

Can high school students check the veracity of information about COVID-19? A case study on critical media literacy in Brazilian ESL classes

Karin Paola Meyrer

Universidade do Vale do Rios dos Sinos, Brazil

Dorotea Frank Kersch

Universidade do Vale do Rio dos Sinos, Brazil



Peer-reviewed article

Citation: Meyrer, K. P., & Kersch, D. F. (2022). Can high school students check the veracity of information about COVID-19? A case study on critical media literacy in Brazilian ESL classes. *Journal of Media Literacy Education*, 14(1), 14-28. <https://doi.org/10.23860/JMLE-2022-14-1-2>

Corresponding Author:
Karin Paola Meyrer
paolameyrer@gmail.com

Copyright: © 2022 Author(s). This is an open access, peer-reviewed article published by Bepress and distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. JMLE is the official journal of [NAMLE](#).

Received: October 20, 2020

Accepted: February 24, 2021

Published: May 19, 2022

Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

Competing Interests: The Author(s) declare(s) no conflict of interest.

[Editorial Board](#)

ABSTRACT

In a globalized world, critical media literacy is imperative when selecting the content we consume amid countless offers. Therefore, the purpose of this case study is to analyze which resources 3rd year high school students (16-17 years old) from an English as a Second Language class in Brazil use in the construction of authorial journalistic articles demystifying fake news about COVID-19 and if the interventions conducted previous to the task were helpful in their process of developing critical media literacy. To this end, firstly students analyzed news about COVID-19 from international websites; secondly, they discussed aspects of a video that circulated widely in WhatsApp chat groups; and, finally, they produced journalistic articles demystifying popular fake news about COVID-19 in Brazil. The findings suggest a great capacity of students to justify their perceptions about what is fact and what is fake once they were provoked to do so, showing the development of critical media literacy and news literacy through the arguments presented in their articles.

Keywords: *critical media literacy, news literacy, COVID-19, ESL.*



Journal of Media Literacy Education

THE OFFICIAL PUBLICATION OF THE

NATIONAL ASSOCIATION FOR MEDIA LITERACY EDUCATION (NAMLE)

Online at www.jmle.org

INTRODUCTION

Information is everywhere: in television programs, on social media such as Facebook, Twitter, and Instagram; and in instant messaging applications such as WhatsApp. It has been easier than ever to be informed and/or entertained since the most varied contents are a click away from digital users. However, we live in a serious information crisis never before experienced in modern society. Frequently we see societies being divided between science and politics, which is potentialized by the television and internet media (Aguaded & Romero-Rodriguez, 2015; Milenkova & Lendzhova, 2021). The Internet has been used for the dissemination of lies and hate speech, leading us to a digital crisis, perhaps without precedent in human history (Stoddard, J., et al., 2021). The development of critical readers and writers imposes itself as a *sine qua non* condition for full participation in social life. We must know how to discern fact from fiction and verify sources and we must teach our students to do so as well.

To this end, the promotion of moments in classrooms that enable the development of critical media literacy – not only in the first language (L1) but also in the second language (L2) – are crucial. According to Kleiman and Marques (2020), it is the role of the school to prepare students to identify values and ideologies in all texts they read in order to question and confront information disseminated. Those contents are frequently manufactured by certain institutions and problematically shared as legitimate in popular sources, but they “only contribute to oppression itself and the exploitation of socioeconomically vulnerable groups” (Kleiman & Marques, 2020, p. 30).

English as a second language (ESL) classes can be an excellent space for the promotion of critical media literacy skills. Authentic materials, which are the ones retrieved from real life sources such as news sites and research platforms, can serve as analytical tools in ESL classes. They can propose reflections and debates, incorporating real meaning to the tasks that are proposed, making students think about real life issues and not only perform mechanical grammar activities (Jiménez & Gutiérrez, 2019).

Brazil has around 120 million active users of the instant messaging application WhatsApp, and the app is used for both professional and personal matters (Fenelon & Torresan, 2019). Consequently,

the propagation of news, fake or not, through WhatsApp is frequent and rapid. We believe that students must question the information they receive and consume; with that in mind, one of the most effective ways of developing this critical consciousness is by analyzing and questioning authentic materials at school, such as videos students receive in their own WhatsApp interactions.

The international outbreak of COVID-19 occurred in the beginning of March, 2020 in Brazil. Television newscasts and social media began reporting about COVID-19 as abruptly as the virus arrived in Brazil, and false information proliferated (Melo et al., 2020). This included inaccurate messaging on the risks of COVID-19 and its methods of prevention, perpetuated by fear and panic. Considering this scenario, we developed a pedagogical intervention during ESL classes. Its objective was to promote critical media literacy by having students identify and critique fake news related to COVID-19. The participants were third year high school students (aged between 16 and 17 years old) from a private institution in the south region of Brazil. The objective of this case study was to analyze which resources students apply in the construction of autoral news articles demystifying fake news about COVID-19 through the lenses of the Transpositional Grammar for Multimodality Analysis framework by Cope and Kalantzis (2021). The case study was supported by the following research questions:

RQ1: In what ways do third year high school students apply the strategies previously learned to identify and demystify fake news about COVID-19?

RQ2: How multimodal resources are being used in the construction of their news articles demystifying fake news found in social media and online chat applications?

We hope this study helps ESL teachers and also first, second and third language teachers reflect on the crucial importance of developing critical media literacy interventions in their classes seeking for the development of the critical and well informal citizens of tomorrow.

The Brazilian Educational System

In Brazil, children join compulsory basic education when they are four years old, attending two years of kindergarten. When they are six years old, they attend five years of elementary school

(first, second, third, fourth, and fifth year). Around ages 12-13, they attend four years of middle school (sixth, seventh, eighth and ninth years). After that, they attend three years of high school (first, second, and third years) in order to conclude their basic education at the ages of 17-18 years old.

