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Processes of (in)visibility and the construction of normalities: power relations and the constitution of people with disabilities in mathematics textbooks

Procesos de (in)visibilización y construcción de normalidades: relaciones de poder y constitución de personas con discapacidad en libros de texto de matemáticas

Processus d'(in)visibilisation et construction des normalités : relations de pouvoir et constitution des personnes en situation de handicap dans les manuels de mathématiques

Processos de (in)visibilização e construção de normalidades: relações de poder e constituição de pessoas com deficiência em livros didáticos de matemática

Tatiane da Silva Alves<sup>1</sup>
Universidade Federal de Mato Grosso do Sul
Mestre em Ensino de Ciências e Matemática
<a href="https://orcid.org/0000-0001-9295-1791">https://orcid.org/0000-0001-9295-1791</a>

José Wilson dos Santos<sup>2</sup>
Universidade Federal da Grande Dourados
Doutor em Educação Matemática
<a href="https://orcid.org/0000-0002-7410-7252">https://orcid.org/0000-0002-7410-7252</a>

### **Abstract**

As described by Michel Foucault, power relations occur economically, seeking the best effect through the least effort, that which encounters the least resistance. This study arises from these concerns, as it analyzes and describes discursive practices that emerge from mathematics textbooks, instituting a specific way of being/conceiving the person with a disability. The theoretical-methodological framework is grounded in the mechanisms of discourse control and in the relationships between knowledge and power, adopting discourse analysis as a tool to interrogate the regimes of truth that sustain the configurations of disability within the educational context. We take as empirical material the collection *A Conquista da Matemática*, intended for the final years of elementary education. The evidence that emerges from the analyzed corpus reveals a recurring and limited imagetic construction: disability is depicted almost exclusively through wheelchair users and people with visual impairments (blindness or low vision). Other embodiments are silenced. Furthermore, the absence of a meaningful connection between these images and the pedagogical activities suggests an inclusion that never

<sup>1</sup> tatianealves091320@gmail.com

<sup>&</sup>lt;sup>2</sup> josewsantos@ufgd.edu.br

truly materializes, a presence shaped more by the need to fulfill a requirement than by genuine engagement with difference. This evidencing a pseudo-integration of differences into the pedagogical and social context, operating more as a symbolic gesture than as a truly inclusive practice. What is at stake, then, is less about what is shown and more about what is allowed to be seen.

Keywords: Mathematics education, Inclusion, Mechanisms of discourse control.

### Resumen

¿Cómo se produce una imagen? Y más aún: ¿cómo se produce un sujeto? Este estudio parte de esas inquietudes al analizar y describir las prácticas discursivas que emergen del libro de texto de Matemáticas, instituyendo una forma específica de ser/concebir a la persona con discapacidad. El marco teórico-metodológico se ancla en los mecanismos de control del discurso y en las relaciones entre saber y poder, asumiendo el análisis del discurso como una herramienta para interrogar los regímenes de verdad que sustentan las configuraciones de la discapacidad en el contexto educativo. Tomamos como material empírico la colección A Conquista da Matemática, destinada a los últimos años de la educación primaria. Las evidencias que emergen del corpus analizado revelan una construcción imagética recurrente y limitada: la discapacidad es representada casi exclusivamente por personas usuarias de sillas de ruedas y personas con discapacidad visual (ceguera o baja visión). Otras corporalidades son silenciadas. Más aún: la ausencia de vínculo entre estas imágenes y las actividades pedagógicas revela una inclusión que no llega a concretarse, una presencia marcada más por la expectativa de cumplir un requisito que por un compromiso real con la diferencia, lo que evidencia una pseudo-integración de las diferencias en el contexto pedagógico y social, operando más como un gesto simbólico que como una práctica verdaderamente inclusiva. Lo que está en juego, entonces, no es tanto lo que se muestra, sino aquello que se permite ver.

*Palabras clave*: Educación Matemática, Inclusión, Mecanismos de Control del Discurso.

## Résumé

Comment se produit une image ? Et plus encore : comment se produit un sujet ? Cette étude part de ces interrogations en analysant et en décrivant les pratiques discursives qui émergent du manuel scolaire de mathématiques, instituant une manière spécifique d'être/concevoir la personne en situation de handicap. Le cadre théorique et méthodologique s'ancre dans les mécanismes de contrôle du discours et dans les relations entre savoir et pouvoir, adoptant l'analyse du discours comme outil pour interroger les régimes de vérité qui soutiennent les

configurations du handicap dans le contexte éducatif. Nous avons pris comme matériau empirique la collection A Conquista da Matemática, destinée aux dernières années de l'enseignement fondamental. Les indices qui émergent du corpus analysé révèlent une construction imagétique récurrente et restreinte : le handicap est représenté presque exclusivement par des personnes en fauteuil roulant ou ayant une déficience visuelle (aveugles ou malvoyantes). D'autres corporalités sont réduites au silence. Plus encore : l'absence de lien entre ces images et les activités pédagogiques révèle une inclusion qui ne se réalise pas véritablement, une présence marquée davantage par l'exigence de remplir une condition que par un réel engagement envers la différence, ce qui traduit une pseudo-intégration des différences dans le contexte pédagogique et social, fonctionnant davantage comme un geste symbolique que comme une pratique réellement inclusive. Ce qui est en jeu, alors, ce n'est pas tant ce qui est montré, mais ce que l'on permet de voir.

*Mots-clés* : Éducation mathématique, Inclusion, Mécanismes de contrôle du discours.

## Resumo

Conforme descrito por Michel Foucault, as relações de poder se dão de modo econômico, buscando o melhor efeito por meio do menor esforço, aquele que encontra menor resistência. Este estudo parte dessas inquietações ao analisar e descrever práticas discursivas que emergem do livro didático de Matemática, instituindo uma forma específica de ser/conceber a pessoa com deficiência. O referencial teórico-metodológico ancora-se nos mecanismos de controle do discurso e nas relações entre saber e poder, assumindo a análise do discurso como ferramenta para interrogar os regimes de verdade que sustentam as configurações da deficiência no contexto educacional. Tomamos como material empírico a coleção A Conquista da Matemática, destinada aos Anos Finais do Ensino Fundamental. Os indícios que emergem do corpus analisado revelam uma construção imagética recorrente e restrita: a deficiência é figurada quase exclusivamente por pessoas cadeirantes e deficientes visuais (cego/baixa visão). Outras corporalidades são silenciadas. Mais ainda: a ausência de vínculo entre essas imagens e as atividades pedagógicas revela uma inclusão que não chega a acontecer, uma presença marcada mais pela expectativa de cumprir um requisito do que por um engajamento com a diferença, evidenciando uma pseudo-integração das diferenças ao contexto pedagógico e social, operando mais como um gesto simbólico do que como uma prática efetivamente inclusiva. O que está em jogo, então, é menos o que se mostra e mais aquilo que se permite ver.

*Palavras-chave:* Educação matemática, Inclusão, Mecanismos de controle do discurso.

# Processes of (in)visibility and the construction of normalities: power relations and the constitution of people with disabilities in mathematics textbooks

Inclusive Education plays a crucial role in constructing a society in which all individuals have equal opportunities and can fully exercise their citizenship. To achieve this goal, it is essential to strengthen public policies that ensure the effective implementation of inclusive processes across all fields and levels of education.

