Reflecting Diversity ANALYSIS OF REPRESENTATION OF IDENTITIES IN TEXTBOOKS

GENDER
SEXUAL ORIENTATION
AGE
DISABILITY
ETHNICITY











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INTRODUCTION

In academic debate, the notion of intersectionality has gradually evolved into a more generic and global 'interpretative lens', aiming to restore the complexity of human identity, particularly in its representation and perception. In the introduction, we will focus on the theoretical conceptualisation of intersectionality and its meanings. Specifically, we will explore how this theory contributes to understanding how different forms of discrimination (such as racism, sexism, and classism) intersect and overlap. Furthermore, we will discuss how we can address the interactions between these categories and the unique experiences that emerge from their different iterations.

METHODOLOGY

This section explains the methodological process of the study, including the selection of analytical categories, and the criteria for textbook selection.

This section presents an exploratory data analysis across all major intersectional categories based on collected national

QUALITATIVE

The chapter provides a qualitative analysis derived from reading and conducting a quantitative analysis of textbooks. It presents two main categories:

The limited roles of women and men in textbooks

- Objectification of women Fictional women and real men
- Childcare
- Linguistic feminine gender
- Outdoor activities Beauty ideal
- · Family ties

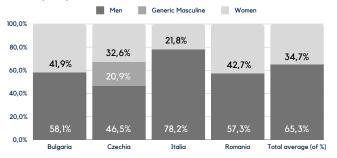
The limited representation of diversity

- Diversity speakers
- · An exercise on the topics of equality vs. gender stereotypes
- · History as a limited source of diversity
- Eurocentrism
- Tokenism

COMPARATIVE DATA ANALYSIS AND IMPLICATIONS OF FINDINGS

This chapter introduces comparison of collected national data across selected intersections, including gender representations in textbooks, gender in public and private spheres and in narrative character roles. Additionally, we examine representations of sexuality, wealth and poverty, disabilities, and the intersection of age, gender, and family ties.

This graph exemplifies the underrepresentation of women compared to men (including the generic masculines) in humanities textbooks.



LOCAL CASES

This chapter monitors the current knowledge and needs regarding intersectionality among school teachers.

Results indicate that teachers are sceptical about textbooks' ability to subconsciously convey information to students. As a consequence, they do not consider it important for minority groups, for example, the Roma ethnic group, to be better represented in textbooks.

CONCLUSION

Textbooks continue to perpetuate traditional gender roles and stereotypes. The significant underrepresentation of women, particularly in active and public roles, and the overemphasis on traditional, family-oriented roles for women, contribute to a skewed worldview that limits the aspirations and selfperception of students, particularly girls.

Additionally, there were almost no people with disabilities depicted in the textbooks, relationships were predominantly heteronormative, and they did not reflect the diversity of society in terms of

A SET OF **CRITERIA FOR FURTHER ASSESSMENT** OF DIFFERENT **TEXTBOOKS**

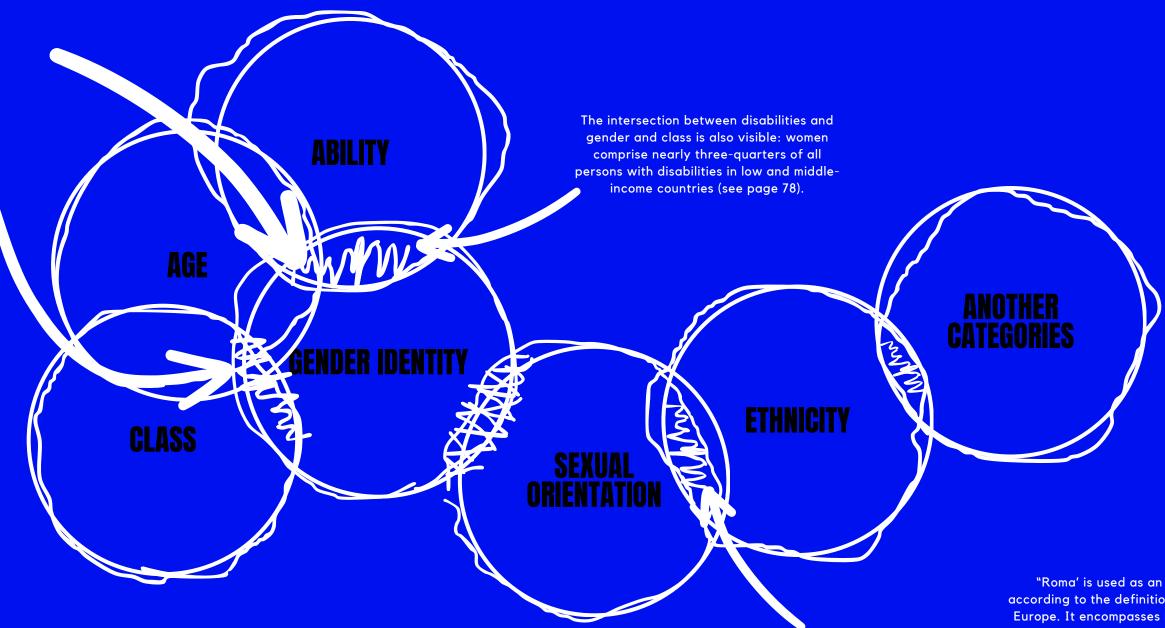
NATIONAL SYSTEM OF **SELECTION AND REGULATION OF TEXTBOOKS**

REFERENCES, LIST OF **ACRONYMS**

CONTENT

The combination of ageism and sexism has a unique and aggravating effect on discrimination and inequality. Being exposed to gender discrimination during lifetime causes deepening of inequality in older age. Older women are disproportionately affected by some health conditions, including depression. Also older women experience economic inequality which manifests in multiple aspects, including legal status, access and control of property and land, access to credit, and succession rights (see page 75).

1 INTRODUCTION



CONTENT OF THE CHAPTER

- Foreword
- Project background
- About intersectionality

The Romani culture remains highly traditional, with homosexuality considered taboo. Being expelled from the family and community is not an uncommon form of punishment in such cases (see page 64).

"Roma' is used as an umbrella term, according to the definition of the Council of Europe. It encompasses Roma, Sinti, Kale, Romanichals, Boyash/Rudari, Balkan Egyptians and Eastern groups (Dom, Lom and Abdal); groups such as Travellers, Yenish and the populations designated under the administrative term Gens du voyage; and people who identify themselves as Gypsies. The EU Agency for Fundamental Rights (FRA), like the Council of Europe, adds the term 'Travellers' as necessary to highlight actions that specifically include them" (Council of Europe 2012).

FOREWORD

Dear Readers,

This research report, called *Reflecting Diversity: Analysis of Representations of Identities of Textbooks,* is the result of a joint effort between four European countries and their respective organizations, which came together to discover what kind of worldview is being conveyed to pupils through textbooks. Focusing on intersectionality, this research report thoroughly analyses textbooks from Bulgaria, the Czech Republic, Italy and Romania.

Textbooks accompany us almost every day for at least 12 years. If we know their significant role in shaping minds, beliefs, values and social norms, we must adopt an intersectional approach to analysing these textbooks. Intersectional analysis provides information about the corresponding systems of discrimination, oppression and dominance about gender, ethnicity, class, age, sexual orientation and others. This is the only way to determine whether pupils gain a comprehensive, non-stereotypical and contextual understanding of their world and what influences and factors shape their knowledge of their positions and roles within the community. By incorporating an intersectional approach into the analysis of textbooks, we can uncover how various systems of discrimination intersect and impact the content presented to students. This holistic examination allows us to identify potential biases, stereotypes, and gaps in representation that may exist within educational materials. Ultimately, fostering inclusivity and promoting diversity within textbooks is essential for nurturing critical thinking skills and fostering a more equitable learning environment for all students.

The ultimate goal of this analysis is to provide a crucial first step that needs to be added in the contexts of the mentioned countries: the introduction of intersectional textbook analysis. This report serves as the initial encounter with the data, emphasising the exploratory nature of our findings. The results underscore the urgent need for a deeper, broader, and more systematic analysis of textbooks. This foundational effort aims to pave the way for future research to address the complex interplay of identities within educational materials and subsequently contribute to concrete solutions for addressing the strongly stereotypical textbook patterns.

Each organization involved in this project has thoroughly researched STEM and humanities textbooks to assess whether there is variation in textbook content and what stereotypes they contain as they influence pupils' socialisation and career choices.

By delving into the content of these textbooks, we aim to promote a more inclusive and equitable educational experience, encouraging pupils to embrace diversity and challenge stereotypes.

PROJECT BACKGROUND

Reflecting Diversity: Analysis of Representations of Identities of Textbooks is the output of the project Teaching Across Intersections. The project was designed to expand secondary school teachers' knowledge of intersectionality as a tool of inclusion and to provide them with a set of soft skills that allow them to fulfil the needs of pupils on various intersections of gender, ethnicity, economic status, religion, sexual orientation, disability and so on. Thanks to that, a safe and welcoming environment in the classroom can be created.

The project was implemented by four organisations - Gender Information Center NORA (Czechia), Idrisi Cultura e Sviluppo ETS (Italy), SDRUZHENIE WALK TOGETHER (Bulgaria) and Young Initiative Association (Romania).

For more information and updates visit our websites:

www.gendernora.cz/en/.
www.idrisiculturaesviluppo.org
www.younginitiative.org/about-us-2/
www.facebook.com/associationwalktogether/

Gender Information Centre NORA

Gender Information Centre NORA is a Czech non-governmental non-profit organisation established in 2004 and located in Brno. GIC NORA builds its activities on a feminist approach and deals with gender equality-focused issues. Its mission is to promote and support equality between men and women in society at international, national and regional levels as well as to improve the lives of socially disadvantaged groups in Czech society. GIC NORA has implemented projects focusing on gender-sensitive education, promoting gender equality in the labour market or aiming to eliminate discrimination against ethnic minorities.



The name NORA is inspired by the name of the heroine from Henrik Ibsen's book from 1879. At that time, the social status of women was clear - they were only wives and mothers.

However, Nora felt that she had the right to be herself, so eventually, she ran out of her patience and stood up against this convention and ultimately became a global symbol of women's emancipation.

Idrisi Cultura e Sviluppo ETS



Idrisi Cultura e Sviluppo ETS is a non-profit association founded in 2020 in Palermo, Italy, which promotes numerous non-formal learning activities aimed at improving skills and knowledge from a personal, civic, and social perspective throughout life. Within association, there are experts in non-formal education, experts in educational design and creativity, cultural mediators with experience in exhibitions, playwrights, and theatre performers. At the core of Idrisi's work lies the development of artistic-educational solutions aimed at combating intolerance and exclusion, the persuasive nature performative language, visual art, and nonformal educational approaches.



SDRUZHENIE WALK TOGETHER

SDRUZHENIE WALK TOGETHER (Bulgaria)

Association Walk Together is a non-governmental organization (NGO) established in 2013 in Sofia, Bulgaria with the objective of serving as a platform for bringing together youth, trainers, youth and social workers, young policy makers, experts, and volunteers from both the country and the European Union. Our primary purpose is to facilitate the sharing and exchange of knowledge among these diverse individuals. At Association Walk Together, our main focus lies in community-based projects focused on themes such as social-economic and technological advancements. Additionally, our programs cater to the specific interests of both young people and adult learners, including those facing cultural and social barriers, thereby creating opportunities for individuals with fewer privileges.

Young Initiative Association

Young Initiative Association (Romania)

The Young Initiative Association (AYI) is a Romania educational NGO that was founded in 2009. Our mission is to empower people through education and we do this through 3 main pillars of action: Social Inclusion, Youth Empowerment and NGO Development. The Association's vision is that an educated society is a strong and free society. We believe in the power of education to change people and communities, create opportunities and support children and young people to develop to their true potential, because a quality education develops free spirit, initiative, critical thinking, curiosity and creates the prerequisites for an independent life.



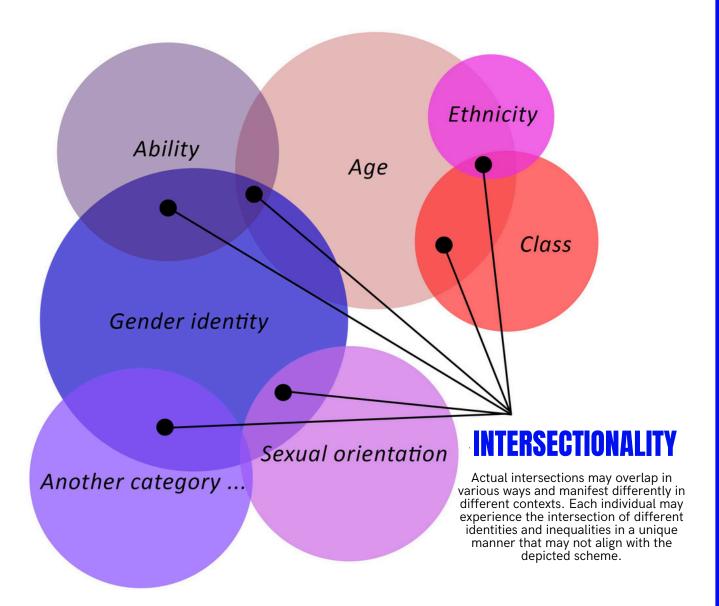
ABOUT INTERSECTIONALITY

"It is no longer possible to think of gender as an isolated category, because it is inevitably interconnected with other social categories such as ethnicity and class. Hence the term intersectionality."

JEFF HEARN

The origin of intersectionality as both a meaningful word and an operational concept is usually understood to be related to the work of law professor Kimberlé Crenshaw, who played a decisive role around the beginning of the 1990s and subsequently during the first decade of the new millennium, in codifying intersectionality as a sociological hypothesis and interpretative lens (Crenshaw 1991). On the other hand, intersectionality and its keywords are deeply attributable to the emergence of the socalled black feminism starting around the 1970s. Collectives, claims, and activities that can now be described as queer - including the Combahee River Collective (1978) - and have been typical of Black feminism were formed in response to and against the collectives and claims of white women. These movements are to be understood as the practical genesis of the concept of identity (and discrimination) and, consequently, for us, of intersectionality. The notion of intersectionality has gradually evolved in academic debates into a more generic and global interpretative lens that aims to work with the complexity of human identity and, above all, its representation and perception. This approach compels us to use more nuanced conceptual forms that do not aim to analyse or address phenomena such as racism, feminism, or classism in isolation. Instead, intersectionality seeks to recognise how people exist within their cultural contexts. It explores how social categories such as gender, race, class, sexuality, and ability intersect and interact to create unique experiences of inequality and privilege. Intersectional practice aims to examine all possible combinations of privilege and vulnerability. However, the focus should not be on evaluating how vulnerable our particular identity is. Everyone has a complex, intersectional identity; there is nothing inherently more complicated about the identity of any individual, including a white, middle-class, straight man. The critical question is whether these identities are explicitly acknowledged as we address any issue (Sen 2021).

From an operational point of view, intersectionality has become a way to contrast the concept of fixed and monolithic identity and speak of cultural and social phenomena more as processes than as acquired data. It is common that intersectionality, as an interpretative lens, serves today to deconstruct a specific cultural product starting from the recognition of a dominant identity trait (e.g., race), recognising and identifying others: gender, sexual orientation, economic well-being or, more generically, class, and so on.



Picture 1: Illustrative intersectionality diagram (GIC NORA 2023).

The methodological challenge of intersectionality is the potential for essentializing and homogenizing the experiences of individuals with similar identities.

Intersectionality recognises the importance of acknowledging diversity within groups, but it can be challenging to avoid essentializing individuals based on their membership in a particular social category (Bjørnholt, Reilly, Tastsoglou 2022). Additionally, it can be difficult to ensure that intersectionality is not reduced to a checklist of identities but instead recognised as a dynamic and fluid practice (Bowleg 2008)

Despite these challenges, intersectionality remains an essential concept in understanding the complexities of social inequality and can incorporate differentially located situated gazes at these inequalities (Yuval-Davis 2015). Researchers must continue to grapple with these methodological challenges to ensure that intersectionality is used nuancedly and thoughtfully in both research and practice.

A study "Intersectionality in quantitative research: A systematic review of its emergence and applications of theory and methods" (Bauer et al. 2021) looked at how intersectionality is included in quantitative researches. The fact that such a study was even done shows the emergence of this concept in the academic literature and, of course, in our daily lives. The study's primary results showed that 707 scholarly articles focused on meeting inclusion criteria. However, 26,95% of the articles failed

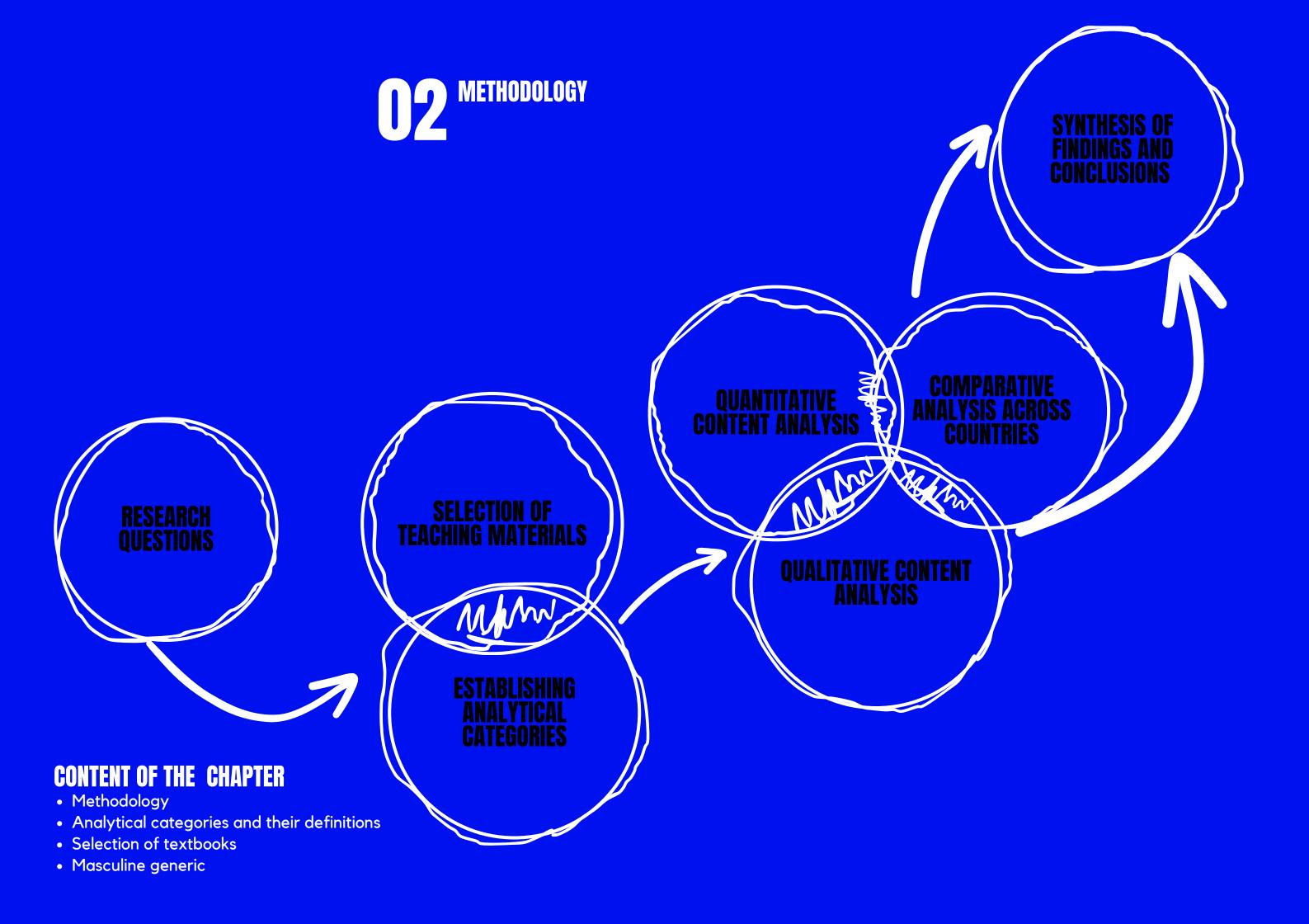
to define intersectionality and 17.5% of the articles had a position that did not reflect or mention social power. The quantitative methods used in these studies are typically quite basic, though newer and more modern methods have emerged. Future research should focus on better-defining intersectionality and how to study it, mainly through quantitative approaches. Additionally, it is essential to develop and adapt quantitative analysis methods as much as possible (Bauer et al. 2021). To achieve this, it is necessary to integrate quantitative approaches that can measure and analyse the data with interpretative qualitative methods. These qualitative approaches can provide deeper insights, contextualize the findings, and identify areas that require further quantitative investigation, especially for categories that are difficult to quantify. Our specific approach is detailed in the Methodology chapter.

Intersectional critique still favours the convergence of the three significant categories of gender, race, and class. Recent research and movements on disability, and eventually sexual orientation, have given rise to some fascinating new ideas. As Helma Lutz (2014) points out, the list of intersections is limitless and includes things like gender, sexual orientation, ethnicity, skin tone, nation, class, culture, age, money, religion, and place of residence (Lutz 2014). It's crucial to remember that 'the point isn't to get into smaller and smaller cohorts defined by identity, but to understand our lives and each other's' instead (Sen 2021).

INTERSECTIONALITY
TRIES TO 'RECOGNISE
THE DIFFERENT WAYS'
IN WHICH PEOPLE, IN
THEIR CULTURE,
EXIST.

To make intersectionality an operational concept, for example, in the educational sciences, it is exciting to understand in which times, places, and situations intersections may occur and in detail which ones. Furthermore, paying attention to which differences are most discussed, problematic, and dominant is equally interesting.

Regardless of the complexity present in the very concept of intersection, the goal is to use these guidelines from a methodological and didactic point of view: to be able to face and describe discrimination and oppression in a more pertinent way, but above all, to work so that, in a classroom or any other educational setting, teachers and educators can more decisively develop a narrative that promotes social justice, contrasting manifestations of hatred and intolerance. This often means, in academic practice, to understand how at the intersection of differences, some are usually missing, others are only hinted at and, consequently, are felt and considered secondary.



