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RELEVANCE

It is important for children to see themselves represented in educational materials.

Studies suggest that seeing textbook characters who resemble you can improve academic achievement, diversify occupational aspirations, bolster identity development, and help learners to feel included in society¹⁻⁸. For example, when **girls** do not see themselves represented in pictures on science tests, their performance is lower compared to when they do see pictures of women in these tests. Additionally, addressing girls in the masculine form on math tests contributes to the belief that science is for men².

Ethnic representation and stereotyping can affect adolescents as well. For example, experimental research shows that **adolescents of color** perform worse on tests in science and other subjects when they read a text containing negative ethnic stereotypes beforehand or are shown stereotyped images⁵. Further, a lack of ethnic diversity in education materials can be unpleasant for students of color and make them feel less at home in the classroom.

Lastly, previous research shows that the inclusion of LGBTQ+ characters has a positive effect on students. When **LGBTQ+ students** see themselves represented in the curriculum, they face fewer negative comments in class, feel more at home at school, perform better, and come to school more often⁸. Additionally, improving textbook inclusiveness may arguably reduce prejudice among all students. Research indicates that individuals who consume more media that features characters from underrepresented groups have fewer stereotypical opinions about those groups²¹. Similarly, research indicates that people who watch media in which a person from their group interacts with another group have fewer stereotypical opinions about that group and feel less anxious²¹.

The evidence therefore points towards the importance of inclusive educational materials for fostering equal opportunities in education. Yet recent research shows that women and marginalized ethnic groups are systematically underrepresented in current textbooks in various countries, including the Netherlands. Additionally, textbooks often contain gender and ethnic stereotypes⁹⁻¹⁵. In many cases, members of the LGBTQ+ community do not even appear in textbooks at all¹⁶⁻¹⁷.

Consequently, many children are exposed to subtle cues in textbooks that can harm their learning motivation and performance.

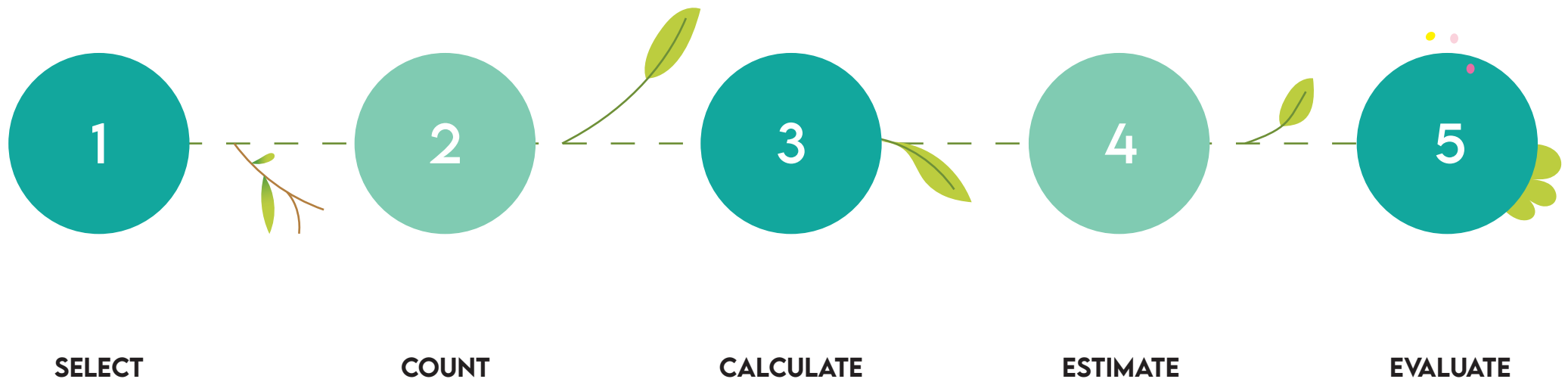
This document is made to help publishers so that they can assess for themselves how inclusive their textbooks are and to provide practical tips to make textbooks more inclusive. Stereotypical patterns are generally not intentionally included in textbooks, nor do many writers, and editors find them acceptable. They, like all people, have (automatic) stereotypical associations that influence how texts and images are written and selected.



HOW INCLUSIVE ARE OUR TEXTBOOKS?

To gain insight into how inclusive your textbooks are, it is not necessary to analyze every page. By randomly selecting and analyzing a portion of the textbook, you will have all the information needed.

Follow these steps:





SELECT

Randomly select 25% of the pages of the textbook
by using a random number generator website.

(e.g., <https://numbergenerator.org/25randomnumbersbetween1and100>)



COUNT

Count all women, characters from marginalized ethnic groups, and LGBTQ+ characters on these pages in text and pictures.

See Appendix B for an example of how to count characters.

The sex of the characters can be assumed by gendered names, personal pronouns, or pictures.

1

Ethnicity can be assumed by the physical appearance of characters in the images or through the use of first and last names common among marginalized ethnic groups.

