

# Education, Fake News and Post-Democracy in Brazil: A Discursive Analysis of PISA in Focus

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**To cite this article:**

Marcia Aparecida Amador Mascia. Education, Fake News and Post-Democracy in Brazil: A Discursive Analysis of PISA in Focus. *Education Journal*. Vol. 12, No. 4, 2023, pp. 130-135. doi: 10.11648/j.edu.20231204.13

**Received:** June 9, 2023; **Accepted:** June 28, 2023; **Published:** July 11, 2023

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**Abstract:** The aim of this article is to discursively analyze the qualitative results of PISA (Programme for International Student Assessment) in order to better understand the educational context in Brazil referred to fake news and post democracy and to point out how these results can help us to undertake public policies to improve education issues in Brazil. Theoretically, we rely on the Foucauldian concept of discourse. The corpus consists of discourses of PISA in Focus, short texts available on the OECD website and also on INEP-Brazil on the qualitative results of the answers to the questionnaires applied to the students. For the analysis it was chosen PISA in Focus 113 that intended to answer the following question: Are 15-year-olds prepared to deal with fake news and misinformation? The analysis, conducted by discursive lenses, demonstrates the importance of understanding the order of fake news discourse by teachers in a way of providing students with mechanisms to distinguish between fake news and truths. We concluded that Brazil has yet a long way to advance in relation to other countries in terms of an education that enables students to distinguish between fake and true news. These results can help us to direct public policies to better prepare students for reading in the virtual world in a way to prepare them to be well-informed citizens and to preserve democratic values.

**Keywords:** Education, Fake News, Discourse, Post-Democracy, PISA in Focus

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## 1. Introduction

It can be said that PISA (Programme for International Student Assessment) is part of a perspective of international studies of comparative assessment of student performance, whose starting point, according to authors such as Carvalho [1], can be located in the 1950s and associated with the work of several research institutions linked to UNESCO, being one of the most famous the International Association for the Evaluation of Educational Achievement (IEA) – which, for about three decades, undertook studies, focusing on mathematics, reading, and sciences.

With the advent of the Organization for Economic Cooperation and Development (OECD), the centrality of the IEA ends, being replaced by PISA, which gives continuity to the comparison project in Education, that is, “the formulation of laws and secondly scientific support for policy decision, whereas for the latter pragmatic reasoning dominates in a commitment to the construction of indicators and standards for policy decision – from where the compared education is a

decision-making moment; the latter is more dependent on economic theory and especially human capital theories and the belief in education as a factor that leads to modernization/development” [1] (p. 47).

PISA was launched in the late 1990s with the proposal of being an instrument for the international comparative assessment of the performances of students. PISA has been asserting itself, throughout this new millennium, as one of the main means of action of the OECD in the educational field, in order to offer for those participating countries a survey of data on the knowledge and skills of their students. and, consequently, on the performance of their education systems. It is an instrument that generates knowledge, in order to point out political actions derived from the data collected.

The differential of PISA, in relation to the IEA, is to investigate how 15-year-old students use what they have learned to interpret different types of texts, in order to solve problems in their daily lives: in relation to reading level (reading literacy); for solving mathematical problems

(mathematical literacy) and for solving scientific situations and challenges (scientific literacy). Thus, PISA moves away from the type of assessment that focuses on disciplinary content having as target the skills to meet real-life challenges.

If, on the one hand, PISA seeks to transcend disciplinary content, on the other hand, two other issues have been addressed by current research: those that discuss and denounce international assessment as a control device [2, 3] and those that seek to demonstrate at which point the assessment can contribute to improve the quality of education and, consequently, society, understanding it as a thermometer.

