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Education for global citizenship and sustainable development in social science textbooks

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Abstract

This article reviews the state of research and data on relevant content, broadly understood as sustainable development, in social science textbooks worldwide. Specifically, it examines the extent to which these textbooks could help learners to acquire the knowledge, skills and values that are needed to meet goal 4.7 of the United Nation's Sustainable Development Goals: 'By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development'. It reviews relevant literature and analyses three cross-national, longitudinal databases containing information that is coded from textbook content to assess the current state of knowledge. In addition to analysing measures concerning the environment and sustainable development, this article also focuses on areas of human rights, global citizenship, gender equality, and multiculturalism/social diversity. We find that textbook discussions of these variables have, in general, steadily increased since the middle of the 20th century. The article concludes by indicating where future research efforts are most needed, identifying geographic and substantive needs, and considering monitoring mechanisms that could encourage on-going evaluation and monitoring of textbook content.

1 | INTRODUCTION

Educators, policy makers, parents, and many others have long advocated that education can play a pivotal role in mitigating ongoing violence and the unrelenting destruction of our natural world. Thus, having students learn about global citizenship and sustainable development is increasingly recognised as central in promoting peace and justice worldwide. Target 4.7 of the new Sustainable Development Goals (SDGs) calls on the world to ensure that 'all learners acquire the knowledge and skills needed to promote sustainable development, including, amongst others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of

peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development' (United Nations, 2015). Despite the key role this educational focus could play in constructing a better world, little cross-national or longitudinal data are available to assess progress towards these goals. Hence, we currently have a poor grasp of the degree to which this commitment is reflected in the content of schooling worldwide. This dearth of knowledge partly stems from the difficulties to create cross-nationally comparable metrics. Longitudinally, enrolment data are available, but they provide little detail about school content. Classroom observations and interviews offer excellent contemporary snapshots, but they require extensive resources in many countries and cannot give a sense of historical trends. Fortunately, recent advancements in textbook analyses hold the promise of providing new and important insights. School textbooks provide an unobtrusive way of examining classroom resources in ways that higher-level curricular policies cannot. In the textbook analysis component of the Trends in International Mathematics and Science Study (TIMSS), scholars conceptualise textbooks as the 'potentially implementable' curricula (Schmidt, Mcknight, Valverde, Houang, & Wiley, 1997; Valverde, Bianchi, Wolfe, Schmidt, & Houang, 2002). They are intermediaries between curricular guidelines and classroom activities, as well as one of the most-used classroom tools worldwide (Torney-Purta, Lehmann, Oswald, & Schulz, 2001). An evolving body of work demonstrates that large samples of textbooks are available for many countries and that preliminary measures of Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) can be developed through content analysis.

Building on this growing body of cross-national textbook studies, this article reviews existing research on sustainable development content in social science education across the globe. It examines relevant literature and analyses three cross-national, longitudinal databases containing information on the content of textbooks. In order to assess textbooks in relation to GCED and ESD, it focuses on textbook discussions of the environment, human rights, global citizenship, gender equality, and multiculturalism and social diversity. In addition, the article highlights knowledge gaps and reflects on the possibilities and limitations of potential monitoring mechanisms for the on-going assessment of textbook content in the service of SDG 4.7.

2 | CURRENT STATE OF KNOWLEDGE

Here, we review relevant literature on GCED and ESD content in textbooks and analyse several existing databases. Our analysis centres on cross-national, longitudinal studies in order to evaluate what is known about changes in curricular emphases in a comparative framework. Moreover, we describe empirical trends, rather than explain the impact of social movements and education reform waves or other processes that influence textbook content. We present trend data on relevant indicators of textbook content, drawn from three textbook databases.

2.1 | Data and methods

We examine secondary school textbook data gathered in three waves, resulting in three cross-national longitudinal datasets. Dataset 1 consists of data coded from 456 secondary school textbooks in history, civics, and social studies, sampled in 68 countries between 1970 and 2008. Dataset 2 contains data on 703 secondary school textbooks in history, civics, social studies, and geography, drawn from 88 countries between 1950 and 2011. Finally, Dataset 3 holds data from 1,024 history, civics, social studies, and geography textbooks at the secondary level from 98 countries between 1890 and 2013 (703 come from Dataset 2). More detailed information on the characteristics of the three datasets is found in the Appendix.

A research team composed of faculty and doctoral students in the International and Comparative Education programme at the Stanford Graduate School of Education compiled these datasets over several years. Since systematic textbook lists used in different countries are rarely accessible (making random sampling impossible), we sampled books from available collections for maximum coverage of countries, decades, and types of books. Most books came from the Georg Eckert Institute for International Textbook Research in Germany which holds the most extensive collection of textbooks from around the world (178,000 volumes from 173 countries). We selected additional books from university libraries, local bookstores, publishers and private collections worldwide. We coded textbook content using

TABLE 1 Textbook indicators analysed from each dataset

	Dataset 1 (1890–2013)	Dataset 2 (1950–2011)	Dataset 3 (1970–2008)
Environment & sustainable development		Discussion of: environmental protection/damage; environmental rights; global environmental issues.	
Human rights	Discussion of human rights.	Discussion of human rights documents.	Discussion of human rights violations.
Global citizenship	Suggestions for students to get globally involved.		Discussion of global citizenship.
Gender equality	Discussion of: women's rights; discrimination against women.	Discussion of: violence against women; women's contribution to society.	
Societal diversity	Discussion of: immigrant/refugee rights; ethnic, racial, religious minority rights.	Discussion of gay and lesbian rights.	Discussion of disability rights.

standardised protocols developed at Stanford University with much piloting and inter-rater reliability testing. As we adapted our coding protocols to address evolving research questions, our three dataset protocols covered slightly different, but often overlapping, thematic areas, including several core questions that were repeated verbatim in all three waves. We wrote these in a manner that required little interpretation on behalf of coders, thus boosting our reliability. Foreign language (usually native) speakers were trained and supervised to code books in languages that were not spoken by our team.

