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# The invisible obstacle to educational equality: gender bias in textbooks

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**Abstract** Gender bias in textbooks (GBIT) is a low-profile education issue, given the 72,000,000 children who still have no access to schooling, but this article argues that GBIT is: (1) an important, (2) near-universal, (3) remarkably uniform, (4) quite persistent but (5) virtually invisible obstacle on the road to gender equality in education—an obstacle camouflaged by taken-for-granted stereotypes about gender roles. Specifically, GBIT: (1) is important because (a) textbooks occupy ~80% of classroom time, and (b) it may contribute to lowering girls' achievements, especially in weak schools in poor countries; (2) has been found worldwide to varying degrees (except, perhaps, Sweden in recent years); (3) involves nearly identical patterns of under-representation of females, plus stereotypes of both genders' occupational and household roles that overwhelmingly underplay women's rising worldly importance; (4) is decreasing very slowly, according to "second generation" re-studies; and (5) remains obscured by the "hidden-in-plain-sight" system of gender stratification and roles. Case studies from Syria, India, Romania, China and the US document these points. Other case studies from Sweden and Latin America describe government initiatives to reduce GBIT, with differing levels of success. Totally revising textbooks (and curricula) to eliminate this bias is quite unlikely, partly because it is very costly. The article concludes by presenting inexpensive alternate methods that *can* combat GBIT.

**Keywords** Girls' education · Textbooks · Gender-bias

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## Thesis and outline of the argument

Gender bias in textbooks (GBIT) is not a burning education issue in a world where 72,000,000 children still have no access to schooling (UNESCO 2008, p. 2). Nonetheless, this article argues the case that it is (1) an important, (2) nearly universal, (3) remarkably uniform, (4) quite persistent but (5) virtually invisible obstacle on the road to gender equality in education—an obstacle camouflaged by taken-for-granted stereotypes about gender roles. Totally revising textbooks (and curricula) to eliminate this sexism is highly unlikely, however, partly because it is very costly. So, the article ends with inexpensive partial methods to expose and counteract GBIT.

(1) Concerning **importance**, the article asserts that gender bias in textbooks *does* matter.

One reason is the importance of textbooks themselves. Consider these statistics:

- Sadker and Zittleman (2007, p. 144) cite research "that students spend as much as 80 to 95% of classroom time using textbooks and that teachers make a majority of their instructional decisions based on the textbook."
- A Canadian study found that the average teacher uses textbooks for 70 to 90% of classroom time (Baldwin and Baldwin 1992).
- To this must be added the almost invariably gender-biased textbooks used in teacher training, as well as the reinforcement of gender-stereotyped attitudes that this inculcates among teachers.

A second reason is that GBIT is suspected of diminishing girls' achievements (although to an unknown extent). The problem seems most severe in the weakest school systems in the poorest countries—which often have gender-biased teachers' attitudes as well as learning materials. The following contrast illustrates the point: On the one hand, in almost all countries that participate in international educational testing, girls have an advantage over boys in reading that is greater than girls' now-shrinking shortfall in mathematics and science (Ma 2007). On the other hand, an analysis of 16 of the world's least affluent nations—14 of them in sub-Saharan Africa—shows that girls did *worse* than boys in reading. These countries' schools were of such poor quality that only a small proportion of students learned to read by the time they completed primary school—but only 33% of girl graduates could read, vs. 37% of boys (Wils et al. 2005).

(2) With respect to **near universality**, gender-biased textbooks have been found world-wide but only three regions remain where female enrollment lags behind: sub-Saharan Africa, South Asia, and the Middle East/North Africa, particularly in their poorest and/or most "fragile" states. Conversely, the data show that gender bias in schoolbooks is ubiquitous, to varying degrees. Only in Sweden have government efforts to eliminate gender bias from textbooks and curricula apparently succeeded. In fact, in promoting gender equality, Swedish textbooks may depict males in stereotypically female domestic tasks more often than is prevalent even there.

(3) There is also a quite **uniform pattern** of gender bias in textbooks around the world. Studies exposing this pattern emerged at the same time as the Second Women's Movement: In the Western hemisphere, the first was in Chile in 1970 (Magendoza), a year before the publication of content analyses in the US by an activist (U'Ren 1971) and a historian (Trecker 1971). Other efforts to expose and ameliorate gender biases in schoolbooks (and sometimes in curricula) also began world-wide. All these far-flung studies showed strikingly similar findings:

- Whether measured in lines of text, proportion of named characters (human or animal), mentions in titles, citations in indexes, and so forth, females were underrepresented.
- Moreover, females and males were shown in highly gender-stereotyped ways in the household as well as in the occupational division of labour, and in the actions, attitudes and traits portrayed. To wit: women were accommodating, nurturing drudges at home and in the few instances they were depicted at work it was in traditional activities; girls were passive conformists, while boys and men did almost all the impressive, noble, exciting and fun things and almost none of the caring, or "feminine" acts or jobs. As Ikuko Anjo Jassey summarized it,

> Virtually all of the studies concluded that textbooks have not adequately reflected the range of women's roles and occupations in the real world. In general, it seems gender biased images remain strongly present in school textbooks throughout the world (Jassey 1998, p. 88).