In this article, we hypothesize that PISA results point to tensions between the quantitative and the qualitative results, with the quantitative being spread mainly by the media in a sensationalist way and, also, particularly quoted in the researches, since they are more visible, because of the statistical tables, or rankings [4]. We consider that they construct subjectivities [5] from dichotomies such as inclusion versus exclusion; uniformity versus diversity; right versus wrong; developed versus underdeveloped (or under development); productive versus non-productive. The quantitative results point to the construction of a neoliberal subject, centered, autonomous, having control over his/her destiny, erasing the historical conditions responsible for the emergence of knowledge, powers, regimes of truth and, consequently, subjects [6]. In turn, the qualitative ones, denser and less visible, have not been much considered, but they are the ones that can help us to truly understand the current social and educational framework in Brazil and the world. And, consequently, we hypothesize that the results are not being adequately used to improve education Brazil.

The present research addresses to one of the main current problems in society in Brazil, the emergence of fake news, considering how it has affected democracy, leading to power a neo-fascist president, Jair Bolsonaro. As a researcher I started to investigate the role of the education to preserve democracy and decided to see whether external tests have been giving attention to it. Giving the wide repercussion in the globe, PISA was chosen in this research in order to reflect upon the importance of preparing students to the critical use of digital media, particularly fake news, in educational contexts. PISA assesses young students at the age of 15, exactly those that they are at the forefront of the use of digital media and, consequently, more exposed to fake news which is a cause of concern of their wellbeing and the future of society.

The corpus consists of excerpts of discourses of PISA in Focus, short texts available on the OECD website and also on INEP-Brazil on the qualitative results of the answers to the questionnaires applied to the students when the PISA assessments take place. In our case, we chose PISA in Focus 113 written by Suarez-Alvarez [7] that intended to answer the following question: Are 15-year-olds prepared to deal with fake news and misinformation?

The objectives of the article are: to discursively analyze excerpts of PISA in Focus 113 that exposes whether 15 year-old students can identify fake news in order to better

understand the educational context in Brazil in relation to other countries and to point out how these results can help us to undertake public policies to improve social and education issues in Brazil.

We intend to bring out the conflicts that are usually erased and camouflaged that support contemporary educational rationality, questioning it in the light of discursive studies, in order to better understand the contemporary relations established by external assessments, particularly PISA, and better understand the situation of Education in Brazil. Theoretically, we rely on the Foucauldian concept of discourse.

We organized this paper into 3 sections: in the next section, we present the theoretical-methodological framework, followed by the analysis and conclusions.

## 2. The Rules of Discourse

When we talk about fake news, misinformation and post-democracy, we are talking about discourses.

To discuss discourse, we will bring Foucault's contribution in "The order of discourse", in which the author raises the rules that govern discourse, focusing on its "construction".

In his work, Foucault, when theorizing discourse, emphasizes the orders that delimit it, because, for the author, this is the result of clashes between subjects and knowledge; thus, truth, unity and meaning are produced in discourse, but from clashes: "in every society the production of discourse is at once controlled, selected, organized and redistributed by a certain number of procedures whose rule is to ward off its powers and dangers to gain mastery over its chance events, to evade its ponderous, formidable materiality". [8] (p. 52)

As can be inferred from the excerpt, Foucault lists and characterizes the procedures that promote the order of discourse, being the school, the focus of our analysis, one of those spaces of "control, selection, organization and redistribution".

The author presents the procedures into two types, external and internal, responsible for interdiction, segregation and production of the truth. Such procedures ultimately provide us with the conditions for the discourse, operating as devices that restrict the access of all subjects to discourses. So, "none shall enter the order of discourse if he does not satisfy certain requirements or if he is not, from the outset, qualified to do so" [8] (p. 62).

The author concludes his work by denouncing that "any system of education is a political way of maintaining or modifying the appropriation of discourses, along with the knowledges and powers which they carry" [8] (p. 64). Thus, Foucault problematizes the educational practice, pointing it out as one of the great procedures of subjection of discourse in our society. Perhaps this assertion answers the question that begins the work: "what, then is so perilous in the fact that people speak, and that their discourse proliferates to infinity? Where is the danger in that?" [8] (p. 52). The author shows evidence that the danger lies on the procedures of domination established in the act of inscribing ourselves in this order of

discourse, since “discourse is the power which is to be seized” [8] (p. 53). Discourse ultimately functions as a power relationship and that is what makes it dangerous.