When it comes to additional language learning, not much time is reserved in the syllabus of Brazilian public schools. Additional language education in Brazilian public schools does not offer enough time or opportunities for students to develop a new language besides Portuguese, which is one of Brazil's official languages alongside sign language (LIBRAS). In most public schools, students start learning English by the sixth year of middle school (when they are around 12-13 years old), and, in most cases, they have one or two 50-minute lessons of English per week. In some schools, Spanish is also offered, but with an even lower amount of time, usually offering one 50-minute lesson a week since the subject is not considered mandatory in the national syllabus anymore. Since Brazil is a continental country, the disparities also appear in continental proportions. The Brazilian school system is unequal and studies show the significant relation between the students' performance and the infrastructure available for the development of quality education for all (Garcia, 2016; Vasconcelos et al., 2020). Therefore, families with a higher purchasing power tend to pursue private schools for their children, seeking for a better academic formation. Aligned with this context, bilingual schools have gained space in the Brazilian scenario, offering students a different perspective of the teaching-learning process. However, public (tuition free) bilingual schools in Brazil are rare to find, once more showing the disparities in the national educational system. Consequently, most bilingual schools are private, which means they are attended by a fraction of the society. As for the additional language teaching in those private bilingual institutions, Portuguese/English curriculums are the most popular ones, once English is considered a prestige language, carrying the promise of a brighter future for its speakers.

Participants and setting

The participants of this study were students from the third year of high school (16-17 years old), which means they were concluding their basic education studies by the end of the school year of

2020. In this study, we will refer to L1 as Portuguese, which is one of the official languages in Brazil, and L2 as English.

We conducted the research in a private school in the south region of Brazil with a bilingual, Portuguese-English, curriculum until the end of middle school. The setting was chosen because Author 1 is an English teacher at the institution, having the possibility to develop interventions with students from different ages inside the school. Therefore, the teacher-researcher had access and authorization from both the school and the participants to conduct this study. The ethics committee of the school consented with the conduction of the study and the students' legal guardians signed an informed consent template. Furthermore, the students-participants also signed a use permission template approving their participation in the research and the usage of their productions for the sake of the research analysis.

The intervention happened during the ESL classes. In those classes, students are divided according to their English-language proficiency levels. The school in which the study was conducted offers a bilingual curriculum until the end of middle school in which students have ten 50-minute classes of English per week. Five of those classes are dedicated to Language Arts, which includes the study of grammar, vocabulary, syntax, and English literature. The other five periods are conducted through the Content and Language Integrated Learning (CLIL) methodology, including subjects such as Science, Philosophy, Programming, and Financial Education being taught in English. High school students, which were the ones participating in this study, have two 50-minute English classes per week once the bilingual curriculum finishes in middle school.

The class in which the activity was conducted consisted of 18 students, six boys and 12 girls, ranging from 16 to 17 years old. Most of the students – 15 of them – joined the institution's bilingual curriculum in kindergarten. The other 3 students join the school in high school, but also had a high proficiency level in the language. The group's proficiency level in English varied between B2 and C1, according to the Common European Framework (Council of Europe, 2001). Therefore, the class had an advanced level of English in reading, writing, speaking, and listening – enabling research activities to be conducted solemnly in the target language, both by the teacher and the students. Because of their

high proficiency level in English, and the fact that Author 1 was their English teacher at the time, those students were recruited to participate in the study.

The interventions were proposed in-person at the beginning of the 2020 school year before the establishment of the remote learning system as a response to the COVID-19 pandemic. The school operated with in-person activities from February 17th, 2020 until March 16th, 2020. In March 18th, 2020, the remote learning system was established due to the status of the COVID-19 pandemic in the south of Brazil. Therefore, the intervention developed for data collection was conducted for approximately three weeks still in the in-person model of classes.

LITERATURE REVIEW

Critical literacy in English as a Second Language (ESL) classes

The objectives of ESL classes are being expanded over time. Teaching grammar and vocabulary is no longer enough, especially if we consider classes in which students have a high proficiency in the target language. The dynamic and fast-paced society in which we live expects ESL students to be able to act in a future whose contours are uncertain. The future may possibly bring new jobs and career opportunities which will require students to be skilled with different abilities from the ones they have today. They need to be able to move in different spaces - geographic or virtual - and to live peacefully with social and cultural differences. Therefore, it is necessary to develop students' perceptions so that they recognize and respect the diversities in their communities as well as their connectivity to the globalized world (Meyrer, 2021).

In September 2020, approximately 63% of the world's population had access to the Internet (*Internet Users Distribution in the World*, 2020). Meanwhile, Brazil had approximately 70% of its population with access to the Internet (*PNAD Continua TIC 2018*, 2018). However, 80.2% of the population is connected through wireless broadband connection and 99.2% of people use smartphones to reach 3G and 4G connections, as stated in the report provided by IBGE, the Brazilian Institute of Geography and Statistics (*PNAD Continua TIC 2018*, 2018). These statistics show that although the number of connected people may seem high, the quality of these connections and the equipment used

as means to access are not ideal. Brazil is still a long way from establishing digital equity (Junqueira, 2020), and the remote classes format adopted by many public and private schools during the COVID-19 pandemic has evidenced it.

With these digital possibilities, new forms of communication are reshaping the way people interact and learn. Consequently, English language classes cannot be excluded from this development. Lessons that instigate critical literacy awareness in ESL classes can go beyond the teaching of grammar and vocabulary. According to Luke (2012), critical literacy implies "understanding how texts and speeches can be manipulated to represent and actually change the world" (p. 9). The perspective of critical literacy in the ESL classrooms broadens the perception of teaching only the technicalities of the English language, it enables students to develop skills that go beyond the learning of the language per se. New approaches to ESL are being suggested – with a more comprehensive view of teaching, making sure students are exposed to the most varied genres being equipped "to access, evaluate, analyze and create news media products" (Maksl et al., 2015, p. 31) and other multimodal resources as well.

The benefits of ESL teaching practices that encompass critical literacy can be numerous. However, when considering the technological advances that we have experienced in the last decades, it is necessary to promote critical literacy practices that go beyond analog activities. It is impossible to detach ESL classes from the general fabric of the society being established, nothing within a society operates in isolation (Freire, 1967). Many studies were developed regarding critical reading of news media (Geers et al., 2020; Kiili et al., 2019; Kohnen et al., 2020), although none of them have used widely shared WhatsApp videos as a material for participant to analyze. The online messaging application is highly popular in Brazil (Quitnilha, 2022) which facilitates the dissemination of real and fake information through it. Having said that, we are in need of critical thinking in both physical and mediated life, especially considering the enormous amount of information to which we now have access to.