METHODOLOGY

For this research report called Reflecting Diversity: Analysis of Representation of Identities in Textbooks, we analysed eight sets of materials containing textbooks and workbooks. Four sets were STEM-oriented teaching materials, while the other four focused on the humanities. Every organisation has the same methodology for analysing textbooks and workbooks to ensure the reliability and comparability of the results across different sets of educational materials and states. The content analysis aims to map how secondary school textbooks are burdened with stereotypes and biases by using the optics of the intersectional approach. In our definition, secondary school entails pupils between 11 and 15 years old.

Intersections of gender, ethnicity, sexual orientation, religion, economic status, and ability were considered. Intersectional perspective allows us to comprehend the complexity of social reality and, consequently, the complexity of the lives of pupils of various genders, religions, economic and cultural backgrounds, sexual orientations, and (dis)abilities.

According to researchers from Masaryk University (Czech Republic), contemporary Czech research on textbooks needs a more stable community of scientists who would engage with the topic in an organised way (Maňák and Klapko, eds. 2006). Any analysis of school textbooks is often a product of individual initiative rather than a result of systematic inquiries. Even though our initiative is not a systematic solution, it transcends the efforts of individual national organisations and organisational cooperation. At the same time, it conceptually extends beyond individual topics, incorporating the concept of intersectionality.

Our extensive reading approach adopts the schematic yet valuable set of questions and guidelines proposed by Hancock (2007), integrating relevant observations in the context of symbolic representation formulated by Winker and Degele (2009). Our methodology is also inspired by ethnographic content analysis, which 'is used to document and understand the communication of meaning, as well as to verify theoretical relationships' (Altheide 1987). It is a document analysis technique to organise explicit and latent information in various written materials, such as textbooks. The main principles of intersectional analysis, and thus the procedure we followed in this text, as in the blue text below:

- 1. The intersectional analysis is heavily based on a theoretical assumption: any text (textbooks, literary text) which tends, even slightly, to represent reality will express different identity categories, whose symbolic value determines the 'intrinsic complexity of the textual fabric'.
- 2. The intersectional analysis' aim is to identify the aforementioned differences 'simultaneously', adding those traits which are omitted from the text, giving them equal importance, e. g underlining the symbolic relevance of their absence.
- 3. The analysis will certainly consider these categories 'in their own historical, cultural dynamism' yet, in our case, the focus is on extratextual factors.

- 4. The analysis will avoid essentialist approaches, aiming at 'contextualised explanations'.
- 5. The final aim is to find a 'model' or 'stereotype' to which the textbooks implicitly refer to representing identities.

We chose this methodology to determine what is being communicated and how it is communicated and to assess the potential impact of these messages (to whom the message is addressed and what impact is expected). The method is characterized by the 'reflexive and highly interactive nature of the investigator, concepts, data collection, and analysis' (Altheide 1987) and thus differs from purely quantitative content analysis. While categories and variables initially guide the study, others are allowed and expected to emerge throughout the study (Altheide 1987). The aim is to observe not only the frequency of elements and signs but also the intersectional relationships between them, their contextual embedding within the text, and features missing (or latent) within the context.

After identifying our research problem and question—"In which way are secondary school textbooks burdened with stereotypes and biases?"—the next step in ethnographic content analysis is to address a precise methodological approach to answering the question (Evans et al. 2021). To investigate the content and form of the textbooks, we first establish analytical categories, which we then express in quantitative proportions and relationships. These categories are used to conduct a quantitative content analysis to measure the frequency and distribution of representations. Following this, a qualitative content analysis interprets the meanings attached to actors, things, processes, activities, and symbols in the textbook content. This results in a final quantitative assessment of the frequency or absence of the given analytical categories, complemented by a qualitative relational interpretation of the phenomena in the textbooks.

The nature of our quantitative data analysis is exploratory. The aim is to take a limited number of textbooks (eight) and analyse them in depth across different countries, focusing on the frequency of specific signs and representations and interpreting their interrelationships and meanings. This approach provides a systematic way to uncover patterns, identify anomalies, and test hypotheses about the data. It helps to quantify the representation of different identities, while qualitative analysis provides deeper insights and context, enabling a comprehensive understanding of the intersectional dynamics within the textbooks.

The results of the intersectional content analysis were conducted in four countries (Czech Republic, Bulgaria, Italy, and Romania) and were compared and assessed by members of the participating organizations. Several conclusions were reached regarding applying an intersectional perspective in the textbooks. These findings highlight the need for deeper, broader, and more systematic analysis to foster inclusivity and diversity in educational materials.

In conclusion, our methodology combines intersectional analysis, ethnographic content analysis, and exploratory quantitative analysis to comprehensively understand how stereotypes and biases are embedded in secondary school textbooks. This approach quantifies the representation of different identities and interprets their interrelationships and contextual meanings. We aim to foster more inclusive and equitable educational practices by examining both quantitative and qualitative aspects.

ANALYTICAL CATEGORIES AND THEIR DEFINITIONS

The analytical categories were established to ensure results concerning the intersectional process mentioned above.

This content analysis of intersectionality includes primary division between disciplines, specifically the **humanities** and **STEM** fields (science, technology, engineering, mathematics) that comprise the first two analytical categories. The reason for this division is that humanities and STEM textbooks have their specificities, which are shaped by the fact that this is how the labour market and science itself are divided. Therefore, this disciplinary division is in combination with all the analytical categories described below.

For the analysis of gender roles of men and women, we have defined, in addition to the analytical category of gender, categories linked to the study of the narratives that convey learning in textbooks. The primary division is into a pair of a **main character** (an active role with strong agency, the knight saving a princess) and, in contrast, a secondary, **supporting character** (a passive role, serving as an 'object' to be acted upon rather than an active agent, much like a sleeping princess).

The gender category includes individuals whose gender was identifiable regardless of age, encompassing children, girls, boys, and even anthropomorphized animal characters (e.g., a hedgehog identified as male by having a beard and a hedgehog identified as female by wearing a skirt).

We further used the analytical gender category to identify the gender roles of men and women in the social order, which we defined through the categories of **private** and **public spheres**. The primary difference between the two is that the public sphere is the area of paid work, sports, politics and other activities in which people associate. In contrast, the private sphere is smaller, closed and is the area of care for the household and dependents (children and the elderly or sick) i.e. unpaid work that occurs within the household setting. We also considered the intersectionality of **age** with **family ties**. This allowed us to explore how gender, age, and familial relationships intersect in the representation of social roles in the textbooks. We were inspired to define the threshold for old age by the research presented in the OECD study on Ageing and Employment Policies.

Sexual orientation encompasses a large number of variants such as asexual, bisexual, and pansexual; however, due to the analysis of textbooks that usually include any sexuality very rarely, we have chosen to map **heterosexuality** and **homosexuality**, which are the most prevalent variants within sexuality. We examined the categories of sexuality at the intersection of **gender**: men, women, and **non-binary people**. The self-determination of the gender identity of the characters was not presented in the textbooks. Therefore, we focused on gender expressions, i.e. how individuals's gender is represented outwardly, for example, through clothing, hairstyle, and gendered language. Non-binary gender was analytically grasped as an explicitly presented non-binary person. An illustration in which a man or a woman could not be identified due to low quality or size, as was the case in the text when gender was not identifiable, but this does not mean that it represented a non-binary figure. Therefore, given the current state of the textbooks, we decided not to expand the gender categories to include other categories such as transgender or queer - that were absent.

Another analytical category is **cultural and ethnic minorities** (in relation to project countries). We have also expanded the category and thus delineated it to include religious minorities. This category aims to capture the representation of other cultures in textbooks and its impact on learners' perceptions.

The representations of other cultures and gender categories were examined about economic background. Economic background was mapped into two categories: wealth and poverty. Wealth was defined as any trait associated with higher economic status (e.g., driving a Ferrari or vacationing in Florida), while poverty was defined as situations indicating economic need (e.g., saving for clothes or dealing with foreclosure). We also explored how economic background affects individuals differently, considering who benefits from wealth and who is affected by poverty, whether male or female.

Throughout the content analysis of the analytical categories mentioned, we maintained a reflexive and highly interactive stance consistent with the principles of ethnographic content analysis. This meant that our researchers actively engaged with the text, continuously evolving their understanding and interpretations. While we began with predefined categories to guide our study, we remained open to emerging categories and themes that surfaced during the analysis.

Our analysis culminated in a comprehensive assessment of the frequency and absence of analytical categories related to intersectionality within the textbook content. Additionally, we provided a qualitative relational interpretation of the phenomena observed within the textbooks, shedding light on the connections and contextual embeddings of intersectional elements. This mixed-methods approach allowed us to go beyond mere quantification and examine the nuances, complexities, and potential biases inherent in portraying intersectionality within the educational materials.

SELECTION OF TEXTBOOKS

Each country selected two textbooks: one from the field of humanities/social studies and one from natural sciences. The aim was to capture the situation in two completely different fields of subject in these four European countries. The description of particular choices is available below:

BULGARIA

- Philosophy (for humanities)
- Electrical Engineering (for STEM)

For the purpose of the content analysis, the organization SDRUZHENIE WALK TOGETHER selected textbooks from Philosophy and Electrical Engineering.

To fulfill the project's objectives, the team of participating teachers decided to present two different subject areas—professional and general education, covering both technical and humanitarian disciplines. Textbooks on specialized technical training were found to be highly theoretical, presented in a neutral style, and lacking concrete examples and applications. In contrast, humanities textbooks extensively refer to, utilize, and explore the themes addressed in the project.

The selected textbooks are for pupils in the first stage of high school (9th grade), covering general education and industry-specific professional preparation.

The subject 'Electrical Engineering' is studied by all pupils across various professions and specialties. The textbook used is a revised edition of 'Electrical Engineering' by Lyuben Ananiev, originally published in 2004 and supplemented by Evgenia Nikolova in 2011, by the 'New Knowledge' publishing house. It is designed for pupils in vocational high schools and vocational training centers in the professional fields of 'Electrical Engineering and Energy' and 'Electronics, Automation, Communication, and Computer Equipment.'

SELECTED TEXTBOOKS

- Philosophy for 9th grade of publishing house 'Prosveta' by author collective -Evelina Ivanova-Vardzhiyska, Yasen Zahariev, Donka Paneva-Ivanova, 2018.
- 'Electrical Engineering', by Lyuben Ananiev, published in 2004 and supplemented by Evgenia Nikolova in 2011 by 'new knowledge' publishing house.

CZECHIA

- Czech Language (for humanities)
- Mathematics (for STEM)

For the purpose of the content textbook analysis, the organisation GIC NORA has chosen textbooks and workbooks from Czech Language and Mathematics, that are two subjects with the largest time allocation in the student's timetable. These subjects are taught every day in lower secondary schools.

Czech Language and Mathematics are also subjects that are compulsory for all pupils in the Czech Republic.

All of the school books are aimed at pupils in the seventh grade of lower secondary school, which means for teenagers at the age of 12 - 13 years. These textbooks consist of school books and workbooks and are from a Czech publishing house called Nová škola.

SELECTED TEXTBOOKS

- Kvačková, J, Jindrová, L., Laicmanová, A., Mrázková, L., Sekotová, Z. & Bičanová, L. 2022. The Czech language 7. (orig. Český jazyk 7). 2nd updated edition. Brno: Nová škola. Duhová řada. ISBN 978-80-7289-607-3.
- Jedličková, M., Krupka, P., Nechvátalová, J. 2016. Mathematics (orig. Matematika). Brno: Nová škola. Duhová řada. ISBN 978-80-7289-837-4.
- Rosecká, Z. 1998. Mathematics 7th grade: How to calculate percentages. (orig. Matematika 7. Ročník: Jak počítat s procenty). Brno: Nakladatelství Nová škola. ISBN 80-85607-73-5.
- Rosecká, Z. 1998. Mathematics 7th grade: prepared according to the Primary School curriculum. Numeracy moments. (orig. Matematika 7. ročník: zpracováno podle osnov vzdělávacího programu Základní škola. Počtářské chvilky). Brno: Nakladatelství Nová škola. ISBN 80-85607-71-9.

ITALY

- Italian language and literature (for humanities)
- Natural Sciences (for STEM)

For the purpose of the content textbook analysis, the organisation Idrisi Cultura e Sviluppo ETS has chosen to analyse frequently adopted textbooks choosing, in terms of subjects, Italian language and literature in the Humanities field, and Natural Sciences in STEM.

The two subjects represent, with some exceptions, the highest number of hours of teaching and learning per week. In detail, the organization analysed the textbook Nel cuore dei libri. Valori, generi, temi. Vol. 3, commonly used to teach Italian language & literature for pupils aged 12-13 and Scopriamo la natura. Vol. 3, the most commonly used textbook for the STEM field for pupils of the same age.

SELECTED TEXTBOOKS

- Savino, B, Pozzoli, O., Aristodemo, P. 2018. *At the heart of books. Values, genres, themes.* (orig. Nel cuore dei libri. Valori, generi, temi). Milano: Pearson-Paravia. ISBN: 8839531629
- Zanoli, R., Pini, L., Veronesi, P. 2017. Let us discover nature. Vol. A-B-C-D. For middle school. With online update. (orig. Scopriamo la natura. Vol. A-B-C-D. Per la scuola media. Con aggiornamento online). Bologna: Zanichelli. ISBN: 8808366650.

ROMANIA

- Romanian language and literature (for humanities)
- Physics (for STEM)

The Young Initiative Association from Romania chose to analyse a Romanian language and literature textbook and a Physics textbook, both published by Art Klett Publishing House in 2019.

Romanian language and literature is the most important subject in the national curriculum, being studied along the full preuniversitario educational road of a student, while Physics is studied from the seventh grade onwards based on the high school's profile chosen by the student. Both textbooks are aimed at pupils in the seventh grade of middle school, which means for teenagers of 13 - 14 years old.

SELECTED TEXTBOOKS

- Sâmihăian, F., Dobra, S., Halaszi, M., Davidoiu-Roman, A., Corcheș, H. 2019 (printed version). 2022 (online version). Editura Art Klett. Limba și Literatura Română, Clasa a VII-a. ISBN 978-606-076-439-7.
- Stoica, V., Dobrescu, C., Măceşanu, F., Băraru, I. 2019 (printed version). 2022 (online version). Editura Art Klett. Fizică, Clasa a VII-a. ISBN 978-606-076-429-8.

MASCULINE GENERIC

Central to our methodology is considering the grammatical structures employed in the various countries involved in our project. Languages around the world exhibit distinct approaches to linguistic gender and expression. So, our particular focus is on the linguistic phenomenon known as the 'masculine generic' as it manifests within these diverse language contexts.

What does masculine generic mean? Linguistically, the appellation of a person is masculine. That appellation is meant to be neutral regarding biological gender because the speaker does not know biological gender or considers it less important than other social characteristics in the given context. Masculine generic is used mainly when including a woman, a man, or a group of people in a particular national, professional, status, functional, or other group. Masculine generic is a linguistic phenomenon common in most Romance and Slavic or German languages.

Let's examine the sentence: "Only experienced teachers teach in our school." In English, the term 'teacher' is gender-neutral, encompassing both males and females. However, in numerous other languages, occupational titles often have distinct masculine and feminine forms. For instance, in the Czech language, 'teacher' can be 'učitel' for males and 'učitelka' for females, while in the plural, 'male teachers' are 'učitelé' and 'female teachers' are 'učitelky.' The concept of the generic masculine entails that the masculine plural form is frequently used for both male and female teachers, and occasionally, the singular masculine form may also be employed when referring to females. Consequently, when a sentence employs the generic masculine ('učitelé') to describe all those involved in teaching at a school, it may not offer clarity to the reader, leaving them uncertain whether it exclusively refers to experienced male teachers or if it also encompasses experienced female teachers.

According to the research of Czech linguist Jana Valdrová, who researched the influence of masculine language forms on thinking about reality in the Czech Republic, the main problem with the use of masculine generics is that it leads perceivers to over-represent men in their mental representation of people. Among the research respondents were male and female pupils of the 1st-grade elementary school. The assignment was to give funny names and surnames to different people performing some of the professions, such as scientist, teacher, salesman, doctor, cook, zoo worker, computer expert or student, supermarket thief, etc. The result was that when using the generic masculine, the tested girls remembered the image of a man in an average of 83.1% of all cases, and the boys connected the generic masculine with a male surname in 92.6% of the cases. Simultaneously with the research on the influence of generic masculine, the impact of using gender-balanced formulations was also tested. The task was to indicate the profession with both a female and a male form. Such an assignment evoked the image of a man in girls, on average, in 44.6% of the items and a boy in 57.4%. Research thus shows that only balanced formulations make it easier to equip the image of both men and women. The overall summary of the study also corresponds with the conclusions of the German linguist Josef Klein, which states that although the balanced use of personal names will strengthen the representation of women, even in such conditions, the tendency to associate with men persists (Klein 2004 in Valdrová 2008).

In some languages, there is an extensive use of masculine generic. In the context of gender equality and also Intersectionality, for girls and women, it could be more challenging to identify with role models which are presented in textbooks because it is primarily written in the masculine version of the word. Feminist writers (see Bourdieu 1991; or Renzetti, Curran) have conceptualised language as a principal element for the stabilisation of social conditions as well as an active means for emancipatory transformation and change. Concerning gender, this means that, on the one hand, language may represent, reproduce, and reinforce the status quo of gender relations in society, but, on the other hand, may also be used as an instrument of conscientization and change.

For this reason, it is necessary to use gender-aware alternatives (for example, instead of sportsmen, use athletes) or use appellations in both linguistic variants (e.g. a group of actors and actresses).

In the Czech case, for example, using masculine generic is widespread in textbooks and workbooks. Most often, it is used for appellation of the groups of workers (e. g. travellers, inspectors, huntsmen, wine growers, adventurers, ...) and also groups of people in different nationalities (Egyptians, Celts, the Slavs, Ukrainians, ...). In Romanian, an important notice is also that officially, the grammatically correct version to use is the masculine generic one, while the 'female' version is considered informal language and not grammatically correct. Also, in the textbooks, there are referrals to the other pupils in the classroom, and the word used is 'colegi' (colleagues), which implies a masculine generic. As mentioned above, there is even a grammatically correct form to say female colleagues ('colege'), but that is rarely used and is mostly used in informal language.

The appellation in masculine generic is used in instructions of maths exercises and also in lexical exercises. In some cases, the assignment written in masculine generic could even change the final outcome of the exercise: "Each group chooses one eminent scientist, searches for information about him and prepares the task as a poster." (assignment from the analysed Czech language textbook: Kvačková et al. 2022). As a result, all female scientists could be indirectly excluded from the final processing, because in the Czech language, there are different words for male and female scientists ('vědec' / 'vědkyně').

In our point of view, the use of masculine generic makes textbooks and workbooks non-inclusive for half of all pupils.

The reason why is masculine generic mentioned before the analysis itself is that different countries have approached this phenomenon differently.



THE MAIN PROBLEM
WITH THE USE OF
MASCULINE
GENERICS IS IT LEADS
PERCEIVERS TO OVERREPRESENT MEN IN
THEIR MENTAL
REPRESENTATION OF
PEOPLE.

We report on masculine generics because they are a significant phenomenon from a feminist perspective. However, it should be pointed out that in the analysis itself, it was taken into consideration only in the case of the Czech Republic – the researchers were much more attentive to this phenomenon.

In the methodological part, this phenomenon was approached as follows: Whenever a masculine noun refers to a group of persons, including women (e.g. nationalities, professions, etc.), we made a mark for the masculine generic. Whenever we found a masculine noun referring to a specific man/boy, we made a mark in the men category. However, both groups are assigned to the male category because, linguistically, women and girls are rendered invisible by using such nouns. In most tables, numerical data refers to the group marked with masculine generic (in the table, we denote as MG). The quantitative analysis shows how widespread the phenomenon of masculine generic is.

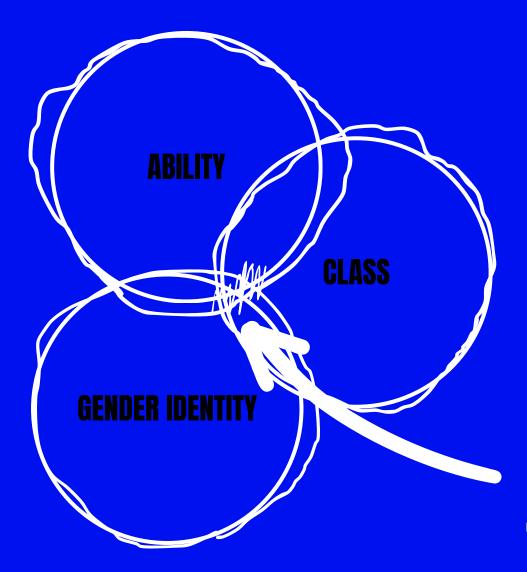
Although we realize that its use simplifies the use of the Czech language and shortens sentences, it also brings several problems, such as girls being unable to identify with the text sufficiently. Therefore, there is a need to use gender-balanced wording and gender-sensitive language as a whole.

Another country represented in this project is Italy, which still needs to address this language problem. Italy is moving in the right direction towards linguistic inclusiveness. Masculine generic is a grammatical phenomenon present in the Italian language as well: canonical cases in which, in constructing sentences and statements, the masculine is used to include subjects of both sexes or, even more frequently, to refer to an entire category of people (for example tutti sono andati al cinema, everybody went to the movie theatre). Therefore, although the use of the masculine generic is grammatically permissible and also frequent, the Italian language remains an idiom that strongly marks gender on nouns, which are understood as having intrinsic gender, using moreover parallel forms in both masculine and feminine. In this sense, in the textbooks commonly adopted in primary and secondary schools, it is not stated that the preferred and standard form must necessarily be the masculine generic. In fact, until the beginning of the new millennium, Italy was substantially at the forefront of linguistic inclusion, starting with the commitment made by the academic world in the 1990s. In 1998, the POLITe project (Pari Opportunità nei Libri di Testo) was born under ministerial guidance and with the explicit aim of requalifying educational and didactic materials inclusively, primarily through language and only partially through representations. In Italy, in response to the POLiTe project, the Italian Publishers Association (AIE) developed and fully adopted a Self-Regulation Code for publishers, which includes practically all publishing houses involved in education and didactics. Since 2001, textbooks have been able to bear the 'POLiTe' label, recognising the presence of intellectual and editorial efforts towards inclusivity.