Having discussed the concepts that support this research, the following section presents the analysis.

### 3. Fake News and Misinformation: What PISA 2018 Says

The Digital Security Report in Brazil [9] showed that from the first to the second quarter of 2018, the year of the presidential election campaign, an increase of 50.6% in fake news was identified, adding up to a total of 4.4 million detections – 1.5 million more than in the previous quarter. Thus, Brazil can be considered, today, one of the countries with the highest number of production, circulation and consumption of fake news in the world. The phenomenon of post-truth and fake news circulates in Brazil through digital networks.

According to McIntyre [10], we can identify in post-truth a complex constellation of themes, which converge with each other, creating a distorted worldview such as: scientific denialism, political hyperpolarization, cognitive biases, big data, social media and online bubbles that lead people to act in a certain way, impacting the whole society. In turn, Ceppas & Rocha [11] (p. 289). define post-truth, as the name given: “For the large-scale potentiation – provided by digital networks – of racism, religious fundamentalism, sexism, misogyny, lgbtphobia and the most diverse prejudices and attempts to justify the maintenance of social inequalities, under the appearance of a discursive dispute, as a rule directly promoted by retrograde political-economic platforms, 'in the name of the people and good persons’”.

The large-scale circulation, consolidated by web 2.0, transformed internet users from consumers to content producers, enhancing information and, consequently, the dissemination of fake news, understood as intentionally untrue news but which are constructed as conventional journalism news which transmits an image of credibility and legitimacy [12].

Considering the current moment in which we live in Brazil, of democratic regression and recently high mortality rate from Covid-19<sup>1</sup>, particularly as a result of fake news that circulated on the Internet, such as Kit-Gay<sup>2</sup> and Kit-Covid<sup>3</sup>, we decided

to investigate what PISA 2018 data could tell us in this regard. This analysis explores particularly the publication PISA in Focus which consists of a short monthly series of education policy-oriented analysis of a PISA topic. It usually has few pages and it is signed by different organizers. Some of the topics are related to what students answer to a socioeconomic report during the test.

On November 2022, there were 116 topics and we raised one topic for discussion. Our analysis will thematize the results/discussions of PISA 2018. So, it was chosen PISA in Focus 113 [7] that intended to answer the following question: Are 15-year-olds prepared to deal with fake news and misinformation?

The search for information in the virtual environment has been growing in recent years, and the Covid-19 Pandemic has substantially leveraged it, particularly the new generations that were born with digital technologies in use in our world. Social interactions started to be mainly via devices and apps, especially social network ones, such as whatsapp, instagram, facebook, among others, whether for family, work, study, love relationships, shopping. However, in the midst of all this, fake news or even post-truths end up being easier to send or resend, impacting the lives of people who cannot identify what is fact and what is opinion.

Thus, PISA 2018 “asked students whether during their entire school experience they were taught a) how to decide whether to trust information from the Internet, b) how to compare different web pages and decide what information is more relevant for their schoolwork, c) how to detect whether information is subjective or biased, and d) how to detect phishing or spam emails” [7] (p. 2).

And it presents us with the following conclusions: “An average of 54% of students in OECD countries reported being trained at school on how to recognize whether information is biased or not. Students from advantaged socio-economic backgrounds in all participating countries and economies in PISA 2018 scored higher in the index of knowledge of reading strategies for assessing the credibility of sources than students from disadvantaged socio-economic backgrounds. Education systems with a higher proportion of students who were taught whether information is subjective or biased were more likely to distinguish fact from opinion in the PISA reading assessment” [7] (p2).

These data show us how the educational relationship is intrinsically linked to the social context of the country, advantaged socioeconomic contexts prepare students more to identify fake news than disadvantaged socioeconomic contexts, being Brazil considered one of these disadvantaged contexts by the data provided by PISA, such as we will see on Figure 1 below. This gives us a mirror of how we are in Brazil, that is, we are not preparing 15-year-old students to be a person capable of distinguishing between fact and opinion and accessing strategies to detect biased information and malicious content, such as phishing e-mails or fake news.