Critical media literacy, news literacy and multimodality

By definition, critical media literacy is a deepening of awareness, which allows students to

analyze diverse multimodal texts and their relationships to the audience, information, and power (Kellner & Share, 2005). Students must know how to read the context surrounding the contents they consume online, in order to identify bias and how sources can be considered trustworthy (Funk, et al., 2016). Therefore, exercises that promote critical media literacy can help students select and analyze the content they consume online, not only inside the classrooms, but also, and more importantly, it is expected from them to apply what they have learned in their lessons outside school (Marques, 2021; Meyrer, 2021).

This necessity presents itself with regards to fake news. Generally, fake news can be defined as news of a journalistic nature without a factual basis, but which are presented as such (Allcott & Agentzkow, 2017). Generally, “fake news” is defined as news of a journalistic nature, in its majority, which presents false information in order to deceive the reader. Social media such as Twitter, Facebook and instant messaging apps like WhatsApp have been used as platforms for easy and rapid spread of fake news (Valenzuela et al., 2019), another reason for its rapid dissemination relies on the critical illiteracy of its readers. In a recent policy brief organized by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the term *disinfodemic* was coined referring to the confusion regarding medical science during the COVID-19 pandemic, causing immediate impacts on entire societies, characterizing a pandemic of disinformation (Posetti & Bontcheva, 2020).

There are many different types of fake news which fulfill the most varied purposes (Brennen, 2017), however, for the sake of this study we will briefly discuss two of them. The first of them is *misinformation*, that is, “unintentionally false information” (Pennycook et al., 2020). The second of them is *disinformation*, that is, “deliberately misleading information” (French & Monahan, 2020). The first, refers to the dissemination of false information without the intention of doing so. In this case, the critical illiteracy of the reader might be one of the main reasons for its occurrence. Meanwhile, disinformation is spread with the deliberate intention to deceive its consumer.

Therefore, the development of multiliteracies (New London Group, 1996) and new media literacies (Hobbs, 2010) is essential to skill our students for a reality in constant transformation. Through multiliteracies and the new media

literacies, it can be provided the possibility to develop the many skills that are required to read a text these days. It is about being capable of reading between the lines, analyzing images and figures and separating what is real from what is fake. Furthermore, the distinctions between consumer and producer no longer exist, and the fine line between “public” and “private” demands new ethical challenges for people of all ages who consume online content (Hobbs & Jensen, 2013).

Thus, it is necessary to address those issues which are central to the experience of growing up in a world full of mass media, diverse culture, and digital media (Hobbs & Jensen, 2013). It is extremely important to promote moments of debates about fact, fiction and opinion in the ESL classrooms as well, considering the vast array of online content available for speakers of not only one language, but two or more (Meyrer, 2021).

Furthermore, news literacy has a crucial role in students’ lives – to inform self-governing citizens (Christians et al., 2009) and although news articles have long been present in L1 and L2 classes (Ashley et al., 2017; Fleming, 2013), educators and scholars are still discussing the applications and the forms of analysis of news literacy. Having said that, Cope and Kalantzis, (2021) have developed the Transpositional Grammar for Multimodality Analysis framework with the objective of helping in the analysis of multimodal artifacts developed by students in their process of constructing knowledge. More than reading multimodal pieces, students are also producing them and much can be learned by analyzing the strategies they use in this creative process. The authors (Cope & Kalantzis, 2021) claim that multimodal meanings exceed the limits of academic literacy as we used to know it, once digital devices have presented themselves with numerous possibilities when compared to analog resources of creation. Cope and Kalantzis (2021) propose five functions in their framework to analyze meaning in students’ multimodal creations, which are: 1) reference, involving the content of the production; 2) agency, considering the actors and factors involved in the creation process; 3) structure, analyzing how the resources build the whole; 4) context, what are the surroundings of the productions; and finally, 5) interest, considering the audience for whom the production was designed.

The possibilities of creation have been expanded in the digital, since there are many different resources available for the production of texts, such

as hyperlinks, images and fonts, making it more difficult to set apart fact from fake (Beach, 2009). Therefore, critical media literacy, and specifically news literacy, can help not only students, but society in general when it comes to analyzing the information they consume, identifying the quality of its sources and questioning its veracity. Therefore, ESL contexts can be spaces to nurture strategies to develop critical analysis of online content once teachers can adapt the activities according to the level of proficiency of their students in the target language.

Challenges of evaluating online content and the importance of collaboration

To evaluate the veracity of online content in the current era is not an easy task. Considering its complexity, researchers have found that people rely on a variety of strategies in order to determine whether the information they have encountered online is real or fake (Brashier & Schacter, 2020; Musgrove et al., 2018; Pennycook et al., 2021;). Some of those strategies include: site or source cues (e.g., appearance, absence of advertising); message cues (e.g., citations, links to external authorities); author cues (e.g., author qualifications and credentials) along with qualities of the individual user such as internet experience, reliance, and personality traits (Metzger & Flanagin, 2015).

Other psychological studies (Kahne & Bowyer, 2017; Velasquez, 2012) have shown that users tend to believe information which has been shared by trustworthy people, such as friends or relatives. These findings portray what frequently happens in instant messaging apps, such as WhatsApp, since users share information they have received from close acquaintances and family members without further checking its veracity once they trust the collocutor (Allcott & Gentzkow, 2016). This behavior encompasses a significant characteristic of Web 3.0 users, which represents a new disruptive phase in the evolution of the web, focusing on greater user utility, decentralization of information and openness (Rudman & Bruwer, 2016). Therefore, individuals no longer have to search for information. Rather than browsing to find websites of their interest, many users consume the most random content through social media that are suggested for them by algorithms (Kohnen et al., 2020).

With all these possibilities for easy content access, we must bear in mind the central role of the

new literacies. Those new literacies can be described as new skills one has to learn in order to engage with new tools and technologies as our societies evolve and change (Leu et al., 2017). There are many factors to be considered in the development of new literacies, and one of them is the important role of collaboration. Although online research and analysis can be an individual act, it may be enhanced when performed collaboratively (Leu et al., 2017). The process of *collaborative learning* is described as the engagement of two or more learners coordinated in synchronous interaction with the purpose of achieving the same goal (Jeong & Hmelo-Silver, 2016).