This entails a constant revision of educational processes, encompassing initial and continuing teacher training, collaboration among schools, families, and communities, the dissemination of inclusive practices, and the production and distribution of educational materials. Once these commitments are upheld, they enable the construction of a more equitable society—one that respects and values diversity while providing adequate conditions for the academic, social, and emotional development of teachers, students, and society at large.

This movement requires a broad and complex set of actions, since official regulations alone are insufficient to guarantee inclusive processes, as highlighted by Pereira (2019). On the contrary, what we often observe are institutional processes and curricular regulations that, under the banner of inclusion, establish normalization processes that result in the erasure and/or invisibilization of differences. The textbook stands as one of the instruments that operates within this framework (Mascarin & Santos, 2024).

In fact, the mobilization of textbooks as tools for instituting ways of conceptualizing people is not unique to the national context. A news article published on 02/13/2025 exemplifies this by highlighting how German textbooks portray Brazilian children: "[...] The book *ABC der Tiere* (ABC of Animals), published by Mildenberger, describes a child named Marco as someone born in Rio de Janeiro who 'does not attend school, searches for food in the trash in the morning, and wants to be a soccer player'" (Bião, 2025, p. 1).

Such messages—whether explicit or subliminal—reveal how both Brazilian and foreign curricula function as instructional manuals for "learning to see," imprinting a specific mode of being onto the minds of all, categorizing what is important or true and relegating the unimportant to contempt, forgetfulness, or ignorance. Veiga-Neto and Saraiva (2011, p. 9) reinforce this understanding by emphasizing that "[...] the school shapes singular individualities, creating subjectivities [...] subject positions subordinated to the social whole."

Thus, we argue that schools must remain vigilant to these normalization processes, which aim to naturalize differences to the point that we no longer perceive them. One such instrument is the textbook. While we recognize its importance, we must not overlook the way it activates a set of discursive and non-discursive practices that institute "[...] ways of being and

existing in the world, allowing individuals to compare themselves, measure themselves, see themselves, mirror themselves, adapt themselves, and subjectify themselves" (Neto, 2018, p. 4).

This reflection becomes even more compelling when connected to empirical evidence that reveals the concrete effects of such dynamics on the subjective constitution of individuals marked by difference. One such example can be found in research data concerning how people with disabilities perceive themselves in society. Participants "[...] indicated that their self-image was clearly negative and directly linked to the perception that 'others' had of them; in other words, they showed full awareness of the prejudice and social stigmatization to which they were subjected" (Nunes et al., p. 138).

It is within this context—one involving curriculum, power relations, and the constitution of subjects—that we propose an analysis of the mathematics textbook. As a public policy instrument instituted by the State and accepted as a vehicle of scientific knowledge—even if, as Bonafé (2013) asserts, it delivers a cold science—the mathematics textbook attains the status of truth and aligns itself with "[...] the practices, strategies, and technologies through which discourse circulates, imposing a truth about what must, must not, and how something should be said [...] in order to meet the order of discourse that constitutes it" (Candia & Santos, 2023, p. 14).

Given this context, we aim to investigate which elements, references, and/or characteristics of people with disabilities are emphasized in mathematics textbooks. This question guides our intent to analyze and describe discursive practices that emerge from the mathematics textbook, instituting a specific way of being/conceiving the person with a disability.

## **Theoretical Contributions**

According to Michel Foucault, discourse can be compared to a black hole that multiplies, absorbing and redirecting meanings. In this sense, this article seeks to interrogate which possibilities of existence are being absorbed and which are being repelled in the representations of people with disabilities in mathematics textbooks, considering that the discursive structure present in the textbook not only reflects but also actively participates in the fabrication of subjectivities, shaping how students perceive disability and, consequently, how they relate to it.

These subjectivities are produced subtly and gradually. It is no longer a matter of domination by force, where punishment was seen as "[...] a firm action of justice and, at the

same time, the exaltation of the figure of the sovereign, and its effects must be etched into the memory of the 'subjects'" (Santos, 2021, p. 61).

Now, power operates economically and disciplinarily, through control over the "soul" of individuals: "[...] an art of shaping and distributing individuals in a determined time and place, hierarchizing them within a network of relationships [...]" (Santos, 2021, p. 66). This same discipline, which makes bodies docile and normalizes them, can be extended not just to individuals, but to an entire population, producing what Foucault termed *governmentality*:

[...] a set of practices through which it becomes possible to constitute, define, organize, and instrumentalize the strategies that individuals, in their freedom, may have in relation to others. They are free individuals who seek to control, determine, and delimit the freedom of others and, to do so, make use of certain tools to govern others. This is therefore based on freedom, on the relationship of the self with itself, and on the relationship with others (Foucault, 2006, p. 286).

All these elements—these forms of exercising power—are not separate; rather, to varying degrees, they coexist in different environments and share a common element: their institution through discourse and the production of truth. Ultimately, "[...] there is no exercise of power without a certain economy of truth discourses that function within this power, stemming from and operating through it. We are subjected by power to the production of truth, and we can only exercise power through the production of truth" (Foucault, 2016, p. 22).

It is, therefore, a fact that power relies on discursive production. But this is not just any discourse—random, free, independent, and inconsequential, producing effects and subjects by chance. Rather, "[...] in every society, the production of discourse is at once controlled, selected, organized, and redistributed by a certain number of procedures whose function is to ward off its powers and dangers, to master its random occurrence, and to evade its formidable materiality" (Foucault, 2014, p. 8). This discourse must possess enough "force" to be recognized as true, which implies the production of mechanisms for controlling discourse.

In *The Order of Discourse*, Foucault (2014) describes the mechanisms employed in the production and control of discourse. Silva and Santos (2021, p. 5-6) summarize these mechanisms, grouping them into three categories:

[...] external mechanisms, which include prohibition—responsible for selecting who or what may be said; rejection—a mechanism aimed at distinguishing between what should be understood as true or false, valid or invalid, legitimate or illegitimate; and the will to truth (true–false opposition)—through which the desire to produce and disseminate 'truth' is made evident. Internal mechanisms include: commentary—as certain texts or discourses are continually commented on and reinterpreted, they ensure the continued relevance and influence of specific discourses; authorship—which assigns identity,

position, and authority to the speaking subject, fundamental for the acceptance of discourse; disciplinarization—referring to the structure that determines the production of knowledge and the circulation of discourse, defining who may speak and in what context. Social mechanisms of discourse control include: enunciation rituals—which establish formalities and expectations regulating how discourse is delivered; discourse societies—groups of individuals organized around the production and control of discourse through specific rules for its creation, distribution, and circulation; and finally, the social appropriation of discourse—how certain discourses are appropriated by social groups to exercise control or power.

It is evident that no individual, corporation, or institution needs to mobilize all these mechanisms simultaneously to attempt to control discourse. However, it is impossible to navigate spaces of power and truth production without the ability to operate them. Thus, understanding the paths these mechanisms follow, how they are identified, instituted, (re)activated, and deployed, becomes an important task for comprehending the dispersed power-knowledge relations in society, and particularly within mathematics curricula.