Although the data do not specifically refer to the Brazilian context, but in general, PISA in Focus 113 informs us that: “Fifteen-year-olds' total online consumption has risen from 21

<sup>1</sup>According to official data, in June 2023, 702.907 thousand people had died. (<https://covid.saude.gov.br/>. Accessed on 02-06-2023)

<sup>2</sup> During the 2018 presidential campaign, videos, photos and texts circulated in Brazil on social networks that attributed to candidate Fernando Haddad (PT) the creation of a “kit gay” for 6-year-olds, a kit that encouraged children to become homosexuals. Part of the posts also said that the book “Aparelho Sexual e Cia” was adopted in government programs while Haddad was Minister of Education between 2005 and 2012.

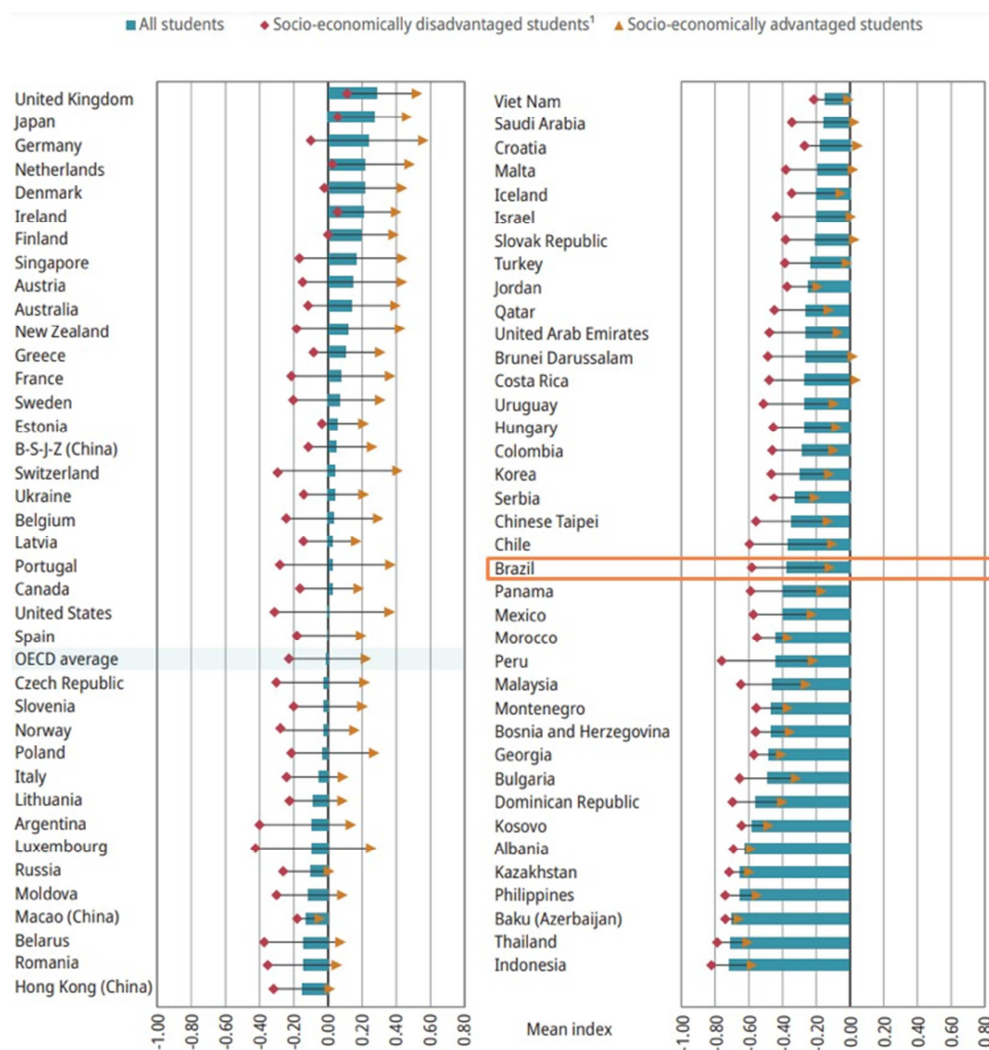
<sup>3</sup> The so-called kit covid has been indicated as an early treatment protocol against covid-19 by Brazilian politicians. Ivermectin and azithromycin, for example, are some of the drugs that are part of the combination of drugs used for the prophylaxis or early treatment of the disease, even without scientific proof of the benefits to patients.

