de Souza, N. Hein, A. K. Hein, ALT: um software para análise de legibilidade de textos em Língua Portuguesa, *arXiv preprint arXiv:2203.12135* (2022).

- [10] T. François, A. Müller, E. Rolin, M. Norré, Amesure: a web platform to assist the clear writing of administrative texts, in: Proceedings of the 1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 10th International Joint Conference on Natural Language Processing: System Demonstrations, 2020, pp. 1–7.
- [11] R. Monteiro, R. Amaro, S. Correia, A. Pintard, R. Gauchola, M. Moutinho, X. Blanco Escoda, iRead4Skills - Complexity Levels, 2024. URL: <https://doi.org/10.5281/zenodo.10459090>. doi:10.5281/zenodo.10459090.
- [12] S. R. Rey, M. Garcia, Clasificación automática de textos por niveis de lecturabilidade: recursos e modelos para o galego, *Linguamática* 17 (2025) 33–56. URL: <https://www.linguamatica.com/index.php/linguamatica/article/view/488>. doi:<https://doi.org/10.21814/lm.17.2.488>.
- [13] A. Pintard, T. François, J. Nagant de Deuxchaisnes, S. Barbosa, M. L. Reis, M. Moutinho, R. Monteiro, R. Amaro, S. Correia, S. Rodríguez Rey, M. Garcia González, K. Mu, X. Blanco Escoda, iRead4Skills Dataset 1: corpora by complexity level for FR, PT and SP, 2024. URL: <https://doi.org/10.5281/zenodo.10889888>. doi:10.5281/zenodo.10889888.
- [14] S. Rodríguez Rey, M. Garcia, A comparative study of multilingual fine-tuning and prompting for automatic text readability classification in galician, in: M. Shardlow, T. François, R. Amaro, J. Baptista, R. Cardon, E. Ribeiro, H. Saggion, R. Stodden, A. Todirascu, R. Wilkens (Eds.), Proceedings of the Joint Workshop on Readability and Text Simplification (READIXTSAR) @ LREC 2026, ELRA Language Resources Association, 11 May 2026, 2026, pp. 101–120. Proceedings licensed under CC BY-NC 4.0.
- [15] S. R. Rey, M. Garcia, Corlega: Corpus de lecturabilidade en galego, 2025. URL: <https://doi.org/10.5281/zenodo.15441342>. doi:10.5281/zenodo.15441342.
- [16] S. Rodríguez Rey, A. Bernárdez Braña, M. Garcia, Exploring linguistic features in a new readability corpus for spanish, *Procesamiento del Lenguaje Natural* 74 (2025) 221–239. URL: <http://journal.sepln.org/sepln/ojs/ojs/index.php/pln/article/view/6677>. doi:10.26342/2025-74-15.
- [17] P. Qi, Y. Zhang, Y. Zhang, J. Bolton, C. D. Manning, Stanza: A Python natural language processing toolkit for many human languages, in: Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics: System Demonstrations, 2020. URL: <https://nlp.stanford.edu/pubs/qi2020stanza.pdf>.
- [18] X. G. Guinovart, M. A. S. Portela, Building the galician wordnet: Methods and applications, *Language Resources and Evaluation* 52 (2018) 317–339. doi:10.1007/s10579-017-9408-5.
- [19] I. de Dios-Flores, S. P. Suárez, C. C. Pérez, D. B. Outeiriño, M. Garcia, P. Gamallo, CorpusNÓS: A massive Galician corpus for training large language models, in: P. Gamallo, D. Claro, A. Teixeira, L. Real, M. Garcia, H. G. Oliveira, R. Amaro (Eds.), Proceedings of the 16th International Conference on Computational Processing of Portuguese - Vol. 1, Association for Computational Linguistics, Santiago de Compostela, Galicia/Spain, 2024, pp. 593–599. URL: <https://aclanthology.org/2024.propor-1.66/>.