We present the results of descriptive statistical analyses, graphing the proportion of textbooks in our datasets that contain content that is relevant for GCED and ESD over time. We focus on textbook discussions of the environment, human rights, global citizenship, gender equality, and multiculturalism and social diversity, followed by a summary of common trends across these dimensions. Table 1 summarises these indicators. We show longitudinal trends at the world level and, wherever possible, at the regional level (using UNESCO regions). All regional graphs begin in the 1980s, as sample sizes for some regions before then are too small to merit regional analyses.[1] Whilst our indicators are not exhaustive measures of how textbooks could incorporate content that is relevant for SDG 4.7, they offer an initial overview of potentially relevant trends 2

2.2 | Environment

Our first area of interest concerns textbook content on the environment, one of the most explicit dimensions of education for sustainable development. Bromley, Meyer, and Ramirez (2011) found that environmental themes in textbooks in general, and sustainable development in particular, became increasingly prevalent in the latter half of the 20th century and that global environmental themes were more likely to influence textbook content than environmental factors that were unique to particular countries. Analysing content that specifically addresses sustainable development in both textbooks and curriculum guides in 21 developing countries, Benavot and Owens (2012) encountered the area of environmental content more often than other measures that they analysed (such as economic, socio-cultural, and skills/values content areas). They found this area in roughly two-thirds of their sources, whilst the other areas were discussed in only about a third. Bromley et al. (2011) found that environmental problems were increasingly presented as affecting the entire world and that, over time, environmentalism was often linked to global human rights issues, such as the fundamental right to a clean world. Figure 1 presents decadal averages of three indicators related to textbook coverage of the environment between 1950 and 2011. They include whether environmental protection or damage is discussed in at least one paragraph and whether they are framed as a global environmental issue. We also measure whether a given book mentions rights linked to the environment. The first two indicators show substantial growth over time. Coverage of environmental
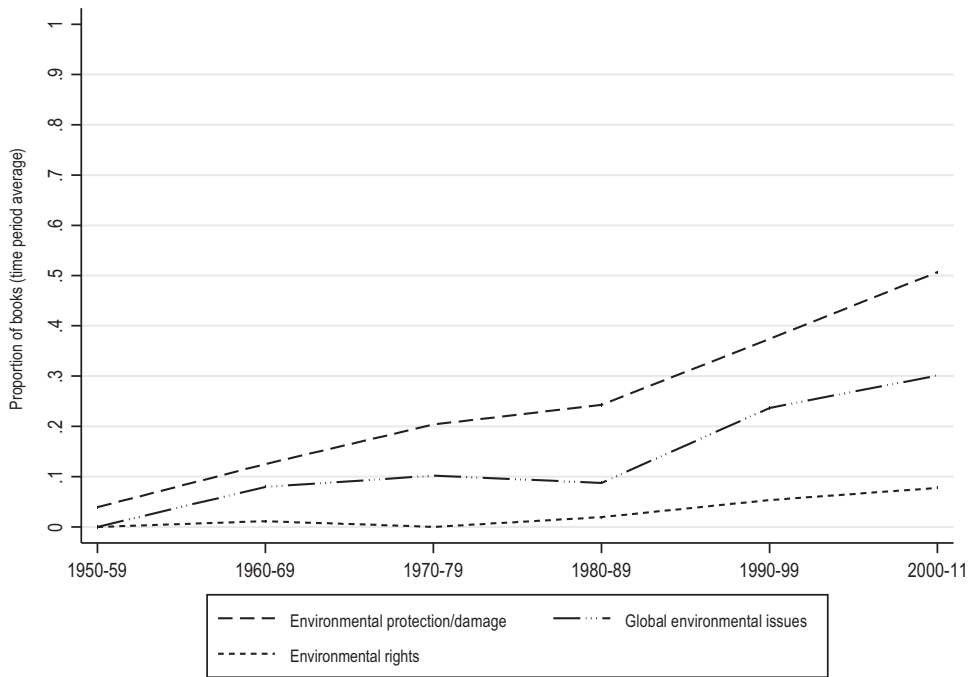
FIGURE 1 Environmental content in textbooks since 1950
Note. All indicators are drawn from Dataset 2

protection or damage has increased tremendously: in the 1950s, only about 5% of textbooks mentioned this issue, whereas by the last decade (2000–2011) 50% did. And, whilst between 1950 and 1959 no textbook included these as a global issue, close to 30% did so between 2000 and 2011. Environmental rights have experienced noticeable but much less dramatic growth: whilst virtually no book discussed them in the 1950s, roughly 10% did so in the last decade.

Figure 2 shows decadal averages of the proportion of books discussing environmental damage or protection, broken down by region between 1980 and 2011. Discussions of the topic are more pervasive in the 2000s than in the 1980s. There are subtle differences in the regional patterns. Books from Latin America and the Caribbean and those from the Arab States show increases in their coverage of the topic. African textbook coverage drops slightly in the 1990s, but then rises in the 2000s. Discussion in books from Europe and North America, which in the 1980s was the highest across regions, has been relatively stable in the last three decades. The only recent decline is found in Asia and the Pacific in the 2000s. In the latest decade, 80% of books from Latin America and the Caribbean incorporate the issue, but only 30% in the Arab States. For all other regions, around 40% covered the issue in the 2000s.