hours a week in PISA 2012 to 35 hours per week in PISA 2018 – almost the equivalent of an average adult workweek in OECD countries” [7] (p2). We know that in Brazil a large portion of the population does not have access to digital technologies, however, in recent years the use of cell phones and social networks has grown, particularly among young people, so, for sure, Brazilian 15-year-olds spend most of the time of their day browsing the internet in some way, which increases exposure to fake news, for example. In January 2021, according to the Global Digital Report, Brazilians spent 10 hours and 08 minutes connected, being considered the second position in the world ranking of countries with the most daily access time. This data make us infer that the connection time of young Brazilians must also be high.

PISA in Focus draws attention to “the consequences of being poorly informed”, and among the consequences, cites “It can lead to political polarization, decreased trust in public institutions and undermined democracy” [7] (p2)), exactly what we are experiencing in Brazil, political polarization and disbelief in democracy, or the emergence of a post-democracy. Casara [13] uses the term post-democracy to identify “a state

without strict limits to the exercise of power, at a time when economic power and political power are approaching, and almost re-identifying, without shame” [13] (p. 23). According to the author, the expression post-democracy can be attributed “to the English political scientist Colin Crouch, who used it to designate the moment when democratic institutions fully formally function (elections, freedom of expression, etc.), but at the same time democratic dynamics progressively disappear” [13] (p. 23). In post-democracy, post-truths or fake news are related and coexist as the absence of limits between public and private interest, between truth and lie, between facts and opinions.

However, the gap between the growth of use of digital technologies and the learning of skills for their use is not just for Brazilians, as the text under analysis attests: “Students’ use of the Internet continues to increase while the opportunity to learn digital skills in school is far from universal” [7] (p. 2). In other words, it is inversely proportional the growth in Internet use and the learning of skills that raise awareness between truth and lies, hence the increase in fake news. Below, we present a figure, Figure 1, taken from PISA in Focus 113.



**Figure 1.** Students' knowledge of reading strategies for assessing the credibility of sources, by socio-economic status. Source: (Adapted from: Suarez-Alvarez [7] (p. 4).

This figure shows Brazil compared to other countries, but particularly to the OECD average in relation to students' knowledge of reading strategies for assessing the credibility of sources, by socio-economic status. In Brazil, the average of the total population is between 0.0 and -0.40, the socially advantaged are between 0.0 and -0.20 and the less advantaged are at -0.60, that is, around 1/3 of the students are in the disadvantaged range, showing a low learning of knowledge of reading strategies that enable to identify sources of credibility in relation to the news.

These data are important to make us rethink education; what kind of citizen are we forming? People who don't have the ability to distinguish fake news from real ones. We are talking about a generation that turned 15 years in 2018 and will be the adults of tomorrow. As Foucault (1981) attests to us, access to discourse is "dangerous", not everyone can have access to discourse, hence, discourse is controlled, organized and distributed so that few have access, only those who control it. It seems to us that, in the case of Brazil, not offering fake news identification strategies is part of this control, the population control, which we saw in the 2018 election and in the Pandemic. There is a discursive struggle between science, facts, on the one hand, and regression, biased opinions, on the other, and the loser is the entire population.

PISA 2018 included in the reading assessment a unit-item that tested whether students could distinguish between facts and opinions. Having compared the results of the answers to the questionnaire that asked if they had read strategies to identify fake news and the answers to the test unit, PISA in Focus 113 concludes that: "Education systems with a higher proportion of students taught how to detect biased information in school were more likely to distinguish fact from opinion in the PISA reading assessment" [7] (p5).