2

Whether characters belong to the LGBTQ+ community can be inferred in two ways:

1. It is explicitly mentioned that characters belong to this community
2. Based on common knowledge about celebrities who belong to the LGBTQ+ community (e.g., we know that singer Elton John is married to a man, and that actress Laverne Cox is part of the transgender community).

3



CALCULATE

Calculate the proportion of these groups with respect to the total number of characters on the selected pages, and check if that matches the desired proportion of these groups.



ESTIMATE

Think critically about your preferred approach. Broadly speaking, we can distinguish three approaches to representation and stereotyping: the conservative, status quo, and emancipatory approach. It is important to realize that none of these approaches are neutral. The (lack of) representation of certain groups in society in different activities and roles in textbooks always implies messages about the importance of these groups, and what is expected from them and seen as appropriate. Publishers should therefore keep in mind how their preferred approach may affect their impressionable young readers.

In the conservative approach, characters are represented conservatively in ways that do not reflect the current situation (e.g., presenting women only in caregiver roles, excluding people of color and members of the LGBTQ+ community).

Textbooks written from this approach show children the idea that groups in society must (return to) the occupations, roles, and activities that align with conservative views.



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In the status quo approach, characters in textbooks reflect your society, in which groups in society are not equally represented across occupations, roles, and activities (e.g., equal numbers of men and women but few women are portrayed as scientists, characters of color but few people of color in high-status occupations, and characters from the LGBTQ+ community according to their share of society).

Textbooks written from this approach show children the idea that different expectations exist for different groups in society. Thus, certain professions, roles, and roles do not seem to be for everyone*.

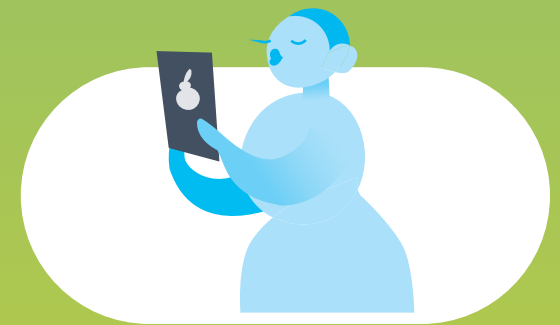


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In the emancipatory approach, all groups in society are represented in a variety of occupations, activities, and roles.

People are not restricted by the positions that align with conservative views (e.g., men as the main caregivers, people of color as professors, and members of the LGBTQ+ community as parents).

Textbooks written from this approach show children the idea they matter and can pursue all kinds of professions or roles, no matter what social group(s) they belong to.



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* Each classroom is different from the next. Schools in major cities sometimes have more students of color than white students. LGBTQ+ students live everywhere in the Netherlands, from the smallest conservative villages to the big cities.

In addition, differences in (ethnic) representation exist between the different educational levels. Still, it is good for all students to see different groups represented in educational materials, as this can reduce stereotypes. This can positively impact students of color, especially those living in an environment where they are a minority.



EVALUATE

Evaluate whether the representation of different groups in your textbooks matches your vision. If you conclude that your textbooks are less inclusive than you anticipated, you can use the practical tips below to increase inclusiveness and reduce stereotyping.

PRACTICAL TIPS FOR INCREASING INCLUSIVENESS



MORE ETHNIC DIVERSITY

1

Actively give characters names that are common among marginalized ethnic groups within your country. Making use of the following name generators can be helpful.

<https://blog.reedsy.com/character-name-generator/>

This website generates over 1 million names from various languages (Arabic, Turkish, etc.)

<https://mixedname.com/>

This website generates a list of names that are common in two different languages (e.g., names common in Dutch and Arabic). It also lists names from various languages (Dutch, Yoruba, etc.)

2

Refer more to the first and second person (me, you, I) and to family members (my brother, my cousin) in exercises.

By doing so, textbooks automatically become more inclusive. All children think of their personal environment when reading such sentences.

3

Use more illustrations and pictures of people of color who are not commonly featured in your textbooks.

Be mindful, however, of not only featuring people of color in stereotypical content.

See 'practical tips to reduce the prevalence of stereotypes' for more information.

MORE GENDER DIVERSITY AND LGBTQ+ INCLUSIVITY

1

Actively include women in textbooks so that the proportion of women and men is roughly 50-50.

Although gender bias in representation is often unintentional, it is remarkably common across countries and stable over the last decades¹⁸⁻¹⁹.

Make sure women are not solely presented in gender stereotypic professions, roles, and activities.

2

As a first step towards more LGBTQ+ inclusion:

Include famous people who are generally known to belong to this community.

A second step:

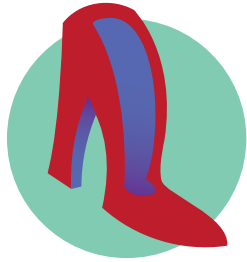
Include same-sex parents or other couples in assignments and stories. The best way to increase inclusiveness is to present LGBTQ+ characters in everyday situations (e.g., Sara's fathers are doing groceries) instead of solely presenting them in situations where their background is emphasized.