As previously stated, there are many elements of the new literacies to be considered, but one of them is particularly relevant for the sake of this research: “collaborative online reading and writing practices appear to increase comprehension and learning” (Leu et al., 2017, p. 8). When engaging in collaborative writing practices, students can enhance their understanding on the topic, improving the quality of their productions. When they are working together, they can discuss their ideas, expose different points of view and help one another in the writing and organization of the text itself. Collaboration is a fundamental competence to participate in the social practices of the 21st century (Zammit, 2010). Several studies have shown that offering activities that promote collaboration among students refines their thinking and leads them into producing deeper and more significant analyses (Kersch & Marques, 2017; Rowsell & Walsh, 2011). Collaboration in both online and offline writing practices has been seen as significant to improve the comprehension and knowledge development of the students who are engaged in those practices (Ashley et al., 2012; Leu et al., 2017;).

METHODS

The activity was conducted by Author 1, who was the English teacher of the participants previously described at the time of the research. Throughout the article, we will refer to Author 1 as *the teacher*, once she was both the author and the conductor of the data collection activities, characterizing this study as an action research. In action research, the teacher-researcher plans an intervention to be developed with their students to be further evaluated and analyzed, playing a double role (Tripp, 2005). The research is also of a

qualitative nature once it analyzes students' written productions.

In order to answer the research questions and fulfill the objective of this study, the students were submitted to a series of activities with the main objective of raising awareness and developing critical media literacy. After the initial activities, as a final task, students wrote in pairs news articles demystifying fake news which were circulating in social media and in the instant messaging application WhatsApp. For the sake of the analysis,

considering that the oral interactions among students were not recorded or formally documented, and some activities required students to explore websites, only two of the final written productions (the news articles) of the participants were analyzed through the Transpositional Grammar for Multimodality Analysis framework by Cope and Kalantzis (2021). Figure 1 portrays the framework used for the analysis of the news articles along with its guiding questions for each of the proposed functions.

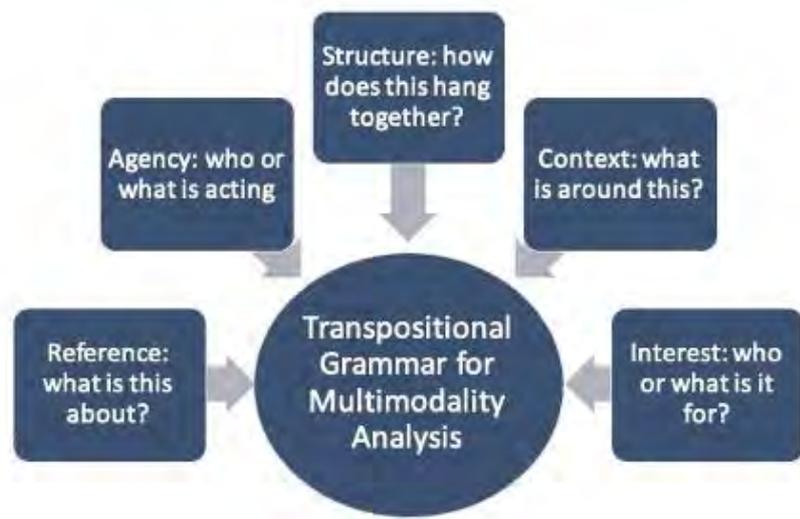


Figure 1. *Framework for multimodal productions analysis.*
 Source: created by the author based on Cope & Kalantzis (2021)

This framework in particular was chosen for the analysis of the journalistic articles once they are organized as digital multimodal pieces, presenting themselves with many possibilities beyond written words (Beach, 2009), as are most of the texts we interact with nowadays.

The intervention and data collection

In order to reach the final production of the news articles, the teacher planned a series of activities with the objective to promote the development of critical media literacy and news literacy. The activities will be briefly described in order to explain the process in which students were conducted previous to the writing of their articles. The activities were conducted during the English classes which occurred in person in two different moments of the week. Each class had a 50-minute period duration and the complete intervention was developed in approximately three weeks.

Firstly, the teacher started a conversation with students about the diverse amount of information related to COVID-19 that had been circulating in the media. Then, they were asked to gather in nine pairs to analyze news about COVID-19 in several international online newspapers. Students received the orientation to browse international websites and read one or two articles related to the topic "COVID-19". The teacher did not specify which article they were supposed to read, the instruction was simply to read the pieces of news about COVID-19. Since students were browsing the websites and reading one or two articles, the free visiting pass was enough, without the necessity of having a paid signature in order to access the online pages.

Each pair was responsible for accessing and briefly analyzing one news site, such as *The Telegraph* (United Kingdom); *The New York Times* (United States), *The New Zealand Herald* (New Zealand), *The Australian* (Australia), *Aljazeera* (Qatar), *Japan Times* (Japan), *China Daily* (China),

and *The Moscow Times* (Russia). These sources were chosen so that students could get an overview of how news about COVID-19 was being portrayed around the world. When analyzing the news articles, each pair was instructed to make notes in a Google Doc shared with the teacher aiming at answering the following questions:

- a) What do all news articles about COVID-19 have in common?
- b) Who is the intended audience?

These notes were later shared orally with the entire group. Secondly, the teacher presented a video that had widely circulated through WhatsApp chat groups. In the video¹, a man, who called himself a “self-taught chemist,” stated that the best form of prevention against COVID-19 was “through the application of vinegar” in the hands. The person asserted that the promotion of the usage of hand sanitizer was “nothing more than a way to generate profits for its manufacturers.” The video also claimed that hand sanitizer was only composed of 30% alcohol and 70% water.

Although the video was in Portuguese, questions and discussion were posed in English. Before showing the video, the teacher asked students to individually make further notes on a Google Doc, answering the following questions:

- a) Do you believe in the information being said in the video? Why? / Why not?
- b) What evidence is there in the video that proves its veracity?
- c) Do you check information you received through WhatsApp?

The teacher started a discussion about their responses regarding the information provided in the WhatsApp video. After the discussion, the students were shown another video² produced by the University of Indiana (USA) explaining the science behind fake news and explaining the term misinformation. Before watching the video, students received a worksheet with the following questions on them to be answered during and after the exhibition of the video:

- a) How does misinformation spread?
- b) What strategies can we use to check the veracity of online contents?
- c) What is the role of the automated bots in the spread of fake news?
- d) Research the difference between "misinformation" and "disinformation".