However, as demonstrated in the qualitative and quantitative analyses of the Italian textual sample, Italy still needs to fully represent a model of good practices in didactic packaging. On the one hand, using the masculine generic in substance appears less frequent and dominant in Italian textbooks. Instead, there is a fair occurrence of both masculine and feminine linguistic forms, and rigidly gendermarked statements are rarely used (preferring, for example, impersonal forms in which gender is unspecified).

Another issue pertains to literary and visual representations, which typically accompany and characterise any textbook in any thematic field. In this sense, recent reports (Biemmi 2010) show that in terms of representations and explicitly concerning the guidelines of the POLiTe project, the overall condition has not improved and has slightly worsened: male protagonists keep being at least twice as frequent as female ones, professional roles tend to be still represented in a sexist manner, representations of otherness beyond ethnic diversity are lacking, and so on. Finally, there is not an explicit focus nor an intense debate on how and why to include possible intersections between differences and traits in the construction of characters or settings or on how to address specific topics, such as sexual diversity or even disability, for pupils aged 6-13, which is also reflected in the following analysis.

QUANTITATIVE EXPLORATION OF TEXTBOOKS



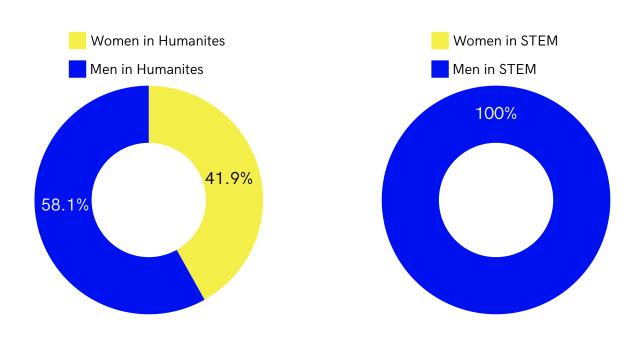
The intersection between disabilities and gender and class is also visible: women comprise nearly three-quarters of all persons with disabilities in low and middle-income countries.

CONTENT OF THE CHAPTER

- Bulgarian textbooks
- Czech textbooks
- Italian textbooks
- Romanian textbooks

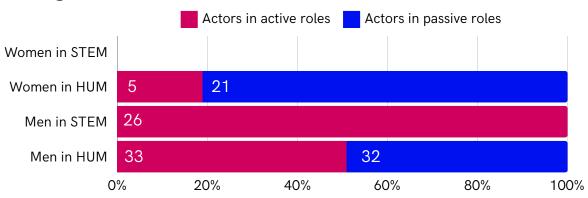
Bulgarian textbooks

Graph 1.1 Representation of Men and Women in Bulgarian Textbooks

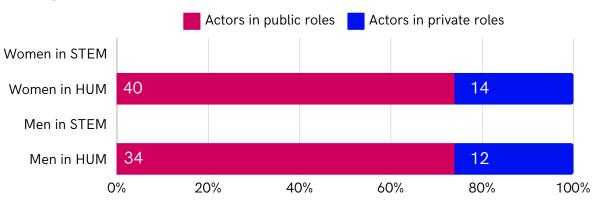


In the selected Bulgarian STEM textbook, only males were featured, with a total of 32 men. In contrast, the humanities textbook showed approximately 42% female (80 women) and 58% male (111 men) representations. Therefore, some categories of intersectionality in Bulgarian textbooks make sense to analyse only within the framework of a humanities textbook, as shown in Graph 1.1. This distinction highlights the gender disparity in representation across different subjects, emphasising the importance of subject-specific analysis to understand the nuances of gender representation in educational materials.

Graph 1.2 Representation of Type of Actors in Active and Passive roles in Bulgarian Textbooks (100% stacked chart)



Graph 1.3 Representation of Type of Actors in Public and Private roles in Bulgarian Textbooks (100% stacked chart)

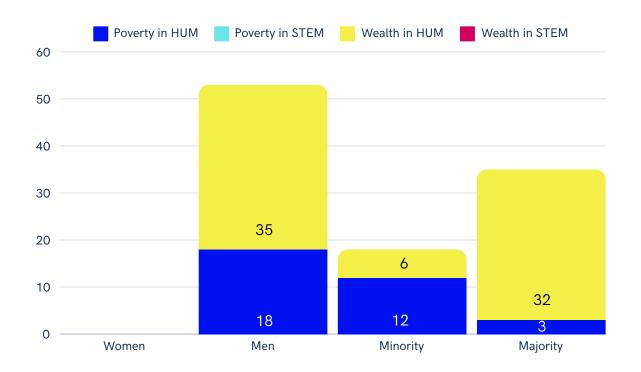


In the analysis of Bulgarian textbooks, men were featured in leading, active roles 64 times and women five times. Supporting roles included 32 men and 21 women. In the Bulgarian STEM textbooks, only men were identified as the main characters; no one was cast in supporting roles. Let us take the example of a humanities textbook. To illustrate the difference in the representation of active and passive roles between men and women, we need to account for the proportional representation of women and men in these roles. Overall, fewer women are depicted in textbooks, but if we take the ratio, approximately 19% of women were cast in the leading role and 81% in the supporting role. For men, the ratio is approximately 50/50. Graph 1.2 shows that textbooks reproduce the 'traditional' perception of men and women. Women less often find themselves in leadership or dominant roles, possibly contributing to the vertical segregation of women in decision-making positions.

As illustrated in graph 1.3, men were depicted as caregivers or in connection with household care 12 times, and women 14 times. The data collection did not distinguish between public and private spheres in the STEM textbook, thus only examples from the humanities textbook are analysed. In the public sphere, i.e., in the labour market, playing sports or doing other activities outside the private sphere, men appeared 34 times and women 40 times. This shows no stereotypical division of gender roles in the public and private sectors in this intersection.

Overall, the analysis highlights significant gender disparities, with men more frequently depicted in active and leadership roles while women are often shown in passive or supportive roles.

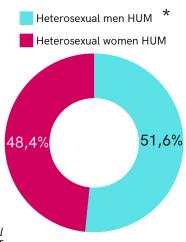
Graph 1.4 Representation of Wealth Levels Based on Gender and Ethnicity in Bulgarian Textbooks



In the STEM textbook, wealth and ethnicity differences were not present. In contrast, the humanities textbook showed 18 characters from ethnic minorities and 35 from the majority group, with all examples of wealth disparity featuring only male figures. Among the ethnic minority characters, 67% were depicted as poor and 33% as rich. For the ethnic majority group, 9% were depicted as poor and 81% as rich. This highlights a significant contrast in the portrayal of wealth between ethnic groups, with minorities more frequently depicted in poverty and the majority in wealth.

Graph 1.5 Representation of Sexual Orientation in Bulgarian Textbooks

No sexual orientation was depicted in the Electrical Engineering textbook (STEM). In contrast, the Philosophy textbook (humanities) presented 80 heterosexual men and 75 heterosexual women. However, homosexual men and women were not represented in either textbook. This lack of representation indicates a significant gap in inclusivity regarding diverse sexual orientations in Bulgarian educational materials.



^{*}The textbooks did not include any representations of other sexual orientations, such as gay or bisexual, nor did they depict any gender identities, such as non-binary.

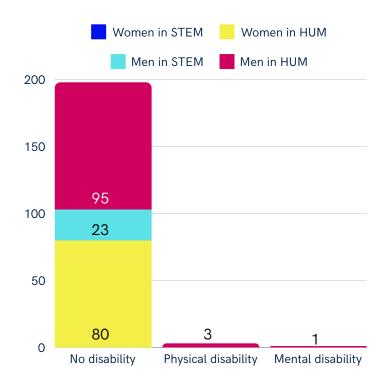
Graph 1.6 Men and Women in Family Relations by Age in Bulgarian Textbooks



Bulgarian humanities textbooks, the ages of 23 women and 47 men were distinguishable. Only 9.5% of the women depicted were over 55 years of age, compared to 34.3% of men, indicating that older women were proportionally much less represented than older men. Additionally, 26% of the women were shown in family roles, while 74% were depicted without family ties. For men, 19% were shown in family roles and 81% without. This suggests that women were more often portrayed in family roles compared to men, highlighting a gender disparity in the representation of older individuals and family ties.

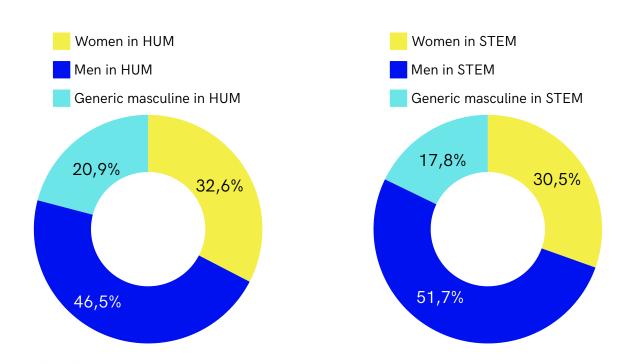
Graph 1.7 Representation of Disabilities in Bulgarian Textbooks

The number of cases of physical and mental disabilities presented in Bulgarian textbooks is very low. Disabilities are entirely absent in STEM textbooks, the while humanities textbooks include only a few cases related to people living with disability. 3 men from HUM represents physical disability and 1 man from HUM mental disability. This minimal representation highlights a significant gap in addressing and including individuals with disabilities, suggesting a need for more inclusive content that accurately reflects the diversity of student experiences and abilities.



Czech textbooks

Graph 2.1 Representation of Men and Women in Czech Textbooks

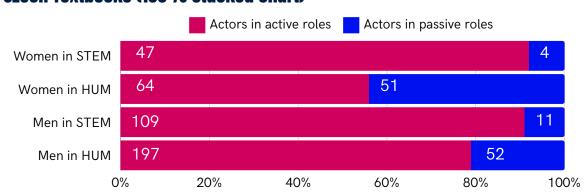


In the selected Czech textbooks, there were 368 individuals in humanities, comprising 171 men (46.5%), 77 men (20.9%) in generic masculine and 120 women (32.6%). There were 174 individuals in STEM subjects, with 90 men (51.7%), 31 men (17.8%) in generic masculine and 53 women (30.5%). Therefore the use of generic masculine further skews the differences numbers, as shown in graph 2.1. To summarize, in the math (STEM) textbook, 53 actors were women (37.1%), and 90 were men (62.9%), but the generic masculine increased the count to 121 men (69.5%). Similarly, in the Czech language textbook, 120 actors were women (41.2%), and 171 were men (58.8%), with the generic masculine raising the men count to 248 (67,4%). This usage exacerbates the already pronounced gender disparity, indicating that the representation of men significantly outweighs that of women. The generic masculine impact highlights the need for more gender-neutral language to provide a balanced representation in Czech educational materials.

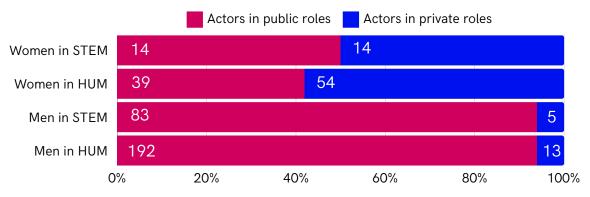
The analysis of gender and social roles in mathematics (STEM) and Czech language (humanities) textbooks (Graph 2.2 and 2.3) reveals significant differences in representation. Women are more frequently depicted in supporting roles, particularly in humanities textbooks. Among the 166 women and 369 men portrayed, 33% of women and 17% of men were in supporting roles, with a more

significant disparity noted in humanities texts. Masculine generics are commonly used, even though it does not adequately represent both genders. This form appeared 29 times, mainly for main, active protagonists. Men were shown in supporting or passive roles nine times, with two instances using masculine generic terms, while women appeared four times in these roles. Within this graph, we count generic masculine as cases for men.

Graph 2.2 Representation of Type of Actors in Active and Passive roles in Czech Textbooks (100% stacked chart)



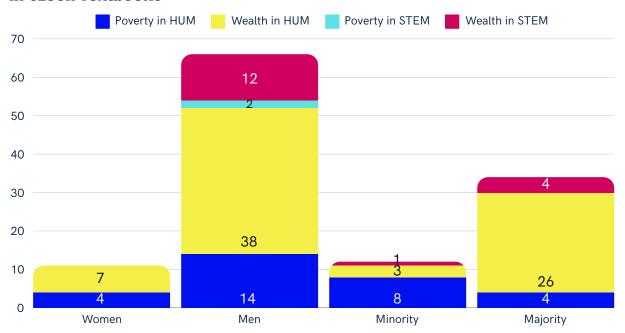
Graph 2.3 Representation of Type of Actors in Public and Private roles in Czech Textbooks (100% stacked chart)



STEM textbooks often perpetuate traditional gender perceptions. Women seldom appear in leadership. This lack of representation can contribute to the vertical segregation of women in leadership positions. Men in STEM were depicted as caregivers or household helpers five times (6% of men), while women were shown in these roles 14 times (50% of women). In the public sphere, men appeared 83 times (94%), compared to 14 appearances by women (50% of women). The situation is comparable to the humanities textbook's (see graph 2.3). Thus, STEM and humanities textbooks follow the same trend of portraying women in the predominantly caring role of private life and men as active and public actors. This reinforces gender stereotypes and contributes to the horizontal segregation of men and women in the labour market, with sectors like healthcare, social care, and education becoming increasingly feminized.

Graphs 2.2 and 2.3 confirm the hypothesis that men are portrayed as active protagonists in humanities textbooks to a greater extent than women. There was no significant difference in the proportions between men and women in STEM textbooks. However, it is also necessary to account for absolute values, i.e., the higher number of men overall in textbooks (see Graph 2.1) logically increases the representation of men in leading roles. At the same time, the graphs show that textbooks portray women significantly more often in private roles (family roles/situations) than men who occupy public positions.

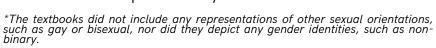
Graph 2.4 Representation of Wealth Levels Based on Gender and Ethnicity in Czech Textbooks



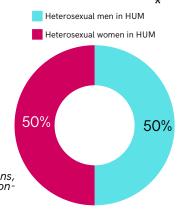
The depiction of ethnic majorities and minorities in Czech textbooks shows a clear bias. Most majority figures are associated with material wealth or prestige, while minorities rarely receive the exact representation. For instance, 67% of ethnic minority characters are depicted as poor, compared to only 9% of majority characters. Meanwhile, 81% of majority figures are shown as wealthy, versus only 33% of minority figures. In STEM textbooks, majority figures linked to wealth appear four times more often than minority figures. As seen from the table above, minorities, particularly the Roma minority, are rarely mentioned. With around 250,000 Roma individuals, making up about 2.4% of the Czech Republic's population (OGCR 2021), their lack of representation in school books may contribute to the poorer performance of Roma children compared to those from the majority society. Gender representation also shows disparities in wealth and poverty. Men are depicted with wealth and prestige much more frequently than women. In humanities textbooks, men are associated with wealth 38 times, while women are linked only 7 times. Conversely, men are shown in financial distress 16 times, compared to women 4 times. This indicates that men are seen as financial providers, while women are largely excluded from economic roles, perpetuating gender stereotypes.

Graph 2.5 Representation of Sexuality at the Intersection of Gender indentity in Czech Textbooks

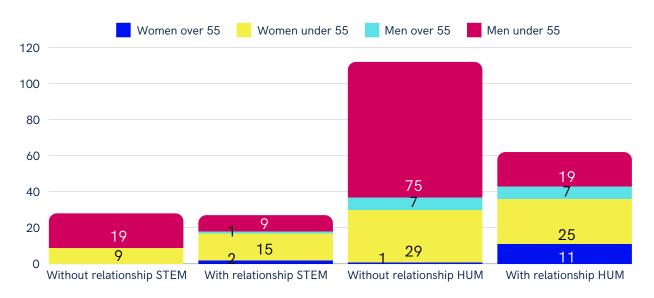
No readable sexual orientation was depicted in the mathematics textbook. In contrast, the Czech language textbook explicitly labelled ten men and ten women as heterosexuals, mentioning them in connection with heterosexual family life. The absence of diverse sexual orientations suggests that sexual orientation is not considered relevant by the creators of Czech textbooks. The same could be said about non-binary identities, which were not depicted in any textbooks.



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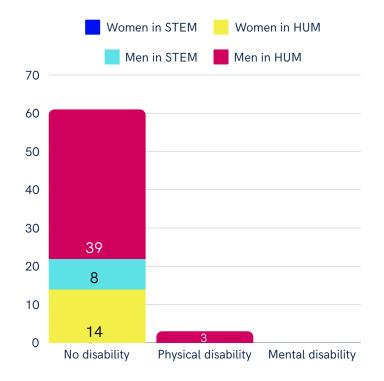
Graph 2.6 Men and Women in Family Relations by Age in Czech Textbooks



In humanities textbooks, women over 55 are predominantly depicted in family roles, with 91% shown in this context and only one depicted alone. Older women are barely represented in STEM. Younger women often appear without relationships in both fields, highlighting more diverse roles. Men over 55 are less frequently shown in family contexts, especially in STEM, while younger men are often depicted without family ties. This suggests textbooks portray older individuals, particularly women, mainly in traditional family roles, namely in the roles of grandmothers. The limited depiction of people over 55 as grandparents overshadows their varied potential roles, leading to a homogeneous portrayal.

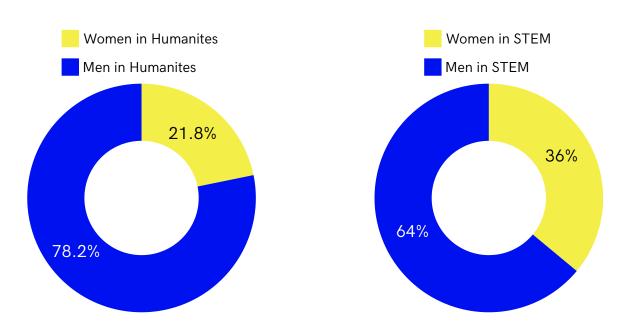
Graph 2.7 Representation of Disabilities in Czech Textbooks

The depiction of disabilities in Czech textbooks is minimal. In the mathematics textbook, 8 cases were assessed with no persons depicted with disabilities, all being men without disability. This invisibility suggests a lack of representation for people with disabilities. In the humanities textbook, 3 individuals with disabilities were depicted, all men. This indicates a significant gap in inclusivity, as women and individuals with diverse disabilities are underrepresented in educational materials.



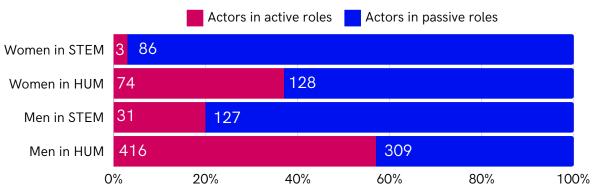
Italian textbooks

Graph 3.1 Representation of Men and Women in Italian Textbooks

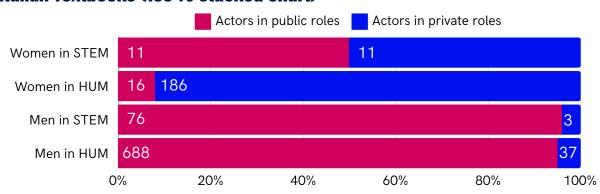


Italian textbooks offer many figures to be analysed due to the predominance of visual elements, photographic representations, and literary extracts. The Italian textbooks reveal significant gender disparities in the representation of social roles. In Italian language and literature textbooks, 927 figures were analysed, with a notable imbalance of 725 men (78.2%) and 202 women (21.8%). This trend extends to STEM subjects; out of 247 characters, 158 were men (64%), and 89 were women (36%). This pronounced disparity underscores the need for subject-specific analysis to understand the nuances of gender representation in educational materials. Subsequent analysis will delve into how these textbooks portray public and private spheres, active and passive roles, and the representation of age, ethnicity, and sexual orientation to provide an exploratory view of the inherent biases of Italian textbooks.

Graph 3.2 Representation of Type of Actors in Active and Passive roles in Italian Textbooks (100% stacked chart)



Graph 3.3 Representation of Type of Actors in Public and Private roles in Italian Textbooks (100% stacked chart)

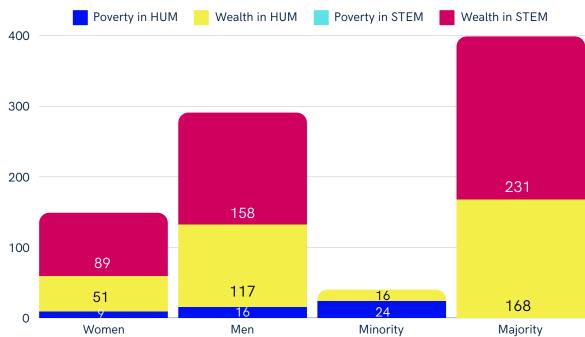


In the humanity textbook, men were predominantly depicted in the public sphere (688 instances, 95% of the total count of men). In contrast, women were primarily shown in private, domestic settings (186 cases, 92% of the total count of women). This stark contrast highlights a gender bias where men are seen as active participants in public life, and women are relegated to private, homebound roles. This trend continues in STEM Natural Sciences textbooks with even fewer female representations. Out of 247 characters, only three active female characters were identified compared to 31 active male characters. Supportive roles were also dominated by males (127 instances) versus females (86 cases). The STEM textbooks showed minimal female characters in public spheres, further reinforcing gender stereotypes.

Moreover, in Italian language and literature textbooks, 927 figures were classified into primary and supportive or secondary characters. The results highlight a very unbalanced ratio: 725 male characters and only 202 female characters, either protagonists or in supportive roles. For the distinction between private and public spheres, most male characters (688) were associated with public-related backgrounds, while most female characters (186) were linked to private, domestic settings.