2.3 | Human rights

Many scholars of international education argue that human rights' discussions in curricular materials are a key indicator of nation-states converging towards prioritising individual rights over earlier emphases on national citizenship (Meyer, Bromley, & Ramirez, 2010). In support of this view, previous cross-national analyses have demonstrated that support for human rights in contemporary social science textbooks had increased over time (Bromley, 2014; Ramirez, Bromley, & Russell, 2009). Figure 3 plots mentions of human rights since 1890, as well as discussions of human rights documents and violations (since 1950 and 1970, respectively). Whilst it shows that textbooks already began to incorporate human rights discourse early in the 20th century, the strongest growth has taken place since the 1980s. By the last decade, close to half the books mention human rights, contrasting with only 5% in our earliest time period. Figure 3 also highlights that textbooks are more likely to mention human rights documents than human rights violations. Though both indicators show increases over time, textbook discussions of violations remain relatively few, with just over 10% in the 2000s. In contrast, more than 30% in that time period covered human rights documents.[2]
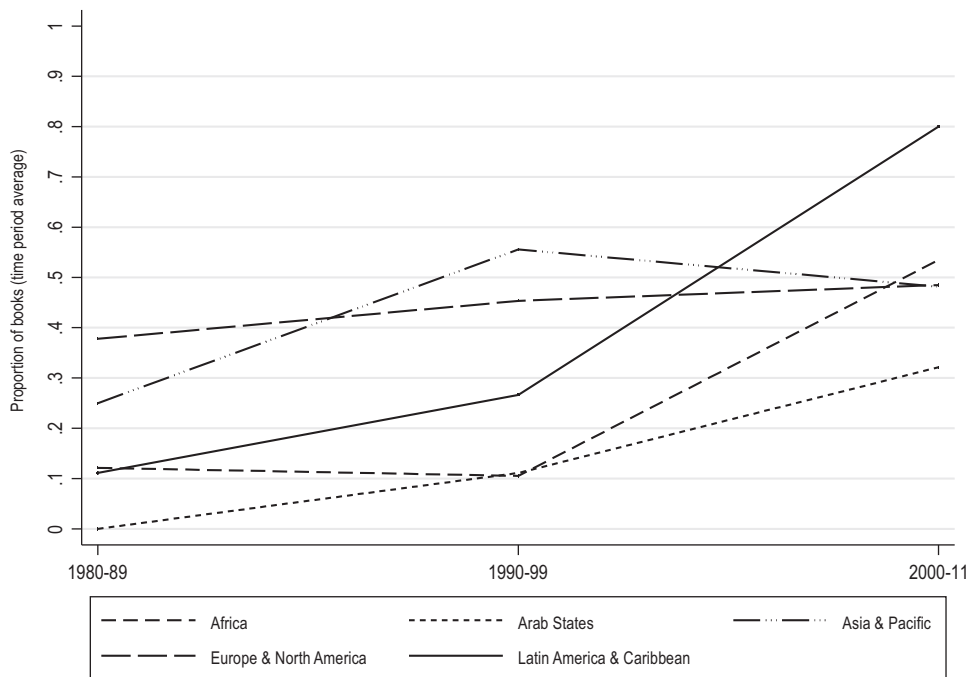
FIGURE 2   Discussions of environmental damage and protection in textbooks since 1980, by region
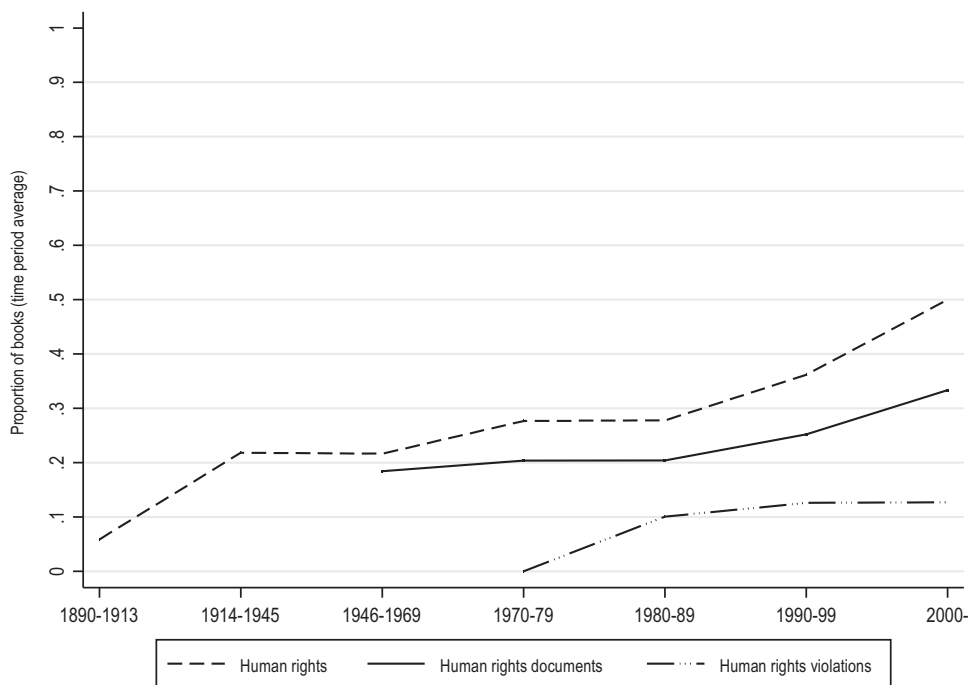*Note.* This indicator is drawn from Dataset 2

FIGURE 3   Human rights content in textbooks since 1890
Note. To consolidate small sample sizes in the early decades, data from 1890 to 1969 is presented in three time periods: the era before World War I (1890–1913), the years spanning the two World Wars (1914–1945), and the post-World War II decades (1946–1969). Starting in 1970, we present decadal averages of the indicators. For the line starting in 1890, Dataset 3 was used (ending in 2013), for the line starting in 1946 Dataset 2 (ending in 2011), and for the line starting in 1970 Dataset 3 (ending in 2008)
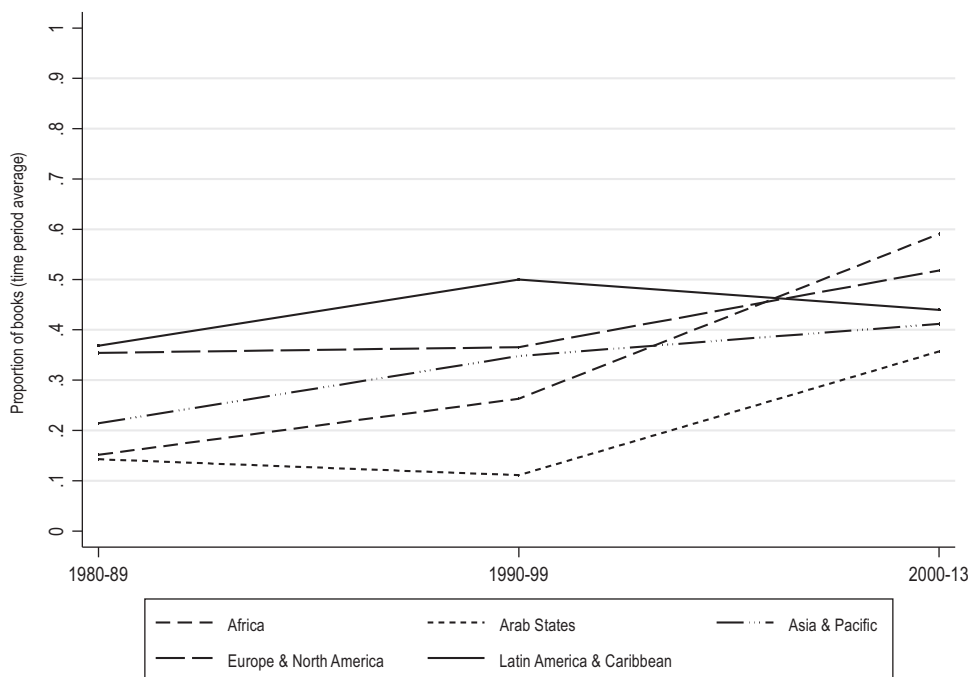
FIGURE 4 Mentions of human rights in textbooks since 1980, by region
Note. This indicator is drawn from Dataset 3

Figure 4 presents decadal averages of the proportion of books mentioning human rights by region, spanning the 1980 to 2013 period. Books from Asia and the Pacific and Africa show consistent increases throughout. Mentions in books from Europe and North America and the Arab States were relatively stable between the 1980s and 1990s, but then rose in the 2000s. Coverage in books from Latin America and the Caribbean appears to have risen in the 1990s, but then declined slightly in the most recent decade. Whilst human rights have been incorporated across regions, some differences remain, even in the last decade. The highest rates in the 2000s are in Africa (around 60%) and the lowest in the Arab States (around 35%).