# Identity, Difference, and Normalization Processes: The Gaze upon the "Other"

When addressing important aspects of social relations, Silva (1999) highlights the importance of amplifying voices and visibility of marginalized and minoritized identities. This relates directly to how we view the "other"—the "different one," often perceived as the bearer of all social ills. This type of thinking assumes that poverty belongs to the poor; violence, to the violent; learning difficulties, to the student; disability, to the disabled person; and exclusion, to the excluded (Duschatzky & Skliar, 2001, p. 124).

This reflection leads us to consider how difference is perceived and interpreted in society and emphasizes the need to reverse our gaze—to go beyond stereotypes and prejudices and to recognize, in difference, the cultural wealth of our country.

However, it is important to recognize that difference is defined in relation to an assumed equality—that is, a norm that establishes what is common or "normal," and from there, defines what is different or abnormal. This issue is broadly discussed by Michel Foucault in *Abnormal*, a transcription of his lectures at the Collège de France in 1975. If we could summarize his understanding of the subject within this process, we could say that "abnormality" "[...] results from the subject's deviation from parameters defined by normality; in other words, it is culturally and socially constructed by individuals and institutions within society, and produced through differentiation or contrast with what conforms to social imperatives" (Mascarin & Santos, 2024, p. 2).

In this context, valuing differences requires confronting normalization processes, since every "[...] norm carries with it both a principle of qualification and a principle of correction" (Foucault, 2010, p. 43), and is instituted "[...] through a multiplicity of subjections (from child to adult, offspring to parents, the ignorant to the learned, the apprentice to the master, the family to public administration, etc.)" (Foucault, 2002, pp. 51-52).

It is also worth highlighting that, in a time of discursive instability and conceptual drift—where terms like culture, identity, inclusion/exclusion, diversity, and difference are used interchangeably and without accountability by those who control representations of specific social groups (Duschatzky & Skliar, 2001)—educators and the scientific field, among others, are urged to maintain a constant state of awareness. They must understand how curricula are shaped by normalization processes, power relations, and private interests that intertwine public and private spheres in ways that are nearly inseparable (Santos, 2021).

It is important to remember, as Foucault (2011) warns, that power is neither good nor bad in itself. He asks: "[...] Would it be acceptable if it were entirely cynical? Would it be accepted if people saw in it only a limitation on their desires, leaving untouched even a reduced part of their freedom?" (Foucault, 1988, p. 83). In other words, "[...] power differs from violence in that, while violence belongs to the realm of deprivation and imposition, power belongs to the realm of seduction and governance" (Santos & Silva, 2021, p. 1277). From this perspective, we are coerced, guided, and seduced by power relations to behave as expected.

This observation reinforces the importance of questioning and analyzing the discourses operating in school curricula, aiming for a more critical understanding of how bodies are rendered docile and governed in order to instill in society a specific identity—where every word, every movement, may be measured and controlled. After all, "[...] in a society like ours [...] it is well known that one does not have the right to say everything, that one cannot speak of everything in any circumstance, and that not everyone can speak of everything" (Foucault, 1999, p. 9).

In this context, the textbook "[...] cannot be a monster that spreads its truth, that says anything at any time. Rather, it must serve as a support for the 'will to truth'—a truth that is socially constructed within power relations, woven thread by thread, and set to function in the productive chain" (Santos, 2019, p. 149).

All this highlights the need to go beyond a purely linguistic understanding of discourse and to consider it as a practice that shapes power relations in each historical moment. Discourse does not merely transmit information; it establishes limits and rules about what can be said, who can speak, and how, influencing our understanding of the world and shaping our way of

seeing and being a subject in society. Discourse functions as "[...] an instituting practice, as materiality, as that which creates the objects it speaks of (Rago, 2009, p. 17).

Therefore, Foucault (1996) emphasizes the intrinsic relationship between discourse and power, drawing attention to the fact that certain discourses are privileged and legitimized by society, while others are silenced. This is evidenced by Santos and Silva (2019, p. 260), who explain how textbook production aligns with "[...] other discourses in power games; discourse that places the constitution of the mathematics textbook within the dynamics of true and false, regulating which discourses are acceptable and determining the type of mathematics textbook that is authorized to circulate."

It is precisely this authorized textbook that we seek to examine—to understand which discourses about people with disabilities it sets in motion, and how it adjusts social structures, shaping perceptions and practices.

# **Methodological Pathway**

In this section, we describe the path of a qualitative study grounded in discourse analysis from a Foucauldian perspective. This approach seeks to reveal how school curricula not only organize but also constitute ways of being a subject today, producing and delimiting specific modes of existence. To this end, we analyzed images and activities present in mathematics textbooks, extracting from the discourses that permeate the material a set of statements that reinforce an ideal of subject historically situated.

The qualitative analysis proposed here does not stem from direct engagement with empirical subjects, but rather from the problematization of the statements that compose the texts and images of the didactic material, understanding them as discursive practices that participate in the fabrication of truths, identities, and exclusions. As Revel (2005) notes, Foucault's thought does not offer a rigid method, but rather a conceptual toolbox that allows us to question the conditions of possibility of discourse and the power effects it enacts. Accordingly, the investigation into how mathematics textbooks contribute to the control and constitution of people with disabilities is not limited to a formal or thematic description of content. Instead, it operates as an analytical gesture of interrogating the truth regimes that sustain it, asking what can be made visible, sayable, and thinkable within this discursive field.

Foucault (2014) reminds us that discourses are produced and circulated through mechanisms of control, such that discourses not only describe reality but also construct and delimit it. From this perspective, the inclusion of certain images in textbooks—as well as the exclusion of others—cannot be seen as a neutral, innocent, or unintentional act. Rather, they are evidence of how a discursive field is produced, within which certain bodies, gestures, or institutions are legitimized as worthy of visibility, while others remain silenced and rendered invisible.

Based on these parameters, the analyst must "[...] treat discourse not as a mere collection of signs, but as practices that systematically form the objects of which they speak" (Foucault apud Dreyfus & Rabinow, 2010, p. 82). Given that discourse is composed of statements—a mechanism of social configuration that produces and sustains meaning within a cultural and historical context—it is essential in this research to bring forth the statements embedded in the discourses that permeate the mathematics textbook. After all, "[...] conducting a discourse analysis means seeking regularities in enunciations" (Pacheco & Silva, 2018, p. 2).

In this context, discourse does not emerge spontaneously; it is shaped by the social, historical, and discursive conditions surrounding it. Foucault (1996) makes clear that power is not separate from discourse, but rather embedded in its threads, and that knowledge is constituted within these relationships. An example of its effects on the production of mathematics textbooks is highlighted by Santos and Silva (2019, p. 269), who point out that these materials serve as "[...] a support for the will to truth—a truth socially constructed within power relations, woven thread by thread, and put to work within the productive chain."

By taking the mathematics textbook as empirical material, we reaffirm our commitment to Foucauldian analysis, which does not proceed from a central source of power that "[...] from a determined point, influences various social organizations (top-down analysis). On the contrary, we envision a bottom-up analysis, not starting from the center but from the periphery, from micro-powers in their most regional forms, where they become capillary [...]" (Santos, 2021, p. 33).

These parameters guided our comprehensive reading of all collections approved by the National Textbook and Teaching Material Program (PNLD) 2023. We examined each work in

its entirety to identify the presence of images of people with disabilities, which allowed us to count and compare their quantity across different collections. From this initial movement, we selected for analysis the mathematics textbook collection *A Conquista da Matemática*. This choice was based on the fact that it is a recent work, offering an updated view of the editorial field on the topic. Moreover, it contained the highest number of images of people with disabilities among all the works in the PNLD call, as previously noted, thus justifying its selection for the study.