Despite this imbalance, humanities textbooks are more diverse than Natural Sciences textbooks, which need more varied and intersectional perspectives. Following a recent trend, the Italian language and literature textbooks started to include more varied ethnicities, especially in their visual representations: this element, however, doesn't seem to lead towards compassionate and educational approaches, nor intersectional perspectives in dealing with identities and cultural realities. The figures, either visually depicted or present in the literary extracts, are in most cases static and rarefied, artistically illustrated in a neutral, child-like way. Contexts and backgrounds are, moreover, substantially absent. Characters in STEM textbooks are often isolated without contextual backgrounds, which limits the representation of diversity and complexity in these educational materials.

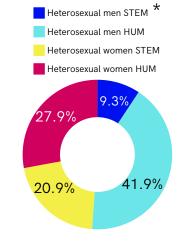
Graph 3.4 Representation of Wealth Levels Based on Gender and Ethnicity in Italian Textbooks



Poverty is scarcely represented in STEM subjects, with Italian language and literature textbooks containing only 24 instances, all from literary excerpts. Visual representations of poverty are absent across both sectors. Economic disadvantage is predominantly linked to race or gender, with poverty almost exclusively associated with non-white characters, except for those from historically impoverished Southern Italy. This reflects a historical divide where Northern Italy is aligned with Northern Europe, and Southern Italy has historically faced economic hardships. Wealth is mainly depicted among majority group, with 168 instances in humanities and 231 in STEM, compared to 51 and 89 wealthy female characters, respectively. Even within poverty depictions, male figures predominate, with 16 instances compared to 9 for females. Italian textbooks generally need to adequately address the diversity of economic conditions, often isolating characters in non-contextual backgrounds, which limits understanding their socioeconomic realities.

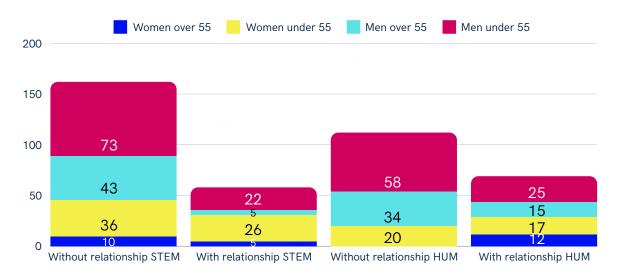
Graph 3.5 Representation of Sexual Orientation in Italian Textbooks

The depiction of sexual orientation in Italian textbooks is minimal. In humanities, 12 heterosexual women are portrayed as wives or mothers, and 9 in STEM are often shown as pregnant. Male figures in heterosexual relationships appear 18 times in humanities and only 4 in STEM. Homosexual relationships are entirely absent in both domains. Additionally, characters are often depicted without contextual backgrounds, limiting the understanding of their social and relational dynamics.



^{*}The textbooks did not include any representations of other sexual orientations, such as gay or bisexual, nor did they depict any gender identities, such as non-binary.

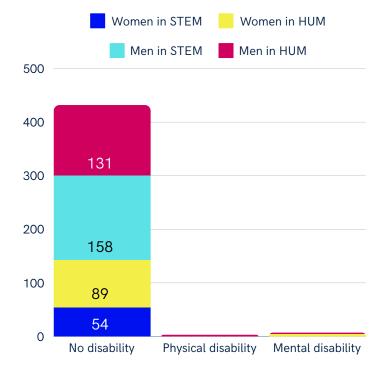
Graph 3.6 Men and Women in Family Relations by Age in Italian Textbooks



Age representation in Italian textbooks skews significantly towards younger individuals. Older female characters (over 55) are nearly absent in both humanities and STEM subjects, with only 12 instances in familial roles in literature textbooks. Older male characters are more represented, mainly as historical figures or scientists in STEM. In humanities, 15 men over 55 are shown in relationships, while 34 are depicted without any. In STEM, 43 older men lack relationships, compared to 5 who have them. Younger men and women are more frequently shown, with 58 men and 20 women under 55 depicted without family ties in literature textbooks. This depiction reflects age-related stereotypes, with older women portrayed primarily in family roles while older men are shown in professional or independent roles.

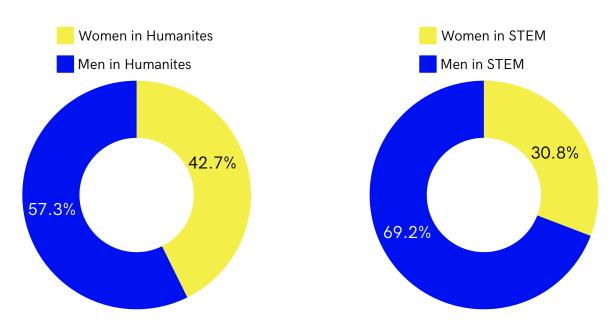
Graph 3.7 Representation of Disabilities in Italian Textbooks

Disability representation in Italian textbooks is severely lacking. There were no visual representations of physical disabilities. Mental disabilities were sporadically mentioned in contexts literary within humanities textbooks but were not visually represented. In STEM textbooks, characters with disabilities were absent. completely Conversely, depictions of physically intense activities, like sports, featured 131 male and 89 female without disability in humanities, and 158 male and 54 female without disability in STEM. There were only seven mentions of mental disabilities, all literary.



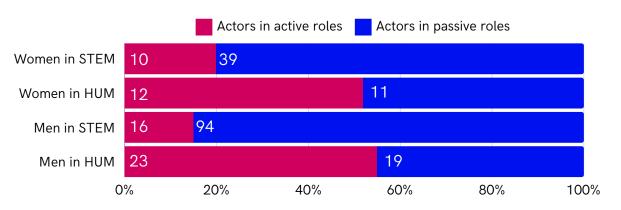
Romanian textbooks

Graph 4.1 Representation of Men and Women in Romanian Textbooks

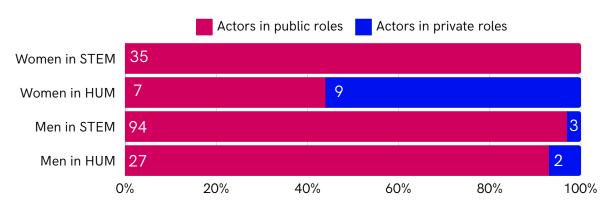


The Young Initiative Association from Romania analysed a Romanian language and literature textbook and a Physics textbook, both published by Art Klett Publishing House in 2019. The Romanian language and literature textbook, a core subject in the national curriculum, was compared with the Physics textbook, studied from the seventh grade of middle school for teenagers 13 - 14. In the Romanian language and literature textbook, 82 figures were analysed: 47 men (57.3%) and 35 women (42.7%). The Physics textbook showed a more pronounced imbalance, with 159 figures: 110 men (69.2%) and 49 women (30.8%). Overall, men outnumbered women in both textbooks, although the humanities textbook showed a relatively more balanced distribution. These percentages indicate that while the humanities textbook strives for a more equitable representation of genders, the STEM textbook continues to reflect a significant gender disparity, underscoring the ongoing challenge of achieving gender balance in educational materials.

Graph 4.2 Representation of Type of Actors in Active and Passive roles in Romanian Textbooks (100% stacked chart)



Graph 4.3 Representation of Type of Actors in Public and Private roles in Romanian Textbooks (100% stacked chart)

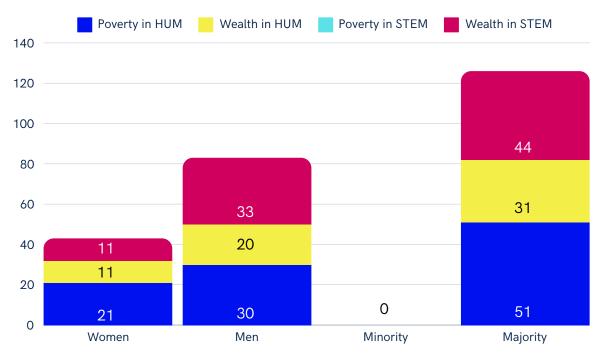


In Romanian textbooks, gender representation in public and private roles and passive and active roles varies significantly. The Romanian language and literature textbook (humanities) showed 82 figures: 47 men and 35 women. The Romanian language and literature textbook depicted 27 men and 7 women in public roles. Men in humanities were predominantly shown in active roles as main characters (23 instances), while women appeared in active roles 12 times. Conversely, women in STEM were more frequently shown in supporting/passive roles (39 cases), compared to men who were depicted passively 19 times. This suggests a bias where men are often portrayed in active, public spheres, while women are more likely to be shown in passive or supportive roles (as clear from graphs 4.2 and 4.3).

In the Physics textbook, there were 110 men and 49 women. Men were depicted in public roles 94 times and only 3 in private roles. Women, however, were depicted in public roles 35 times (0 in private roles) and 10 in active roles and 39 in passive roles. This highlights a more significant disparity in STEM subjects, where men dominate both public and active roles, and women are relegated to passive and private roles.

Interestingly, the Physics textbook (where STEM is traditionally perceived as a 'masculine' domain) showed a slightly more balanced representation than the literature textbook. The literature textbook still portrays women more frequently in passive or supporting roles despite featuring influential female literary figures. This reinforces traditional gender stereotypes, with men depicted as the main actors in public and active domains, while women are often confined to supportive or background roles. Additionally, 18 male scientists are highlighted in the Physics textbook, emphasising historical and modern achievements by men. Household duties of 'private life' are rarely mentioned.

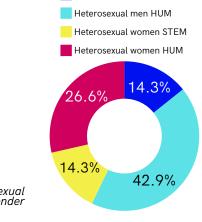
Graph 4.4 Representation of Wealth Levels Based on Gender and Ethnicity in Romanian Textbooks



In humanities, women are depicted in poverty 21 times (65.6% of female depictions) and in wealth 11 times (34.4%). Men are shown in poverty 30 times (60% of male depictions) and in wealth 20 times (40%). In STEM, women appear wealthy 11 times (100%), with no depictions of poverty, while men are shown wealthy 33 times (100%), with no instances of poverty. Ethnic minorities are not represented in any economic context, while the majority group is depicted in poverty 51 times and in wealth 31 times in humanities. In STEM, the majority appears wealthy 44 times, with no depictions of poverty. In the Physics textbook, there are several mentions of racial diversity, such as an Afro-American girl playing basketball with Caucasian kids and Asians working on a construction site, but the literature textbook largely neglects ethnic and cultural minorities, focusing predominantly on the Orthodox religion. This lack of representation contributes to a homogenous portrayal of society.

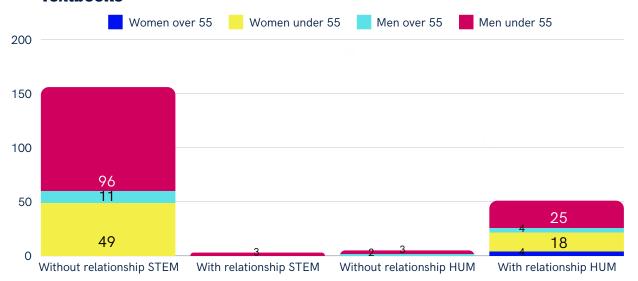
Graph 4.5 Representation of Sexual Orientation in Romanian Textbooks

The analysis of Romanian textbooks found minimal representation of sexual orientation. In the Physics textbook, there were only two pictures that indirectly hinted at heterosexual couples, while the Romanian language and literature textbook explicitly depicted heterosexual relationships and families in at least half of the texts. There were no references to homosexual relationships in either textbook. There is a lack of reflection of the spectrum of relational dynamics present in contemporary society.



Heterosexual men STEM *

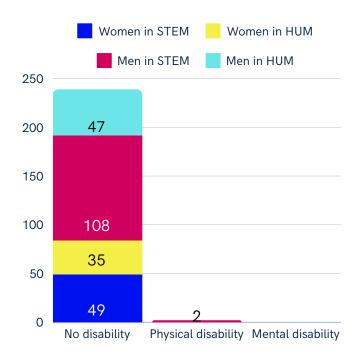
Graph 4.6 Men and Women in Family Relations by Age in Romanian Textbooks



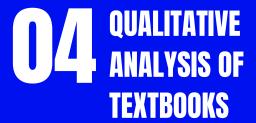
In Romanian textbooks, the depiction of men and women in family relations varies by age. In the Physics textbook, all women shown were under 55, primarily young girls or women, with no mentions of family relationships. Men were also mostly depicted as under 55, with two instances showing them in familial roles, such as a father explaining physical phenomena to his son. Older men were represented mainly as historical figures or scientists, while older women were almost entirely absent. This pattern suggests an age-related stereotype, where younger women are more visible, and older individuals, particularly women, are significantly underrepresented.

Graph 4.7 Representation of Disabilities in Romanian Textbooks

Disability representation Romanian textbooks is severely STEM textbook lacking. mentioned physical disabilities twice, referring to men, while the Romanian language and literature textbook had no characters with physical or mental disabilities. The gender in these mentions was neutral, but visual depictions indicated men. This lack of visibility for individuals with disability, especially women, in educational materials underscores the need for more comprehensive and inclusive representations.



^{*}The textbooks did not include any representations of other sexual orientations, such as gay or bisexual, nor did they depict any gender identities, such as non-binary.



CONTENT OF THE CHAPTER

THE LIMITED ROLES OF WOMEN AND MEN IN TEXTBOOKS

- Objectification of women
- Childcare
- Outdoor activities
- Beauty ideal
- Fictional women and real men
- Linguistic feminine gender
- Family ties

THE LIMITED REPRESENTATION OF DIVERSITY

- Diversity speakers
- An exercise on the topics of equality vs. gender stereotypes
- History as a limited source of diversity
- Eurocentrism
- Tokenism





The Romani culture remains highly traditional, with homosexuality considered taboo. Being expelled from the family and community is not an uncommon form of punishment in such cases.

THE LIMITED ROLES OF WOMEN AND MEN IN TEXTBOOKS

This chapter presents a part of the qualitative analysis of textbooks from Bulgaria, the Czech Republic, Italy, and Romania, focusing on the representation of gender and ethnic diversity. As a result of our intersectional analysis, we examine how these educational materials perpetuate or challenge traditional stereotypes through specific examples, and the inclusion of 'Diversity speakers'. The analysis reveals persistent gender disparities, with women often depicted in passive roles and men in active ones, and highlights the superficial treatment of ethnic diversity. By identifying these patterns, we aim to uncover the implicit stereotypes in these textbooks. The excerpts are based on analysed textbooks, including text examples and image interpretations.

OBJECTIFICATION OF WOMEN

An example from Czech textbook (Bičanová et al. 2022)

Stereotypes in depicting men and women often appeared in Czech textbooks. Women and girls were most often associated with appearance, for example: "I like how Eva's hair is done" or "She has a hole in her stockings". Please take a look at the figure in the Czech language textbook next. It illustrates a description of social etiquette. A snippet of the text suggests that the lyrics are aimed at men - "We'd rather skip anything that reliably drips on our tie..." (Špaček 2008 in Bičanová et al., 2022). Nevertheless, the picture shows a woman whose place in cultured society the reader is supposed to infer only from the exaggerated make-up and false eyelashes. It is a pity that the illustration does not refer to the active involvement of women in social life, but again, it was used here only as an example of what the outer shell of a person should or shouldn't look like. This is despite the fact that the text was addressed to men.



CHILDCARE

An example from Romanian textbook (Sâmihăian et al. 2019; Stoica et al. 2022)

Although one can appreciate that it is no longer only women who care for the household and children, the gender pattern is still reproduced. The pictures confirm that the gender stereotype of the division of housework (Connell & Messerschmidt 2005) is reproduced, as we see in the image where the father and son work in the garage. However, the depiction of a father caring for a small child in a stroller is engaging. At first glance, it defies the gender stereotype, but a more attentive viewer will see how the gender stereotype still appears here. The child is not in his arms, but in the pram, the father is not standing close to the child and is not touching him/her, but he is standing quite far from the pram compared to the suitcase, which he holds closer to his body. There is, therefore, an apparent reference to travel or work. His clothes also suggest a more formal environment. At first glance, it may seem that it is a non-stereotypical depiction. However, the appearance of the man suggests he is involved in public sphere activities - travelling, working or else. Thus, the picture supports the symbolic division of gender roles with man earning money and engaging in public activities. This subtle reinforcement of traditional gender roles through imagery is not an isolated phenomenon but rather a pervasive issue in educational materials.





OUTDOOR ACTIVITIES

An example from Italian textbook (Savino et al. 2018; Zanoli et al. 2017)

In the analysed textbooks, inequality in the depiction of gender in outdoor activities was very often represented. While male characters are represented in active spending of outdoor and leisure activities, such as doing sports, female characters are depicted only in certain 'soft' situations, such as sniffing a flower or picking fruit. The pictures below are, in this sense, a significant example. This disparity in the portrayal of outdoor activities reinforces gender stereotypes that assume women are more passive and sensitive while men are active and bold (Bem 1993). This affects perceptions and expectations of what is 'appropriate' or 'normal' behaviour for men and women in outdoor activities. Such portrayals also influence how women and girls imagine themselves and their options for outdoor activities. Suppose female characters are only portrayed in passive and aesthetically oriented situations. This can lower women's self-esteem and limit their ability to see themselves as active and courageous participants in outdoor activities (Bem 1993). Sandra Bem in her research and theoretical works show that depictions in texts and visual materials can influence perceptions and expectations of gender roles and possibilities. To create an equal and inclusive society, it is essential to emphasise a balanced and diverse portrayal of men and women in all kinds of activities, including outdoor ones, to avoid reinforcing stereotypes and limiting individuals' opportunities based on gender (Bem 1993).





BEAUTY IDEAL

An example from Czech textbook (Bičanová et al. 2022)

In the next picture, we see an illustration of a woman as a rendition of the story of the birth of Pandora from Greek mythology. The description of the image represents a particular ideal of beauty: "The goddess Athena gave her a splendid veil, a white robe, and a splendid waist, the goddess of beauty Aphrodite gave her unearthly grace, and Hermes gave her a lively speech and a sweet voice." (Bičanová et al. 2022). From the quote, we can infer that the idealized woman is expected to embody standards of beauty and, more broadly, traditional femininity, where the aspect of beauty is inseparable.



The image thus illustrates how the ideal of female beauty often manifests: the woman is hypersexualized (her body features unrealistic proportions, an extremely slim waist, and prominently defined breasts. She wears revealing clothing that accentuates her body's shape, with colours resembling her skin tone, creating an almost nude appearance. Her posture includes an arched waist to highlight her breasts and buttocks). She moves with delicate body motions and has long, light-coloured hair. The image represents an ideal of beauty that refers more to the contemporary sexualized discourse of female bodies than the period's ideal of beauty. Importantly, such an uncritical portrayal of beauty creates unrealistic expectations, affects the perception of oneself and the perception of one's sexuality and identity, and generally creates much pressure on girls at a sensitive age (in this case, twelve-year-old girls) (Fredrickson & Roberts 1997).

Even if the portrayal of Pandora had been more in line with the historical concept of beauty, it would still be an unfair situation where a woman appears only as an object of desire and beauty. The fact that the ideal of beauty is historically and locally variable is a well-known and documented phenomenon (Wolf 2015).

Representations highlighting the importance of women's appearance reinforce the notion of them being the embodiments of beauty to be viewed and admired rather than individuals valued for their diverse qualities. This can lead to internalised identification, where girls learn to view themselves through the critical eyes of others, often resulting in body dissatisfaction and disordered eating behaviours (Grabe, Hyde, & Lindberg 2007). To combat this, educational content should strive to present women in diverse and empowering roles, highlighting their achievements, strengths, and intelligence. This shift can foster a more holistic self-perception among young girls, promoting resilience against the pervasive pressures of societal beauty standards and contributing to a healthier, more inclusive educational environment.

FICTIONAL WOMEN AND REAL MEN

An example from Czech textbook (Bičanová et al. 2022)

Fictional characters such as Cinderella, Medusa, and Little Red Riding Hood usually played the leading role if women were talked about. On the contrary, in the context of men, references were often made to real-life figures such as real Czech kings and princes (in such cases, the most common cause was an attempt to connect the subject with history) or famous personalities such as Jan Neruda, Johann Sebastian Bach or Stephen Hawking. References to real women were rare (for example, the critical Czech writer Božena Němcová). Research also confirms this tendency at one of the elementary schools in the Czech Republic in 2018 (Slavík 2018). When analysing the decoration of common school spaces, the researchers revealed that there is a visible pattern of different girls' and boys' roles that were captured in the pictures.



While boys/men appeared significantly more often as active (playing games, fighting, travelling, exploring, performing professions of paid work in the public sphere, etc.) and technically proficient (controlling means of transport, weapons), girls were more significantly represented as spiritual beings (fairies, witches), or princesses who occasionally show overt emotionality (crying, are sad or scared) or are depicted as portraits and characters who do not perform any action, just passively watching boys's activities. They were strongly associated only with caring for others in the private sphere (Slavík 2018). This phenomenon, identified by Slavík (2018), highlights the pervasive nature of gender stereotypes in educational settings. Such representations can profoundly impact children's self-concept and aspirations. Boys are encouraged to see themselves as active and competent, with potential for public success, while girls are subtly guided toward passive and supportive roles. To address this imbalance, it is crucial to integrate more real-life female role models into educational content, showcasing women's contributions across various fields. This approach can help dismantle stereotypes and provide both boys and girls with a more balanced and empowering view of gender roles, fostering an inclusive environment that values and promotes gender equity.

LINGUISTIC FEMININE GENDER

An example from Czech Republic (Bičanová et al. 2022)

Also, professions are perceived in a gender-stereotypical way. Most professions in textbook are referred to by a generic masculine (forester, watchmaker, traveller, lawyer, chauffeur, pilot). Only those professions that are stereotypically perceived as feminine were marked in the linguistic feminine gender (this concerned, for example, the professions of educator, teacher, clerk, saleswoman, flight attendant, etc.)

This linguistic practice reinforces traditional gender roles by embedding stereotypes in the language used to describe professions. The use of the generic masculine for most professions implicitly suggests that these roles are predominantly male domains, thereby marginalizing women and perpetuating gender bias (Hellinger & Bußmann 2001). Conversely, marking traditionally feminine professions with the linguistic feminine further entrenches the idea that specific jobs are inherently suited to women. This dichotomy not only limits the aspirations of young girls but also reinforces the social expectation that men should occupy more prestigious or demanding professions. To promote gender equity, it is essential to adopt genderneutral language in educational materials, ensuring that all occupations are accessible to everyone, regardless of gender.