2.4 | Global citizenship

Global citizenship is another area that is relevant for SDG 4.7. Scholars have argued that schools originated in Europe primarily as a nation-building enterprise in order to create national citizens from the diverse people living within the national borders (Ramirez & Boli, 1987). However, over time, more countries have shifted to a more global-focused civics curriculum (Ramirez, Meyer, & Wotipka, 2009). In addition to documenting a worldwide rise in textbook foci on global citizenship since the 1970s, Buckner and Russell (2013) found that, in the 2000s, 89% of their analysed books also discussed national citizenship, suggesting that global citizenship discourse did not necessarily replace notions of national citizenship.

Figure 5 plots the proportions of books that suggest ways for students to become involved globally (since 1980), such as by writing letters for Amnesty International and discussing global citizenship or membership in an international community (since 1970). Apart from a drop in the 1980s, both increase over time, though discussions of global citizenship are notably more pervasive. Nevertheless, coverage remains relatively low, with only around 25% of books discussing this topic in the 2000s.

Figure 6 zooms in on regional variation regarding global citizenship narratives, graphing decadal averages by region from 1980 to 2008. Almost all regions show increases since the 1980s, although less so in the Asia and Pacific region. Latin America and the Caribbean stand out, with especially high rates: in the last two decades, around half the books
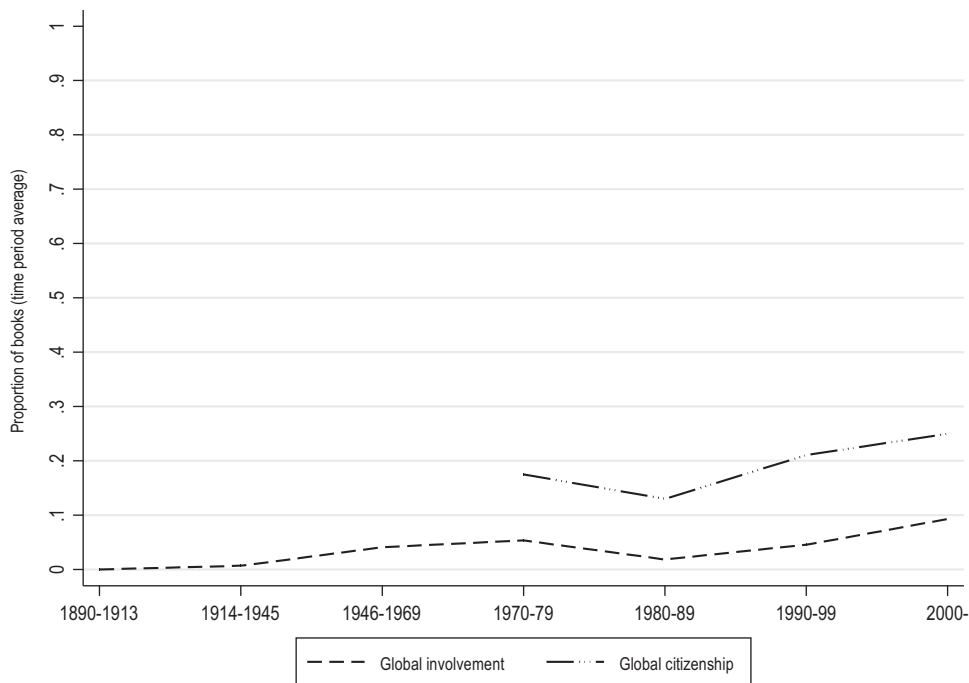
FIGURE 5 Global citizenship content in textbooks since 1890
Note. For the line starting in 1890, Dataset 3 was used (ending in 2013). For the line starting in 1970, Dataset 1 was used (ending in 2008)
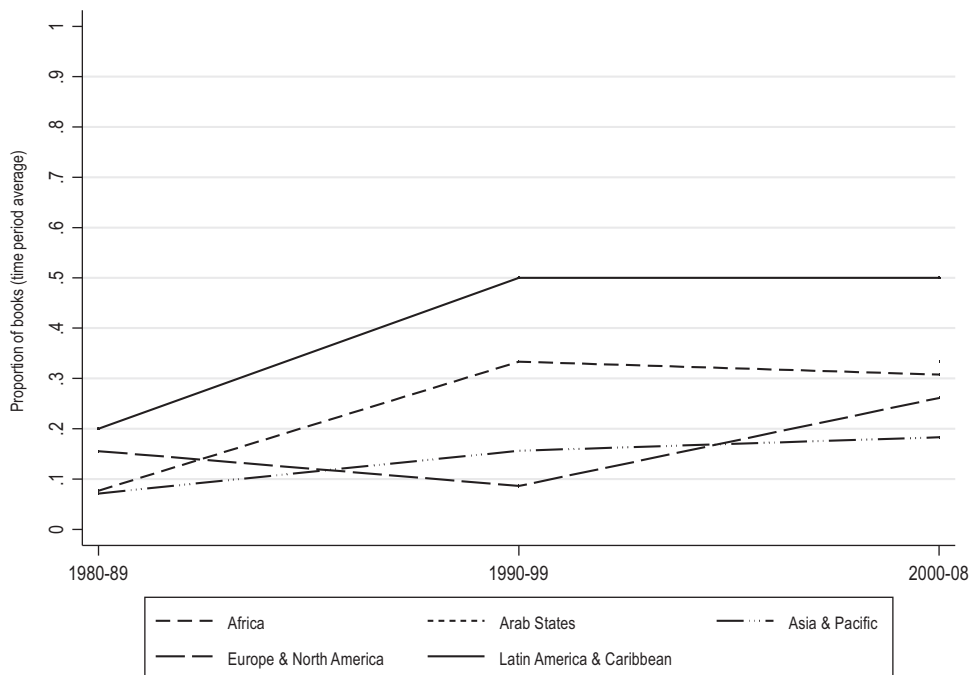

