EmRede
Revista de Educação a Distância
UniRede

EmRede, v.12. 2025

Academic Literacy in English in Cyberculture: a Cyber-research Training in the Context of the Pandemic

Jones de Sousa
Federal Rural University of Rio de Janeiro (UFRRJ), Seropédica, Rio de Janeiro, Brazil
jonesdesousa@hotmail.com

Edméa Oliveira dos Santos
Federal Rural University of Rio de Janeiro (UFRRJ), Seropédica, Rio de Janeiro, Brazil
edmeabaiana@gmail.com

Abstract: This research aimed to understand the process of acquiring academic literacy in English by a Brazilian research group during the COVID-19 pandemic, which was conducted exclusively remotely using digital interfaces such as the "RNP Web Conference" and WhatsApp. Using cyber-research training, based on data generated in a context that does not separate teaching and research, we propose a classification of interfaces to be chosen for online didactic design, highlighting the importance of curating digital interfaces, and suggesting a reorganization of essential skills for this literacy in light of the new challenges of international scientific dissemination.

Keywords: Education; Academic Literacy; Cyberculture.

Letramento Acadêmico em Inglês na Cibercultura: uma Ciberpesquisa-Formação no Contexto da Pandemia

Resumo: A pesquisa buscou compreender o processo de aquisição de letramento acadêmico em Inglês por um grupo de pesquisa brasileiro durante a pandemia de Covid-19 de forma exclusivamente remota, usando interfaces digitais como "Conferência Web RNP" e WhatsApp. Utilizando a ciberpesquisa-formação, a partir dos dados gerados num contexto que não aparta docência e pesquisa, propomos uma classificação das interfaces a serem escolhidas para o desenho didático on-line, e destacamos a importância de uma curadoria das interfaces digitais, além de propomos uma reorganização das habilidades essenciais para este letramento em face dos novos desafios da divulgação científica internacional.

Palavras-chave: Educação; Letramento Acadêmico; Cibercultura.

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

EmRede
Revista de Educação a Distância

UniRede

Alfabetización Académica en Inglés en la Cibercultura: una Ciberinvestigación-formación en el contexto de la Pandemia

Resumen: La investigación buscó comprender el proceso de adquisición de la alfabetización académica en inglés por parte de un grupo de investigación brasileño durante la pandemia de Covid-19 de forma exclusivamente remota, utilizando interfaces digitales como "Conferência Web RNP" y WhatsApp. Utilizando la ciberinvestigación-formación, a partir de los datos generados en un contexto que no separa la docencia de la investigación, proponemos una clasificación de las interfaces que deben elegirse para el diseño didáctico en línea, y destacamos la importancia de una curaduría de las interfaces digitales, además de proponer una reorganización de las habilidades esenciales para esta alfabetización ante los nuevos retos de la divulgación científica internacional.

Palabras clave: Educación; Alfabetización Académica; Cibercultura.

Received on: 2024-06-03

Accepted on: 2025-04-06

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

EmRede
Revista de Educação a Distância
UniRede

1 INTRODUCTION

To understand the motivation behind the research discussed in this text, it is important to acknowledge the unfortunate assumption that individuals who have not attended language schools or participated in immersion programs, such as exchange programs, may come to university with limited English proficiency. These students have overcome barriers to basic education and reached stricto sensu graduate programs, where they generate academic knowledge for these institutions. At this level of education, a lack of English proficiency becomes an institutional problem since "the fact that Brazilian students are generally monolingual impacts public policies that encourage the internationalization of education" (Jareta, 2015, n.p., translated by us).

Examining the importance of English for academic purposes is justified by its fundamental role as the lingua franca of science since the second half of the 20th century. Therefore, it is equally important for Brazilian academics to have access to international scientific literature in English as it is for Brazilian scientific literature to circulate on international networks.

Stricto sensu graduate programs generally require applicants to demonstrate English proficiency for admission. However, "Instrumental English," which is limited to the ability to read texts in the additional language, is increasingly falling short of meeting researchers' real needs.