- e) The video of the self-taught chemist from WhatsApp is an example of misinformation or disinformation?

The answers were orally discussed after students concluded the task. Special attention was given to questions D and E to ensure students understood the difference between the terms and that they could apply it correctly using the WhatsApp video previously analyzed as a reference.

As for the final part of the intervention, students gathered in the original pairs from the website analysis and they were tasked to write a journalistic article demystifying one or two fake news stories that circulated in Brazil about COVID-19. Students based their writings on the structure of the online newspapers articles analyzed and they were given the following written instructions for the task:

“In pairs, you are going to write a journalistic article demystifying one or two fake news stories that circulated on the Internet about COVID-19. Remember to follow the structure of a journalistic article:

- a) Attractive headline;
- b) Brief introduction to explain the main topic being discussed;
- c) Development paragraphs;
- d) Mention trustworthy sources to support your arguments throughout the text;
- e) Concluding paragraph with your final considerations;
- f) Check the grammar and spelling of your writing;
- g) Mention the sources you have used.
- h) Be prepared to share your articles with your classmates once they are concluded.”

Two articles from different pairs were selected for analysis. The articles were chosen considering they were the ones which followed more precisely the structure given to the development of the task.

Results by the light of the transpositional grammar for multimodality analysis framework

The functions of reference and agency (Cope & Kalantzis, 2021) are the same for both the texts being analyzed. The activity consisted in the creation of journalistic articles demystifying widely circulated fake news about COVID-19 in Brazil. Students based their articles on the structure given by the teacher and used other articles written in

¹ <https://www.youtube.com/watch?v=DAGYXL-FqMY>

² <https://www.youtube.com/watch?v=BIv9054dBBI>

Portuguese as sources throughout their writings. Therefore, the functions of reference (Cope & Kalantzis, 2021), consisting in the topic of the assignment, and agency (Cope & Kalantzis, 2021), which refers to the students' active role in the development of their articles, is the same for both articles being analyzed.

As for the third function, Cope and Kalantzis (2021) describe structure to be analyzed in multimodal productions referring to the overall organization of the text. The first article, developed by Pair 1, portrayed a title which indicates the theme

to be addressed: the public health problem and the spread of misinformation. The introduction of the article contextualizes the topic of the text for the reader. It also uses an image to deny the false claims being discussed in the source text. Figure 2 shows those elements conversing with one another in order to inform the reader about fake news. The title makes an analogy between the sanitary crisis of COVID-19 and the spread of fake information, calling the reader's attention, which is an essential characteristic for a journalistic headline.

Fake news, the real pandemic

Coronavirus is a type of virus. There are many different kinds, and some cause disease. A newly identified type has caused a recent outbreak of respiratory illness now called COVID-19, and in the last few days it became world news due to a pandemic being declared by the world health organization. Because of that the coronavirus subject has become very present everywhere on the internet, together with news of real importance we managed to find a lot of fake news, that are being widely spread on the internet.

A news that has spread widely through the media in Brazil is that marijuana can immunize a person against the new covid-19, A print screen simulating being from a report circulates on social media that says a study in the United States concluded that people who smoke marijuana are immune to Covid-19. The text says that cannabis users, unlike those who smoke ordinary cigarettes, have been resistant to the coronavirus. but this is just a big lie, not a study has been done on marijuana that proves that it generates any benefit that can cure the coronavirus, these fake news can be very dangerous and usually spread very quickly, there have been recorded cases of deaths due to self-medication that was passed through a fake report.



Figure 2. Screenshot 1 of the article written by Pair 1

Popular fake news and why they are not true

The fake news surrounding the Coronavirus epidemic and why they are easily disputable

Coronavirus is a disease that has been spreading in large proportions in the last few months, causing great repercussion and, surely, panic. In this scenario, many fake news are being spread and because the authorities do not have a lot of information yet, most people believe them. One of the most popular fake news is that the virus can be cured by lemon and honey and that vinegar works as a hand sanitizer. We will tell you why they are not true.

One of the cases that got a lot of attention on the news was of the British man, Connor Reed, who was living in Wuhan when he caught the virus. The English teacher refused to take any medication and claimed to cure his disease with "hot toddy", a combination of whisky, lemon and honey. Newspapers like Reuters told this story and explained why this is not true. "According to the World Health Organization (WHO) there is no specific cure yet for the new Coronavirus".



Figure 3. Screenshot 1 of the article written by Pair 2

Meanwhile, Pair 2 made use of a title and subheading in their article, which is common in journalistic written genres, as shown in Figure 3. Moreover, Figure 4 presents another strategy employed by Pair 2 often used in news articles – citing important chunks of source information in the body of the text. Cope and Kalantzis (2021) claim that when students structure their knowledge in multimodal productions new strategies need to be applied to ensure the coherence and cohesion of the text as a whole. Having said that, Figures 3 and 4 show that Pair 2 added a picture to illustrate the subject being discussed in their article along with journalistic strategies to highlight important quotations.

Although lemon and honey can be beneficial for increasing for your symptoms, they are not capable of curing a disease by themselves. According to The Sun, honey can ease the pain of a sore throat and lemon can decrease phlegm. However, COVID-19 is a newly discovered disease which unfortunately does not have a cure neither a way of prevention yet. The infected have only their symptoms treated and that is all the doctors can do for now.

“There are no specific treatments for COVID-19 and treatment is based on clinical presentation. Most cases are mild and self-limiting, and treated symptomatically”, a WHO spokesperson told Reuters.

Figure 4. Screenshot II of the article written by Pair 2

Fake news and conspiracies at a time like this are so obviously reprehensible that the most interesting issue is the challenge of the news itself. In periods of public panic, people do not seem to care much about the truth of the news they are spreading on social networks, and this has become an even bigger problem thanks to the globalization of the modern world, where you can pass on information to thousands of people in the matter of seconds. We must bear in mind the obligation to check if the information we pass on is real. If we do not do this we may have to deal with several problems at the same time.