FAMILY TIES

An example from Romanian textbook (Sâmihăian et al. 2019; Stoica et al. 2022)

In most texts, examples depicting indoor and housing-related activities in the Romanian literature textbook tend to be shared between husband and the wife. It is sometimes explicitly said who takes care of the children. Still, in most of the stories, a woman (mother, grandmother, Virgin Mary, etc.) is the one who either seems more protective and attentive to the needs of the children or displays more affection towards them.

An illustrative example is Popa Tanda's story, a character who had one of the highest social statuses in 19th-century Romanian society (the priest) and who is intelligent, talented, hardworking and wise, while his wife does not have a name or a clear identity at the beginning of the story; she only exists as the priest's wife, no other specific characteristics are stressed upon besides she is "sick" at some point and has four children. She gains a voice when they both make decisions for the good of the household, therefore they have a respectful relationship overall, but the man is the head of the family. The women are presented as living in respectful, happy and harmonious relationships. Still, most of them do not exceed the responsibilities of bearing and raising children, even though they are formally educated (exclusively in Humanities - philology and pedagogy). Also, most of them present the same traits loving, caring and attentive to their children's needs. Furthermore, this gendered portrayal in the Romanian literature textbook needs to be more contextualized by historical norms. For instance, in Popa Tanda's story, the priest is depicted as having strong individual traits, while his wife is initially defined solely by her marital status and maternal role. Her lack of identity underscores women's secondary status, reinforcing the idea of men as decision-makers and women as caregivers.

Most of the textbook relationships base themselves on the mother-daughter duo. From a gender point of view, this is the impact of excessively binding expectations from men; in other words, behaviour that is not too emotional is expected from men, which limits the father in showing emotions and thus also strengthening the relationship between him and his children (Connell & Messerschmidt 2005). This fact is reflected in the portrayal of family relationships, and fathers are then less portrayed in these situations.

 $\Delta 7$

THE LIMITED REPRESENTATION OF DIVERSITY A THOUSAND TIMES DIFFERENT

DIVERSITY SPEAKERS

An example from Italian textbook (Savino et al. 2018; Zanoli et al. 2017)

Ethnic diversity tends to be substantially absent in every visual representation. The analysed textbooks, published between 2017 and 2018, sometimes represent ethnic diversity, but without any accurate contextualization. Elements of 'diversity', for example, humanistic contents, which are different from the strictly Western and Italian tradition, tend to be offered to the young reader and learner as 'exceptional': dedicated chapters that list authors such as Malcolm X as 'Diversity speakers'. 'Diversity speakers' become a voice for representing and promoting diversity, equality and inclusion in society. However, focusing only on exceptional individuals without the social and historical context of the marginalization of a given ethnic minority may not be as inclusive as it could be because recognition and respect are limited to only a small group of talented individuals.

In contrast, others from the ethnic group are ignored (Banks 2009). Closely related to the role of 'a spokesperson for diversity' is a phenomenon where, for example, companies (in our case, publishers or textbook authors' collective) emphasise their support or involvement in issues such as diversity, equality or inclusion, but in reality, this effort is not entirely authentic or does not bring fundamental positive changes. It can be a superficial effort to gain a good name or increase popularity without real commitment or involvement in solving the problem (EIGE 2024). This risk is borne by the practice above of using only 'diversity spokespersons' to fulfil the conditions of inclusion and diversity.



AN EXERCISE ON THE TOPICS OF EQUALITY VS. GENDER STEREOTYPES

An example from Italian textbook (Savino et al. 2018; Zanoli et al. 2017)

In connection with the solution to inclusion and diversity, the inconsistent content of the textbook *Nel cuore dei libri* (Italian language and literature) is very interesting; it explicitly addresses gender equality-related topics, proposing exercises and essays on themes such as gender pay gap and inequality of the job market. Still, if we focus on representation, there isn't sensitive, inclusive representation in the textbook. There is a substantial gap between masculinity and femininity representation. For example, there is an exercise where jobs and professions are addressed, and the representation includes, as depicted in the picture below, male pilots but female hostesses.



HISTORY AS A LIMITED SOURCE OF DIVERSITY

An example from Bulgarian textbook (Ivanova-Vardzhiyska et al. 2018; Ananiev et al. 2011)

In topics of aesthetics, artistic works are presented in a way that predominantly showcases heterosexual couples. Although these works are historical, they are approached exclusively through a heteronormative lens. The absence of homosexual relationships reflects the historical context in which homosexuality was criminalized and stigmatized (Connel & Messerschmidt 2005). Therefore, it is essential to include comments explaining why historical and artistic records are predominantly heteronormative. Additionally, we should pose questions that encourage critical thinking: Why are other sexual orientations not represented in these materials? This approach allows us to reflect on historical realities while fostering an understanding of how certain groups and their experiences have been systematically excluded or overlooked.



 $\Delta 9$

EUROCENTRISM

An example from Czech textbook (Bičanová et al. 2022)

"People in Need provided specialised training on personal hygiene to villagers, resulting in a 50% increase in people adopting proper hygiene habits. Local women learned to prepare nutrition for their children more effectively, and 25% more now breastfeed their newborns." (Člověk v tísni 2017 [online] in Bičanová et al. 2022).

Text and the image that showed Western humanitarian aid to African children is not an isolated phenomenon but part of a broader context that reinforces a Eurocentric view of other cultures (Said 1978). This view, although not necessarily intentional, may result from a lack of awareness of the Eurocentric perspective that occasionally appears in textbooks. A criticism of Eurocentrism is that this perspective creates imbalances and distorted images of other cultures (Said 1978). In the case of portraying Africans as malnourished and dependent on the help of Europeans, a stereotypical and paternalistic view is reinforced. In this way, African cultures are reduced to the position of objects that require rescue interventions or intervention by Europeans. Consequently, narratives are constructed from a European viewpoint, fostering asymmetrical power dynamics and suppressing the agency and voice of African peoples (Said 1978).



TOKENISM

An example from Bulgarian textbook (Ivanova-Vardzhiyska et al. 2018; Ananiev et al. 2011)

In the analysed textbook the phenomenon of tokenism takes place. "Tokenism is the act of including a few individuals from underrepresented groups in a superficial manner to create an illusion of diversity while not addressing the underlying issues of discrimination and exclusion..." (Develop Diverse 2024).

Let's take a look at the following example. On the image bellow there are two children who have other then white skin tone which can be seen as an attempt for more diverse representation. The text of the exercise do not thematise the ethnicity which can be (but does not necessarily have to be) a positive aspect as people of colour are not reduced to their ethnicity; there is no need to raise the topic of ethnicity so that people from minorities can be present.

However, taking into consideration the little appearance of non-white characters in the textbook this visual occurrence can be marked as manifestation of tokenism – the portrayals of non-white people are used for the sake of superficial diversity. The characters do not have agency, they are not the narrators of the story, they are used only as decoration, no attempt to create a deepper connection with the characters and their specific situation is made.

Moreover, on the picture, we can see that in both cases, non-white characters are children in contrast to white people being adults. Picturing a minority group only with children representatives may provoke the idea of a dependent people to be cared for; such representation can convey meaning to the entire ethnic minority (Said 1978) and can provoke paternalistic approach towards whole ethnic group.

In conclusion, in the textbook only few portrayals of non-white persons appear. When they appear, their representation is often shallow. Although there are little neutral or positive portrayals of non-white people the tendency is to depict them as being poor, dependent or in need which can be found as lacking complexity or even degrading. Overall such representation does not contribute to the empowerment improvement of the position of the ethnic minorities who are often disadvantaged.



COMPARATIVE DATA ANALYSIS AND IMPLICATIONS OF FINDINGS



CONTENT OF THE CHAPTER

- Gender representations in intersections
- LGBTQ+ at intersections
- Gender and ethnicity in wealth and poverty intersections
- Intersections of age, gender and of family ties
- Disabilities at intersections

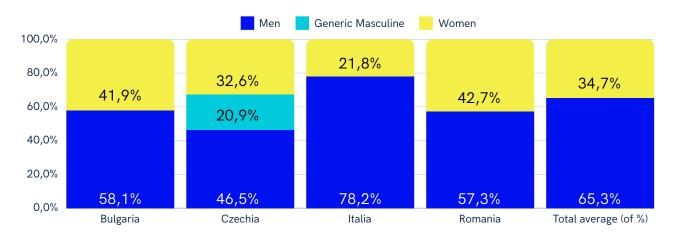
Gender representations in intersections

This comparative analysis revealed gender inequality in the Czech Republic, Italy, Bulgaria, and Romania textbooks. Across the countries, humanities textbooks feature 65.3% male and only 34.7% female representations (Graph 5.1). The most significant disparity in humanities textbooks was found in the Italian textbook, with 78.2% male and only 21.8% female representations. The situation is similar in STEM textbooks (Graph 5.2), with an even lower representation of women, except in the Italian textbook. On average, 75.7% of representations in STEM textbooks are male, and only 24.3% are female. Notably, the Bulgarian STEM textbook contains no female characters at all.

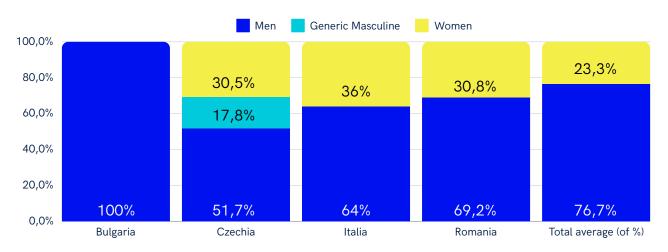
Moreover, this low representation of women and high representation of men is accompanied by the phenomenon of their gender stereotypical representation. To understand how men and women are represented in public and private spheres, it is crucial to acknowledge the underrepresentation of women, as previously mentioned.

In the next section, we will use a representation ratio to explore this intersection beyond the absolute numbers of men and women. This ratio captures the proportion of men and women within their respective populations (for example, how many women out of the total number of women are depicted in the private sphere). This approach allows us to gain deeper insights into the relative representation of genders in different contexts. The ratios in graphs 5.3 and 5.4 represent the ratios of public to private roles for men and women within the textbooks analysed. These ratios are calculated by dividing the number of individuals in public roles by the number of individuals in private roles for each gender. A higher ratio indicates a more significant proportion of public roles than private ones, while a lower ratio suggests a predominance of private roles. For example, a ratio of 18.59 for men in Italian humanities textbooks means that men are depicted in public roles almost nineteen times more often than in private roles. In contrast, a ratio of 0.08 for women in the same textbooks means that women are depicted in private roles much more frequently than in public roles. This analysis was necessary to quantitatively assess the extent of gender bias in portraying public versus private activities, providing a clearer picture of how textbooks perpetuate or challenge traditional gender stereotypes.

Graph 5.1 Representation of Men and Women in Humanities (100% stacked chart)



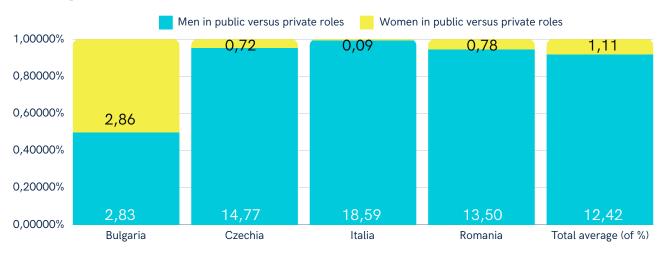
Graph 5.2 Representation of Men and Women in STEM (100% stacked chart)



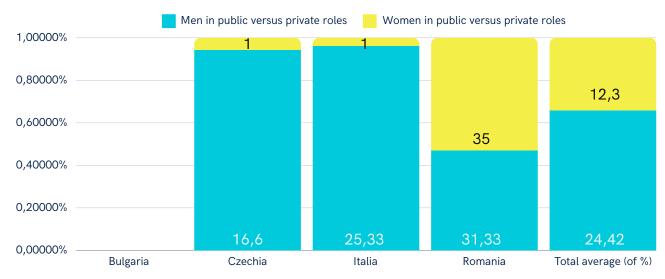
In humanities textbooks, the ratio for Bulgaria shows almost equal representation, with 2.83 for men and 2.86 for women. In contrast, the Czech Republic exhibits a stark imbalance, with a ratio of 14.77 for men and 0.72 for women, indicating a strong preference for depicting men in public roles. Italy and Romania also show significant gender biases, with Italy's ratios at 18.59 for men and 0.09 for women and Romania's at 13.5 for men and 0.78 for women. In STEM textbooks, the disparity is even more pronounced. Bulgaria shows no representation of public or private roles for either gender. The Czech Republic has a ratio of 16.6 for men and 1 for women. In contrast, Italy have ratios of 25.33 for men and 1 for women, highlighting an extreme underrepresentation of women in public roles. Romania's case in STEM is specific as there were no women depicted in private roles, only 35 women in public roles, 94 men in public roles and three men in private roles.

IIn addition, Graphs 5.3 and 5.4 illustrate the difference in these ratios among men and women. The ratios have been converted into percentage differences. This conversion allows for comparisons between men and women within the same country, making the relative magnitude of the ratios easier to understand. The graphs make the size of the differences clear in these representations. On average, across all countries, the ratio for the humanities was 12.42 for men in public roles (which are more than twelve times as many as in private roles) and 1.1 for women in public roles (about the same number of women in public roles as in private roles)—the percentage of ratios is a significant 92% for men and 8% for women. For STEM, the difference was 24,42 for men in public roles and 12,3 for women. Still, the results of this chart are only illustrative because the textbook, as mentioned, lacked representation of public and private roles in Bulgaria and women's private roles in Romania. The percentage comparison of the ratio is 66% for men and 34% for women (see Graph 5.3 and Graph 5.4).

Graph 5.3 Comparison of gender ratios in public and private roles in Humanities (100% stacked chart)



Graph 5.4 Comparison of gender ratios in public and private roles in STEM (100% stacked chart)



The analysed countries' results confirm the underrepresentation of women in terms of the frequency of depictions and the limited representation of both women and men in terms of their roles in textbooks. Studies from different countries and cultures have reached the same conclusion. Among them are a survey of Iranian English language textbooks (Lee and Mahmoudi-Gahrouei 2020), a study of Pakistani secondary school English language textbooks (Malik et al. 2021), and a comparative analysis of English language textbooks in Hong Kong and Australia (Lee and Collins 2010). These confirm gender inequality in textbooks in both developing countries as well as in developed countries.

The Pakistani and Iranian comparative analysis (Lee and Mahmoudi-Gahrouei 2020; Malik et al. 2021) also surveyed gender non/activity in textbooks. It also found that textbooks often portrayed women as inactive and less critical to the story's plot, while men were active and plot movers. Our data also support these findings.

We use the same ratios as in Graphs 5.3 and 5.4 to analyse the representation of men and women across active, principal, and supporting or passive roles. In this section, we only discuss ratios that are more directly comparable. Graphs 5.5 and 5.6 show the ratios for humanities and STEM textbooks and their percentage differences. Within the humanities textbooks, the Romanian textbook had the most minor differences (ratio of 1.21 and 1.09 for males and females, respectively, the ratio of representations of leading roles to passive/supporting ones). Overall, the difference again favoured men's representation of active or leading narrative roles (1.84) versus women's (0.79), a percentage of 70% to 30%. These ratios were already more balanced in the Czech STEM textbooks (9.9 for men and 11.75 for women) and Romanian STEM textbooks (0.17 for men and 0.26 for women).

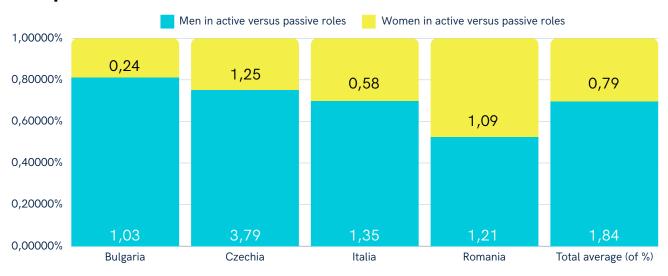
Thus, within the STEM textbooks across countries, the difference in the representation of significant roles between men and women was smaller than for the humanities, i.e. a 72% to 28% ratio of ratio sizes (10.83 for men and 4.26 for women) in 'favour' of men.

The phenomenon illustrated in Graphs 5.1 to 5.6 reveals the depth of gender inequality, mainly related to STEM textbooks. There, the under-representation of women appears as an even more striking problem. Our findings show that STEM textbooks are more often set in the context of the public sphere, and this trend was confirmed in the Czech, Italian, and Romanian STEM textbooks. In interpreting the Bulgarian STEM textbook, the social context is absent, i.e. neither the private nor the public sphere appears. The omission of the private sphere from the STEM textbooks leads to a more remarkable absence of women in these textbooks, as the area with which they are stereotypically associated is omitted.

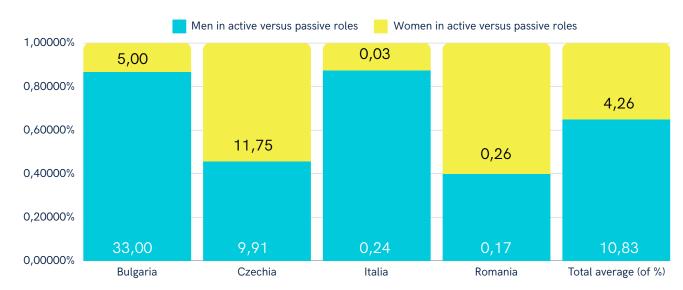
In the context of the under-representation of women and girls in STEM content, there is a relatively international solid trend to include social issues in the science curriculum. This is to counteract the declining interest in natural sciences and ensure that pupils will learn how to apply scientific knowledge and solve controversial or socially relevant problems (Morris 2014).

These questions are linked to scientific issues and include social, ethical and environmental aspects. Such a change in the conceptualisation of the curriculum in STEM textbooks necessarily also brings with it more opportunities and risks in the portrayal and representation of men and women. These STEM textbooks are generally intended to increase interest in these fields, so observing the impact of such practices on girls' interests is relevant. Furthermore, these textbooks' lack of social context can reinforce the idea that STEM fields are disconnected from the real world and the broader social issues that affect people's lives. This was the focus of a doctoral study that examined girls' responses to natural science lessons that included social aspects in their teaching. Some girls did not consider such a curriculum to be 'proper' science because they felt that 'proper' science only involved a set of facts and experiments. Still, others saw it as a positive development. According to Helen Morris, the construction of science as a set of facts without a social context must be questioned to legitimise the inclusion of social science issues in natural science (Morris 2014)

Graph 5.5 Comparison of gender ratios in active and passive roles in Humanities (100% stacked chart)



Graph 5.6 Comparison of gender ratios in active and passive roles in STEM (100% stacked chart)



It is appropriate to recall the statement of gender theorist and philosopher Judith Butler. In her writings, Butler argues that the binary perception is not only limited to the male/female gender binary but also manifests itself in other dualities, such as the culture/nature, and reason/emotion divisions (Butler 2003 in Nagl-Docekal 2017). Also, this 'natural sciences vs. humanities' pairing involves a perception through which we can clearly discern which of these pairings is masculine, rational, and more prestigious compared to social, emotional, caring, and less respected. Morris calls for the recognition of the value and the necessity of the social perspective in the STEM curriculum because, she argues that without this corrective step, such a 'softening' of the hard sciences could lead to its devaluation. This prediction is based on the aforementioned and socially skewed perception of the different values of the male and female gender.

The fact that STEM textbooks depict men more often than women can have important implications for individuals and a society as a whole. This affects women because they are usually excluded from well-paid, high-skilled jobs in STEM fields, limiting their career advancement and earning potential (OGCR 2021). In addition, another consequence is the limitation of innovation and progress, which impacts society as a whole. Different perspectives and experiences are needed to solve complex problems and develop innovative solutions. When women are excluded from STEM fields, their perspectives and experiences are also excluded, limiting the creativity and effectiveness of teams and organisations working in STEM fields.

The problem of the underrepresentation of women in STEM fields and the gender-stereotyped portrayal of men and women in textbooks, in general, is rooted in historical and cultural factors. One factor is the historical exclusion of women from formal education and scientific institutions. Women were often not allowed to attend universities or participate in scientific societies, and those who did enter these fields frequently faced significant discrimination and barriers preventing them from succeeding. Even though these formal barriers no longer exist in the European Union, gender stereotypes and prejudices persist, affecting career choices and opportunities for girls and women (Abir-Am 2010). For example, girls are often socialised (even via textbooks) to believe that they are not as good at maths or science as boys, which discourages them from studying STEM (for literature dedicated to this, see Bian et al. 2017; Wood and Eagly 2012; Fiske et al 2002; Davies et al. 2002; Murphy et al. 1007; Cvencek et al. 2011; Spencer et al. 1999; Galdi et al. 2014).

However, several studies show that differences in intellectual ability, including mathematical ability, between boys and girls are small or negligible. However, as age increases, differences in achievement emerge but still need to be more significant and consistent that they could be attributed to biological differences between males and females (Hyde et al. 2008; Else-Quest et al. 2010; Halpern et al. 2007). For example, repeated international research by the Programme for International Student Assessment (PISA) shows that in particular disciplines, boys outperform girls in some parts of the world, and girls outperform boys in different parts of the world (OECD 2019). For example, boys outperformed girls – but only by 5 percents – in mathematics, on average, in their results across OECD countries (OECD 2019). Moreover, boys significantly outperformed girls in mathematics in 32 countries, while the opposite pattern was observed in 14 countries. The most significant difference in gender performance in mathematics was observed in Qatar, where girls outperformed boys by around 24 percent.

A study examining the differences in the performances of girls and boys worldwide suggests that the gender stereotype of brilliance has a racial and cultural component. The research revealed that American children, as well as Chinese ones, associated brilliance with white males compared to white females. However, once Chinese and American children were asked to associate brilliance with Asian people, they attributed brilliance to Asian women rather than Asian men. Thus, research shows that adopting gender stereotypes of brilliance differs concerning cultural or racial context (Yuhang et al. 2022; Muñoz 2022).