(4) Concerning the **persistence** of gender bias in learning materials, data from a number of "second generation" studies that replicate earlier research after two or three decades find some improvement, but usually at an excruciatingly slow pace.
(5) Concerning the **near-invisibility** of gender bias in textbooks—and its effects—it is part of the "hidden curriculum" (Stromquist et al. 1998). In essence, gender bias in schoolbooks is "hidden in plain sight". Their stereotypes of males and females are camouflaged by the taken-for-granted system of gender stratification and roles and this constrains girls *and* boys' visions of who they are and what they can become.

The remainder of the article is organized as follows: The next section presents empirical data concerning (a) the common patterns and (b) the persistence of gender bias in textbooks. The material about common patterns is drawn from developing countries; that involving persistence comes from "second generation" studies in the United States. In terms of methods, all these studies are based largely on content analysis. The third section discusses a few examples of attempts to remediate gender bias in education, including Sweden's perhaps too-thorough efforts and some mixed cases of partial progress in Latin America. The final section looks at how to get around the problems—and the enormous expense—of a complete overhaul of books and curricula. It considers methods that can be used by teachers, students and even parents to first boost their awareness of gender bias in the students' textbooks—and then to actively counteract it.

## Patterns and persistence of gender bias in textbooks

### The main patterns: examples from the developing world

Three countries are discussed in some detail to illustrate the common patterns of gender bias in learning materials: (1) Syria; (2) the state of West Bengal, as well as an overview of India, and (3) Romania. The studies entail varying levels of quantitative content analysis and qualitative methods. Since the nations represent different levels of gender equity in education, Tables 1 and 2 present their male/female Gross Enrollment Ratios (GERs) and Gender Parity Index (GPI) in (1) primary and (2) secondary education (where the countries vary considerably).

**Table 1** Gross enrollment ratios in primary education

| Country | Total (%) | Male (%) | Female (%) | Gender Parity Index (GPI) |
|---|---|---|---|---|
| Syria | 124 | 127 | 121 | 0.95 |
| India | 125 | 129 | 120 | 0.93 |
| Romania | 107 | 108 | 106 | 0.99 |
| China | 112 | 113 | 111 | 0.98 |

*Source*: UNESCO (2008), Table 5, pp. 284–291

**Table 2** Gross enrollment ratios in secondary education

| Country | Total (%) | Male (%) | Female (%) | Gender Parity Index (GPI) |
|---|---|---|---|---|
| Syria | 68 | 70 | 65 | 0.94 |
| India | 59 | 65 | 52 | 0.81 |
| Romania | 85 | 85 | 86 | 1.01 |
| China | 76 | 75 | 76 | 1.01 |

*Source*: UNESCO (2008), Table 8, pp. 308–313

## Syria

Alrabaa (1985) analysed 28 textbooks from grades 8–12 and found them to be male-biased in content and language; indeed, females were disparaged and victimized. The biased texts served 500,000 students per year and spanned all major subjects. They violated government policies adopted in 1965 and 1973 to create a curriculum and textbooks conducive to sex role equality.

An intensive quantitative study of a subset of books, those from 1979–81, found that:

- Concerning prevalence: males provided the leading characters in 75% of the 353 lessons analysed; they also made up 87% of those portrayed in 54 biographies (ibid.).
- Concerning the division of labour: the analysis counted a total of 463 occupations: 84% (391) were filled by males and 16% (72) by females. Men were shown as presidents/kings ($N = 89$) and soldiers ($N = 52$), as well as professionals and farmers. A few women were shown in traditional jobs but most were in economically dependent domestic roles.
- In terms of favorable images: For males, brave was the most common ($N = 82$). For females, beautiful was the most prevalent ($N = 42$). There were only two overlaps in the male and female top ten: kind and educated.