## **Data Analysis**

We began our analysis by surveying the number of images of individuals with and without disabilities present in the textbooks. The results are shown in Figure 1.

Figure 1.

Number of images of people with disabilities in the collection (Prepared by the authors).

STAGE	PEOPLE WITHOUT DISABILITIES	PEOPLE WITH DISABILITIES	NUMBER OF PEOPLE PER TYPES OF DISABILITES
6 <sup>th</sup> grade	81	4	2 people in wheelchairs 2 people with visual impairments (blind/low vision)
7 <sup>th</sup> grade	36	7	3 people in wheelchairs 4 people with visual impairments (blind/low vision)
8 <sup>th</sup> grade	34	4	1 person in wheelchair 3 people with visual impairments (blind/low vision)
9 <sup>th</sup> grade	15	4	2 people in wheelchairs 2 people with visual impairments (blind/low vision)
TOTAL	166	19	8 people in wheelchairs 11 people with visual impairments (blind/low vision)

The analysis of Figure 1 reveals that, in the mathematics textbooks examined, 10.3% of the images include people with disabilities—a percentage close to that reported in the 2022 Continuous National Household Sample Survey (PNAD Contínua), conducted by the Brazilian Institute of Geography and Statistics (IBGE), which indicated that in Brazil, approximately 18.6 million people aged two or older have some type of disability, representing 8.9% of the population in that age group.

Similarly, this percentage aligns with data from the School Census, which shows that out of a total of 47.3 million enrollments in basic education in Brazil in 2024, 3.47 million involved students with some type of disability—approximately 7.3% of the total.

This is not to suggest that the publisher intentionally aligned the number of textbook images of people with disabilities with the official statistical data on the Brazilian population. Rather, we highlight this as a curious observation: the collection with the greatest number of such images reflects figures strikingly similar to those found in official national data.

Since this coincidence was not confirmed by the publisher, we do not seek to uncover a hidden truth. Instead, our focus remains on analyzing the discourses embedded in what is said (shown, revealed), considering how these discourses produce truth effects that may contribute to the legitimation and/or production of the "truth." They reveal ways of organizing and particular strategies for rendering people with disabilities visible. These and other rationalities should not be confused with justice or inclusion but rather understood as strategies for reproducing a visibility regime—one that defines who may appear, how, and under what conditions, thereby containing certain presences within boundaries previously established by the order of discourse.

So far, we have highlighted two main points:

- 1. These numbers reflect a substantial increase in enrollments of students with disabilities compared to 2022, when 2.56 million students in this category were recorded. That is, within just one year, the number of such enrollments rose by 73.7%. This sharp increase demands closer attention—not only to how this population is being received in schools but also to how didactic materials contribute to their subject formation. It invites us to consider how these students conceive of themselves and how they are perceived by peers, both with and without disabilities. As Elias & Scotson (2000, p. 24) note: "[1]abeling another group as 'humanly inferior' is one of the weapons used by dominant groups in power struggles, as a means of maintaining their social superiority."
- 2. It is important to note that data on the population with disabilities in Brazil can vary depending on the methodology of different studies. For example, the 2010 Demographic Census indicated that 23.9% of the Brazilian population had some type of disability—

about 45.6 million people at the time. Therefore, when analyzing such figures, it is essential to consider the methodological context of each study for an accurate understanding of the reality of people with disabilities in the country.

Given the data presented—and acknowledging that some textbooks have made progress in including images of people with disabilities—this process still follows a restrictive pattern. Even when a relatively higher percentage of this social group appears, the images are predominantly limited to wheelchair users or people with visual impairments (blind or low vision). It should be noted that this is not specific to the selected work or to Brazil. Studies such as Mascarin and Santos (2024) identify the same tendency to confine representations of people with disabilities to wheelchair users and the blind.

This phenomenon is also observed in research conducted in Spain. In a study of textbooks and digital educational resources, Regueira (2019, p. 165) noted that "[...] there is almost no presence of people with disabilities (sensory, physical and/or mental), and the only examples relate to individuals with physical disabilities who use wheelchairs" (our translation).

Along the same lines, Rodríguez and Moreira (2022, pp. 10–11) found that "[...] most of the analyzed digital didactic resources do not account for student diversity. [...] many resources are neither accessible nor adaptable for students with special educational needs."

Although the authors use the term "special educational needs," it is worth noting that more recent research has adopted the term "specific educational needs." This shift seeks to move the focus away from the disability itself and toward the singularities of each student and their context. For instance, in their investigation of deaf students' access to mathematical knowledge, Morás, Nogueira, and Farias (2023) use this terminology when discussing differentiated pedagogical practices committed to equity and the recognition of learners' unique characteristics in inclusive settings. This terminological choice is not just a linguistic update—it represents a political-pedagogical stance that supports education rooted in diversity as a fundamental dimension of the teaching and learning process.

All of these research contexts point to the presence of control mechanisms such as *rejection*, which seeks to distinguish true from false discourses, valid from invalid, and

legitimate from illegitimate—thus selecting which types of images may circulate in textbooks. *Disciplinarization* also plays a role, as it institutes a specific way of addressing the topic—a trend evident in different works and countries, as previously illustrated. In addition, there is the mechanism of *discourse society*, represented here by publishing groups that organize textbook production and determine which discourses they intend to promote—or avoid.

We understand that this rigid framing of people with disabilities—as wheelchair users or individuals with visual impairments—undermines efforts to build an inclusive society. It reinforces the invisibility and exclusion of many students with other types of disabilities who, like all individuals, deserve to be seen and respected. More than that, they should be recognized for their potential and acknowledged as subjects of rights and responsibilities—essential for affirming their dignity.

This invisibilization of people with disabilities results in a process of normalization that removes or minimizes the individual's capacity—whether or not they have a disability—to be outraged by the absence of people with disabilities in social spaces, particularly in the workplace. This occurs insofar as the neoliberal economic discourse, grounded in competition, "[...] excludes people with disabilities from educational processes (which are merely adjusted to ensure their permanence), from a labor market reserved for the 'normal,' and from social environments or public institutions that are often inaccessible" (Mascarin & Santos, 2024, p. 17).

From this perspective, we observe how school textbooks are traversed by mechanisms of discourse control, such as interdiction, which prohibits or limits the circulation of certain themes, words, or forms of discourse. In this case, we note that the discourse of inclusion is not prohibited—since it is present even in the PNLD's own public notice—but rather limited, promoted only to the extent that it does not provoke changes to the existing system, or does so in a calculated manner, aligned with the prevailing power regime.

By limiting visibility to these stereotypes, textbooks convey a simplistic and stereotyped view of people with disabilities, perpetuating the idea that only such conditions are relevant to inclusion. This not only marginalizes other types of disability but also fails to reflect the reality

of students with specific educational needs, who encompass a wide variety of conditions and lived experiences.

Testimonies from a mathematics textbook editor working for a major publishing group point to a possible "justification" for this process: [...] the vision of the book has changed, the vision is now of a more beautiful, more artistic, more well-finished book [...], teachers glance at it and fall in love—it's the visual aspect. They say, 'Wow, how beautiful!', [...] the cover pages, the illustrations, they are enchanted (Santos & Silva, 2019, p. 260).