Thanks to the extensive Brazilian publishing market, which provides access to important international works in Portuguese, particularly in Education, Brazilian researchers can complete their postgraduate courses without needing to read original works in English. Although the flow of articles in international journals does not rely on this translation market, digital interfaces can translate short texts with some accuracy, which could corroborate the neglect of English reading proficiency on the part of some researchers. Writing in English is as challenging as reading for the same reasons. Both the existence of an excellent professional translation market and the constant evolution of digital interfaces for this purpose are factors to be considered.

Even before the Covid-19 pandemic, which imposed social distancing measures to contain the spread of the virus, online scientific events were already a growing reality, only intensified by the pandemic. Thus, participation in international scientific events became more accessible without the need to be physically present. However, greater English skills were required, such as listening and speaking, so researchers could present their work and exchange experiences with colleagues in international scientific communities.

A renowned research group at a federal university, already engaged in its own

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

internationalization process by sharing knowledge produced by its members through publications, exchanges, and participation in international events, realized that academic literacy in English is essential to training its members, from scientific initiation students to research partners with doctorates from other networks.

Thus, the group's researchers, led by an English teacher and doctoral student in education, decided to co-create a training and research device to promote academic literacy in English among its members.

This article aims to understand the importance of curating digital interfaces that aid in acquiring academic literacy in English, as well as propose reorganizing the most important related skills in light of the new challenges of international scientific dissemination.

After the introduction, the next section, titled "Development," discusses the chosen methodology, details the research and training framework, and presents data from the fieldwork. Finally, we present the "Considerations" section, in which we outline the objectives of this article.

2 DEVELOPMENT

Since 2005, the research methodology known as "Research-Training in Cyberculture," originally developed for Edméa Oliveira dos Santos's doctoral thesis, has been updated by her and her "Teaching and Cyberculture" research group (GPDOC).

Based on four founding epistemologies, Cyber-research Training consists of a participatory, qualitative research methodology in which teaching and research are inseparable, and the researcher is simultaneously training and being trained.

Multireferentiality, studies in/of/with everyday life, and complexity together with cyberculture form the epistemological basis of this methodology. This methodology is necessary for educators to understand their practice by researching and being trained through it, regardless of the educational network they are part of.

And at the core we find the term "device", which, according to Santos (2020, online, translated by us) consists of pedagogical thinking that is updated in a network, in other words, in the set of “pedagogical intelligences materialized in acts of curricula mediated by network technologies, in online interactive relationships and in the city-cyberspace interface, constituting authorships, in research-training”.

Analyses are carried out on the data produced in the context of a device that culminate in the

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

research findings. In this method, these findings are referred to as subsuming notions, which Santos (2019, p. 124, translated by us) defines as "the analytical categories, products of the analysis and dialogical interpretation between empiricism and theory in a process of significant learning" for all research practitioners.

In this study, theoretical bricolage begins with the founding epistemologies of the method and the study of multiliteracies because, as Magda Soares (2002, p. 156, translated by us) states, "Literacy is a plural phenomenon, historically and contemporaneously: different literacies over time and in our time."

And if our time is a time of cyberculture, we can use the term “cyberliteracy”, as Marcela Cockell (2009) has already done, which has a more contemporary understanding and is aligned with what we believe to be literacy in cyberculture, as it already relates it to an important characteristic of the digital network: hypermedia, “a mixture of hypertext (textual parts that connect from one node to another under the action of the reader) and multimedia (texts are no longer just verbal, but mixed with visual and sound)” (Santaella, p. 17, 2021, translated by us).

The academic literacy in English in the cyberculture to which we refer is the set of skills necessary for apprehending, producing, and disseminating academic content in English by Brazilian education researchers, supported by digital network interfaces that foster their autonomy.

2.1 A Device to Call Our Own

In this study, a training and research program was created to help researchers at a Brazilian federal university improve their English skills. The practical use of mediation through networked technologies happened mostly through the use of two interfaces, a term we use to refer to the programs or applications used, because, "in its simplest sense, the word refers to software that shapes the interaction between user and computer. The interface acts as a kind of translator, mediating between the two parties, making one sensitive to the other" (Johnson, 2001, p. 19, translated by us).