Figure 5. Screenshot II of the article written by Pair 1

To make sure that the information is true, it is fundamental to check the sources. There is a limited number of high level journalism papers or virtual papers that can be trusted, as well as government websites. The platform where the news are being shared is also a form of indication. Most links being shared on WhatsApp and Facebook contain debatable information. Finally, it is important to look for those news in more than one location.

Figure 6. Screenshot III of the article written by Pair 2

Furthermore, the conclusion of the article written by Pair 2, shown in Figure 6, argues the need to verify sources and information, especially those that are available on popular platforms. The article from Pair 2 also indicated reliable websites for the consumption of information, such as recognized newspaper websites and governmental websites.

Considering Pair 1 and Pair 2 article conclusions, it is seen the importance of the context in which the writing activity was proposed. Students are giving

The fourth function described in the transpositional grammar framework by Cope and Kalantzis (2021) is context. Context is extremely important in order to understand the depths of a multimodal piece (Cope & Kalantzis, 2021). The writing proposal of the journalistic articles did not appear solemnly during the English classes, there were other activities developed prior to the final construction of the article, as described in the previous section of this article. Figure 5 shows the conclusion of the article written by Pair 1. In this section, students wrote about people’s behaviors in times of panic and the responsibility we hold when sharing content online.

advice to their readers in order to prepare them to select information they read online, recalling the activity of analysis of a widely circulated video from a self-taught chemist about homemade recipes to prevent COVID-19 made in classes prior the writing of the article.

Finally, the last function described in the framework is regarding interest (Cope & Kalantzis, 2021). Once more, for both pairs the analysis of this function is the same, once that the main objective of

the text was to demystify widely spread fake information about COVID-19 in Brazil, to later share them with their peers and the school community through the school's official website. Besides their peers, students were also aware of the fact that they were writing to their teacher, who would correct and grade the papers. The structure of the articles from both Pair 1 and Pair 2 followed the style of a journalistic article, the language used in both texts was appropriate to the task, except for some grammar and semantic mistakes, which were later pointed out by the teacher.

DISCUSSION

Both Pair 1 and Pair 2 have shown understanding of the structure of journalistic articles, producing relevant considerations for identifying misleading information. The title of the article written by Pair 1, "Fake News, the Real Pandemic," demonstrates the association between the COVID-19 pandemic and the amount of false information circulating in online platforms. This association shows a deep understanding of the context surrounding the students: a pandemic as never seen before, with very little scientific knowledge about the COVID-19 virus, at the time, and information being spread from the most varied channels. This reading of the context is extremely important in the construction of knowledge through multimodal pieces with a critical reflection (Cope & Kalantzis, 2021). On the other hand, Pair 2 opted for a more straightforward title, "Popular Fake News and Why They Are Not True."

Pair 1 shows awareness in their article that globalization is the main factor for the spread of online content and that it allows more people to have access to the information digitally, once more showing the importance of the understanding of the context in which one is inserted in order to have more reasonable and well supported arguments to their claims.

Pair 1 did not investigate specific scientific sources to demystify the false information being discussed in their article, but they claim the non-recognition of studies arguing such content, showing they may have used cross-checking strategies to confirm the veracity of the statements in their article.

Pair 2 used more standard conventions related to the journalistic style than Pair 1, such as headings, highlighted phrases, images, and they mentioned recognized international health agencies, such as the World Health Organization (WHO). Choosing the

WHO to support their arguments shows Pair 2 is aware that for matters of global health, the World Health Organization is one of the most suitable and reliable sources to be used. However, Pair 2 affirms in their conclusion that there is a limited number of journalistic trustworthy sources in the digital world and mentions governmental websites as secure and reliable assets. With those claims, Pair 2 fails to understand and demonstrate that governmental websites can be filled with propaganda and biased allegations. Strategies such as lateral reading and cross-checking can be effective to analyze content that is expected to be trustworthy, such as the ones found in governmental websites and recognized journalistic websites.

The matter of interest is crucial in multimodal texts (Cope & Kalantzis, 2021), which means that students must be aware of the agendas behind any sort of text (Kellner & Share, 2005) and Pair 1 has shown their concern in their conclusion with the responsibility we bear when sharing content online. Pair 1 demonstrated to be aware of the possible consequences of sharing fake news and the importance of checking facts before passing them on to the world. Pair 2 also addresses the importance of checking the sources previous to their sharing showing in this segment they are aware of the importance of cross checking, however failing to spot that in their previous claims.

CONCLUSION

After reading global news, analyzing a widely shared WhatsApp video with disinformation about COVID-19 and discussing the science behind fake news through an institutional video produced by the University of Indiana (USA), in pairs, students were challenged to write a journalistic article demystifying fake news about COVID-19 which had been widely spread in Brazil.

In the developed activity, students were invited to research, reflect and write about fake news spread in Brazil during the beginning of the COVID-19 outbreak. By writing their own articles they had the chance of being active agents in their own learning processes, while the teacher played the role of assistant in provoking and guiding them in their discussions.

Two articles were selected to be analyzed through the Transpositional Grammar for Multimodality Analysis framework (Cope & Kalantzis, 2021), once the students' productions

were considered multimodal texts. It was noticed that students could structure the text connecting pictures with the content of their statements and using journalistic strategies, such as highlighting important quotations, throughout their texts. Furthermore, it is believed that the activities developed prior to the writing of the articles aided students in the organization of their texts, once they had initially analyzed global news about COVID-19 to later discuss the veracity of the widely spread WhatsApp video to finally work with their peers in the development of their own productions. Throughout the process, students improved their critical media literacy and their news literacy, once they used reasonable and well supported arguments in their articles to demystify fake news, such as the lack of scientific proof and the speed of information spread, especially considering the globalized world in which we live in, according to Pair 1.

Pair 2 has also mentioned trustworthy sources in their article, such as the World Health Organization (WHO) showing their news literacy abilities, once the WHO is a global reference for health matters. Pair 1 has discussed the lack of studies in order to prove the misleading information discussed in their text, showing they have cross-checked the content of their article. Moreover, both pairs have recommended to the reader to be cautious when sharing news, emphasizing our responsibility as citizens to check facts before spreading them and the possible consequences if the contrary occurs. Students have shown a high level of critical literacy in their statements showing their concern with the importance of being well-informed and aware of the dangers of online contents. In spite of the high level of critical literacy seen in most of students' claims in their texts, it is seen that the abilities to perform lateral-reading, cross-checking and perceiving governmental websites as being possibly biased still needs to be further developed.