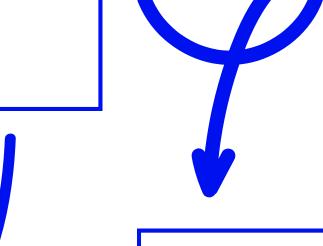
The perception of professions that are supposedly more suitable for boys and girls is taken from visual content all around us, but it is not the only cause of gender-stereotyped career choices. The choice of a future profession also depends on whether that profession is perceived as financially lucrative. This aspect is often considered when boys choose their future occupation because of the stereotypical perception of men as breadwinners. As for the future occupational choices of girls' the possibility of combining a career with motherhood or other care is considered. This is one of the reasons there are specific sectors of the labour market where women tend to accumulate, eventually leading to feminization. They are typically characterised by care work, such as teaching, health and social care. This gives these professions an 'image' of suitable employment for women, and as a result, gender stereotypes associated with women are transferred to these professions. In other words, jobs focusing on emotional and caregiving aspects are often perceived as natural for women, and as such, they are frequently considered to require little effort or non-specialized expertise. This perception, coupled with the stereotype that women are not primary breadwinners, results in these professions being undervalued and underpaid in society (Crompton and Sanderson 1990).

A negative consequence of the above is the unequal pay between women and men. As a result of unequal pay and women's lower economic participation (due to their usual role as the primary carer in the family and the consequent need to reconcile work and personal life), women, especially single mothers, are more likely to suffer from poverty (Muñoz 2022). Single mothers of working age who take proper care of their children cannot, in most cases, afford to put money aside for the future. And in retirement, she is often left with a tiny pension (Muñoz 2022).

"IN STEM TEXTBOOKS, THE DISPARITY IS
EVEN MORE PRONOUNCED, WITH AN EVEN
LOWER REPRESENTATION OF WOMEN, EXCEPT
IN THE ITALIAN TEXTBOOK."

ANALYSED COUNTRIES
CONFIRM THE
UNDERREPRESENTATION
OF WOMEN IN TERMS OF
THE FREQUENCY OF
DEPICTIONS."

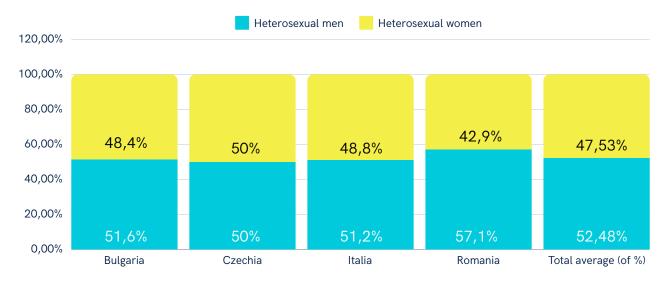
"THE RESULTS IN



"THEY ALSO SHOW
THE LIMITED
REPRESENTATION
OF BOTH WOMEN
AND MEN IN
TERMS OF THEIR
ROLES IN
TEXTBOOKS."

LGBTQ+ at intersections

Graph 5.7 Representation of Sexual Orientation (100% stacked chart)



*The textbooks did not include any representations of other sexual orientations, such as gay or bisexual, nor did they depict any gender identities, such as non-binary.

This comparative analysis revealed that precisely 0% of LGBTIQ+ representations and identities are depicted in textbooks from the Czech Republic, Italy, Bulgaria and Romania. The main finding is that sexual orientation appears in textbooks only in representations of a heterosexual orientation. We examined sexual orientation in combination with the intersection of gender, i.e. male, female and non-binary persons. The percent of depictions of heterosexual orientation in men appeared in 52,48% of cases and in women 47,53% of cases. Non-binary people were depicted in 0%, so their sexual orientation was not present either. Graph 5.7 also illustrates that differences between representations throughout countries' textbooks are almost the same. In humanities textbooks, there were naturally more representations of sexuality (heterosexuality) than in STEM.

The silence regarding sexual orientation in textbooks does not only include relationships but the absence of knowledge and culture, which to date includes movements, policies, rich artistic manifestations, literary works and much more. The silence covers almost everything that can be traced back to sex, being it even today one of the biggest taboos in our classes, even considering the general – and genuine – need of adolescents and young adults to learn related to sex education.

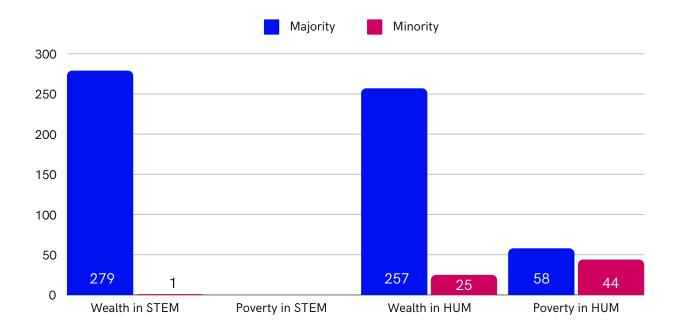
Discrimination of homosexual relationships is more than demonstrable in humanities textbooks about the frequency of heterosexual relationships. Even if in STEM textbooks, on the one hand, it is a lack of interest or inability to place the so-called 'hard' science in social contexts, and therefore there is no opportunity to present sexuality, it is also about discrimination. The reason is that the underrepresentation of gender identities and sexual minorities in STEM textbooks is very much connected to the expectation that science is an identity-neutral space or a space where a person's identity seems to have no bearing on the situation, but this covertly results in the normalisation of heterosexuality and cisgender identities in scientific spaces (Yoder and Mattheis 2016). Without critical reflection on this implicit 'don't ask/don't tell' gender and sexual identity policy that persists in STEM fields (Bilimoria and Stewart 2009) and STEM textbooks, a large proportion of LGBTQ people in STEM professions will hide their identity. The american research 'Queer in STEM Organisations: Workplace Disadvantages for LGBT Employees in STEM Related Federal Agencies' found out just under three percent (2.8%) of their sample identifies as LGBT, which is noticeably lower than national estimates that 3.4% of the U.S. population identifies as LGBT (Ragins 2008). It suggests that LGBT persons are under-represented in these STEM-related agencies relative to their representation in the U.S. population in general (Cech and Pham 2017).

Discrimination against LGBTQ in STEM has the following forms. The research 'Systemic inequalities for LGBTQ professionals in STEM', for example, shows that LGBTQ experts in STEM are more likely to experience career limitation, harassment and professional devaluation than their non-LGBTQ colleagues. They also reported more frequent health problems and were more likely to intend to leave STEM. These trends were similar across STEM and employment sectors (Cech and Waidzunas 2021). Additionally, male LGBT undergraduates are much less likely to stay in STEM degrees than straight men (Hughes 2018). Thus, there is an obvious problem with the recruitment and retention of LGBT individuals in STEM fields. In terms of education, the data also shows that male LGBT undergraduates are much less likely to stay in STEM degrees than straight men. Additionally, Intersectional research surprisingly showed that LGBT status has the most significant average effect on salary, not gender or disability (Cech 2022). These findings reveal LGBTQ status as a clear axis of inequality in STEM.

Globally, 5–10% of any population is estimated to comprise LGBTIQ people (Anon 2016). Roughly this percentage of the population will also be in the Roma minority, which is very numerous in the surveyed countries. Due to the absence of sexual orientation other than heterosexual in the textbooks of the Czech Republic, Bulgaria, Romania and Italy, it is clear that LGBTQ + Roma are an utterly invisible group in textbooks. Being represented in textbooks would be an essential step towards addressing the multiple discrimination this group faces. "This minority often experiences discrimination not only from the majority due to ethnic origin or sexual orientation but also from Roma society, which is very traditional and conservative and sees homosexuality as something unacceptable. Sometimes, LGBTIQ Roma are excommunicated by their family or the community; consequently, they find themselves homeless, alone, with no family or friends" (Fremlová and Bučková 2021).

Gender and ethnicity in wealth and poverty intersections

Graph 5.8 Count of majority and minority across the countries surveyed relative to the representation of wealth and wealth



Secondary socialisation, which takes place at schools, is vital in integrating minority groups into society. Due to the constant migration flows, the structure of societies is becoming more and more diverse. Still, as the analysis of the textbooks has shown, these changes are not reflected in school textbooks of any of the analysed states.

For example, it is estimated there are 10 to 12 million Roma people living in Europe, making the Roma minority the largest ethnic minority in Europe. In Romania, Roma people make up to 30% of the population; in Bulgaria, at least 12.2% of the population are Roma people; in the Czech Republic, they make up 3.2 % of the population; and in Italy, Roma people represent 1.7 % of the makeup of its population (Lecerf 2024). Our analysis of textbooks from Bulgaria, Czech Republic, Italy and Romania shows that ethnic and cultural minorities (Roma minority and others) are underrepresented in the textbooks. And because the space for their representation is thus limited in the textbooks, it is unrealistic to depict their internal diversity adequately. The underrepresentation compared to the population makeup of each country is very significant (see Graph 5.8).

The underrepresentation of the minorities is also documented by the study 'The Representation of Roma in European Curricula and Textbooks' (Spielhaus 2020), which analysed the portrayer of Roma people in the textbooks of 22 states (Specifically Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Hungary, Italy, Republic of Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Spain, North Makedonia, United Kingdom; and Kosovo). Even though the representation of Roma minority differed by the state and by "the extent and manner in which Roma are mentioned" (Śpielhaus et al. 2020), the underrepresentation of Roma is apparent in most of these textbooks. If we look specifically at their analysis of textbooks from Bulgaria, Czech Republic, Italy and Romania, we see that out of 76 analysed Bulgarian textbooks, only 16 of them mentioned the Roma people. Among the 36 Czech textbooks, 11 contained references to the Roma minority. In the case of Italy, the mentions were the least frequent. Of the 33 Italian textbooks, only 8 mentioned Roma. In contrast, a significant proportion, 18 out of 25 Romanian textbooks, mentioned the Roma minority.

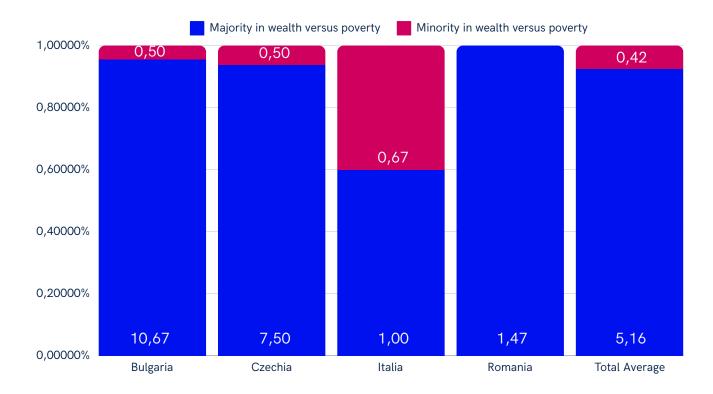
In cases where there is a reference to the historical position of Roma, Roma people are often depicted only as victims without further contextualization of their position from a structural point of view, without any voice or agency, and their imagery is often stereotypical (Spielhaus et al. 2020). Roma people in textbooks are usually viewed as a homogenous group that is segregated/separated from the majority even though there is not almost any information about their culture (Spielhaous et al. 2020).

However, it is not only a problem of disproportionate representation of the national minority in the textbooks of the given states in relation to the actual population distribution of the society. It is also necessary to deal with the representation of other cultures, both ethnic and religious. That is important because pupils are subjected to the representation of different cultures in various media without access to other, more objective sources.

The research 'Race and Affect in Digital Media Cultures' points out how much influence representation itself has when considering the functioning of racism (Alinejad 2023). Given the widespread adoption of digital technologies, practices of racial and ethnic ordering and discrimination are reproduced, re-evaluated and, to some extent, reinvigorated in ways that are unique to online space. As the mentioned research argues, race and its representations require revision in light of these 'online' communications that range from hate speech to hashtagged anti-racist movements (Alinejad 2023). According to the researchers, "the notion of representation has sustained relevance for under-standing how emergent digital media forms produce ideologies of race and ethnic difference." (Alinejad 2023) With this lack of objective sources of knowledge about minorities (their traditions, history and daily life), the underrepresentation of ethnic, cultural or religious minorities in

textbooks is problematic, as they do not cultivate pupils' critical thinking and leave them uncritically accepting racist and xenophobic information from digital sources. This also opens up the issue of minorities both in textbooks and in the classroom in general as the problems of segregation and desegregation in the education system are brought out.

Graph 5.9 Comparison of ethnicity ratios in wealth and poverty representations in Humanities and STEM (100% stacked chart)



Under these conditions, we can expect that it is difficult for most students to understand and overcome the differences between them and their minority classmates and create a sense of inclusion for everyone. At the same time, this stereotypical imagery and information create obstacles for the minority pupils in creating a sense of belonging to the school environment, as well as to society and finding their place in it. That is one of the reasons why minority pupils need to see 'points of self-identification' with the 'grand narrative' of the school subject and the whole school system. Another reason, as Wilkinson (2014) has shown in his research on the absent curriculum in history teaching, is that this has significant consequences on the sense of belonging and the connection to these subjects. As stated above, Atkins, Fertig and Wilkins (2014) have shown that "having (even a passive) role model that shares the same identity as studied minorities can lead to their improved educational performance" (Atkinson et al. 2014). Wilkinson shows that a curriculum which would not include minorities, their histories, and contributions to history affects students' connectedness to the subject and can lead to harder remembering, and understanding of the subject and consequently even lowering their performance (Wilkinson 2014).

In addition to social exclusion, race has the most significant impact on careers and, professional opportunities and respect, as evidenced by intersectional studies within the STEM field, such as "The intersectional privilege of white able-bodied heterosexual men in STEM". This research found that differences by race/ethnicity especially for black - compared to white respondents - had the largest consequences for this (in addition to social inclusion) professional area (Cech 2022). Our analysis repeatedly shows that the STEM field needs to be more socially flexible to embrace inclusion or diversity.

Another intersection we can practically illustrate with data is the connection between the categories of wealth and poverty within examples that reveal socio-economic status. In all observed STEM textbooks across the countries, as shown in Graph 5.8, 279 individuals were depicted as part of the majority with readable wealthy socio-economic status, and only one as part of the minority. Poverty was not depicted at all in STEM textbooks for either the majority or the minority.

In humanities textbooks, the distribution was more varied: 257 examples of the majority were shown as wealthy, compared to 25 of the minority. Poverty was depicted in humanities textbooks with 58 examples from the majority and 44 from the minority. When minorities were represented, they were disproportionately shown in the context of poverty. Poverty was not depicted at all in STEM textbooks.

To compare the results of depicting poverty and wealth within ethnic groups across countries, ratios (as used in previous chapters) are more effective than absolute numbers. These ratios best illustrate the difference in representation between minorities and the majority. In Graph 5.9, we can see that the largest difference in ratios is in Bulgarian textbooks, where the majority in wealth was depicted more than ten times as much as in poverty (ratio of 10.67), and minorities were shown twice as often in poverty (ratio of 0.5). This difference cannot be calculated in Romanian textbooks as there were no representations of minorities in roles of poverty or wealth. In Italian textbooks, the ratio was more balanced, with a ratio of 1 for the majority (equal examples depicting the majority in wealth and poverty) and 0.5 for the minority (twice as many minorities depicted in poverty as in wealth). Overall, poverty is underrepresented in textbooks across both the majority and minority groups. In STEM textbooks, socio-economic division is not a topic, while in humanities textbooks, poverty is still underrepresented, with more representations coming from clearly minority groups.

An explanation for the representation of welfare and wealth rather than poverty in textbooks could be the findings of studies dealing with neoliberalism in the content of global English textbooks. One of these studies, entitled "Neoliberalism and global textbooks: a critical ethnography of English language classrooms in Serbia', claims that the neoliberalism contained in the textbook motivates pupils to learn English and transform themselves into suitable citizens and workers for the current economic order (Bori 2021).

"MIGRATION IS MAKING SOCIETIES
MORE DIVERSE, BUT THIS IS NOT
REFLECTED IN THE SCHOOL TEXTBOOKS
OF ANY OF THE ANALYSED STATES."

Graph 5.10 Frequency of men and women across the countries relative to the representation of wealth and poverty



Furthermore, we were interested in the general presentation of women and men in connection with wealth and poverty, thanks to which we could reveal at least a potential tendency towards multiple discrimination of minority women.

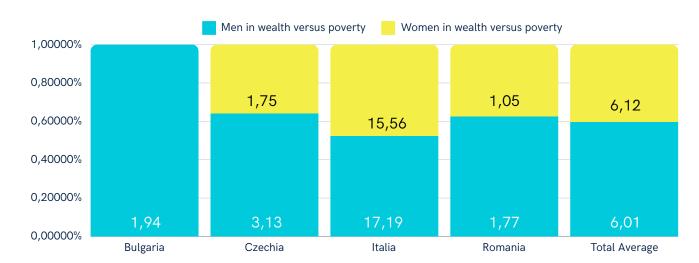
Based on the division of textbooks into STEM and humanities across all observed countries, there were 513 instances depicting identifiable characters with a gender associated with wealth and 114 with poverty. The most significant disparity was again found in STEM textbooks (see Graph 5.10), where only two instances of poverty were depicted, compared to 303 wealth cases. In humanities textbooks, the difference was more minor but still showed a significantly higher representation of women in the context of poverty.

This difference can be better compared across countries using wealth versus poverty representation ratios. From Graph 5.11, it is evident that Bulgarian textbooks did not include representation of women. The slightest difference was in the Italian textbook, where women depicted as wealthy were more than 15 times more frequent (ratio 15.56) than those described as poor. Similarly, men were portrayed as wealthy up to 17 times more often (ratio 17.19). Therefore, the notable difference was not in the representation of men and women in wealth but in the overall depiction of wealth across characters.

In Czech and Romanian textbooks, the situation was similar. In Czech textbooks, men were more often depicted as wealthy than poor (ratio 3.13), and the same was proper for women, but to a lesser extent (ratio 1.75). In Romania, the ratio for men was 1.77 and for women 1.05.

Overall, there is a significant underrepresentation of poverty compared to wealth, with poverty more frequently represented by women. Connecting only men, stereotypically the breadwinners, to poverty or wealth reproduces embedded gender stereotypes of European societies. This is supported by the findings about gender representation analysed above, showing that women in textbooks are more likely to be represented in connection to a private sphere than to the public one.

Graph 5.11 Comparison of gender ratios in wealth and poverty representations in Humanities and STEM (100% stacked chart)



However, it must be said that due to the low representations of minorities, we did not identify the intersection with gender in our analysis, as these would be small units. Nevertheless, attention should be drawn to the fact that each minority might have different gender roles and norms, which might differ from those of a majority. What might be acceptable or desired for one minority group might not be sufficient for the majority. This might be looks, closing, way of talking, and manners. In other words, stereotypes that are linked to minorities are usually gendered. This means there are different stereotypes for ethnic women and men, which might affect the educational trajectory of those minority students (Riegle-Crumb 2006).

This intersection of gender and ethnicity must be reflected when the need to present a multicultural society is heard. Researchers (Pollard 1993) have shown that intersecting gender and ethnicity can combine "either increase or decrease the level of school disadvantagement of some groups of these children" (Smetáčková and Jahodová 2015).

For example, studies conducted in the United States show that African American boys from socioeconomically disadvantaged families achieve poorer educational outcomes at the elementary school level compared to girls from the same background (Pollard 1993).

As Jahodová stated: "The relationship between ethnicity, sociocultural origins and gender can have different forms, and that is the reason why the inequalities based on these signs can be either mutually highlighted, more significant or weakened" (Smetáčková and Jahodová 2015). Some researchers (Jarkovská et al. 2015) state that this underlining of ethnicity appeared in their research only in some cases of cultural minority members, but not in the case of Roma minority, where highlighting of their ethnicity prevailed.

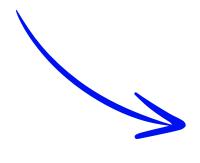
The homogenous portrait of any minority is problematic for many reasons. Still, with the arrival of new refugees from Ukraine as well as from Syria and other countries, the heterogeneity of these groups becomes more apparent. Both textbooks and teachers should account for it.

There is a massive difference in whether migration is voluntary or not. Living in war and running from it can have strong psychological consequences for these pupils, and as such, it can make it harder for them to integrate (Reisenauer, 2022). Experiences and backgrounds are unique for each student, and there is no homogenous (Ukrainian, Syrian, or other) minority.

As the Diversity and Citizenship Review authors stated: "While it is crucial to understand another person's religion, ethnicity and culture to appreciate more fully who they are, it is then simplistic to define them by one of these alone" (Ajerbo et al. 2007).



"OVERALL, THERE IS A SIGNIFICANT UNDERREPRESENTATION OF POVERTY COMPARED TO WEALTH, WITH POVERTY MORE FREQUENTLY REPRESENTED BY WOMEN IN TEXTBOOKS."



"THIS INTERSECTION OF GENDER AND ETHNICITY NEEDS TO BE REFLECTED WHEN THE NEED TO PRESENT A MULTICULTURAL SOCIETY IS HEARD."

Intersections of age, gender and of family ties

Ageism refers to any kind or act of discrimination based on numeric age. Usually, it entails the presumption that most people have a poor quality of life. The first time that the term 'ageism' was coined in literature was around the 1960s (Butler 1969) when the first signs of discrimination were shown to specific people just because they were old. Commonly, the term 'old' is composed (Kydd and Fleming 2015) of the young old (65-74), the middle old (75-84) and the old old (85+). Butler (1969) used term ageism in relation to the elderly. Today, however, it has been extended to all age groups who experience discrimination because of their age. But it can still be interpreted as the exclusion of older people from everyday life.

The quantitative data within Graph 5.12 compares the differences in the representation of age and family ties or private life mentioned in the previous chapters across all countries. There is a comparison of separate HUM and STEM textbooks across all states combined and an overall average across all states. The chart is again based on a comparison of the ratios. The ratios in Graph 5.12 represent the roles with or without readable family ties for men and women within the textbooks analysed, also divided by the category of age (above and under 55 years). These ratios are calculated by dividing the number of individuals in family roles by the number of individuals without family roles for each gender. Higher ratios indicate a more significant proportion of family ties, while lower ratios suggest a predominance of private roles or "without clear family ties".