The situation at the university where the study was conducted is important to understand why the study made certain choices. All the information in the study came from 2021, a year when the university stopped all in-person activities, like classes and meetings. This was done to try to stop people from gathering and spreading the new virus.

Thus, the research participants, whom we call cultural practitioners, as we assume that when we research Cyberculture, “subjects are not mere informants, they are cultural practitioners who

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

produce cultures, knowledge and expertise in the context of the research" (Santos, 2019, p. 21, translated by us), could only interact in cyberspace, initially conceptualized as a "new means of communication that arises from the global interconnection of computers" (Lévy, 1999, p. 17, translated by us), and today understood as "the internet inhabited by human beings, who produce, authorize themselves and constitute communities and social networks through and with the mediations of networked digital technologies" (Santos, 2019, p. 30, translated by us).

For this reason, the device was organized around the effective use of two interfaces: the WhatsApp messaging application and the RNP Web Conference videoconferencing interface. The intentional selection of these interfaces and their subsequent use has allowed us to establish one of the subsuming notions.

To this end, we will briefly explain each of these interfaces that would constitute a true "virtual learning environment" beyond its most generic meaning, if we considered "only its technological infrastructure, that is, the set of interfaces and/or tools and contents of a course" (Santos, 2019, p. 97, translated by us).

While the "RNP Web Conference" consists of an open-source web conferencing system for online learning called BigBlueButton, which allows real-time interaction between practitioners, that is, synchronous activities, WhatsApp is responsible for asynchronous communication on the device, meaning that communication does not necessarily have to be in real time.

According to the June 2022 Panorama Mobile Time/Opinion Box survey, which investigated app usage in Brazil, the latter tops the rankings as the most popular app on Brazilian smartphones. Therefore, we justify its selection. The features employed for the training and research device were instant text and audio messaging, image and video sharing, and the ability to create groups.

For our training and research tool, two groups were created: one consisting of all the cultural practitioners involved in the research and another consisting of a doctoral student and two research fellows. The first group included a graduate of the Literature program, while the fellows were students in the institution's program. Both groups were configured to allow all participants to freely send messages and edit group data, thereby granting them administrator status.

Familiarity with the application and the informality it provides allowed for a horizontal relationship among all participants in the research group. The group aimed to integrate studying this essential language into its activities to access global scientific knowledge and disseminate its work on international networks.

While WhatsApp's features may seem trivial, the videoconferencing interface's capabilities

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

deserve special attention. First, let's justify its selection. The acronym RNP stands for the National Research and Education Network (RNP), which has promoted the online circulation of national scientific knowledge since 1989. RNP partners provide numerous services to institutions, particularly regarding internet access. They connect universities, educational and cultural institutes, research agencies, teaching hospitals, parks, and technology hubs.

The political decision to use the RNP's videoconferencing service prioritizes the availability of secure institutional platforms that can interact with other official online educational interfaces. Below is a summary of the main features used during synchronous meetings:

Chart 1– "RNP Web Conference" interface features

Functionality	Explanatory Summary
Conference	It allows real-time communication between participants through audio and video.
File presentation	Allows display of files in different formats, with better performance for those in PDF format (portable document format).
Poll	Allows you to simultaneously ask all participants with pre-determined answers (multiple choice) and display your results to all participants.
Chat	It allows real-time communication through the use of text between its participants.
Shared notes	It allows the creation and editing of texts, in real time, among its participants.
External video sharing	Allows sharing of videos through the use of external links (YouTube videos, for example).

Source: Authors' authorship (2025).

With the technologies related to digital networking properly presented, we can now present the structure of the device with its respective interfaces:

Figure 1: Device structure

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

EmRede
Revista de Educação a Distância
UniRede

Source: Authors' authorship (2023).

From this structure, we could forge each act of curriculum, "here viewed as a social and cultural invention, with possibilities of transforming into a *socio-educational multi-creation* , into an *autonomous and shared experience* " (Macedo, 2020, p. 22, author's emphasis, translated by us).