Such a statement points to an aesthetic-economic discourse produced by discourse societies—in this case, a discourse focused on the production of a marketable book, to the detriment of other factors such as the potential for learning or inclusion. From this perspective, the books produced "[...] move away from more in-depth analyses, reflections, and connections between content, in favor of a linearly organized book—a 'list-of-exercises book,' 'made up' to meet official requirements; however, with the aim of pleasing the teacher" (Santos & Silva, 2019, p. 263).

We dare to bring into debate two possible, more objective "justifications" for the fixation on the idea of inclusion in textbooks through images of wheelchair users and blind or visually impaired individuals: (1) alignment with the aesthetic discourse, such that, in an attempt to produce a "pretty" book, illustrations that deviate from a predetermined standard of normality are avoided; (2) the absence of a multidisciplinary team capable of developing mathematics activities adapted to various types of disabilities, particularly those of an intellectual nature. As a result, only the two aforementioned types of disability remain in the material, based on the assumption that, for these, no adaptation is necessary in relation to the activities proposed to other students in the class.

If we are to suggest yet another possible reason for this "model" being present across different textbooks and countries, we may point to the competition within the textbook market, which drives publishers to analyze and replicate the content of textbooks that receive higher evaluations in the PNLD. This constitutes a:

[...] panoptic system hovering over textbook production, which causes works approved by the PNLD to be closely scrutinized by other authors, resulting in "[...] books that are

highly similar in terms of graphic design, content organization, texts, and activity proposals—in short, standardized books [...]" (Santos & Silva, 2018, p. 24).

Having discussed these issues regarding the quantity and limitation of disability types, let us now examine how they are incorporated into the textbook through the images found therein.

## The Person with Disabilities and Mathematics Activities: How Are They Articulated?

From this point forward, we turn our attention to the images of people with disabilities present in the textbook collection, seeking to understand how these images are connected to the proposed activities and what possibilities the collection offers for promoting human rights and social inclusion. This aim aligns with the 2023 PNLD call for submissions, which recommends the selection of teaching materials capable of "[...] promoting education and culture in human rights, taking into account the rights of children and adolescents, the Statute of the Elderly, and the Statute of People with Disabilities, as well as fostering diversity, equality, and social inclusion" (Brazil, 2023, p. 43).

We make no claim to exhaust all possible interpretations of the work. Therefore, we have selected only a few images that we consider representative of the general tendencies observed in the collection, using them as a basis to reflect on how the collection engages with these guiding principles, as illustrated in Figure 2 below.

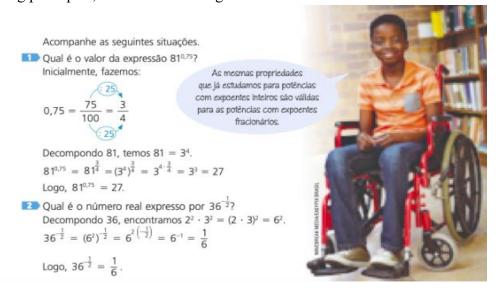


Figure  $2^3$ .

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<sup>&</sup>lt;sup>3</sup> The image resolution is blurred as it appears in the book.

## Boy in a wheelchair (Júnior, 2022d, p. 55)

As observed, the activity presents the topic of powers with fractional exponents in a technical and direct manner. Notably, there is no relationship beyond the mere presence of a boy in a wheelchair in the image—a clear disconnect between the visual representation and the mathematical content.

The presence of the boy in a wheelchair suggests an attempt to convey inclusion and diversity. However, this effort appears superficial, as it does not establish any meaningful connection to the mathematical content. More than that, the mere presence of a person with a disability in a purely illustrative image, without any articulation with the proposed activity or guidance to support the teacher in expanding students' understanding of the subject as a socially constructed being, seems more like a calculated attempt to "comply" with PNLD evaluation criteria.

This fact does not, however, conceal the presence of discourse control mechanisms, such as the *will to truth*, which, as Foucault (2014) warns, is heavily supported by institutions (such as government agencies and private entities, including publishing groups). These institutions aim to disseminate a desirable truth—in this specific case, the establishment of a superficial idea of inclusion, one that does not withstand closer scrutiny. It is a case of in/exclusion—an exclusive inclusion—in which "[...] many suffer from being part of discriminated groups and are prevented/limited from engaging or participating in the same practices as the groups with which they interact" (Lopes & Fabris, 2020, p. 74).

In other words, it is not merely a question of absence but of a controlled presence—one tolerated under specific conditions that reaffirms hierarchies and keeps individuals marked by difference in subordinate positions. This logic of in/exclusion produces subjects who are present, but silenced, marginalized, or stigmatized—integrated only to reinforce the boundaries of the norm. Inclusion, in this case, operates as a technology of control: it appears inclusive in form but serves to reinforce exclusion in function.

Some possibilities for going beyond mere illustration of a wheelchair user might include the traditional slope calculations for access ramps—commonly found in other works—but could also extend further. For instance, portraying a person with a disability in a work environment, where mathematical formulas could be applied to calculate production output; or in adaptive sports scenarios, where speed calculations might be relevant.

More importantly, the curriculum must create space for discussions about the place of all individuals in society—beyond their abilities and limitations—while also acknowledging the

existence of prejudice and stereotypes in the country and in schools and seeking ways to overcome them.

In this context, we must question the role of mathematics in constructing a more equitable society. Perhaps a good starting point would be to move beyond a model of symbolic or imagetic inclusion that fails to translate well-meaning "intentions" into actual pedagogical practices.

Before we go too far, let us examine Figure 3 below:



## **PROBABILIDADE**

Acompanhe a seguinte situação.

Um dado de seis faces numeradas de 1 a 6 é lançado uma vez. Qual é a probabilidado de esse dado cair com a face 1, 3 ou 5 (os números impares) virada para cima?

Já estudamos como calcular essa probabilidade: ela é de 3 em 6, ou seja,  $\frac{3}{6}$ . Além disso estudamos que  $\frac{3}{6} = 0$ , S = 50%. Mas quando saimos do cálculo para o experimento, ser que conseguimos observar essa probabilidade? Vamos fazer o experimento, acompanhando os passos a seguir, e descobrir.



Figure 3.

Girl in a wheelchair in a group with peers (Júnior, 2022a, p. 192)

This activity presents a probability experiment involving a group of children rolling a die, one of whom is a girl in a wheelchair. Although the context is that of a group activity—which is a valuable initiative—we once again see a clear disconnect between the mathematical content and the illustration accompanying the text.

It is certainly possible that a dice game could involve more than one person, and obviously one of them could be a child or youth in a wheelchair. What stands out, however, is the fact that the person with a disability is part of an extremely diverse group that includes, almost exclusively, individuals representing socially valued inclusion markers: a child with a disability (red-haired), an Afro-Brazilian child, a white child, and a mixed-race child—an ensemble meant to signal diversity. This seems more like a gesture aimed at PNLD evaluators than a genuine attempt to promote inclusion, which would require a more in-depth discussion not proposed in the activity.

In other words, without any meaningful engagement with the topic, these inclusion signals serve only to institute normalization processes in which identity and difference are reduced to visual elements that naturalize the invisibility of minority groups—without having any real impact on knowledge construction.