Thus, the results of the analysis of PISA in Focus 113 show us the necessity to invest in skills that can enable students to distinguish good information from bad information, so that they can know what are the "games of truth" [14] (p218) of their social moment, subjectifying themselves in the field of truth, "in an active fashion through practices of the self" [14] (p291), in order to preserve democratic values. "A game of truth is a set of procedures that lead to a certain result, which, on the basis of its principles and rules of procedures, may be considered valid or invalid" [14] (p281).

For Foucault [6], knowledge and power are intertwined, knowledge generates power and is generated by it. If the school does not offer the necessary knowledge for the full development of citizenship, for political awareness, we are forming alienated, passive subjects, subjugated to the power of totalitarian and hegemonic discourses. This has a very important impact in countries like Brazil, where the propagation of fake news led to power a neo-fascist, denialist government, to a civilizational regression of democratic values, of intellectual, cultural, educational poverty and,

mainly, to a level of misery<sup>4</sup> [15], of hunger that we had overcome in recent decades.

We finish with the words of PISA in Focus that "preserving democratic values and reinforcing trust in public institutions relies on having well-informed citizens" [7] (p. 6).

## 4. Conclusion

This article started from the premise, as it was stated by Santos and Simone, that digital education consists in developing new skills "that involves an intelligent use of the web based on online social networks, on mutual trust, on an ethics that promotes collaboration such as to determine the formation of a social capital consisting of individual resources related and the ability to act collectively". [16] (p. 379)

Considering the school as the place to learn about citizenship and the current Brazilian moment of dissemination of fake news, especially in the political sphere, as in the Covid-19 Pandemic, impacting the whole society, we decided to investigate how this topic was being treated in the largest international test, PISA. We encountered the text of PISA in Focus 113 named as Are 15-year-olds prepared to deal with fake news and misinformation?, by Suarez-Alvarez [7], whose content was analyzed in order to think about the context of education in Brazil, compared to 15-year-old students, that is, at the end of elementary school.

The analysis was mobilized in order to verify the educational context of Brazil in relation to other countries; identify the neuralgic points of education in Brazil and point out how these results can help us to undertake public policies to improve social and education issues in Brazil. Thus, it can be concluded that Brazil has yet a long way to advance in relation to other countries in terms of an education that enables students to distinguish between fake and true news, a crucial point for us to start thinking about changing Brazilian society and, perhaps we should start with raising awareness among teachers. These results can help us to direct public policies to better prepare students for reading in the virtual world.

Foucault, in his work "The order of discourse" [8], establishes the mechanisms of control and functioning of discourse, so, if we look at the material analyzed, in the light of Foucault's thinking, we can think that school must provide students with mechanisms to understand the functioning of fake news and post-truths. In this way, protecting them from fake news that impact their lives, as how has happened in the Pandemic in which many people died for believing in the existence of a Kit-covid that would save them, or for not taking the vaccine for ideological and fidelity reasons to a hallucinating thought.

The quantitative results of PISA that rank the countries are used in Brazil in a sensationalist way, comparing it with other

<sup>4</sup> According to DIEESE data, in March 2021, the beginning of the pandemic in Brazil, there were about 13.5 million people in extreme poverty. Between the beginning of 2019 and the beginning of 2021, almost 1.2 million people entered extreme poverty in Brazil, which corresponds to an increase of 9.0%.

countries and accusing teachers as responsible, in order to underestimate the category of teachers and increasingly depreciate this profession. However, PISA in Focus texts present us with qualitative analyzes that can help us to see beyond the numbers and think about education in a different way, a transformative and liberating education. We must look at these results in order to think about strategies, devices, educational practices inserted in educational policies to build a more conscious, more revolutionary, more fighter for their rights and more transformative generation.

We end with a speech by our main Brazilian Education thinker, Paulo Freire: "Education does not transform the world. Education changes people. People change the world."

## Acknowledgements

This article is part of my research about the impact of PISA in Education in Brazil and it was supported by CNPq (National Council for Scientific and Technological Development).

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