FIGURE 6 Mentions of global citizenship in textbooks since 1980, by region
Note. This indicator is drawn from Dataset 1. The line for 'Arab States' is not shown as none of the books we have from that region mention this indicator during that time period
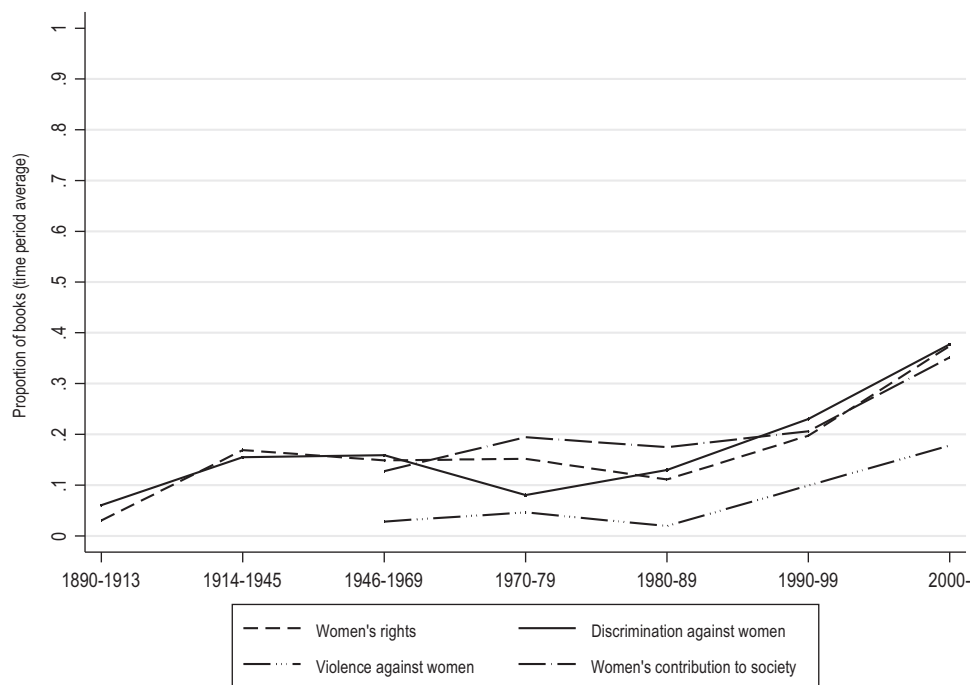
FIGURE 7 Textbook content around gender equality since 1890
Note. Data from 1890 to 1969 are presented as indicator averages in three time periods (1890–1913; 1914–1945, 1946–1969) and data from 1970 onward as decadal averages. For the lines starting in 1890, Dataset 3 was used (ending in 2013). For the lines starting in 1946, Dataset 2 was used (ending in 2011)

talk about global citizenship. The topic is not mentioned at all in our books from the Arab States. This could be due to very small samples for this region in our dataset.

2.5 | Gender equality

Nakagawa and Wotipka (2016) examined how discussions of women and their rights have expanded over time cross-nationally, finding a steady increase in textbooks worldwide. However, other studies found that women were still portrayed in a stereotype way and that textbook discussions concerning the contributions of women—especially women of colour—were still minimised (Bhog & Ghose, 2014; Blumberg, 2007; Schrader & Wotipka, 2011).

Figure 7 presents empirical indicators on textbook content on gender equality. We examine discourse around women's rights, discrimination against women, violence against women, and women's contributions to society. The overall picture is one of growth, particularly in recent years. Discussions of women's rights and discrimination against women begin to show growth by the early 1900s, then remain rather flat, with even some declines, and rise again steeply in the last two decades. Figure 7 suggests, however, that textbooks still seldom incorporate discussions of violence against women. In the latest decade, less than 20% discuss this issue, compared with just under 40% for the other gender-related indicators.

Figure 8 breaks down the proportion of books mentioning women's rights over time by region, again focusing on the time span since 1980. Books from all regions show increases over time, although mentions in books from Africa decline in the 1990s before rising in the 2000s. Increases in books from the Arab States are relatively modest. Even in the latest decade, there continues to be regional variation in the extent to which textbooks embrace markers of gender equality: the lowest rates seem to be in books from the Arab States (just above 10%) and the highest in books from Europe, North America, and Africa (around 40%).
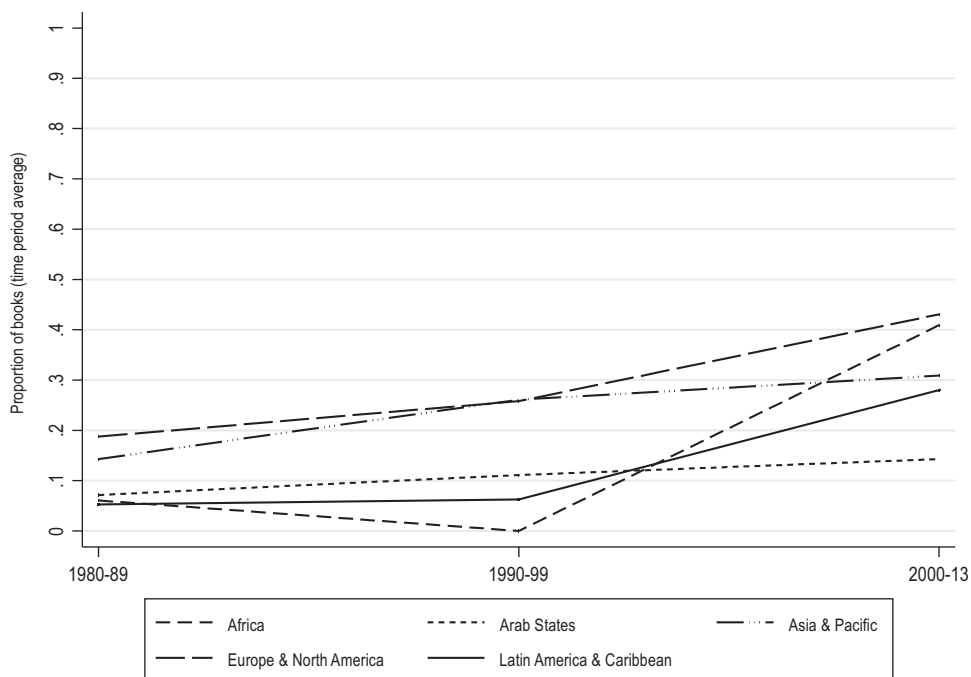
FIGURE 8 Mentions of women's rights in textbooks since 1980, by region
Note. This indicator is drawn from Dataset 3

2.6 | Multiculturalism and social diversity

Analysing 548 secondary social science textbooks published from 1950 to 2010, Terra and Bromley (2012) studied whether women, children, immigrants and refugees, indigenous peoples, other minorities (ethnic, cultural, religious, and linguistic), workers/labour, and gays/lesbians were discussed as having rights and whether they experienced marginalisation or exclusion in their respective countries. Whilst they found some geographic differences, textbooks from all regions increasingly discussed all these groups as both having rights and being victims of discrimination, although coverage of LGBT persons and their experiences tended to be minimal.[3] They also found that, over time, economic or class-based groups were given less attention than cultural, ethnic, and gendered groups; this trend was most notable in the discussion of workers and their associated labour unions. Bromley (2014) found that, whilst human rights' discussions increased worldwide, discussions of the rights of minority groups only increased significantly over time in liberal democracies. Using an expanded data set including more recent textbooks, Jimenez (2017) also found that discussions of the rights and discrimination of immigrants/refugees and workers had shown some evidence of decline in 21st century textbooks, unlike the continuously rising trends for women and minorities through to the present day.