Because the illustrated scene does not challenge the ways in which mathematical knowledge is produced and applied—and because it is not accompanied by any proposal or teacher guidance encouraging discussion about diversity, difference, life conditions of these children, the importance of accessibility, or how its absence affects people with various disabilities or mobility restrictions (whether temporary or permanent)—the image becomes empty. At the same time, it enables the continued invisibilization of the very differences it supposedly aims to include.

Moreover, by failing to establish this articulation, the activity reinforces a *truth regime* in which mathematical knowledge is presented as neutral and universal, reflecting an understanding of mathematics as a tool to manipulate numbers—disconnected from its nature as a living science intrinsically linked to social, political, and economic practices.

This "proper" way of proceeding—organizing mathematics instruction while distancing it from or disregarding the social issues that affect the broader environment—is characteristic of discourse control mechanisms. In this case, *disciplinarization* acts as a way to impose order: each discipline establishes rules determining what is accepted as truth within its field—what a true mathematics textbook should be, which content it should include, and which themes it should address—while excluding anything that does not conform to these predefined rules.

Overcoming this perspective requires dismantling the mechanisms that have historically rendered certain forms of existence invisible. It requires thinking of mathematics not only as abstract content but as a field of knowledge that participates in the production of subjectivities and in social organization. As such, mathematics should help us face both mathematical and

social problems, including the normalization processes that subordinate those who are different, assigning them a specific place.

Duschatzky and Skliar (2001, p. 122) emphasize that "in education, the 'other' as the source of all evil has taken various forms—sometimes overtly violent, other times subtly exclusionary; all, however, have implied an intent to discard the negative element, the non-identical." Therefore, it is essential to break away from this stereotyped and exclusionary view by incorporating more diverse, inclusive, and meaningful representations of people with disabilities—ones that value their potential and promote equal opportunities in educational and social contexts.

Having presented the situations involving the image of wheelchair users in the textbook, let us now consider Figure 4, which depicts a child with a visual impairment (low vision) interacting with other classmates.

MAGEM FORA
DE PROPORÇÃO.

As cores NÃO
SÃO REAIS.

Antônio, se
você me der um terço do
que economizou, eu ficarei
com 110 reais.

Bento, eu
preciso de menos. Basta
que você me dê um quarto das
suas economias para que eu
fique com 110 reais.

6. Dois irmãos acabam de contar a quantia que cada um conseguiu economizar.

Figure 4<sup>4</sup>.

Boy wearing glasses (Júnior, 2022c, p. 163)

The activity presented here reveals limitations both in how the boy's visual impairment is considered and in how it connects with real-life experiences. In this context, the use of glasses serves merely as a "marker of disability," much like the wheelchair for the wheelchair user or

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<sup>&</sup>lt;sup>4</sup> The image resolution is blurred as it appears in the book.

the cane for the blind—strategically inserted so that the PNLD evaluator might interpret it as a gesture of inclusion or an allusion to it.

This is made explicit by the fact that the activity includes no proposal articulating the task with the condition represented. Moreover, the mathematical discussion completely departs from any type of natural conversation two teenagers might have about money. It creates a fictional reality—yet one that is thoroughly normalized—in which school mathematics is so disciplined that it bears no connection or commitment to everyday activities.

Activities like this one—seeking to connect themes such as disability and monetary systems—could serve as opportunities, for example, to use images of blind individuals and explore their relationship with money: how they manage their finances, how they deal with money in daily life, and how they identify bills using tactile markings. Other possibilities might include the use of assistive technologies, such as the NonVisual Desktop Access (NVDA) screen-reading software; resources and didactic materials in digital or audio formats, such as the Digital Accessible Information System (DAISY); or speech recognition programs, like Dragon Naturally Speaking, which allows users to write and research without a physical keyboard.

Aware that the possibilities we propose here exceed the interests or disciplinary procedures present in the collection, we also draw attention to another issue that intersects with this discussion. By framing money-saving habits within a comfortable family environment, the activity disregards social inequalities and the material conditions of "real" students. The mathematical problem assumes that the experience of saving money is accessible and equal for all children, overlooking a range of realities students may face, such as financial hardship, early family responsibilities, or even the need to contribute to household income.

This is not to suggest that economic issues should not be addressed in mathematics textbooks. Rather, we emphasize how the selection of a single approach—one that is disconnected from the "real world" and the diverse social conditions students experience—reinforces a *truth regime* that naturalizes certain economic experiences as universal, without problematizing the structural inequalities that surround them.

All these elements point to the way the analyzed mathematics textbook is immersed in power relations—both operating and being operated by discourse control mechanisms that regulate what must, must not, and how something should be said. In this process, discourses on the inclusion of people with disabilities are selected, weighed, measured, and then inserted into the work superficially, exemplifying what Michel Foucault calls the *social appropriation of discourse*. This refers to how certain discourses are institutionalized and regulated by specific groups to maintain power.

## In the words of Foucault:

The entire education system is a political means of maintaining or modifying the appropriation of discourses, along with the knowledge and powers they carry [...] What, after all, is an educational system, if not a ritualization of speech; if not the classification and fixing of roles for speaking subjects; if not the constitution of at least a diffuse doctrinal group; if not a distribution and appropriation of discourses, along with their powers and knowledge? And what is 'writing' (that of writers), if not a similar system of subjection—one that takes slightly different forms but whose general outlines are analogous? (Foucault, 2014, pp. 41–42)

The way the textbook is intrinsically tied to the control and regulation of discourses reinforces its role within a *truth regime* that frames disability within a logic that treats difference as something to be tolerated—but not as something that can effectively transform pedagogical practices. In other words, disability is portrayed as an external factor that should be accepted within a curriculum that remains structurally exclusionary. To break through this structure, we must shift the discussion toward a model that considers *multiple ways of interacting with knowledge* and the impact of structural barriers on learning mathematics.

In the book *What Is Disability*, Diniz (2007, p. 3) problematizes:

Disability is no longer simply understood as a manifestation of an injury that restricts a person's social participation. Disability is a complex concept that recognizes the injured body but also denounces the social structure that oppresses disabled individuals. Like other forms of bodily oppression – such as sexism or racism – disability studies have exposed one of the most oppressive ideologies in our social life: the one that humiliates and segregates the disabled body.

By comparing the oppression faced by people with disabilities to other forms of discrimination, such as sexism and racism, Diniz (2007) underscores the depth and

pervasiveness of this oppressive ideology. Just as racism marginalizes individuals based on skin color, and sexism discriminates based on gender, society imposes restrictions on people with disabilities—not merely because of their physical limitations, but because of how these limitations are socially interpreted and treated.

Diniz (2007) discusses both the *medical model* and the *social model* of disability, each having distinct impacts on social configurations. The medical model views disability as an individual condition that must be corrected or treated, portraying people with disabilities as objects of pity or inspiration—but rarely as full subjects. This model influences the creation of limited and stereotyped representations in which disability is seen as a personal tragedy, often centered on visible physical impairments.

In contrast, the social model shifts the focus to the social and cultural barriers that restrict full participation of people with disabilities in society. This model advocates for the reorganization of society to remove these barriers and promote inclusion and equal opportunity. When applying this perspective, it becomes clear that an inclusive approach in textbooks would present a broader diversity of disabilities, challenge stereotypes, and foster the acceptance of human difference.