Alrabaa's study also generated some important qualitative findings:

- Male-centred language was used for both males and females (e.g., "mankind"; "he");
- Sex roles were traditional: Males were "masters" in their homes. They didn't consult females on controlling children, let alone household budgeting. Females were depicted as fixated on making husbands happy via housework (ibid., p. 343).
- There was "derogation of women"—the undertone in many descriptions praising women for subservience and domesticity. Females were often portrayed as manipulative, jealous, "fussy do-nothings", weak, irrational, superstitious, or "despicable" (ibid., p. 345).
- "Victimization and acquiescence" of females was not infrequent, while texts "project an exaggerated view of male power" (ibid., p. 346). Women deviating from traditional

> roles were sometimes physically punished: "The textbooks imply that women should endure an abusive male, accepting his violence as 'natural'…the female's silent suffering is highlighted as an inherently good female quality" (ibid.).

Nevertheless, statistically, Syria's record on education is closer to Education for All (EFA) goals of eliminating gender disparities in primary and secondary school enrollment than is that of India.[1]

India

An article by Ellis (2002) concerning school textbooks in the state of West Bengal is not as sophisticated as Alrabaa's study in Syria, but the magnitude of gender bias he encountered in the state's main history and geography texts for years three and four of middle school (Parts 1 and 2, published in 1992 and 1996, respectively) is just as great. Part 2, in particular, seems extreme: of 52 pictures, 50 (96%) are of males. Both females are shown in traditional roles. No women are shown in the chapter about "Main Ways of Earning a Living", nor in an illustration of people receiving land titles from a male government officer. Ellis claims that this "is a false view of reality since in West Bengal, numerous households have women as their heads, who hold [titles] in their own name". Based on his analysis, Ellis opposed any further expansion of these books' adoption.

Ahmed (2006) takes a national perspective in another brief article. He notes that since 1982–83 the National Council of Educational Research and Training (NCERTS) "has been laying stress on removing gender disparities—specifically emphasizing the elimination of sex stereotypes and sex biases from textbooks". Nonetheless, he concludes that women are still shown in stereotyped roles and that "lessons…are male-centric". He cites a survey by Friends of Education that found that "over half of the illustrations depict [solely] men and boys…and only six percent show [solely] women and girls". In the six primary school texts for mathematics not a single woman is shown as a shopkeeper, a merchant, an executive, an engineer or a seller.

Romania

Romania has no gender gap in enrollment. Does it have less gender-biased textbooks? Miroiu (2004) finds the same basic story as in Syria and India. First, she defines some terms related to gender, including "gender neutral", which she terms "the tendency to ignore gender differences as being irrelevant and thus to perpetuate stereotypes as they exist" (2004, p. 86). Second, she notes that:

> Several studies on textbooks…reveal gender problems. Texts are generally gender neutral but their content is a more significant promoter of gender stereotypes than are curricula (2004, p. 90).

Illustrations: These show a stark disparity: "of 106 textbooks analyzed, the percentage of the pictures illustrating girls/women is…13%." While first and second grade textbook pictures depict 24% girls/women, the proportion drops steadily to 10% by 12th grade.

[1] In addition to a greater gender gap in education (see Tables 1 and 2), India has one of the world's most skewed sex ratios, an increasingly used indicator of gender discrimination (Sen 1990, 2001; Blumberg and Holian 2004): only 92.7 women per 100 men. This compares to 105–106 women to 100 men in developed industrial countries, and even 102 women to 100 men in Sub-Saharan Africa (where women are valued as farmers; they raise up to 80% of locally grown food crops (Saito and Weidemann 1990)).

(An interesting exception involves book covers: 45% contain images of both sexes. Sadker et al. (2009) lists "Cosmetic Bias: 'Shiny' Covers" as one of the seven forms of textbook bias: these are covers with more gender (or race/ethnicity) diversity than the biased content inside.)

Content: Depiction of occupations and trades is even more extreme. Textbooks for 3rd to 12th grade contain only 2% of women working—whereas national statistics for 2004 show that more than half of all women are economically active. Out of 5,620 images, 1,306 contain recognizable trades: 1,290 are performed by men, vs. only 16 by women (ibid., p. 91). Similarly, only 1% of men are placed in domestic situations.

Textbook subject matter: The same basic pattern emerges here—and quite strongly. Of the 16,600 lines and 415 pages analyzed in a primary level language and communication text, only 8 lines featured women in public life and 3 lines depicted men in the home. Of 1,966 problems in mathematics and sciences only 282 contain people—and "none of them are in non-traditional roles" (ibid., p. 92). The situation is hardly more gender-egalitarian in other disciplines. For example, in Romanian language and literature, the "main characters are all masculine"; in history, women are wives and mothers of leaders, and Roma [gypsy] women "simply aren't there"; in the arts, there "are only male composers and artists" (ibid., p. 93).

Authorship: These results are not due to an absence of female authors. In Romania, women write about half the primary school texts (52% of 404 authors), and they comprise 43% of the 1,655 authors of high school texts. Moreover, "There is no direct correlation between the gender of the author and the level of gender fairness promoted in the texts" (ibid.).