This sends the message that people from the LGBTQ+ community are part of our society.

***PRACTICAL TIPS
TO REDUCE THE PREVALENCE
OF STEREOTYPES***



ROLE MODELS



Reduce stereotypical patterns by actively incorporating role models from marginalized groups in texts and images. For example, choose to make at least half the journalists, doctors, lawyers, scientists, public officials, etc., women, and a sizeable proportion of these characters persons of color. In this way, students will encounter more counter-stereotypical characters, which could help their confidence in choosing career paths stereotypically not associated with people with their background. Furthermore, seeing more counter-stereotypical characters may help reduce ethnic and gender stereotypes for all students.

The appendix contains a list of website links with information about renowned scientists from marginalized backgrounds whose life stories can inspire students and make your books more inclusive.

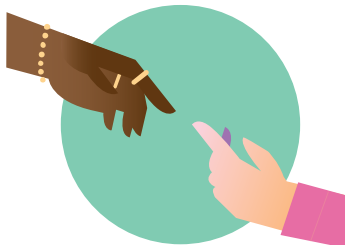
BE MINDFUL OF THE STORIES THAT YOU CHOOSE



Be aware of the themes in the long stories that feature women and people of color. Those are the stories that students are most likely to remember and invite children to identify with the main character(s)²⁰. For example, a large proportion of long stories in first-year secondary school Dutch Math and language textbooks featured girls with concerns about their appearance and eating disorders, as well as black characters experiencing poverty and crime.

Choose more storylines that almost everyone can relate to regardless of their background when featuring women and people of color. For example, everyone can enjoy sports, make a great sculpture, get in a fight with a classmate, perform well on a test, be nervous or enjoy a walk in nature.

INCLUSIVITY OF YOUR TEAM



Include more authors and illustrators of color in your team. This is crucial because professionals of color and with an LGBTQ+ background are more inclined to make stories and images that they would have liked to read or see when they were young. Moreover, these professionals are also more aware of the value of producing and reading an inclusive textbook and reducing stereotypes.

APPENDIX A

APPENDIX A: STEM ROLE MODELS

Role models of color (men & women)

<https://medium.com/nevertheless-podcast/stem-role-models-posters-2404424b37dd>

Black role models (men & women)

<https://www.pbs.org/education/blog/ten-black-scientists-that-science-teachers-should-know-about-and-free-resources>

https://en.wikipedia.org/wiki/List_of_African-American_inventors_and_scientists

<http://crosstalk.cell.com/blog/1000-inspiring-black-scientists-in-america>

<https://www.cbc.ca/radio/quirks/black-scientists-history-1.5918964>

<https://www.blackachievementmonth.nl/pers/>
---> Black Dutch role models (men & women)

https://en.wikipedia.org/wiki/List_of_African_educators,_scientists_and_scholars

Asian role models (men & women)

<https://www.asiaresearchnews.com/content/giants-history>

<https://www.asianscientist.com/2018/03/features/female-scientists-slay-as100/>

https://en.wikipedia.org/wiki/List_of_Indian_scientists

LatinX role models (men & women)

<http://crosstalk.cell.com/blog/100-inspiring-hispanic-latinx-scientists-in-america>

Middle-Eastern/North African role models (men & women)

<https://cosmosmagazine.com/society/top-10-ancient-arabic-scientists/>

https://en.wikipedia.org/wiki/List_of_African_educators,_scientists_and_scholars
-> (see "North Africa")

https://en.wikipedia.org/wiki/List_of_pre-modern_Arab_scientists_and_scholars

Women role models in the 21st century

https://en.wikipedia.org/wiki/List_of_female_scientists_in_the_21st_century

Women role models before the 20th century

https://en.wikipedia.org/wiki/List_of_female_scientists_before_the_20th_century

APPENDIX B

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ASSIGNMENT 1

Change the verb tenses below and underline the word that changes.

1 Are you also going to the fair?

2 Johanna and Bilal sit next to each other in class.

3 Do you know where Pete is?

Total number of people: 17

Women: 10

Men: 7

White people: 7

People of color: 10

LGBTQ+ people: 0

ASSIGNMENT 2

Look at the three photos below.



Write the emotion that you think the person is experiencing in this photo.

ASSIGNMENT 3

Change the sentences to the present tense. Look at the example.

1 Memphis used to write very neatly.

2 Which book did you find boring?

3 Did they play soccer last weekend?

ASSIGNMENT 4

Put a comma on the right place in the sentence.

1 Mehmet, John and Anisa are going to the movies.

2 Fatima, Roxanne, Sabrina and Sylvana are going to an amusement park.

3 This summer, Mr Wang is going on vacation to Belgium France and Spain.

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