Thus, the images included in a textbook are never neutral or random. They either highlight and value particular people and ways of life, or they relegate them to neglect and oblivion—since every choice is also a renunciation. As both a product of and a contributor to power relations, the mathematics textbook plays a role in shaping contemporary society. However, these same relations to which it is subject also shape its form and content.

In this context, "the textbook cannot be a monster that spreads its truth, that says anything at any time. Rather, it must serve the will to truth—a truth socially constructed in power relations, woven thread by thread, and put to work in the production chain" (Santos & Silva, 2019, p. 269). It is precisely at this point that the articulation with Diniz's (2007) models of disability becomes powerful. The medical model, which sees disability as a condition to be corrected, tends to perpetuate limited and stereotyped representations aligned with hegemonic forces that prioritize certain types of bodies and experiences. The social model, on the other

hand, challenges these narratives by asserting that the barriers to inclusion are not found in the disabilities themselves but in the social constructs that marginalize them.

### Final remarks

In this study, we analyzed how references to people with disabilities are mobilized in a collection of mathematics textbooks, aiming to describe how power relations establish a way of seeing/being/conceiving the person with a disability.

Throughout the analysis, we highlighted the presence of mechanisms of control that operate in the adjustment and selection of discourses throughout the textbook, managing what is said, how it is said, and by whom.

Under this framework, we observed subtle strategies that emerge from power relations and normalization processes woven into the mathematics textbooks. These strategies shape the perception of disability and determine which elements related to it will be brought to light and which will be erased or rendered invisible.

The data analysis reveals a pattern of inclusion based on *calculabilities* – a term used here to refer to the technical, statistical, and instrumental rationalities that guide seemingly neutral decisions, yet are deeply infused with logics of control, efficiency, and normalization. Such calculabilities operate as mechanisms of power that determine what can be included, how, and to what extent, without compromising the prevailing disciplinary structure. In the case of mathematics textbooks, this is reflected in the selection and inclusion of elements that do not destabilize the dominant algorithmic logic, maintaining the focus on formal, predictable, and decontextualized relationships.

Even when there is an attempt to address diversity, it is often organized in a way that avoids conflict, dissonance, and the complexity of reality. As a result, a sanitized, fictional reality is created, where presence is regulated to fit within a curriculum that remains unshaken and unaffected by the urgencies of social life. This represents an administered inclusion that preserves order and reaffirms the traditional school model as a space for reproducing disciplinary truths.

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We observed the visual fixation of disability in the figures of wheelchair users and individuals with visual impairments (blind or low vision) as the only possible references in the textbook. We understand that this is not a naïve occurrence. On the contrary, it reflects a reductionist logic anchored in the medical model of disability, restricting it to a biological and individual condition. At the same time, these images act as inclusion identifiers—icons to be observed by PNLD evaluators to ensure the corresponding score in the evaluation process.

When we combine this observation with the same findings reported in other national and international studies, such as Regueira (2019) and Rodriguez and Moreira (2022), we are led to believe that by restricting the representation of people with disabilities to wheelchair users and/or individuals who are blind or have low vision, the textbook aligns with an aesthetic-economic discourse, adjusting its illustrations to an established standard of normality. This suggests the absence of multidisciplinary teams with knowledge and experience in designing mathematics activities that go beyond illustrations focused on physical disability—activities that might instead encompass intellectual disability, social structures, and the barriers they impose on the full social participation of these individuals.

Another noteworthy point is the lack of articulation between the images and the proposed activities. Given the absence of meaningful integration with the content, the illustrations appear to serve a bureaucratic function, acting as a veneer of inclusion aimed once again at fulfilling PNLD requirements. This superficiality exposes a market-driven logic that prioritizes compliance with institutional norms over the educational experience itself.

If we consider, following Michel Foucault, that discourse not only describes an object or reality but also constructs it, we can infer from our analysis that the discourses mobilized in the textbook construct the person with a disability, instituting a specific way of conceiving them and, by extension, conceiving themselves as a subject stripped of rights, interaction, and direct participation in various social fields. Reduced to their disability, their presence as a dignified subject becomes imperceptible—they are erased, made invisible.

As we envision an education that goes beyond the mere repetition of exclusionary models, we are invited to exercise suspicion, to question curricula and our understanding of inclusion, in order to conceive of a school that does not adhere to homogeneous and totalizing

educational projects, but instead makes room for difference. This entails recognizing that we are permeated by mechanisms of discursive control that impose a desired truth upon us, while seeking or provoking cracks in the structure, questioning normalization processes, and opening space for marginal knowledge to emerge—thereby illuminating mathematical possibilities in the fight against exclusion, ableism, and all forms of prejudice.

To assume such a commitment requires more than good intentions; it demands a genuine disposition to abandon crystallized truths and to embrace the discomfort of the unknown. Above all, it requires a sense of unease: are the worldviews we adopt and perpetuate truly our own? Or have they been carefully shaped within normative discourses that lead us to believe there is only one possible path?

If this research seeks to foster tensions and critical reflections, it is also necessary to acknowledge its limitations. The analysis focused on a specific collection of textbooks, which restricts the conclusions to that particular set of materials. Although we were able to identify patterns that point to the erasure and reinforcement of disability-related stereotypes, other essential aspects remained outside the scope of the study—for example, how students and teachers perceive these images and their impact on the construction of conceptions about inclusion and diversity.

To further this discussion, future studies could explore different investigative possibilities: observing the use of these textbooks in classroom settings to understand how their proposals—their illustrations, fixations, absences, and/or superficialities—affect students' experiences; developing educational materials through collaborative and multidisciplinary processes that directly involve people with disabilities, educators, and researchers to create more plural and effective configurations; and investigating the long-term effects of these images on the formation of perceptions and attitudes about inclusion, following students over the years.

Evidently, it is not merely a matter of adding more images of people with disabilities to textbooks, but of broadly and qualitatively rethinking curricular possibilities and the very configuration of educational spaces to welcome that which has previously been excluded. For

this, we must not only look toward the light, but also at what it leaves in the shadows—allowing the margins to become spaces of (re)invention, rather than exclusion.

### References

- Bião, Wesley. Livro didático alemão descreve brasileiro com estereótipos e gera polêmica. Uol on-line. São Paulo. 2025. Disponível em:

  <a href="https://noticias.uol.com.br/internacional/ultimas-noticias/2025/02/13/livro-didatico-alemao-descreve-brasileiro-com-estereotipos-e-gera-polemica.htm">https://noticias.uol.com.br/internacional/ultimas-noticias/2025/02/13/livro-didatico-alemao-descreve-brasileiro-com-estereotipos-e-gera-polemica.htm</a>?. Acesso em fev 2025.
- Brasil. (1996). Lei de Diretrizes e Bases da Educação Nacional, LDB. 9394.
- Brasil. Instituto Brasileiro de Geografia e Estatística. *Pesquisa Nacional por Amostra de Domicílios Contínua 2022*: Características gerais dos moradores. (2023). Rio de Janeiro. Disponível em: https://www.gov.br/mdh/pt-br/assuntos/noticias/2023/julho/brasil-tem-18-6-milhoes-de-pessoas-com-deficiencia-indica-pesquisa-divulgada-pelo-ibge-e-mdhc. Acesso em: 25 fev. 2025.
- Brasil. Instituto Brasileiro de Geografia e Estatística. *Censo Demográfico 2010:* Características gerais da população, religião e pessoas com deficiência. (2012). Rio de Janeiro. Disponível em: <a href="https://pt.wikipedia.org/wiki/Censo\_demogr%C3%A1fico\_do\_Brasil\_de\_2010">https://pt.wikipedia.org/wiki/Censo\_demogr%C3%A1fico\_do\_Brasil\_de\_2010</a>. Acesso em: 25 fev. 2025.
- Candia, Renata de Moraes & Santos, José Wilson dos. (2023). Retratos da velhice: uma análise da representação do homem idoso nos livros didáticos de Matemática do Ensino Fundamental. *Educação Matemática em Revista*. Brasília, v. 28, n. 79, p. 01-18, abr./jun.
- Declaração De Salamanca. (2001). Sobre Princípios, Políticas e Práticas na área das Necessidades Educativas Especiais, 1994, Salamanca-Espanha. Foucault, Michel. Os Anormais. São Paulo: Martins Fontes.
- Diniz, D. (2007). O que é deficiência. In: O que é deficiência (pp. 89-89).
- Dreyfus, Hubert L. & Rabinow, Paulo. (2010). Michel Foucault: za hranicemi strukturalismu a hermeneutiky. Herrmann & synové.
- Duschatzky, Silvia & Skliar, Carlos. (2001). O nome dos outros: Narrando a alteridade na cultura e na educação. *In: Habitantes de Babel: políticas e poéticas da diferença*. Belo Horizonte: Autêntica, p. 119-139.
- Elias N. & Scotson, J. L. (2000). *Os estabelecidos e os outsiders:* sociologia das relações de poder a partir de uma pequena comunidade. Rio de Janeiro: Zahar.
- Foucault, Michel. (1988). *História da Sexualidade I:* a vontade de saber. 14 ed., Rio de Janeiro, Graal.
- Foucault, Michel. (1996). Ordem do discurso (A). Edições Loyola.
- Foucault, Michel. (2006). *Ditos e Escritos*: Ética, Sexualidade, Política. 2.ed. Rio de Janeiro: Forense Universitária.
- Foucault, Michel. (2010). *Em defesa da sociedade:* curso no Collège de France (1975-1976). Tradução Maria Ermantina Galvão. 2 ed. São Paulo: Editora WMF Martins Fontes.

- Foucault Michel. (2014). Ordem do discurso: aula inaugural no Collège de France, pronunciada em 2 de dezembro de 1970. Trad. Laura Fraga de Almeida Sampaio. 24. ed. São Paulo: Edições Loyola.
- Foucault, Michel. (2016). *Em defesa da sociedade:* curso no collège de France (1975-1976). 2.ed. São Paulo: Martins Fontes.
- Júnior, José Ruy Giovanni. (2022). *A conquista matemática*: 6° ano: ensino fundamental: anos finais/ José Ruy Giovanni Júnior. 1. ed. São Paulo: FTD.
- Júnior, José Ruy Giovanni. (2022). *A conquista matemática*: 7º ano: ensino fundamental: anos finais/ José Ruy Giovanni Júnior. 1. ed. São Paulo: FTD.
- Júnior, José Ruy Giovanni. (2022). *A conquista matemática*: 8º ano: ensino fundamental: anos finais/ José Ruy Giovanni Júnior. 1. ed. São Paulo: FTD.
- Júnior, José Ruy Giovanni. (2022). *A conquista matemática*: 9° ano: ensino fundamental: anos finais/ José Ruy Giovanni Júnior. 1. ed. São Paulo: FTD.
- Lopes, Maura Corcini & Fabris Eli Henn. (2020). *Inclusão & Educação*. 1. Ed. Belo Horizonte: Autêntica Editora.
- Mantovani, Katia Paulilo. (2009). O Programa Nacional do Livro Didático-PNLD: impactos na qualidade do ensino público. Tese de Doutorado. Universidade de São Paulo.
- Mascarin, Cíntia da Silva & Santos, José Wilson dos. (2024). Livro Didático de Matemática como Mecanismo de In/Exclusão da Pessoa com Deficiência. *Perspectivas da Educação Matemática*, v. 17, n. 46, p. 1-20.
- Morás, N. A. B., Nogueira, C. M. I., & Farias, L. M. S. (2023). O acesso ao saber matemático em turmas inclusivas: a diferenciação do ensino a partir de tarefas estruturadas em variáveis legitimantes de estudantes surdos. *Educação Matemática Pesquisa*, 25(4), 190–213. https://doi.org/10.23925/1983-3156.2023v25i4p190-213.
- Neto, Vanessa Franco. "Livros didáticos de matemática para o campo: aqui também se aprende a ser mãe" SIPEM Seminário Internacional de Pesquisa em Educação Matemática (2018): n. pág. Web. 26 Ago. 2024.
- Pacheco, Débora & Silva, Marcio. "(A)onde está a matemática?" SIPEM Seminário Internacional de Pesquisa em Educação Matemática (2018): n. pág. Web. 26 Ago. 2024.
- Regueira, Nerea Rodríguez. Los libros de texto digitales. Un análisis descriptivo e interpretativo de sus características. (2020). Tese de Doutorado. Universidade de Santiago de Compostela.
- Revel, J. (2005). *Michel Foucault: conceitos essenciais* (C. Piovezani Filho & N. Milanez, Trad.). Vozes. (Obra original publicada em 2002).
- Rodríguez, Jesús Rodríguez & Moreira, Manuel Area. (2022). Los recursos digitales en la Educación Infantil. ¿ Cómo son y qué opinan el profesorado y las familias?. *Digital Education Review*, n. 41, p. 4-18.
- Santos, José Wilson dos & Silva, Marcio Antonio da. (2019). Relações de poder na idealização de livros didáticos de Matemática. *Práxis Educativa*, Ponta Grossa, v. 14, n. 1, p. 250-272, jan./abr.
- Santos, José Wilson dos & Silva, Marcio Antonio da. (2021). Pluriforme e Multidirecional: relações de poder e a constituição de livros didáticos de Matemática. *Bolema: Boletim*

- de Educação Matemática, v. 35, p. 1275-1293.
- Santos, José Wilson dos & Pereira, Luciane Clementino. (2021). Matemática e Educação Especial: Por uma educação outsider. *In: Práticas e pesquisas no Grupo Teiamat*. Org: Alencar, Edvonete Souza de. p. 156-166.
- Santos, José Wilson dos. (2021). *Corredores e Porões: Uma análise das relações de poder na constituição dos livros didáticos de Matemática*. Curitiba: Appris,
- Silva, Tomaz Tadeu da. (1999). Documentos de identidade: *uma introdução às teorias do currículo*. 3. ed. Belo Horizonte: Autêntica.
- Silva, Marcio Antonio & Santos, José Wilson dos. (2024). Análises Foucaultianas em Livros Didáticos de Matemática: caminhos teórico-metodológicos e possibilidades curriculares. *Perspectivas da Educação Matemática*, v. 17, n. 48, p. 1-20.
- Veiga-Neto, Alfredo & Saraiva, Karla. (2011). Educar como arte de governar. *Currículo sem fronteiras*, v. 11, n. 1, p. 5-13.