### China

China is included as a final example in this section because of the aid it received from the Ford Foundation to document gender bias in textbooks. Although it had essentially eliminated the gender gap in primary and secondary schools, some saw lingering gender bias in textbooks as a problem. The previous three countries involve unconnected, individual studies of GBIT. China, however, with Ford Foundation funding, was able to generate a holistic, coordinated view of the nature and extent of gender bias in its schoolbooks at most levels of education. Specifically, in 2000, the Ford Foundation funded an ambitious effort by 20 researchers to (1) study gender bias in texts and then (2) develop and disseminate some gender-equitable learning materials. The research results are reported in two special issues of *Chinese Education and Society* in 2002 and 2003. The former encompasses pre-primary and primary levels, and the latter includes junior middle school and adult literacy learning materials.

The 2002 editors (Shi and Ross 2002, p. 3) discuss the policy context for gender equity. In May 2001, the State Council passed a Programme for the Development of Chinese Women (2001–2010) that called for including the primary objectives of women's education in the state education plan, and incorporating social gender awareness into teacher training courses and methods. The Council also ratified a Programme for the Development of Chinese Children (2001–2010): "Awareness of gender equality shall be incorporated in the contents of education".

Research methods included both quantitative content analysis of texts and classroom-based investigations. The articles reveal the usual patterns:

Males are disproportionately overrepresented, and females appear most often in reading materials for very young children. The proportion of male characters rises from 48% in

books for 4-year-olds to 61% in books for 6-year-olds. Even here, where most stories focus on family life, gender-stereotyped roles are reproduced (Liu 2002).

Chen and Chen (2002) document an analogous picture in the new five-volume series of mathematics books used in elementary schools. First, males are almost two-third of those depicted. Second, males comprise 74% of those in stimulating activities, whereas females make up 70% of those in passive activities. The usual gender role stereotypes are present in full force: courageous, independent, ambitious and sometimes naughty boys, vs. passive, obedient, neat, cooperative girls.

Yi (2002) analyses social studies texts: 100% of scientists and soldiers are male, whereas 100% of teachers and 75% of service personnel are female. Males dominate the public sphere and females the private one. A woman who was one of the most influential leaders of the Communist Party—and state—is depicted twice: mending Premier Zhou Enlai's clothes, and bringing a guard an umbrella on a rainy day.

Guo and Zhao (2002) analyse the 12-volume elementary language textbooks. Females make up only about one fifth of the historical characters portrayed and the usual male/female stereotypes render them dull and lifeless in comparison with the vibrant males.

Not surprisingly, teacher-pupil and peer interaction also followed the same stereotypes, to girls' disadvantage, in several classroom-based articles.

The 2003 issue (Ross and Shi, eds.), which covers mostly junior middle school, revealed the same patterns. A new element is discussed, however: a mismatch between the curricula, which are gender-biased, "and the actual life experiences of women and men and girls and boys in China's diverse and rapidly changing communities" (Ross and Shi 2003, p. 3).

The first article (Wang 2003) is historical. In the first decade of the 20th century, at the end of the Qing dynasty, articles began appearing urging girls not to have their feet bound, citing the harm it causes. A 1907 Qing text, *Mandarin Language Textbook for the Liberation of Girls,* shows a group of women unwinding their foot bindings, and schoolgirls with unbound feet playing vivaciously. Otherwise, male and female family/public sphere roles are depicted in stereotyped fashion. In the post-Qing Republican China of the 1920s and 1930s,[2] women were urged to acquire modern knowledge and go to work. The Communist triumph in 1949 brought far more change as well as the slogan "women are able to hold up half the sky". It laid the foundation for unleashing women's much-needed labour power as well as elevating their status.

Zhang (2003) describes how second-year middle school students gave contradictory views about their mothers, teachers, and the women in their Chinese language texts. Half disliked career mothers and favored the traditional role. Another 29% favoured combining both roles; the remaining 21% favoured career women-mothers. But the students strongly endorsed a "strong female" for a teacher and disliked their textbooks' nurturing housewives, finding them out of synch with modern family life.

Zhao (2003) also finds conflicting views of gender roles in English language teaching materials for junior middle schools. Although both boys and girls are shown in self-chosen activities the subtle message is: "good girls" shine as much at home as at school.

Song (2003) finds science teachers perpetuating stereotypes: Fully 71% of teachers who read a description of a student with a male name rated him as a good science student, whereas, when the same description was used but the student was given a female name, only 20% of teachers rated her as a good science student.

[2] Especially after the Japanese invasion.

These findings show that China's road to eliminating gender bias in textbooks and curricula will not be a short one, despite an official state policy of achieving gender equity in education.