As in all studies, ours also had limitations and complications. The initial interactions with the students could have been formally documented in order to analyze the process as a whole and identify which strategies were more effective in the process of developing critical media literacy and news literacy. Furthermore, it is suggested the development of the demystifying fake news article writing activity with a control group, proposing critical media literacy activities prior to the writing to only one of the groups and comparing the results in terms of critical media literacy development.

Critical media literacy practices can enlighten students on the importance of being committed to moral and ethical issues when consuming and posting online content. Those practices can raise awareness on the importance of the students' present and future roles as critical, well-informed and ethical citizens in the digital era.

ACKNOWLEDGEMENTS

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES).

REFERENCES

- Aguaded, I., & Romero-Rodríguez, L. M. (2015). Mediamorfosis y desinformación en la infoesfera: Alfabetización mediática, digital e informacional ante los cambios de hábitos de consumo informativo. Mediamorphosis and misinformation in the infosphere: media, digital and information literacy face of changes in information consumption habits. *Education in the Knowledge Society* 16(1), 44-57. <http://digital.casalini.it/3092436>
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of economic perspectives*, 31(2), 211-36.
- Ashley, J., Jarman, F., Varga-Atkins, T. & Hassan, N. (2012). Learning literacies through collaborative enquiry: Collaborative enquiry through learning literacies. *Journal of Information Literacy*, 6(1), 50-71. <https://doi.org/10.11645/6.1.1655>
- Ashley, S., Maksl, A., & Craft, S. (2017). News media literacy and political engagement: What's the connection? *Journal of Media Literacy Education*, 9(1), 79-98. <https://doi.org/10.23860/JMLE-2017-9-1-6>
- Beach, R. (2009). Digital tools for collecting, connecting, constructing, responding to, creating. *Media/cultural studies: Critical approaches*, 206-228.
- Brashier, N. M., & Schacter, D. L. (2020). Aging in an era of fake news. *Current directions in psychological science*, 29(3), 316-323.
- Brennen, B. (2017). Making sense of lies, deceptive propaganda, and fake news. *Journal of Media Ethics*, 32(3), 179-181.
- Christians, C. G., Glasser, T., McQuail, D., Nordenstreng, K., & White, A.R. (2009).

- Normative theories of the media: Journalism in democratic societies.* University of Illinois Press.
- Council of Europe. Council for Cultural Co-operation. Education Committee. Modern Languages Division. (2001). *Common European framework of reference for languages: Learning, teaching, assessment.* Cambridge University Press.
- Cope, B. & Kalantzis, M. (2021). Pedagogies for Digital Learning: From Transpositional Grammar to the Literacies of Education. In M.G. Sindoni & I. Moschini (Eds), *Multimodal Literacies Across Digital Learning Contexts*, (34-54). Routledge.
- Fenelon, P. & Torresan, V. (2019). The rise of WhatsApp from messaging app to purchasing tool. Labs News.
<https://labsnews.com/en/articles/ecommerce/whatsapp-in-brazil>
- Fleming, J. (2013). Media literacy, news literacy, or news appreciation? A case study of the news literacy program at Stony Brook University. *Journalism and Mass Communication Educator*, 68(4), 146-165.
<https://doi.org/10.1177/1077695813517885>
- Freire, P. (1967). *Educação como prática da liberdade.* Paz e Terra.
- French, M., & Monahan, T. (2020). Dis-ease surveillance: How might surveillance studies address COVID-19?. *Surveillance & Society*, 18(1), 1-11.
- Funk, S., Kellner, D., & Share, J. (2016). Critical media literacy as transformative pedagogy. In *Handbook of research on media literacy in the digital age* (1-30), IGI Global.
- Garcia, P. S. (2016). Infraestrutura Escolar: interface entre a biblioteca e as possibilidades de aprendizagem dos alunos. *Roteiro*, 41(3), 587-608.
- Geers, S., Boukes, M., & Moeller, J. (2020). Bridging the gap? The impact of a media literacy educational intervention on news media literacy, political knowledge, political efficacy among lower educated youth. *Journal of Media Literacy Education*, 12(2), 41-53.
<https://doi.org/10.23860/JMLE-2020-12-2-4>
- Hobbs, R. (2010). *Digital and Media Literacy: A Plan of Action. A White Paper on the Digital and Media Literacy Recommendations of the Knight Commission on the Information Needs of Communities in a Democracy.* Aspen Institute. 1 Dupont Circle NW Suite 700, Washington, DC 20036.
- Hobbs, R., & Jensen, A. (2013). The past, present, and future of media literacy education. *Journal of Media Literacy Education*, 1(1), 1-11.
<https://digitalcommons.uri.edu/jmle/vol1/iss1/1>
- Internet Usage Statistics - The Internet Big Picture. (2020). Internet World Stats.
<https://www.internetworldstats.com/stats.htm>
- Jeong, H., & Hmelo-Silver, C. E. (2016). Seven affordances of computer-supported collaborative learning: How to support collaborative learning? How can technologies help? *Educational Psychologist*, 51(2), 247-265.
<https://doi.org/10.1080/00461520.2016.1158654>
- Jiménez, M. C. G., & Gutiérrez, C. P. (2019). Engaging English as a Foreign Language Students in Critical Literacy Practices: The Case of a Teacher at a Private University. *Profile: Issues in Teachers' Professional Development*, 21(1), 91-105.
<https://doi.org/10.15446/profile.v21n1.71378>
- Junqueira, E. (2020). A EaD, os desafios da educação híbrida e o futuro da educação. In A.E. Ribeiro & P.M.M. Vecchio (Eds), *Tecnologias digitais e escola: reflexões no projeto aula aberta durante a pandemia* (e-book). Parábola.
- Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American Educational Research Journal*, 54(1), 3-34.
<https://doi.org/10.3102/0002831216679817>
- Kellner, D. & Share, J. (2005). Toward critical media literacy: Core concepts, debates, organizations, and policy. *Discourse: Studies in the Cultural Politics of Education* 26(3), 369-386.
<https://doi.org/10.1080/01596300500200169>
- Kellner, D., & Share, J. (2007). Critical media literacy is not an option. *Learning Inquiry*, 1(1), 59-69. <https://doi.org/10.1007/s11519-007-0004-2>
- Kersch, D. F. & Marques, R. G. (2017). Redes sociais digitais na escola: Possibilidades de conexão, produção de sentido e aprendizagem. *Diálogo das Letras*, 6(2), 343-362.
<https://doi.org/10.22297/dl.v6i2.2693>
- Khan, M. L., & Idris, I. K. (2019). Recognise misinformation and verify before sharing: a reasoned action and information literacy