To empirically assess the evolution of textbook content along these dimensions, we graphed the proportion mentioning the rights of immigrants and refugees, of ethnic, racial, and religious minorities, of gays and lesbians, and of people with disabilities (Figure 9). Textbook discussions of all topics increase over time, but most remain relatively low. Portrayals of the rights of immigrants/refugees and of ethnic, racial, or religious minorities (for which we have early data) experience some declines after an early increase in the era of the World Wars, but begin to grow again in the 1970s and 1980s, respectively. In the most recent decade, discussions of ethnic, racial, and religious minority rights are the highest at just under 30%, whilst all others fall below 20. Textbook coverage of gay/lesbian rights remains the lowest, at just under 5% in the 2000s.

Figure 10 examines regional variations in these indicators, focusing only on the 2000s, given the extremely low coverage in earlier decades. It shows interesting regional differences. Books from Latin America stand out with the
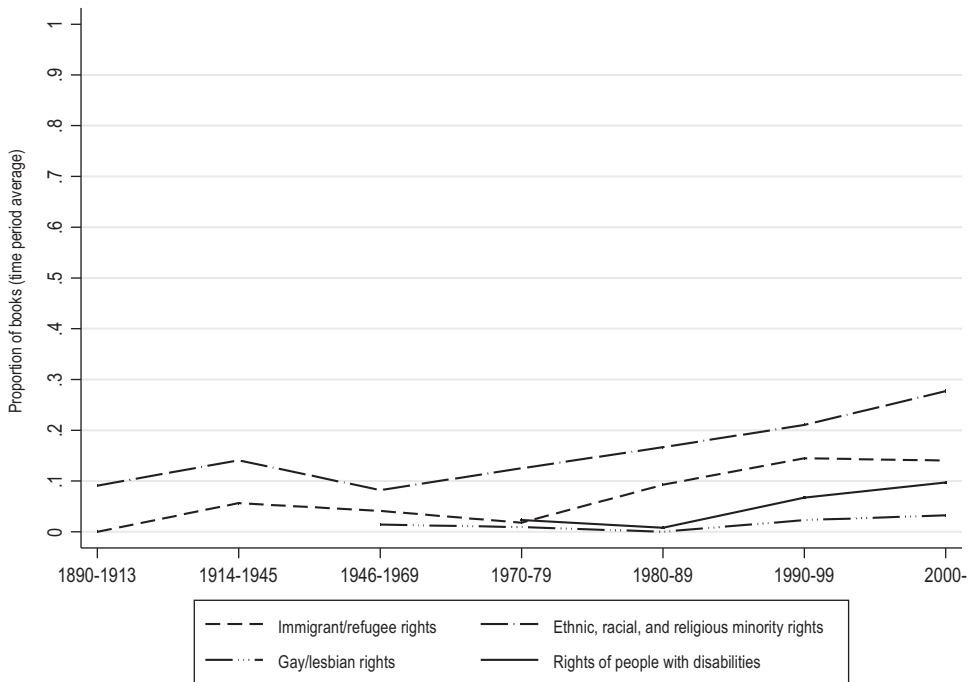
FIGURE 9 Multiculturalism and social diversity content in textbooks since 1890
Note. For the lines starting in 1890, Dataset 3 was used, ending in 2013. For the lines starting in 1950, Dataset 2 was used (ending in 2011), and for those starting in 1970, Dataset 1 (ending in 2008)

highest coverage overall, whereas those from the Arab States have the lowest. Immigrant/refugee rights are not mentioned at all in books from Africa and the Arab States and are seldom incorporated in books from Asia and the Pacific. As suggested by the world level trends presented above, textbook discussions of gay/lesbian rights and the rights of
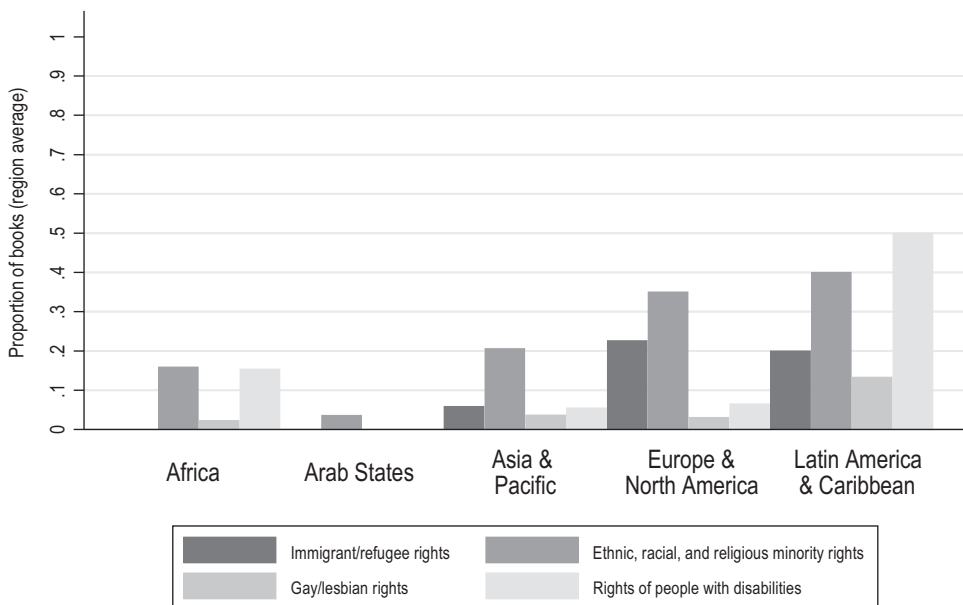

FIGURE 10 Multiculturalism and social diversity content in textbooks in the 2000s, by region
Note. For immigrant/refugee rights as well as ethnic, racial, and religious minority rights, Dataset 3 was used (2000–2013). For gay/lesbian rights, Dataset 2 was used (2000–2011). And for disability rights, Dataset 1 was used (2000–2008)

people with disabilities are the lowest across regions, with one exception: books from Latin America and the Caribbean incorporate disability rights at a notably high rate of 50%.