These examples from four countries (from the larger Blumberg 2007 study) reveal general, quite uniform patterns, especially with respect to three dimensions: (1) under-representation of females in words and illustrations; (2) gender stereotypes in occupational and domestic roles,[3] and (3) gender stereotypes in personal attributes and actions. All three seem equally prevalent across geographic boundaries and more vs. less patriarchal nations. Nevertheless, *higher levels of patriarchy* in a society seem to be *associated with more intensely negative portrayals of females* (i.e., Romanian depictions were gender-stereotyped but females did not seem as disparaged as in Syria or India). The overall patterns, however, show remarkable convergence.

## Measuring the pace of progress: "Second generation" studies from the US

By the 1990s, various "second generation" studies began to analyse the level of persistence of gender-biased schoolbooks in a variety of substantive fields. Most showed modest improvements (sometimes very modest indeed). Three US cases reveal the general findings: (1) high school history texts; (2) children's illustrated books, and (3) teacher training textbooks.

History: Clark and Mahoney (2004) quantitatively analysed six American history high school texts from the 1960s, 1980s and 1990s. Trecker (1971; the first academic US study) had found that 1960s texts omitted almost all women of importance. Clark and Mahoney found fairly moderate, but statistically significant improvements: women had made up only 5% of names in indexes in the 1960s, vs. 13% in the 1980s and 16% in the 1990s. Five other indicators showed the same mild-to-moderate improvement in depicting gender since the 1960s. The authors credit the gains to the feminist movement and the impact of prior studies (e.g., Trecker 1971; Tetreault 1986; for other "second generation" studies, see also Clark et al. 2005; Ellis and Esler 1997).

Children's illustrated books: The pace of change in picture books for young children is even slower than in the high school history books. Davis and McDaniel (1999) replicated Czaplinski's 1972 study of gender in books that won the prestigious Caldecott Award. Czaplinski found 63% male vs. 37% female characters in 1940-1971. For 1972-1997 Davis and McDaniel fount 61% male vs. 39% female—a scant 2% rise. Three other studies echo similar findings: Crabb and Bielawski 1994; Hamilton et al. 2006 and Anderson and Hamilton 2005.

Teacher training textbooks: Zittleman and Sadker (2002) replicated the classic Sadker and Sadker (1980) study that revealed gender bias in teacher training materials. (This is important because later research found that teachers develop "gender blindness" to biased texts if they have not been given gender sensitization instruction.) The 1980 study had examined 24 top teacher education texts and found that 23/24 devoted less than 1% of content to women's contributions or challenges; 8/24 didn't even mention sex bias. Several actually promoted gender stereotypes. The 2002 study found progress "minimal" and "disappointing" in 23 textbooks from 1998-2001. Women-related coverage rose to 3.4% (7.3% in the introductory texts but only 1.3% in the 16 methods books for reading, science, mathematics and social studies). Social studies offered the most coverage (2.5%) and

[3] Some of the stereotyping of female and male gender roles in the family may have to do with the almost "sacred" quality of the family unit in school textbooks around the world; hence the resultant "traditionalistic" portrayals.

reading texts the least (0.3%). Despite these quantitative data, though, they also found that "today's textbooks are less offensive than those published more than 20 years ago".

All in all, it appears that the ***intensity*** of bias is diminishing: the most blatant examples of sexism have disappeared or been muted, although the numbers have not improved dramatically. Ironically, many people think the battle has been won and funding now goes to newer issues.[4]

### Repairing the existing system by filling in four holes: suggestions for future research

What are the main deficiencies of existing research and where should future priorities lie?

(1) The content analyses of textbooks over the last 39 years that consistently find gender biases against girls and women have failed to measure the *intensity* of the bias, so it is more difficult to measure progress or undertake cross-cultural comparisons; this can easily be added to research.

(2) No *impact* studies were found measuring the effects of this form of sexism on girls'—and boys'—educational and occupational outcomes; such research is urgently needed.

(3) One glaring gap needs to be filled in the textbooks—they ignore *women's changing position,* though change is a key characteristic in a world of globalization, growing uncertainty, exponential rates of technological innovation and rising rates of women earning income.

One could never guess a nation's female/male labour force participation rate, sex distribution of occupations, or female/male education levels from its textbooks. Also, one would not suspect women's rise in (a) earning and controlling income and the resulting empowerment this brings (Blumberg 1984, 1988, 1995, 2008), (b) organization and activism, and (c) community involvement—despite the fact that these things are happening worldwide.

(4) Few of the initiatives to reduce gender bias in schoolbooks were accompanied by a good *gender-disaggregated monitoring and evaluation* system. This, too, needs serious attention.

The net result of filling in these four holes should be to further expose and help to eliminate this all-but-invisible obstacle to gender equality in education.