In Bulgaria, the ratio for older women (55+) is 0.000, indicating no representation of family ties, while older men have a ratio of 0.083. In the Czech Republic, older women have a higher family ties ratio of 0.929 compared to 0.533 for older men. In Italy, the ratios are 0.630 for older women and 0.206 for older men. Romania has the highest ratio of older women at 1.000, compared to 0.235 for older men. For those under 55, the ratios in Bulgaria are 0.286 for women and 0.229 for men. In the Czech Republic, the ratios are 0.513 for women and 0.230 for men. Italy's ratios are 0.434 for women and 0.264 for men, while Romania's are 0.269 for women and 0.220 for men. Comparing STEM and humanities textbooks, STEM shows lower overall family ties representation, with ratios of 0.412 for older women, 0.100 for older men, and 0.304 for younger women compared to 0.153 for younger men. Humanities textbooks depict older women with a ratio of 0.900, older men with 0.333, and younger women at 0.508 versus younger men at 0.321. Overall averages across all categories indicate higher family ties representation for women aged 55 and above (0.640) compared to men (0.265) and for younger women (0.375) compared to younger men (0.236).

Graph 5.12 Comparison of Family Ties Ratios Divided by Age Category in Humanities and STEM (100% stacked chart)





The graph 5.12 illustrates the ratios graphically if we were to calculate them to 100%. On the left-hand side (-1 to 0) is a comparison of men under 55 and women under 55. On the right side is a comparison of men and women over 55. The comparison shows that the most significant difference in the representations of the under-55 category is in the STEM textbooks (34% to 66%) and especially in the Czech textbooks, where women are more often portrayed in family roles as mothers and caretakers of children. The ratio difference overall is 39% for men and 61% for women. In the category of older men and women (55+) in textbooks, the difference

is even more pronounced (except in Bulgaria, where no women over 55 were represented), where the overall average reaches up to a difference of 71% for women and 29% for men. Again, the difference is more pronounced in the STEM category and Romanian textbooks. The results show that women are significantly and unambiguously more represented in family roles, a difference that deepens for the category of women 55+.

Age is a significant aspect affecting people's lives, much more so in intersection with other categories. The combination of ageism and sexism has a unique and aggravating effect on discrimination and inequality, which leads to older women being disproportionately affected by health conditions like depression and suffering from the impact of gender inequalities in older age that manifest in multiple aspects, including legal status, access and control of property and land, access to credit, and succession rights (Gutterman 2023). For example, combinations of gender and age play a significant role in individuals' career opportunities and experiences in the labour market. According to a 2020 study by the European Commission, women aged 25-34 are 30% less likely to be employed full-time than men in the same age group. However, a similar disproportion is evident in other age categories. According to the same research, women of pre-retirement age are 20-30% less likely to be employed than men of the same age (Eurostat 2020). Women in both age categories often face age discrimination due to gender stereotypes, as they are expected to take care of the family (children, grandchildren, partners, etc.). Our analysis has shown that women of retirement age are often portrayed primarily as grandmothers taking care of grandchildren without showing other interests, reinforcing this stereotypical image.

However, the intersection of age and gender has other implications. Research shows that older women are less likely to receive adequate diagnosis and treatment for heart disease compared to older men, which may be due to persistent gender bias in the healthcare system (Beery 1995). In addition, according to 2019 OECD statistics, women over 65 in Europe are twice as likely to live in poverty than men of the same age (OECD 2023). This phenomenon is called the feminisation of poverty, which means "increasing incidence and prevalence of poverty among women compared to men, as a result of structural discrimination that affects women's lives and is reflected in lower salaries, lower pensions, fewer benefits, etc." (EIGE 2024).

However, intersections of gender and age can also combine with, for example, ethnicity and/or sexuality to create specific forms of discrimination. An example could be that LGBT Latine women were over four times more likely to lack enough food to eat. In comparison, 6.0% of non-LGBT white, non-Hispanic adults did not have enough food to eat in the past seven days (Chan et al. 2023).

Discrimination based on a combination of age, gender and ethnicity is also evident, for example, in access to and quality of health care. According to research, older black women with early-stage endometrial cancer have a lower likelihood of receiving influenza vaccination and screening mammography compared to white women (Martin et al. 2017). At the same time, older black women are more likely to have their heart disease symptoms underestimated or misdiagnosed compared to white men of the same age. The same study also showed that older black women are less likely to receive invasive medical procedures such as angioplasty or bypass surgery, which are often offered to white men (Felix, Lehman, Nolan et al. 2019).

It is important to portray older people in a variety of ways in the media, but also in textbooks, especially to maintain a more realistic representation, as older people are a diverse group with different experiences, interests and abilities. Stereotypical portrayals can lead to a distorted perception of this age group, which will increase prejudice and reinforce ageism, instead of media representation contributing to greater inclusion and equality of older people in society. Showing active and successful older people can inspire younger generations and show that age is not a barrier to living a full life. Older people should be viewed and treated as a valuable resource in society, rather than just as inferior persons who need to be looked after and who cannot bring any real and lasting value when it comes to influencing younger generations. Also, as research show, exposure to positive portrayals of old age can lead to a less negative perception of personal aging and a stronger calming physiological response for older adults (Fung et al. 2015).

"THE RESULTS SHOW THAT WOMEN ARE SIGNIFICANTLY AND UNAMBIGUOUSLY MORE REPRESENTED IN FAMILY ROLES, A DIFFERENCE THAT DEEPENS FOR THE CATEGORY OF WOMEN 55+."

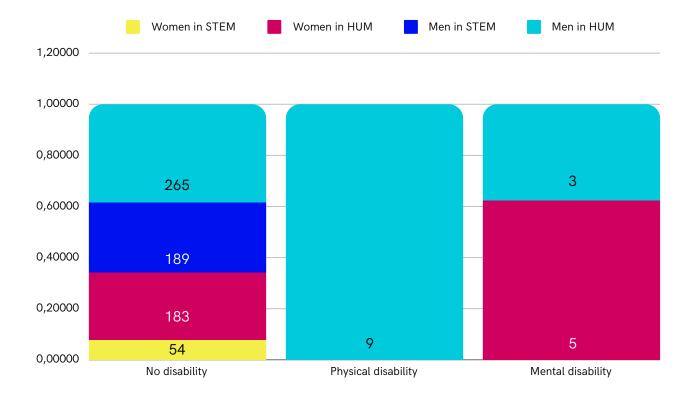


Disabilities at intersections

It is noticeable that none of the states have seen a significant representation of persons with any disability, either physical or mental, in their textbooks. People with physical disabilities were indeed represented more often: for example, several male wheelchair users were included in the textbooks from STEM fields in the Czech Republic and Romania. However, this particular wheelchair served as an illustration of the physical laws. In the case of the Czech Republic, it was also possible to read about the story of Stephen Hawking. In this case, it was a role model for a man with disabilities.

Graph 5.13 illustrates the percentage representation of disabilities across humanities and STEM textbooks, categorized by gender. The percentages are calculated to total 100%. Regarding actual numbers, instances without any mention of disabilities include 54 women in STEM, 189 men in STEM, 183 women in humanities textbooks, and 265 men in humanities textbooks. Regarding representations of disabilities, nine men with physical disabilities are shown in humanities textbooks. Additionally, five women and three men with mental disabilities are depicted in humanities textbooks. In total, there are 17 instances (2.4%) of disabilities represented, compared to 691 cases (97.6%) without any mention of disabilities. This data highlights the significant underrepresentation of disabilities in the textbooks analysed.

Graph 5.13 Representation of Disabilities Among Men and Women in Humanities (100% stacked chart))



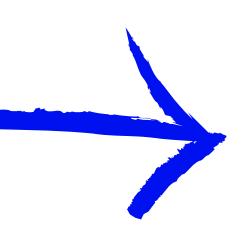
However, it is evident that living with a disability is framed as an individual problem, as something that the person 'has to learn to live with'. The absence of people with disabilities only exacerbates the 'inadequacy' of bodies with disabilities. Medical discourse, which is the model in Western society, frames disabled bodies as deviant, defective or flawed. Indeed, a healthy young body is still seen as the ideal. This discourse is all the more alarming because 15% of the world's population lives with some form of disability (World Health Organization & World Bank 2011). The intersection between disabilities and gender and class is also visible: women comprise nearly three-quarters of all persons with disabilities in low and middleincome countries (IFES 2015). Those with a disability are often denied the opportunity of full participation in the activities of the socio-economic and cultural system of which they are a part. This deprivation comes about through physical and social barriers, as well as discriminatory laws and practices, that have evolved from ignorance, indifference and fear. In most parts of the world, there are deep and persistent negative stereotypes and prejudices against persons with disabilities, which leads to social exclusion and a lack of access to civic space (Civicus 2024).

Lack of depiction of people with disabilities maintains the status quo: The ideal of a human body will exist, work, produce and reproduce itself in a certain way. In contrast, disabled bodies are thus seen as bodies that do not actively participate in life and society; they are socially excluded. But in addition to being seen as unproductive, disabled bodies are also seen as ugly. Textbooks, as well as, for example, magazines or social media posts, deepen the so-called ideal of beauty. The notion of ideal beauty has become deeply ingrained in cultures worldwide, shaped by both global and local influences. This concept establishes a standard of appearance that aligns with diverse cultural preferences while simultaneously appealing to broader, more universal ideals. It suggests everyone should aspire to this ideal, as its attainment brings social advantages, satisfaction, and a sense of accomplishment. However, a critical view has also emerged that the ideal of beauty is a fabricated cultural phenomenon (Grabe, Hyde, & Lindberg, 2007). This critical view has been elaborated into a theory that refers to the ideal of beauty as the beauty myth. What is considered an ideal appearance is not biologically determined, as it might seem at first glance. Instead, culture and how it conditions beauty at a given time or territory plays a more prominent role in shaping it. Wolf (2002) indicates that beauty is a politically determined gold standard. Although the ideal of beauty cannot be universally defined, we can confidently set some particular physical attributes that do not fit the ideal of beauty; these include, for example, women who are too short or too tall, old, obese or have a physical disability, women with dark skin, those who have body hair, and so on (Wolf 2002). Although the purpose of textbooks is primarily to teach the subject matter, they play a role in shaping the view of what the 'right' body should look like. So, not only are people with disabilities symbolically and practically excluded from a fully-fledged life (they have limited opportunities for fulfilment), but by being labelled ugly, they are denied the opportunity to participate in romantic relationships and to feel beautiful and comfortable with their bodies. The studies show that bodily impairment has a negative influence on people with disability's psychological experiences, feelings and attitudes toward their own bodies. Feedback from the social environment also plays a role in their self-acceptance (Taleporos and McCabe 2002).

The word 'ableism' denotes discrimination based on disability, the tendency to regard people with disabilities as inferior or damaged. The American feminist theorist Alison Kafer mentions that it is necessary to view disability through a political lens rather than viewing it separately and apolitically. According to Kafer, in terms of temporality, everyone has been, is or will be disabled at least once, permanently or temporarily (this author also considers short-term injuries or illnesses as disabilities). The idea is that people with disabilities are not a 'homogeneous minority' and, therefore, no generally valid statements or stereotypes apply (Kafer 2013). Since disability will happen to all of us at least once in our lives, it is good to build respect for ourselves and for others in this situation of incapacity.

The underrepresentation of people with disabilities in educational materials has a significant negative impact on pupils with disabilities, who cannot adequately identify with the stories from these materials. Moreover, it can negatively impact their perception of themselves, leading to low self-esteem and viewing them as abnormal or inferior (Harma, Gombert & Roussey 2013).

When pupils are exposed to the idea that having disabilities is a mere exception, they are less likely to accept people with disabilities as full-fledged members of society. Health status is one of the factors of inequality, and it, along with others, leads to poorer social inclusion. However, inclusion and acceptance are critical to a happy life. Ignorance and lack of contact with people with disabilities can lead to stereotyping, which can subsequently result in discriminatory behavior (UN 2024).



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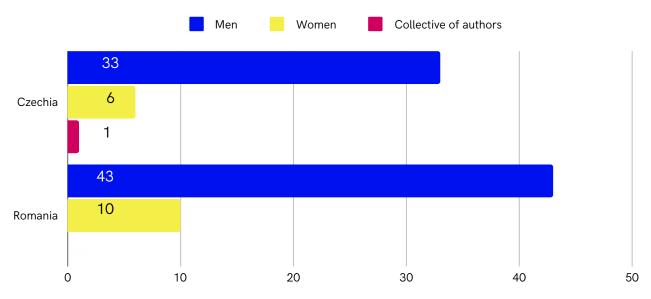
Authorships in intersections

A specific topic of interest in analysing humanities textbooks, particularly those focused on literature and language, is using extracts from famous children's books. Male authors have a numerical superiority in these textbooks, as illustrated in Graph 5.14.

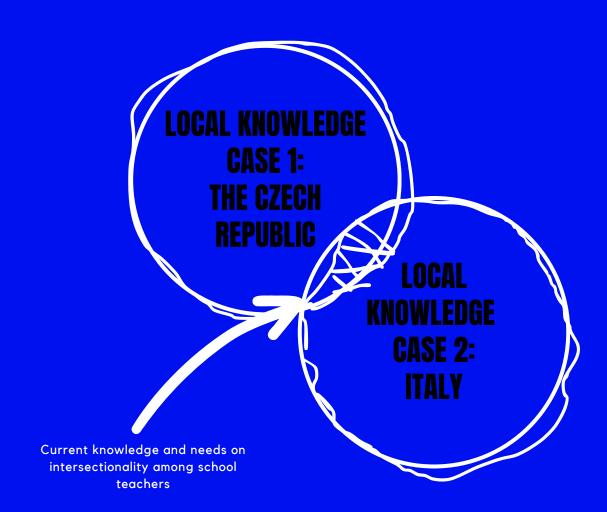
This data indicates a significant disparity in the representation of male and female authors in Czech and Romanian textbooks. Male authors are overwhelmingly represented, with 33 extracts from male authors in Czech textbooks compared to only 6 from female authors and 43 from male authors in Romanian textbooks compared to 10 from female authors. There is also a small presence of collective authorship in the Czech textbooks, with one instance, and none in the Romanian textbooks.

The underrepresentation of female authors contributes to a scarcity of female role models in these texts. This lack of representation can significantly impact young readers, particularly girls, who may struggle to find relatable role models within their educational materials. Female authors who could serve as important role models are largely absent, reinforcing the gender stereotypes that men are the primary contributors to literature and intellectual life.

Graph 5.14 Authorships of mentioned books in Czech and Romanian humanities textbooks (100% stacked chart)







CONTENT OF THE CHAPTER

A MONITORING OF CURRENT KNOWLEDGE (AND NEEDS)
ON THE TOPIC OF INTERSECTIONALITY AMONG SCHOOL
TEACHERS

- Local knowledge case 1
- Local knowledge case 2

A MONITORING OF CURRENT KNOWLEDGE (AND NEEDS) ON THE TOPIC OF INTERSECTIONALITY AMONG SCHOOL TEACHERS

"Local knowledge cases' could be defined as cases carrying local knowledge and conditions. These are cases (...) that can yield spatiotemporally specific findings."

JAN CHRASTINA

In both cases, data collection was conducted through participant observation and field notes.

LOCAL KNOWLEDGE CASE 1:

Background of the workshop was following: A primary and lower secondary school in Brno with a significant proportion of Roma pupils (Czech Republic) carried out a workshop, using interactive exercises based on informal pedagogical methods. 24 teachers and teaching assistants participated in the workshop. The experience of conducting classes where Roma youngsters predominate was a significant trait for the participating instructors. Furthermore, it is crucial to understand the backdrop of the Roma ethnic minority in the Czech Republic; for this purpose, it is important to note that according to government document, about 262,000 Roma are living in the Czech Republic (OGCR 2021). Which is approximately 2.5% of the population of the Czech Republic (CZSO 2023).

FINDINGS:

- Teachers do not believe that textbooks are capable of conveying information to pupils on a subconscious level. For that reason they do not consider it important that the Roma ethnic group is better represented in textbooks. Specifically, it was said that, especially for first-graders, identification with Roma characters is irrelevant, as they don't notice such things in textbooks at all or they have no problem identifying with non-Roma characters in textbooks. (However, this argument is refuted in: Weninger 2020).
- Teachers stated that Roma pupils are slower learners, as they don't study at home, which is, according to them, caused by the lack of role models at home.
- Teachers did not reflect or were not aware of the Eurocentric view of other cultures that appeared in the textbooks.
- Teachers reflected most of the stereotypes and judgments against Roma children and people. They understood that stereotypization of Roma pupils can lead to internalisation of these stereotypes by these pupils.
- Teachers were able to reflect that in some cases, the ethnic and cultural background of pupils can be overlooked and in some cases it can be highlighted. They specifically mentioned that furthemore due to stereotypes, Roma hyperactive pupils will be judged more than Ukranian children. On the other hand, they weren't able to reflect this in the case of an Arab student from our exercise. In this case teachers had problems overcoming their stereotypes, and weren't able to look behind the ethnic, racial or religious identity. During exercises dealing with stereotypization of Muslim students, they weren't able to understand that singling a student on the base of a different cultural identity is problematic, and it can lead to the stigmatization of these students. Also, teachers didn't reflect differences between cultural identity and religious identity. The son of an Arab was automatically considered to be Muslim. If he had problems integrating into the classrooms, the solution for teachers was to suggest returning to the country where Muslims live, even if the student was born in the Czech Republic and had never been to his father's original state.

LOCAL KNOWLEDGE CASE 2:

Background of the workshop was following: Survey on intersectional awareness on teachers of an Italian Secondary School located in Bagheria from Palermo, Italy (7 teachers, 4 of them are also involved in didactics and teaching for pupils with special needs) and with European teachers in the headquarters of the partner organisation Idrisi Cultura e Sviluppo ETS (20 teachers).

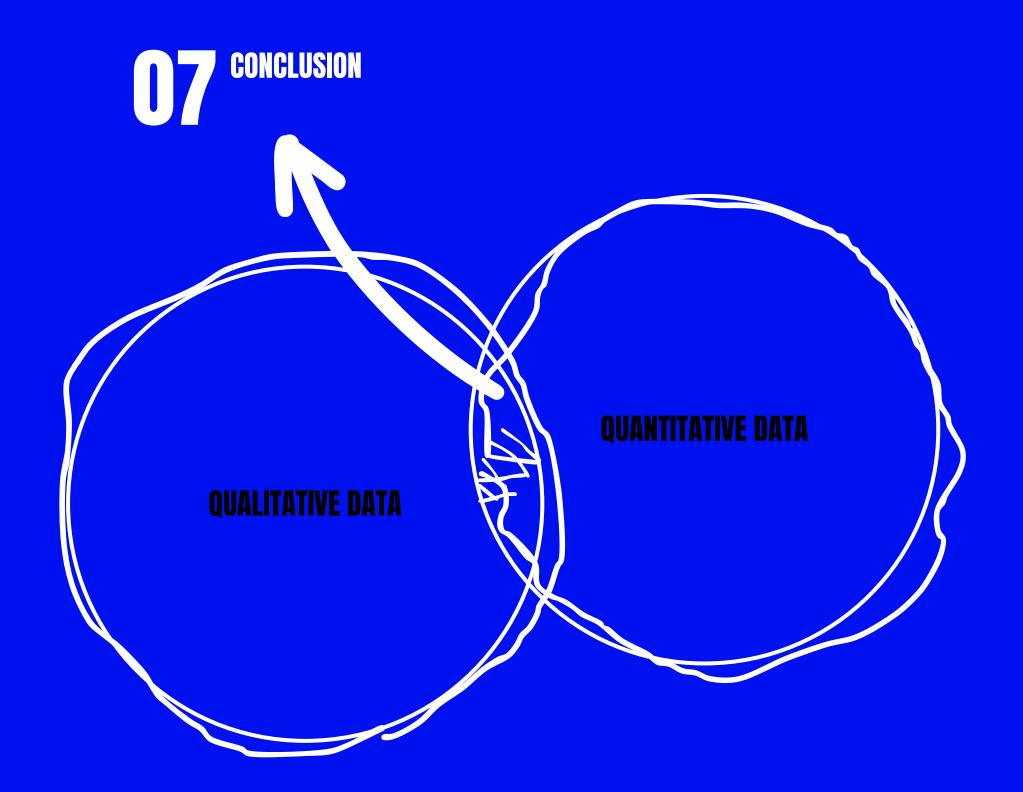
The guided group discussion along with non-formal in-depth interviews and role play and improvisation was used to obtain the data.

The first workshop's context was a lower and upper secondary school located in Bagheria, a suburb of Palermo, Italy, towards the end of the Italian school year. The school is situated in an area considered at risk of high educational poverty and dropout rates, as it is a socioeconomically disadvantaged territory.

The majority of the targets' pupils come from low-income families with parents who have limited literacy skills, living in economic hardship. Another characteristic element strongly underlined by the interviewed targets is the presence of female students, accounting for over 60% of the entire student body, (which is composed of approximately 1,500 students). Additionally, it has been mentioned the strong presence of students with a migratory background, particularly from Tamil and Bengali ethnic groups, which are indeed historically the most relevant ethnic groups in the Metropolitan Area of Palermo with 5341 residents, equal to roughly one third of the total immigrant population, as registered in 2020. In total, in fact, there are 25,445 migrant individuals (mainly from the Philippines, other south-east Asian countries, a number which corresponds to 4% of the total population in Palermo and its suburbs.