3 | SUMMARY OF TRENDS

To summarise, our review highlights substantial progress in the extent to which textbooks worldwide incorporate GCED and ESD content. The highest growth is found in textbook discussions of environmental damage and protection, human rights, and many indicators concerning gender equality. For other dimensions, however, whilst reporting increases, we noticed more modest progress. The proportion of books framing environmental issues in terms of rights remains relatively low and few include some of the more distressing topics around human rights and gender equality (namely, human rights violations and violence against women). Many dimensions of multiculturalism and social diversity are still only rarely discussed (particularly the rights of gays and lesbians and those of people with disabilities). Coverage of global citizenship also remains low.

Our regional analyses overall signaled that these trends, by and large, could not be attributed to a single region. Whilst we are cautious in over-emphasising regional differences because of some small sample sizes, our breakdowns have highlighted that general trends of growth notwithstanding, regions continued to differ in the extent to which they covered the various dimensions.

3.1 | Critical assessment of knowledge gaps

Whilst cross-national and longitudinal textbook databases span an impressive range of content that is relevant for SDG 4.7, we lack data in several key areas and more especially sustainable development. As our coding schemes did not focus on this issue, we have no explicit measures of how the books discuss the concept and its role in individual, national, and global spheres of life. Moreover, although we have several measures related to the environment, we have no data on how textbooks link these discussions to (social) development or the economy. Similarly, it would be worth collecting currently missing data on textbook content that are relevant for the promotion of peace and non-violence.

It would also be important to improve on the qualitative aspects of the measures we have. In other words, whilst we have good measures of whether books discuss certain issues, it is much more challenging to capture *how* they are discussed. It would be helpful to develop better measures of whether books depict different population groups in positive or negative ways, showing both explicit and implicit biases. For instance, South African textbooks from the first half of the 20th century discuss different groups in considerable detail much earlier than many other contemporary textbooks, but the coverage is frequently derogatory and racist (Jimenez, 2017). One obstacle in coding this is that these measures often call for substantial interpretation by textbook coders, which reduces inter-rater reliability.

Finally, the coverage of textbooks in currently available datasets is uneven. Marginalised countries and regions are under-represented, whereas dominant countries and regions are overrepresented, given their greater availability for a longer period of time. In addition, subject coverage thus far has concentrated on history, civics, social studies, and geography. It would be worth expanding this focus to the fields of language, arts, or the sciences and develop data on primary school textbooks, as most current cross-national analyses have focused on middle and secondary school curricula.

4 | CHALLENGES IN MEASURING COUNTRY PROGRESS TOWARDS GCED AND EDS TEXTBOOK CONTENT

As with many global goals, it is not easy to assess the monitoring and assessment of country progress towards SGD 4.7. Textbooks may offer a valuable source of data about national commitments to sustainable development education,

as they can be analysed in ways that remove concerns that teachers or students may alter their behaviour when being studied. Nonetheless, there are two main challenges when developing an index or metric to measure the extent to which countries are making concerted efforts to prioritise GCED- and ESD-related issues in school textbooks: sampling and coding.

4.1 | Sampling

Ideally, one would want to study all the textbooks that are used (and obtain a measure of their usage) in each subject and grade. But in practice there are difficult trade-offs between breadth and depth, making it necessary to decide on particular grade levels or ages. However, individual countries may not cover the same content in the same year of their curricular sequence. For example, Country A may progress from local to national to global, whilst Country B integrates the global throughout. Depending on the year selected, the countries would look very different, although the overall level of global instruction could be similar across a schooling experience. In addition, many countries have decentralised education systems, making it necessary to construct a national average drawn from a sample of only a few regions, despite the fact that there may be considerable within-country variation. Lastly, for some countries it remains difficult to obtain textbooks (Saudi Arabia), and for others it is illegal (North Korea). Thus, researchers must attend to these biases by excluding some countries. Hence, global trends may look rosier than they are if the countries that minimise coverage of GCED and ESD are systematically, if unintentionally, excluded.

4.2 | Coding

One must be cautious about the capacity to develop statistically reliable and valid measures of concepts such as diversity or global citizenship. Translation issues can easily change the meaning of a question and this becomes more nuanced when cultural definitions of broad concepts (e.g., global citizenship) may also vary. For example, economic ideas such as guaranteed employment or a minimum wage are sometimes included under the umbrella of human rights, whilst other concepts focus on civil and political rights.

4.3 | Other limitations

As indicated in Table A1 of the Appendix, most textbooks are at the upper secondary level. Thus, it is not clear whether we would be more likely to find similar thematic trends if we focused on primary school textbooks. On the one hand, primary school texts could be more likely to include environmental themes because they get crowded out of secondary curriculums that focus more on subjects tied to standardised tests. However, certain themes such as human rights violations could be viewed as inappropriate for younger students and thus be less likely to be included. As such, there is value in future cross-national work focusing on primary level textbooks. Additionally, history textbooks significantly outnumber all other social studies texts in our sample, since most countries have been producing these for considerably longer than other social science books. They may be less prone to discuss our thematic issues than social studies textbooks that are more civic-minded in their discourse, or geography books that may raise sustainability issues such as soil erosion, land rights, and climate change.

5 | CONCLUDING OBSERVATIONS AND RECOMMENDATIONS

The trends examined here point to a flourishing of textbook content around environmental awareness, human rights, social equality, and global citizenship worldwide, from relatively low levels in the middle of the 20th century to notably higher levels more recently. With more global attention directed to these issues today, it is perhaps no surprise that they have also entered school curricula. And yet it is clear that not all issues in the global spotlight today are equally incorporated in school curricula. Our findings of more modest increases in textbook discussions around certain topics such as violence against women or LGBT rights may be due to these being still regarded as taboo or too sensitive to

be included in the curriculum. Moreover, regional patterns suggest some cross-national variation in these trends. Books from the Arab States in our dataset stand out for low rates of incorporation across many GCED and ESD indicators measured here, which might not be surprising given the economic and political factors that characterise the region. For instance, NGOs are more likely to be present in developing countries and thus have a greater influence on textbook content in Latin America and Africa than in the Arab States. This could be due to budgetary constraints, since Arab States are less likely to need funding from NGOs, or to political considerations, since most have authoritarian governments that could be less amenable to foreign influences promoting such themes in their textbook content recommendations.