## Remediating gender bias in learning materials: some national government-level cases

### Sweden: Going all the way—and perhaps beyond

Stromquist (2007, p. 36) argues that over a four-decade effort, the "Nordic countries have been successful in decreasing male stereotypes". Sweden leads in this and is the main focus here.

[4] New US issues that have "marginalized gender equity initiatives" (Hahn et al. 2007, p. 337) include: (1) The "high-stakes testing movement" [These are new standardized tests with heavy penalties to schools (loss of funding) and students (denial of diplomas) for failing scores. Often, classroom time tilts toward an urgent race to get pupils passing scores]; (2) The "attention to multiculturalism [that] has overshadowed [or subsumed] gender"; (3) The commonly held belief that gender equity has been realized; and (4) The return of the "boy problem in education" [e.g., poorer reading performance, lower high school graduation rates, declining enrollments in post-secondary education, etc.] (ibid.; see also Klein et al. 2007).

In Sweden, the curriculum explicitly promotes gender equity (Sweden 2006; Eilard 2004, English summary). Eilard's study of gender and ethnicity in a new first grade reader for Swedish multi-ethnic comprehensive schools found some subtle stereotypes of girls still lurking—but that "the position of the boys is more flexible and open to variation than…the girls. The boys are allowed to be childish and soft, while the girls tend to be encouraged to [grow up]".

In fact, there may be deliberate anti-stereotyping in some textbooks, if a study by Carlson (2007) is any indication. She examines "images and values in textbook and practice" in language courses for Turkish immigrants (ibid., p. 125) and discusses "the norm of gender equality":

> There actually are no explicit texts in the textbooks pertaining to this sensitive issue. Instead, a norm of "Swedish" gender equality appears more indirectly, for example in descriptions of the division of labour within a family or in descriptions of who works with what in a workplace. The most obvious hints about "equal distribution" in everyday life are perhaps to be found in illustrations of various domestic tasks. A quite common picture of "the modern man" is of a *man wearing an apron while standing at the stove stirring pots or doing house-cleaning*. Wellros (1995) reacted in an article to what she calls "ideologically arranged pictures in [language course text] books". She maintains that statistics concerning the division of labour in Swedish homes point to a completely different picture from that presented in the textbooks (ibid., p. 136, emphasis added).

Put simply, some textbooks are intentionally going beyond the patterns of Sweden's relatively gender-egalitarian everyday life. Social science studies do show higher levels of male participation in domestic activities (particularly in Sweden) than in non-Nordic countries. But to what extent do Swedish schoolbooks go beyond many readers' lived experience in order to meld the gender-egalitarian curriculum with explicitly anti-sexist didactic materials? The question remains open.

On one side, education and the labour force remain gender-segregated. Males and females study different subjects and work in different careers and venues—in particular, females are more concentrated in the public sector. On the other side, the large proportion of women in Parliament (47% according to IPU 2008) and the Cabinet ($\sim$40%) presents a more egalitarian face. So, too, does the Swedish curriculum (2006), which states that:

> the school should actively and consciously further equal rights and opportunities for men and women…The *school has a responsibility to counteract traditional gender roles* (ibid., p. 4, emphasis added). [It also exhorts all school staff to] "work…against any restrictions on the pupil's choice of study or vocation that are based on gender" (ibid., p. 16).

In sum, Sweden's curriculum and texts promote a more gender egalitarian world than that revealed by national statistics showing labour force sex segregation and by analyses finding mild remnants of gender stereotyping in a few texts. However, even if most remaining stereotypes reflect world patterns, Swedish schoolbooks do so at a dramatically lower level of ***intensity***.

## Latin American cases: partial progress

Latin America has a relatively narrow gender gap in primary school and in about half the countries, girls outnumber boys in secondary schools (UNESCO 2008, pp. 358–361).

Eliminating gender bias in textbooks has been more of a challenge, though—despite many excellent content analyses and other studies of the issue (see Blumberg 2007 for full references).

Stromquist (2007) summarizes her years of studying sexist bias in texts and curricula in developing countries, noting more progress in removing male-centered language than in funding/developing content depicting positive identities among women. Governments rarely attempt such "second level" overhaul strategies unless supported by international aid, she notes.

But such assistance comes in the form of relatively short-lived projects that make continuity difficult. One of the development "lessons learned" is that projects function best when there is strong, stable leadership. When the funding ends or the committed leader leaves the post, momentum and sometimes the gains themselves are partially or wholly lost. Case studies from Peru, Argentina, Brazil and Costa Rica generally illustrate these lessons, and show mixed results from government-mediated initiatives.