- perspective. *Behaviour & Information Technology*, 38(12), 1194-1212.
- Kiili, C., Coiro, J., & Rääkkönen, E. (2019). Students' evaluation of information during online inquiry: Working individually or in pairs. *Australian Journal of Language and Literacy*, 42(3).
- Kleiman, A., & Marques, I. B. A. S. (2020). Letramento crítico em contextos de crise: o papel da escola na era da pós-verdade e de fake News. In D. F. Kersch; G. A. Tinoco; R. G. Marques; & V. A. Fernandes (Eds.), *Letramentos na, para e além da escola* (29-55). Pontes Editores.
- Kohnen, A. M., Mertens, G. E., & Boehm, S. M. (2020). Can middle schoolers learn to read the web like experts? Possibilities and limits of a strategy-based intervention. *Journal of Media Literacy Education*, 12(2), 64-79. <https://doi.org/10.23860/JMLE-2020-12-2-6>
- Leu, D. J., Kinzer, C. K., Coiro, J., Castek, J., & Henry, L. A. (2017). New literacies: A dual-level theory of the changing nature of literacy, instruction, and assessment. *Journal of Education*, 197(2), 1-18. <https://doi.org/10.1177/002205741719700202>
- Luke, A. (2012). Critical literacy: Foundational notes. *Theory into practice*, 51(1), 4-11. <https://doi.org/10.1080/00405841.2012.636324>
- Maksl, A., Ashley, S., & Craft, S. (2015). Measuring News Media Literacy. *Journal of Media Literacy Education*, 6(3), 29-45. <https://digitalcommons.uri.edu/jmle/vol6/iss3/3>
- Marques, R. G. (2021). Projeto em rede: para a construção de um “novo ethos” na educação básica. In D.F. Kersch et al. (Eds), *Multiletramentos na pandemia: aprendizagens na, para a e além da escola* (e-book). Casa Leiria.
- Melo, C. M. D., Silva, G. A., Melo, A. R., & Freitas, A. C. (2020). COVID-19 pandemic outbreak: The Brazilian reality from the first case to the collapse of health services. *Anais da Academia Brasileira de Ciências*, 92.
- Metzger, M. J., & Flanagin, A. (2015). Psychological approaches to credibility assessment online. In Sundar, S.S. (Ed.), *The Handbook of the Psychology of Communication Technology* (pp. 445-465). John Wiley. Na, Y. H., & Kim, S. J. (2003). Critical literacy in the EFL classroom. *English Teaching-anseonggun*, (5)8, 143-164.
- Meyrer, K.P. (2021). “Help Save the Endangered Northwest Tree Octopus from Extinction:” Are 7th year students susceptible to fake news? [Ms thesis, Unisinos University]. Jesuíta Repository.
- Milenkova, V. & Lendzhova, V. (2021). Digital Citizenship and Digital Literacy in the Conditions of Social Crisis. *Computers*, 10(4), 40-54. <https://doi.org/10.3390/computers10040040>
- Musgrove, A. T., Powers, J. R., Rebar, L. C., & Musgrove, G. J. (2018). Real or fake? Resources for teaching college students how to identify fake news. *College & Undergraduate Libraries*, 25(3), 243-260.
- Pennycook, G., McPhetres, J., Zhang, Y., Lu, J. G., & Rand, D. G. (2020). Fighting COVID-19 misinformation on social media: Experimental evidence for a scalable accuracy-nudge intervention. *Psychological science*, 31(7), 770-780.
- PNAD contínua TIC 2018. (2018). Agência de Notícias IBGE. 1-46.
- Posetti, J., & Bontcheva, K. (2021). Infodemic: disinformation and media literacy in the context of COVID-19. *Internet Sectoral Overview*, 3(13), 1-21.
- Quitnilha, D. (2022). WhatsApp é o app mais usado por brasileiros; veja a lista. Istoé. <https://www.istoedinheiro.com.br/whatsapp-e-o-app-mais-usado-por-brasileiros-veja-lista/>
- Rowell, J. & Walsh, M. (2011). Rethinking literacy education in new times: multimodality, multiliteracies, and new literacies. *Brock Education*, 21(1), 53-62. <https://doi.org/10.26522/brocked.v21i1.236>
- Rudman, R., & Bruwer, R. (2016). Defining Web 3.0: opportunities and challenges, *The Electronic Library*, 34(1), 132-154. <https://doi.org/10.1108/EL-08-2014-0140>
- Stoddard, J., Tunstall, J., Walker, L., & Wight, E. (2021). Teaching beyond verifying sources and “fake news”: Critical media education to challenge media injustices. *Journal of Media Literacy Education*, 13(2), 55-70. <https://doi.org/10.23860/JMLE-2021-13-2-5>
- Tripp, D. (2005). Action research: a methodological introduction. *Educação e pesquisa*, 31(3), 443-466.
- Valenzuela, S. et al. (2019). The Paradox of Participation Versus Misinformation: Social Media, Political Engagement, and the Spread of Misinformation, *Digital Journalism*, 7(6), 802-823.

<https://doi.org/10.1080/21670811.2019.1623701>

- Vasconcelos, J. et al. (2020). School infrastructure and public investment in Education in Brazil: the importance of educational performance. *Ensaio: Avaliação e Políticas Públicas em Educação*, 29, 874-898.
- Velasquez, A. (2012). Social media and online political discussion: The effect of cue and informational cascades on participation in online political communities. *New Media & Literacy*, 14(8), 1286-1303.
<https://doi.org/10.1177/1461444812445877>
- Zammit, K. (2010). The New Learning Environments framework: Scaffolding the development of multiliterate students. *Pedagogies: An International Journal*, 5(4), 325-337.