FINDINGS:

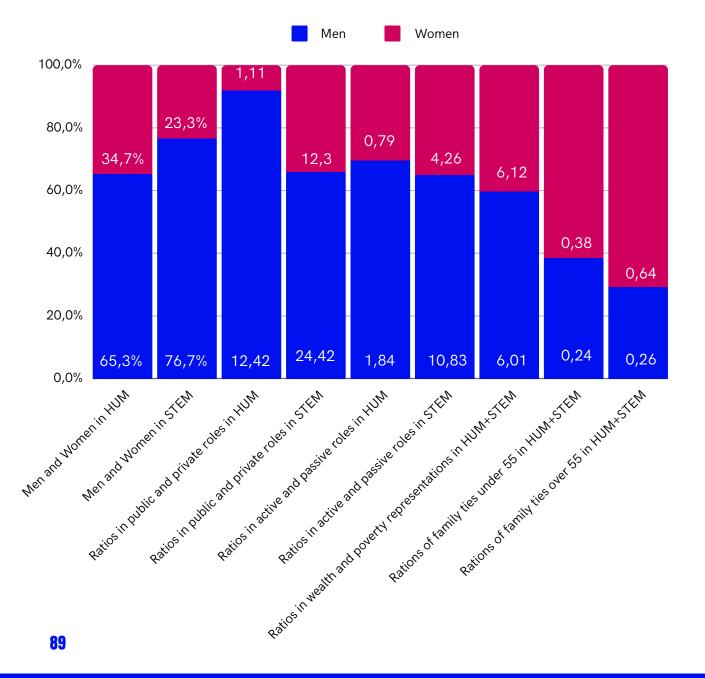
- The textbook was perceived as an object anchored in an increasingly outdated tradition, rarely updated from year to year.
- A considerable competence in terms of intersectionality keywords emerged among the participating teaching staff. However, this competence is not expressed concretely in frontal teaching, which continues to rely on the textbook for practical and didactic purposes, but rather in all the rich para-school and extracurricular activities that Italian schools are now required to carry out due to ministerial directives.
- Furthermore, ongoing activities aimed at increasing the accessibility of educational resources, specifically for visually impaired students or teachers, were also widely cited and praised due to their required, active participation of both students and teachers.
- What is emphasised is the gap between textbook-based lessons, which continue to be increasingly monolithic, and what happens in the afternoon through projects and educational programs that, regardless of their value, are always considered extracurricular and sometimes optional.
- There is a significant disparity between active inclusion policies in the school environment, which are increasingly relevant both in terms of infrastructure and representations and narratives realised in the school setting and the textbook, which is considered outdated and inadequately updated even in other curricular traditions.
- A relevant finding emerged regarding teachers' autonomy: having familiarity with the theme of differences and their intersections, several teachers highlighted how they have often been able to overcome the problem (especially regarding representations of femininity and the private sphere) through self-produced educational and didactic resources.



This study aimed to analyse the representation of gender, ethnicity, age, economic background, disability, and sexual orientation in STEM and humanities textbooks in the Czech Republic, Bulgaria, Romania, and Italy. Using a content analysis approach, researchers examined eight widely used secondary school textbooks in these countries. The analysis involved a systematic review of both written and visual content to identify themes related to intersectionality.

To conduct the analysis, researchers developed a framework based on intersectionality theory, identifying specific aspects related to race, class, gender, and their intersections. This framework guided the examination of the textbooks' content, including photographs, illustrations, and charts, to assess whether they represented diverse groups and whether they reinforced or challenged stereotypes. Some of the most important comparisons can be seen in Graph 7.1 or more in detail in respective chapters.

Graph 7.1 Selection of Main Comparisons and Intersections of Men and Women in Textbooks (Combination of Ratios and Percents; 100% stacked chart)



Gender Representation

The findings revealed significant gender disparities across both humanities and STEM subjects. In humanities textbooks, men represent 65.3% of cases, while women represent only 34.7%. In STEM textbooks, the disparity is even more significant, with 76.7% of representations being men and 24.3% women.

Gender Roles in Public and Private Spheres

The examination of gender roles in public versus private spheres highlights entrenched stereotypes. Men are predominantly depicted in public, active roles, while women are more often shown in private, passive roles. This bias is more pronounced in STEM textbooks, where men are more frequently depicted in public roles than women.

Active vs. Passive Roles

The comparison of active versus passive roles further underscores the gender bias, showing a significant underrepresentation of women in active leadership positions (see their ratios in Graph 7.1). This reinforces traditional gender stereotypes, limiting the perceived roles and opportunities available to women.

Wealth and Poverty Representation

The analysis of wealth and poverty representation reveals another layer of disparity. Men are more frequently associated with wealth, whereas women, especially those from ethnic minorities, are disproportionately represented in poverty. This perpetuates harmful stereotypes about gender and socioeconomic status.

Family Ties and Age

The representation of family ties and age in textbooks also reflects gender bias. Women aged 55 and above are depicted with family ties more frequently than men (the ratio of those depicted with family ties to those without is 0,64 for women and 0,26 for men). For younger individuals, women are depicted more often in family ties (ratio of 0,24 for men and 0,38 for women), as illustrated in Graph 7.1. This suggests that women, particularly older women, are primarily portrayed in roles connected to family and caregiving, while men are shown as more independent and career-focused.

Ethnicity, Disability, and Sexual Orientation

The study found that textbooks generally failed to represent the intersectionality of race, class, and gender, often reinforcing stereotypes and inequalities. Textbooks frequently presented white, middle-class, and male perspectives as the norm while ignoring the experiences of people of color, low-income individuals, and women. The representation of disabilities was minimal, with very few examples of individuals with physical or mental disabilities, and when they were included, they were often portrayed in limited, stereotypical roles. Sexual orientation was almost absent from the textbooks, with no significant representation or discussion of LGBTQ+ individuals or issues.

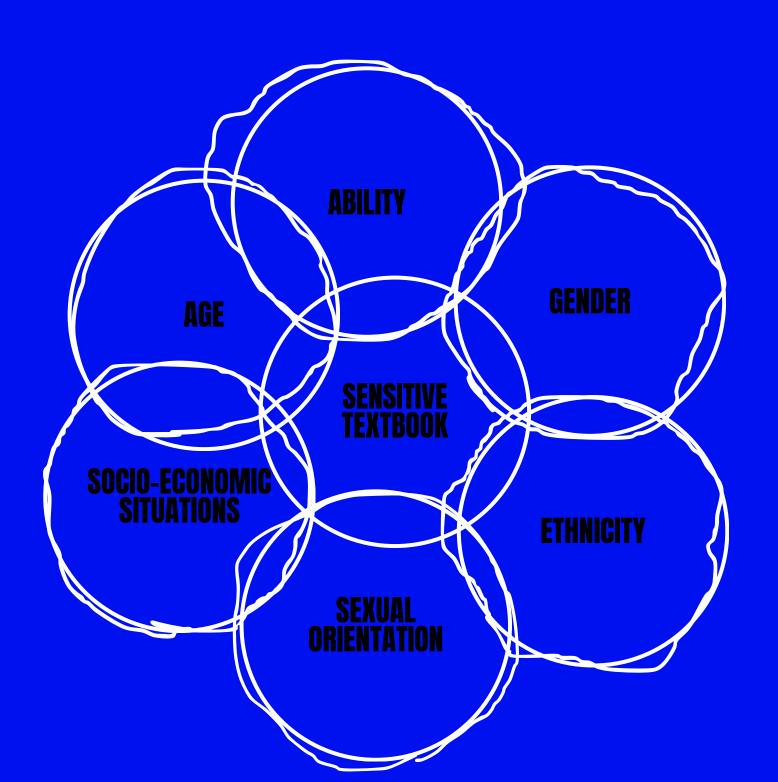
Implications and Recommendations

These findings indicate that textbooks in these four countries continue to perpetuate traditional gender roles and stereotypes. The significant underrepresentation of women, particularly in active and public roles, and the overemphasis on traditional, family-oriented roles for women contribute to a skewed worldview that limits the aspirations and self-perception of pupils, particularly girls. However, such a setting also has a negative effect on the boys. Addressing these biases and working towards textbooks that provide a more balanced representation of genders is essential to foster a more inclusive educational environment. This includes portraying women in diverse roles—both public and private, active and passive—and ensuring that both boys and girls can see themselves in a wide range of professions

and activities. Additionally, it is crucial to include more diverse perspectives related to race, ethnicity, disability, and sexual orientation to provide a comprehensive and inclusive understanding of society.

By integrating these recommendations into the present educational materials, we can enhance their ability to reflect the complexities and realities of contemporary society. This promotes gender equality and empowers all pupils to pursue their ambitions without being constrained by stereotypes. This approach benefits individual pupils and contributes to a fair and just society.

A SET OF
CRITERIA FOR
FURTHER
ASSESSMENT OF
DIFFERENT
TEXTBOOKS



A SET OF CRITERIA FOR FURTHER ASSESSMENT OF DIFFERENT TEXTBOOKS

General approach

Contextualised meritocracy

The textbook uses accomplishments of individuals from marginalised groups and represents them as an example that these accomplishments can be achieved, but it does so by recognising the obstructions created by different socio-economic positions in society as well as inequalities stemming from structural and historical discrimination. Textbooks therefore represent meritocracy as an ideal that can be achieved but not easily and by everyone. Textbooks therefore represent marginalised groups and their position in society in its social and historical context, showing that their socioeconomic status and position in society is not their choice (or subsequently fault), but it is a result of long term systemic discrimination and disadvantages of majority groups.

Diversity

The textbook does not just present diversity through 'diversity speakers' and as a marketing tool. The textbook is authentically and sincerely engaged in matters such as diversity and inclusion, and reflects an understanding of the complexity of the issue and a genuine effort to achieve positive change in society.

Disability

Disability visibility

The textbook includes persons with disabilities who are represented in textbooks through texts, images, stories, and examples. They are visible as part of different contexts and areas, and are not mentioned only in connection with their health condition.

Diversity of disabilities

The textbook represents
different types of
disabilities, including
physical and mental
disabilities. The important
thing to include is to show
that there is a range of
disabilities.

Positive and respectful portrayal: The textbook

portraying a person with a

disability in a positive and

respectful way. It avoids

stereotyping, evaluating their

abilities based on disability and

highlighting their strengths,

achievements and

contributions.

The textbook includes the perspectives of people with disabilities and thus represents a different lived experience.

Different lived

experiences

The textbook promotes the idea that disability is commonly met around us in real life and we should be open, inclusive and not surprised by it.

Normalisation of

disabilities

Socio-economic situations

Balanced depiction

The textbook depicts the variety of socio-economic situations that exist and avoid stereotyping wealth and poverty.

Without prejudice and discrimination

The textbook presents wealth and poverty as the result of many factors, including structural factors, which affect the financial situation of people or groups.

Gender

Positive and respectful portrayal of different sexes and gender identities

The textbook does not contain sexist information and images that reinforce gender stereotypes and discrimination. It does not represent sayings and proverbs about men and women that confirm 'traditional' characteristics without guidance for critical reflection.

Gender-sensitive language

The textbook prefers to use language that includes and addresses all gender identities, instead of the generic masculine. This means that textbooks use forms that respect different sexes and gender identities, for example using dual gender or using genderneutral words and expressions.1

Balanced representation

representation
The textbook
provides a
balanced
representation of
men and women.

Role diversity

The textbook presents the diverse roles and abilities of men and women. It overcomes stereotypes related to traditional gender roles and shows that every individual has the opportunity and right to engage in various activities and professions regardless of gender.

Inclusion of diversity

The textbook represents a variety of gender identities, including transgender, non-binary, and others. The textbook includes examples, stories and characters that are represented by these identities, thus reflecting the diversity of the real world.

Sexual orientation

Variety and diversity

The textbook includes a variety of examples, stories and characters with different sexual orientations at different stages of life, either explicitly or implicitly.

Relationships and families

The textbooks or chapters include couples, families, other forms of relationships where the presence of non-heterosexual models, with or without explicit purpose, is evident.

Emotional and affective dimension

The textbooks include contents related to affectivity, desires and relational expectations, which are not stereotyping.

Sexuality education

In the case of textbooks related to the topic of sexuality education, they include texts and images that are relevant to all sexual orientations.

Age

Depiction of different ages

The textbook depicts different ages in diverse contexts. In particular, people over the age of 55+ are not only represented as caring for grandchildren, but also as otherwise active or working people.

¹Gender-neutral language has the advantage of including people whose gender identity does not fall into the binary system, such as non-binary people.

Ethnicity

Plurality of perspectives

The textbook includes different perspectives and approaches to the presentation of different cultures. The narrator and the driving force behind the story are people from, for example, a minority or another culture.

Representation of diversity in everyday situations

The textbook includes stories portraying individuals from minority ethnicities in everyday scenarios without emphasising cultural differences. This approach ensures that characters are depicted based on their entire character complexity rather than solely on their cultural distinctiveness.

Authentic sources

The textbook uses authentic materials that are the product of the cultures themselves and not just generalised or distorted images and texts. This includes, for example, stories, traditions, art, music, literature and other elements of a given culture.

Inclusive representation

The textbook includes representation of different cultures and ethnic groups (especially minority nationalities such as the Roma) with respect to their varied histories, traditions, languages, arts and other significant aspects.

Multicultural perspective

The textbook reflects the multicultural nature of society and depicts the different roots and experiences of people who are migrants or have parents with a migrant background.

"Intersectionality draws attention to invisibilities that exist in feminism, in anti-racism, in class politics, so, obviously, it takes a lot of work to consistently challenge ourselves to be attentive to aspects of power that we don't ourselves experience."

KIMBERLÉ CRENSHAW



NATIONAL SYSTEM OF SELECTION AND REGULATION OF TEXTBOOKS





CONTENT OF THE CHAPTER

- Bulgaria
- The Czech Republic
- Italy
- Romania



NATIONAL SYSTEM OF SELECTION AND REGULATION OF TEXTBOOKS

BULGARIA

Textbooks, cognitive books and teaching aids in the system of pre-school and school education in the Republic of Bulgaria are approved by the Minister of Education and Science and must meet the approved state educational standard (Ordinance # 10 of 19.12.2017 for cognitive books, textbooks and teaching aids).

The evaluation of draft textbooks and teaching aids is carried out by content evaluators, graphic design evaluators and Polygraphic performance evaluators. The projects that have been assessed 'meet the state educational standard for cognitive books, textbooks and teaching aids' are subject to an assessment of suitability for application, which is carried out in all schools by teachers who teach the respective subject or module at the relevant stage of the level of Education.

For each school year, the Minister of Education and Science approves a list of knowledge books, textbooks and training kits that can be used in the pre-school and school education system. The list is published on the official website of the Ministry of Education and Science before the start of the school year. Based on it, at the beginning of each school year, each school approves a list of textbooks on subjects to be used. Teachers teaching the respective subject choose the textbook they will work on based on the specifics of the educational institution, their vision of the learning process, the structure and style of the textbook. Knowledge books and textbooks not included in the list may not be used in the pre-school and school education system.

Textbooks and training aids in vocational training are not subject to evaluation and approval by the Ministry of Education and Science. Their selection is provided to teachers specialists in a relevant thematic area in view of the type of preparation and the specialty in which the students are trained.

THE CZECH REPUBLIC

"In the Czech Republic, we select textbooks at the state and school level. Evaluation at the state level is embodied by the institution of the so-called approval clause granted by the Ministry of Education of the Czech Republic. Not only one textbook is selected, but on the contrary, a large number of textbooks receive an approval clause, and the final decision on which textbook the school will use rests with the school. Publishers do not have to apply for an approval clause, but this would eliminate them from the market in advance, because textbooks that do not have an approval clause cannot be purchased by the school from budget funds set aside for this purpose, but must be paid for from non-state sources (sponsors, parents). "However, this situation is different for secondary schools, where their parents pay for the students' textbooks" (Greger 2005).

In 2002, research was carried out at the Pedagogical Center of Pilsen, from which it follows that the most important factor in the right to choose textbooks in schools was the approval clause of the Ministry of Education of the Czech Republic. "However, the approval clause was also found to be the most important external factor by teachers from grammar schools and secondary schools, despite the fact that textbooks here cannot be paid for from state resources. It seems that the teachers regard the approval clause as a kind of guarantee of the quality of the textbook" (Sikorová 2007).

The approval process for textbooks and educational materials newly follows the Communication of the Ministry of Education, Youth and Sports Regarding the Procedure and Established Conditions for Granting and Withdrawing Approval Clausefor Textbooks and Educational Texts, and for Including Textbooks and Educational Texts in the Textbook List (2023). This communication outlines specific steps and criteria for granting and withdrawing textbook approvals and their addition to the official list of approved materials.

The publisher applies for an approval certificate from the Ministry of Education, Youth and Sports. The Ministry then forwards the application for the approval certificate of the textbook to the National Pedagogical Institute of the Czech Republic (hereinafter referred to as the 'Institute'). The Institute appoints at least one reviewer. The reviewer is an expert, usually from a university or an educational worker teaching at a school with a similar focus for which the textbook is intended, and who has professional qualifications in the designated educational field. Simultaneously, the Institute also prepares a review report. For textbooks that address current and sensitive social issues to a greater extent, the Institute's review report includes a statement on this area. In justified cases, the Institute arranges an expert opinion on the relevant issue.

The Communication provides a form that specifies the criteria for evaluating textbooks. Reviewers use this form to assess each textbook and determine whether it meets the established standards. Below is a key criterion from the form related to intersectionality:

 Applying the principle of equal opportunities for men and women and gender equality (the textbook does not contain stereotypical approaches regarding gender and creates conditions for equal development of all individuals regardless of gender identity), specifically, it is necessary to assess whether the textbook:

• Shows the diversity and variety of lifestyles and roles of men and women;

- Portrays women/girls and men/boys as equally competent in solving problems and their work as equally important;
- Represents male and female characters equally and in similar contexts for example, in teaching explanations, illustrations, representation of certain groups or specific professions, in exercise examples - as specific people (eg. historical figures) and as illustrative examples;
- Provides a balanced space for authentic male and female voices.
- Offers texts and illustrations that emphasise values such as respect, esteem, diversity, and equality.
- Strives for gender-sensitive expression and addresses girls and boys equally in explanations and exercises.

The Communication of the Ministry of Education, Youth and Sports Regarding the Procedure and Established Conditions for Granting and Withdrawing Approval Clausefor Textbooks and Educational Texts, and for Including Textbooks and Educational Texts in the Textbook List came into effect on July 28, 2023.

<u>ITALY</u>

Schools usually approve textbooks, suggesting them to pupils and families at the beginning of the schooling year. Typically, the approval of textbooks is not mandatory for teachers and schools but it is the most common approach. Teachers usually choose textbooks, eventually including other teaching materials for the classes in which they teach.

The teachers then submit their choice to the Teaching Body (internal unit, consisting mainly of other teachers and/or themselves). Each school has got a Teaching Unit which formally approves the books.

Books are not free and Italian schools do not provide any kind of textbook, adopted or not adopted. There is a price limit established directly by the Italian Ministry of Education. Nevertheless, families in the end must purchase the textbooks, with obvious and possible exceptions (e.g specific regional situations, certified low-income and so on).

Schools can create their own teaching materials too, especially for specific topics. Teachers can for example develop those "personalised" materials during class hours and in collaboration with other teachers, but also working directly with their students. Schools' Teaching Units must register the result of this (eventual) efforts, obtaining the relevant licence and sending then the materials created to the Ministry by the end of the school year, in order to share and distribute them for free to other state schools.

ROMANIA

The institution that officially approves textbooks in Romania is called National Center for Policies and Evaluation in Education) and is a part of the National Ministry of Education.

According to the National Education Law (nr. 1/2011), in Romanian (private or public) schools, it is allowed to use textbooks or auxiliary materials which are approved by the Ministry of Education. This means that all these materials have to follow a given and approved curriculum. Usually, in the classroom, it is the professor/teacher that chooses which textbook or auxiliary materials to use.

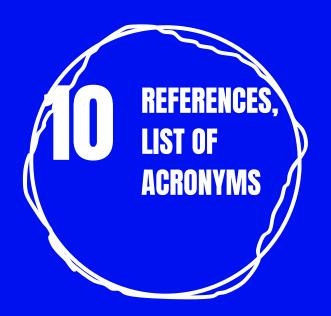
The scientific evaluation of a textbook implies that the book has to follow certain eliminatory criteria and general quality criteria (according to the Order 5913/2008). The elimination criteria is that the textbook has to be (a) according to the national approved subject curriculum and (b) have a non discriminatory content. In order to be according to the national curriculum, the textbooks have to allow the construction of such learning situations from which the pupils will step-by-step reach the given objectives and then the overall learning objectives, as well as obtain the specific and general competences needed for the subject matter. If more than 15% of the matters in the textbook are outside of the approved curriculum, then the textbook cannot be evaluated any further and it is eliminated from the evaluation/competition. For the textbook to have a non-discriminatory content it has to follow the basic non-discriminatory principles, both in text and pictures, and make no difference, exclusion or preference, regardless of race, nationality, ethnicity, language, religion, social category, beliefs, gender, sexual orientation, age, disability, chronic non-contagious disease, HIV infection or belonging to a disadvantaged category.

The general quality criteria refers to five basic items: the correctness of the scientific content of the textbook, the didactic / teaching approach followed in the textbook, the contribution of the textbook to the optimization of the whole learning process (teaching - learning - evaluation), the design of the content of the textbook in relation to the national curriculum and the quality, the accessibility of the language used in the textbook, the quality of the technical editing and the unity of approaches in the textbook.

Regarding the way each educator chooses the textbook they are going to use for the classroom work, this is usually the type of decision taken at a department level from every school, according to the publishing house fancied by the teachers in that specific department.

At some point in 2018, our educational system tried to adopt the 'singular textbook' at a national level (which meant that every subject would have a single book to work from), but it came out as a disastrous idea in no time, because of the low quality of the product.

In the present, as a result of the contest based on the criteria detailed before, there can only be a maximum of three winner publishing houses for each subject and class, therefore there is a certain diversity when it comes to the materials the educator can base their teaching on. Moreover, a lot of auxiliary books which contain both theory and exercises exist as a supplement for the official textbooks so the pupils can deepen the learned contents.



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LIST OF ACRONYMS

CZSO - Czech Statistical Office

EACEA - European Education and Culture Executive Agency

EIGE - European Institute for Gender Equality

FRA - EU Agency for Fundamental Rights

GIC NORA - Gender Information Centre NORA

HIV - Human Immunodeficiency Virus

HUM - Humanities

IFES - International Foundation for Electoral Systems

LGBT (LGBTIQ, LGBTQ+, LGBTIQ+) - Lesbian, Gay, Bisexual, Transgender, Intersex and Queer. An umbrella term used to refer to the community as a whole.

MG - Masculine Generic

NGO - A Non-Governmental Organization

OECD - The Organization for Economic Cooperation and Development

OGCR - The Office of the Government of the Czech Republic

PISA - Programme for International Student Assessment

STEM - Science, Technology, Engineering and Mathematics

UN - The United Nations