In 2000, under the Fujimori government, Peru developed a plan for equal opportunities for women and men (PIO) that included education (Muñoz-Cabrejo 2006). One objective was to eradicate sexist content. The PIO was elaborated by PROMUDEH, the Women's Ministry, between 2000 and 2005. But PROMUDEH formed no working group to achieve PIO objectives before the Minister who developed the plan left. Her successor, an activist, redesigned the plan to be more transformative. She ran into trouble with Peru's conservative Catholic Church and left. The next Minister, a traditionalist, deleted all references to a "gender focus" in favour of a focus on the family. Since then there has been little change in sexist content in textbooks and curricula.

Stromquist's analysis (1997) of gender and education in Argentina reveals similarities to Peru. In 1992, a new education law introduced the principle of equal opportunity and mandated elimination of discriminatory stereotypes in educational materials under a programme called PRIOM. PRIOM revised primary and secondary school curricula by adding gender content (e.g., teaching about previously unmentioned women) and critically examining gender-based social practices and discrimination (Bonder 1994, p. 19; cited in Stromquist 1997, p. 82). However, just before the curriculum was going to be disseminated nationally after much pilot testing, it was attacked as anti-family by conservative parents supported by the Catholic Church. The government finally adopted a "gender-neutral" curriculum advocated by the Church.

In Brazil in 1995–1997 the new "National Curriculum Parameters" (PCN) added a gender focus to the curriculum without controversy—although it was interpreted largely in terms of sexual orientation. The PCN also stressed the importance of textbooks and the Ministry of Education (MEC) reviewed studies of how women appear in those books. The MEC concluded that in the majority of textbooks, the woman is presented only as a housewife and mother, while the man participates in the world of work beyond the household and never appears in situations of affection with his children or doing housework, thus constraining *both* genders (Vianna and Unbehaum 2006, p. 172). The 2001 National Education Plan rarely mentions gender but textbook stereotypes are proscribed: if a text contains gender or race/ethnicity stereotypes, it is considered discriminatory (ibid., pp. 136–137). Finally, Chapter 2 of the 2004 National Plan of Policies for Women guarantees a non-discriminatory education system and textbooks that do not reproduce stereotypes based on gender, race and ethnicity. Despite all these "cross-connections", no data were found citing a (resultant) decline in gender bias in textbooks and/or curricula.

Finally, in Costa Rica, Araya (2006) presents a detailed study of government initiatives to promote gender equity. These include attempts to reduce gender bias in textbooks as

well as to change male-female enrollment patterns in gender-stereotyped curricula. Government efforts extend to laws against discrimination and guaranteeing women's human rights (e.g., the 1995 Law against Sexual Harassment in Employment and Teaching).

In 1987 Andree Michel developed a methodology for analysing gender bias in textbooks that stimulated many studies documenting the prevalence of gender stereotypes in teaching materials, as well as the universality of sexist language (Araya 2006). The biased language was targeted for elimination. In the late 1980s–1990s, the notoriously sexist *Paco y Lola* readers were eliminated from public schools and became rare in private ones. Other textbooks were modified to reduce sexist depictions and increase female representation. Because textbooks pass through multiple departments and hands, however, the changes were often timid—e.g., an illustration of a woman cultivating might end up showing a man. A new series, "Toward the 21st Century", was supposed to eliminate sexist language/illustrations and be made compulsory. However, a Supreme Court resolution granting relief to publishers who claimed that mandatory adoption violated laws of free competition resulted in it *not* being widely distributed. Meanwhile, many current textbooks continue to devalue women and use stereotyped roles, images and language.

In general, Araya found that lofty goals have been far more numerous than actual implementation: gender failed to be institutionalized in education and the public sector. Why? Two reasons were frequent: When a dedicated leader who had promoted the programme left her/his post, and/or when funding for the special initiative in question (often from international sources such as UNESCO or the European Union) ended, the initiative soon fizzled out.

To sum up, all the case study authors note that continued implementation of the initiatives they analyse depends on availability of resources and the preservation of these policies by subsequent governments. Thus, progress in gender equity in education is slow and nonlinear.