Thus, in the GPDOC STAFF group, we drafted the curriculum activities that would be proposed in both the asynchronous GPDOC ENGLISH group and the synchronous meetings via "RNP Web Conference," which took place every Wednesday at 3 p.m. during the three academic semesters offered in 2021.

The proposal of interfaces established the structure of the research and training device, which, when combined with the conception, implementation, and evaluation of each curricular act, provided us with the proposed GPDOC ENGLISH didactic design. Collective authorship was possible because we understood it as an "open work," which encouraged practitioners to co-create practices. Santos (2019, p. 21, translated by us) states that "if pedagogy contemplates 'being epistemologically curious,' this knowledge can be easily transposed and enhanced by interfaces and online communication processes".

Despite lacking access to the city due to measures imposed in response to the Covid-19 pandemic, we relied on the pillars of hybrid environments to create living and formative organizational spaces that transformed the classroom into a more receptive and flexible space, enabling co-creation among all its participants:.

> Hybrid environments are organized into three pillars, taking into consideration: *information sources* (to situate the theme, practice and conception that is part of the class or activity); *authorship systems* (for the manifestation of authorship in individual/pair/group learning actions); and *digital social networks* (to share, discuss and weave more open and informal knowledge, providing the fabric of curriculum acts beyond

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

> institutional *spacetimes*) (Ribeiro; Carvalho; Santos, 2018, p. 5-6, authors' emphasis, translated by us).

In this study, we examined the openness and informality of WhatsApp as a digital social network. We also considered the functionalities of the RNP Web Conference, which constitute authoring systems and information sources. Initially, these were accessed by the mediators and later shared with all cultural practitioners involved in the research. Thus, we can affirm that the training and research device was based on these pillars.

2.2 Understanding What Emerged from Practice

After presenting the training and research device, which is the research field where data is generated for cyber-research training, we will share insights on interface selection and effective use by cultural research practitioners.

Until the two interfaces described in the previous section were implemented in 2021, we used two other interfaces for asynchronous mediation. Both interfaces had features that allowed interaction between cultural practitioners and the posting of content, much like a hypermedia repository.

Mediation is essential for the success of online education because, as Santos (2019, p. 145, translated by us) notes, "when online mediation is of high quality, the student also transforms, beginning to experience and value interactive practices more fully." It is precisely through the proactive stance of the online teacher that new provocations and debates are triggered for all cultural practitioners to experience. Asynchronous interactions were not powerful enough to produce research data in the absence of this stance. However, one characteristic of the two interfaces we chose stood out, enabling us to classify this type of interface for composing training and research devices like this one.

The chosen interfaces served only to promote debates, provocations, and content related to acquiring academic literacy in English in cyberculture. In the interactional sense, there was no space for other topics. It was what we call a "dedicated interface." Not only was it not an interface routinely used by cultural practitioners, requiring some digital literacy for full use, but there was also no "school space" that Paulo Freire (1989, n.p., translated by us) refers to in the poem "School," where he writes, "Important in school is not just studying, not just working, / It is also creating bonds of friendship, / It is creating an atmosphere of camaraderie, / It is socializing, it is 'getting attached to it'!"

In the absence of a physical, in-person environment, perhaps this space is WhatsApp, as it is

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

a commonly used interface by all cultural practitioners in the research. Constant connectivity and various uses make the app a powerful ally in engaging participants. Users can create broadcast lists, send individual messages outside the group, and constantly share relevant (or irrelevant) information with the group. For this reason, we classify it as an **organic interface**, as there's no need for an invitation or any other action to access and use it.

Finally, the videoconferencing interface can serve as a place to create an "environment of camaraderie" as long as the channel is open to everyone for free communication. Although it can be used solely for the device's intended purpose, nothing prevents it from being used for other types of interaction. During the pandemic, similar interfaces were used to celebrate birthdays and weddings and to hold parties. That's why we call our RNP Web Conference a **partially dedicated interface**.

This classification comes from observing how cultural practitioners engage with the interface, the interactions produced in the space, and the actual movement required to access it. While the organic interface is literally in the palm of your hand and consists of an intuitive application that requires no prior preparation after initial setup, dedicated and partially dedicated interfaces require prior technical preparation. This preparation includes logging in with a username and password, setting up a camera, microphone, and headset, and verifying lighting, environment, and content.