Other regional results, such as the high rates of disability discussions in Latin American textbooks, were somewhat surprising. One possible explanation could be that the governments of the region have been more often Socialist or Social Democratic (e.g., Venezuela, Bolivia, Peru, Paraguay, Uruguay, Argentina, and Brazil) in recent years than other regions and that such increasingly centralised States may be more apt to promote the rights of marginalised groups. However, why disability rights and experiences would dominate is unclear and would deserve further study. Overall, the general rise of the themes of global citizenship, environmentalism, and marginalised group rights (among others) is a finding that meshes well with the findings of many earlier textbooks studies, crossnational or otherwise.

In general, it is becoming more commonplace for the various agents involved in textbook production—be they public or private—to view these ideas as important and worthy of inclusion in their respective school curricula. Our rich datasets containing approximately 1,000 textbooks provide a large window into developments in the last decades, but ongoing research could provide important signals to how these ideas may continue to be prioritised—or not—by textbook developers in the years to come.

Before the events of recent years, it could have been tempting to assume that the themes addressed in this article—many of which are intimately tied to economic and political globalisation—represented a movement that would eventually proliferate to all corners of our world. However, recent electoral outcomes across the world—together with the rise of anti-democratic political and social movements—must motivate us to continue to monitor[4] future developments concerning these trends.

Textbooks remain a central classroom tool in most countries worldwide. They are a promising source of data to develop multi-dimensional measures of GCED and ESD content in education systems. Existing research suggests massive changes over time and around the world in these emphases, but we know very little about what drives these trends. In particular, case studies exist to explain particular countries or sub-national regions, but the fact that this is a global phenomenon that generally occurs in the neo-liberal era is less recognised and understood. Textbooks provide an important window into the values and priorities expressed by the many national communities across the world and how these change over time. Therefore, developing a global monitoring and evaluation system examining textbook content is a useful approach to promote high quality education curricula worldwide.

NOTES

[1] In addition, for many indicators, few books mention them in some regions, making an analysis of regional trends unstable. In those cases, we simply show regional breakdowns for contemporary books (i.e., 2000 onwards). The regional analyses must be interpreted with caution because of the small sample sizes.

[2] In analyses that are not reported here, we compared mentions of international/regional human rights documents with those of national human rights documents. We also examined whether textbooks tended to discuss human rights violations domestically or in other countries. We found that human rights documents were more likely to be discussed at the international or regional level. Levels of textbook coverage of human rights violations domestically versus in other countries were comparable.

[3] Sometimes textbooks in a country can promote both themes simultaneously, as when Bhog and Ghose (2014) shared how sometimes Muslims in India were portrayed as outsiders, whilst at others they were celebrated for adding to India's diversity.

[4] Despite these limitations, the trends we find are corroborated by other academic studies that analysed these datasets using multilevel, multivariate regression methods, thus accounting for differing sample sizes per country and controlling for many country-specific characteristics.

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APPENDIX : DISTRIBUTION OF SAMPLES IN 3 TEXTBOOK DATASETS

TABLE A1 Textbook distribution by region and decade, Dataset 1 (1970–2008)[a]

	Africa	Arab States	Asia and the Pacific	Europe and North-America	Latin America and the Caribbean	Total
1970–1979	0	0	12	35	2	43
1980–1989	14	0	28	95	5	129
1990–1999	10	0	33	60	27	119
2000–2008	13	3	73	92	10	165
Total	37	3	146	282	44	456

[a]UNESCO regions. Regions may overlap (see: http://www.unesco.org/new/en/unesco/worldwide/).

TABLE A2 Textbook distribution by subject and decade, Dataset 1 (1970–2008)[a]

	Social Studies	Civics	History	Total
1970–1979	13	9	23	43
1980–1989	36	25	72	129
1990–1999	32	30	62	119
2000–2008	51	45	80	165
Total	132	109	237	456

[a]Subject categories may overlap.

TABLE A3 Textbook distribution by region and decade, Dataset 2 (1950–2011)[a]

	Africa	Arab States	Asia and the Pacific	Europe and North-America	Latin America and the Caribbean	Total
1950–1959	5	5	13	31	2	54
1960–1969	21	10	17	40	11	88
1970–1979	22	3	17	49	18	108
1980–1989	33	14	12	45	18	103
1990–1999	19	18	18	75	15	131
2000–2011	43	28	54	99	15	219
Total	143	78	131	342	79	703

[a]UNESCO regions. Regions may overlap (see: http://www.unesco.org/new/en/unesco/worldwide/).

TABLE A4 Textbook distribution by subject and decade, Dataset 2 (1950–2011)[a]

	Social Studies	Civics	History	Geography	Total
1950–1959	0	9	30	13	54
1960–1969	9	18	50	17	88
1970–1979	15	24	49	31	108
1980–1989	14	17	51	26	103
1990–1999	24	23	70	34	131
2000–2011	51	51	86	56	219
Total	113	142	336	177	703

[a]Subject categories may overlap.

TABLE A5 Textbook distribution by region and decade, Dataset 3 (1890–2013)[a]

	Africa	Arab States	Asia and the Pacific	Europe and North-America	Latin America and the Caribbean	Total
1890–1899	1	0	0	5	2	8
1900–1909	0	0	1	14	2	17
1910–1919	0	0	8	15	1	23
1920–1929	1	1	7	26	2	36
1930–1939	1	0	17	46	5	60
1940–1949	2	2	18	53	3	70
1950–1959	7	9	18	37	3	67
1960–1969	22	11	17	40	12	90
1970–1979	22	3	21	49	18	112
1980–1989	33	14	14	48	19	108
1990–1999	19	18	23	94	16	153
2000–2013	44	28	68	139	25	280
Total	152	86	212	566	108	1,024

[a]UNESCO regions. Regions may overlap (see: http://www.unesco.org/new/en/unesco/worldwide/).

TABLE A6 Textbook distribution by subject and decade, Dataset 3 (1890–2013)[a]

	Social Studies	Civics	History	Geography	Total
1890–1899	0	0	7	1	8
1900–1909	1	3	17	1	17
1910–1919	1	2	20	3	23
1920–1929	1	6	30	5	36
1930–1939	8	12	48	5	60
1940–1949	8	11	58	5	70
1950–1959	1	9	44	12	67
1960–1969	10	18	51	17	90
1970–1979	16	24	52	31	112
1980–1989	14	17	56	26	108
1990–1999	27	25	91	35	153
2000–2013	67	63	137	65	280
Total	154	190	611	206	1,024

[a]Subject categories may overlap.