## Conclusions and suggested strategies for action

In 2000 almost all of the world's nations adopted the Education for All (EFA) Dakar Goals, as well as the Millennium Development Goals (MDG). Among their many landmark objectives to raise the education and well-being of the world's peoples, they include the strongest global commitment yet to gender equality, especially in education. The 5th EFA goal calls for:

> eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.[5]

The statistics in the latest EFA Global Monitoring Report (UNESCO 2008) show many shortfalls in eliminating gender disparities in primary and secondary education. The "great majority of countries" (ibid., p. 33) failed to do so by 2005. The greatest progress has been toward ending the gender gap in primary schooling, yet here, too, performance still lags: Although the global Gender Parity Index (GPI) of primary Gross Enrollment Ratios (GERs) rose from 0.92 in 1999 to 0.95 by 2005, the 2005 data also show that only 63% of nations (118 of 188 with data) had achieved or were close to gender parity (ibid., p. 81; a mere 37% have done so in secondary schooling). The more ambitious goal of gender

[5] Millennium Development Goal 3 is to "promote gender equality and empower women," and its Target for monitoring progress is the same as EFA Goal 5.

equality in education is much farther from being met—and the present article's findings show one reason why. As the 2008 EFA Global Monitoring Report states, "textbooks, curricula and teacher attitudes continue to reinforce stereotypes on gender roles in society" (ibid., p. 2). Clearly, eliminating gender bias in learning materials translates to progress in meeting the EFA and MDG gender goals. But how can this be done?

## Existing partial remedies that overcome the cost barrier

It is so expensive to redo textbooks and curricula that countries rarely attempt it unless there has been a major regime change. The Ford Foundation aid that led to documentation of gender bias in Chinese schoolbooks cost a fraction of a full-fledged curriculum/text reform. Even for the biggest aid donor, the World Bank, this would be costly. Between 1990 and 2005, the World Bank mounted a total of 372 education sector initiatives, on which it spent well over $25 billion. Just over one-fifth of this was spent on 82 projects with specific gender components or an exclusively female clientèle (Tembon 2007). Some large scale education initiatives—including five in Nepal, Bangladesh, Chad, Guinea and Ghana that totaled over $300 million—had explicit components or activities to eliminate gender bias from curricula and/or textbooks. Even these big efforts, however, did not underwrite complete revisions.

So, assuming that changing textbooks/curricula will be a slow process, what can be done quickly and inexpensively? Two authors' ideas provide a partial blueprint:

- Kalia: Her content analysis (1979) of 21 English and 20 Hindi schoolbooks used in the five most populous—and patriarchal—areas of India[6] showed the usual findings. Her next book (1986) created "you can do something about it" exercises that can be carried out by students, teachers and even parents. Each chapter tackles a particular aspect of sexism: (1) language, (2) stereotyping, (3) sex role imagery, and (4) occupational roles. The exercises are too numerous to make this a reader-friendly volume but the basic idea of turning biased material against itself is potentially path-breaking.
- Sadker et al. (2009) identifies seven forms of bias[7] and offers "some practical ideas for confronting them" (e.g., teachers should ask students to search textbooks for examples of each of the seven forms and then ask them to suggest ways to remove the bias).

## A suggested new, more comprehensive remedy that uses the system's flaws against itself

Building on Kalia's and Sadker's approaches, a new anti-GBIT manual could be crafted using the findings of nearly four decades of research that have revealed the common patterns of gender bias. This manual could serve as a template for local adaptation around the world. It would turn the almost-uniform system of gender bias in textbooks on its head via exercises that first expose the bias and then get teachers and students to counteract it.

Such a basic, user-friendly, culturally-sensitive manual could be created by committed researchers. Compared with the expense of a wholesale revamping of national textbooks and curricula, this is a small enough initiative to be within the funding horizon of a variety of donors. The pilot version might best begin with chapters that could be inexpensively incorporated into the curriculum of teacher training institutes. Students could apply their

[6] Haryana, Punjab, Rajasthan, Uttar Pradesh and Delhi.

[7] Blumberg (2007) includes a summary of the seven forms as an appendix.

manual's principles to analysing one (or more) of their own textbooks. This could be used as a more practical form of gender sensitization than the abstract "gender awareness" training that is (infrequently) offered. Both the student teachers' experiences in applying the manual and the gender awareness outcomes of those experiences should be tracked in a gender-disaggregated monitoring and evaluation (M&E) system, the results of which would then be used to fine-tune the manual.

Next, during their practice teaching, the student teachers could have their own pupils (and, perhaps, interested parents) apply the same anti-GBIT techniques to one of their books. Thus, this process could serve as a consciousness-raising device for teachers as well as students. Once proven with student teachers, the manual could be introduced cheaply in routine workshops for on-the-job teachers. The M&E system would further refine this phase. Then, if the manual was found to gender-sensitize teachers and students alike, additional funding to translate it into other languages and adapt it for still other cultural milieus should more easily ensue.

Finally, it is posited that teachers trained to identify and counter gender bias would not be gender-blind in the future. This also could help fight the problem of unconscious sexism in teacher attitudes and classroom behaviour—and help undermine the "hidden curriculum" that may dampen girls' achievement, especially where students, schools and countries are poor.

In conclusion, these remedial action recommendations should help remove the hidden obstacle of gender-biased learning materials from the long road to gender equality in education.

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