The research and training device requires an important notion: digital content curation. This concept "emerged from the way teachers and researchers use content curation in the teaching and learning process based on themes that interest them or that they need to explore further" (Chagas; Linhares; Mota, 2019, p. 39, translated by us).

However, while mediators already carry it out due to information sources underpinning hybrid environments, a new teaching dilemma arises with the advent of cyberculture: "How can we authorize students to become active participants in the teaching-learning process through digital content curation, which can guide them in searching cyberspace for content to solve professional problems?" (Chagas; Linhares; Mota, 2019, p. 34, translated by us).

Despite having a common objective for all cultural practitioners, our device also provided mediators with important literacy during its co-creation process. As Rabello and Cardoso (2022, p. 228, translated by us) explain, "In addition to having access to digital technologies and knowing how to use them, future teachers need to know how to apply them to build knowledge. This knowledge must be developed creatively and critically".

Thus, when discussing the curation of digital content, we also propose the curation of interfaces based not only on the classification of those that could compose a training and research

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

device of this nature but also on those that could assist in independent language study and completion of reading and writing tasks.

After a cultural practitioner posted a video to the GPDOC English group in which an influencer proposed a list of five free apps for learning English, a curriculum initiative was co-created. The GPDOC STAFF group immediately suggested that the mediators test the apps and record videos of their experiences. They shared these videos in the GPDOC English group, where other practitioners could share their opinions and questions.

Writing and reading at the university level are challenging, even in one's native language. Therefore, using digital interfaces to assist with these tasks is valid in contexts where researchers cannot produce work of this caliber in English due to time constraints. Similar to the curriculum process that tested the apps, we used synchronous meetings to develop this literacy. This literacy consists of properly utilizing the translation and proofreading features available online.

This allows us to determine which interface can serve as an important digital literacy for cultural practitioners, which must be added to others from the perspective of multiliteracies to compose the contemporary literacy necessary for Brazilian researchers who want to use English in an academic context. We will call this **Academic Cyberliteracy in English**.

Figure 2: Academic cyberliteracy scheme in English

Source: Authors' authorship (2023).

The emphasis on orality for scientific communication in online events that proliferated during and after the Covid-19 pandemic, added to the existing digital literacy, puts pressure on shifting this

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

academic literacy in English, which has traditionally prioritized reading and writing skills, towards oral communication.

The quest for orality emerged in two phases in the research field. First, cultural practitioners needed to produce narratives that answered the following question: "How did I (not) learn English?" The available hypermedia capabilities permitted answers in various formats (audio, video, and text), revealing significant correlations between learning to speak English and teaching, particularly in basic education. This disconnect from the skill of speaking English was accompanied by processes of authorization and deauthorization, implying continuity or interruption in language study. The narratives also expressed hope that this space would allow for development in orality.

After analyzing the narratives, we began emphasizing orality. We provided space for oral presentations of academic work in English. We also raised awareness among cultural practitioners that effective oral communication in a second language is more important than ideal performance. The rigor of academic journals does not apply to oral communication. This allows researchers to circulate internationally through city-cyberspace interaction. They can also receive colleagues from other networks. This promotes the internationalization of institutions and research groups.

3 CONSIDERATIONS

First, proficiency in English is not just a supplementary skill, but a fundamental necessity for researchers seeking to contribute significantly to the international academic landscape. English is not only a means of accessing global scientific knowledge; it is also an essential tool for disseminating research and collaborating with others in international networks.

Additionally, cyberculture and digital technologies have become increasingly important in academic training and practice. Digital interfaces, such as WhatsApp and videoconferencing platforms, are environments for learning and collaboration, as well as communication tools. Integrating these interfaces into the training and research process can promote flexible, accessible, and collaborative education, particularly in distance learning contexts.

Classifying interfaces as dedicated, organic, or partially dedicated emphasizes the importance of selecting appropriate tools for each educational context. Curating digital content and discerning which interface to use are essential skills researchers must develop to maximize their effectiveness and productivity in the digital environment.

Furthermore, emphasizing orality as part of academic literacy in English underscores the

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

necessity for researchers to cultivate verbal communication skills to actively participate in international scientific events and collaborate with colleagues from other networks.

In the era of cyberculture, we emphasize the importance of a multidimensional and adaptive approach to promoting academic literacy in English. Integrating digital technologies, curating content, and developing communication skills are crucial to this process, which aims to empower Brazilian researchers to excel in an increasingly globalized and digitized academic landscape.

REFERENCES

CHAGAS, A.; LINHARES, R. N.; MOTA, M. A curadoria do conteúdo digital enquanto proposta metodológica e multirreferencial. **Revista Ibérica de Sistemas e Tecnologia da Informação**. n. 33, p. 32-47, 2019. Available at https://scielo.pt/pdf/rist/n33/n33a04.pdf. Accessed on: Aug. 24, 2025.

COCKELL, M. Ciberletramento: multimídia e multimodalidade como propostas de letramento. **Revista SOLETRAS,** n. 17, p. 80-88, 2009. Available at: https://www.e-publicacoes.uerj.br/soletras/article/view/7007/4954. Accessed on: May 20, 2024.

FREIRE, P. **A escola**. [S. I.: s. n.], 1989.

JARETA, G. Por que o ensino do inglês não decola no Brasil. **Revista Educação**. Ed. 223, 2015. Available at: https://revistaeducacao.com.br/2015/11/04/por-que-o-ensino-do-ingles-nao-decola-no-brasil/. Accessed on: Aug. 24, 2025.

JOHNSON, S. **Cultura da Interface**. Rio de Janeiro, RJ: Jorge Zahar Editora, 2001.

LÉVY, P. **Cibercultura**. SP: Editora 34, 1999.

MACEDO, R. S. **A Pesquisa como Heurística**. Ato de Currículo e Formação Universitária. Campinas, SP: Pontes Editora, 2020.

RABELLO, C.; CARDOSO, J. Letramento digital de professores de línguas: uma demanda da cibercultura ainda subestimada pelos currículos de licenciaturas. **Revista Linguagem & Ensino**, Pelotas, v. 25, n. especial, p. 225-249, 2022. Available at: https://periodicos.ufpel.edu.br/index.php/rle/article/view/24775/18302. Accessed on: Aug. 24, 2025.

RIBEIRO, M.; CARVALHO, F.; SANTOS, R. Ambiências híbridas-formativas na educação *online*: desafios e potencialidades em tempos de cibercultura. **Revista REDOC**. Rio de Janeiro, v. 2, n. 1, p. 1-13, 2018. Available at: https://www.e-publicacoes.uerj.br/re-doc/issue/view/1598. Accessed on: May 5, 2024.

SANTAELLA, L. **Humanos Hiper-Híbridos:** Linguagens e cultura na segunda era da internet. São Paulo, SP: Paulus Editora, 2021.

SANTOS, E. **Educação Online:** cibercultura e pesquisa-formação na prática docente. 2005. 351 f.

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082

Tese (Doutorado em Educação) - Faculdade de Educação, Universidade Federal da Bahia, Salvador, 2005.

SANTOS, E. **Pesquisa-formação na Cibercultura**. Teresina, Brasil: EDUFPI, 2019.

SANTOS, E. **Formação de professores e pesquisadores no contexto da pandemia:** possibilidades e limite. 2020. Youtube, 23 set. 2020. 2h34min. [Live]. Available at: https://www.youtube.com/watch?v=hdR3PED0kAY. Accessed on: May 5, 2025.

SOARES, M. Novas práticas de leitura e escrita: letramento na cibercultura. **Revista Educação e Sociedade**, Campinas, v. 23, n. 81, p. 143-160, 2002. Available at: http://www.scielo.br/j/es/a/zG4cBvLkSZfcZnXfZGLzsXb/?lang=pt#. Accessed on: Aug. 24, 2025.

DOI: http://doi.org/10.53628/emrede.v12i.1032 ISSN 2359-6082