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ELIMINATING GENDER BIAS IN TEXTBOOKS:

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EDUCATION

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GENDER BIAS IN TEXTBOOKS:
STILL A NEAR-INVISIBLE OBSTACLE TO EDUCATIONAL EQUALITY – AND A KEY ISSUE FOR POLICY REFORMS PROMOTING GENDER EQUITY IN EDUCATION

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I. INTRODUCTION.

This report builds on an Education for All (EFA) Official Background Paper on gender bias in textbooks undertaken halfway through the EFA period (Blumberg 2007; it was summarized in the 2008 EFA *Global Monitoring Report* and in Blumberg 2008). That research – as well as the current study – found a remarkably similar pattern of gender bias in textbooks virtually worldwide:

> 1. Females – girls, women and animals – were strongly underrepresented.
> 2. Women and girls included in text or illustrations were nearly always depicted in highly stereotyped roles in the home.
> 3. In the relatively few cases portraying women in non-domestic occupations or activities, these were overwhelmingly of the most traditional sort.
> 4. Girls and women were usually passive and often watched while courageous and confident boys and men undertook exciting and worthwhile endeavors and occupations.
> 5. More gender-unequal countries tended to have somewhat more intense (or negative) underrepresentation and stereotyping but similarities far exceeded variations in intensity.
> 6. Furthermore, research that has measured improvement over time – often decades – has found that the pace of improvement in gender bias in textbooks is more often slow (even glacial) than rapid.

Gender bias in textbooks thus remains an almost invisible obstacle to females' equality in education and beyond. Indeed, it is a classic example of the "hidden curriculum" (Stromquist et al. 1998) that may (further) constrain girls from realizing their full potential. And when girls can't reach their full potential, neither can their families, communities and nations (Bertini 2011; Sadker, Sadker and Zittleman 2009).

Gender-biased textbooks are important for another reason: although they may seem less crucial and dramatic a problem than the fact that over 57,000,000 children, 54% of them girls, still are unschooled (GMR 2013/4: 369), the data show that textbooks are used in 70-95% of classroom time (e.g., Sadker & Zittleman 2007:144; Baldwin & Baldwin 1992). Their domination of instruction, coupled with their pervasive gender stereotyping and underrepresentation of females, result in textbooks often being cited as limiting girls' academic achievements and adult options.[1]

The Terms of Reference for the present report are twofold: they include not only a focus on gender bias in textbooks but also on considering evidence of policy and program evolution in selected countries. The research presented here includes studies done since adoption of the EFA Dakar goals in 2000, with more

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[1] E.g., Lesikin 2001:281 describes girls' feelings of exclusion, devaluation, alienation and lowered expectations. Other studies make similar assertions. More empirical research could strengthen the case for textbook reform.

emphasis on 2007-present. It shows that little has changed in the extent or nature of gender bias in textbooks. But the four countries chosen for case studies – Chile, Georgia, Pakistan and Thailand – are interesting for another reason. The first three already have attempted a process of policy reform that in trying to reduce gender bias in textbooks as part of a broader policy initiative – but not one of them has achieved it's policy objectives to date. (Thailand is just finishing the first phase, research and policy recommendations.) On the one hand, the analyses of gender bias in textbooks reviewed for this research overwhelmingly found the usual patterns, including in all four case studies. On the other hand, there are multiple, complex and varied reasons why reform efforts have not yet changed either the amount of gender bias in textbooks or the larger context of gender bias in education in Chile, Georgia and Pakistan.[2] Here is a brief preview:

Chile. A reform-minded government that sought to promote greater gender equity and less gender bias in textbooks was replaced by a quite conservative one, putting reforms on hold. Now, the reform-minded head of state is back in power. This opens the door to reviving and possibly expanding reform efforts vis-à-vis gender equity in education. These include the adoption of guidelines to publishers about reducing gender bias in textbooks and increasing their gender content, coupled with evaluations by outside experts of the extent to which the publishers have met those guidelines.

Georgia. The 2004 "Rose Revolution" replaced an authoritarian government dogged by corruption with one that implemented many laissez faire/pro-private sector reforms. These included using private firms to publish the country's textbooks. But though gender bias in textbooks was studied, the "Rose" government took no active steps to reduce it. That government was replaced by a more statist one. It ended the arrangements with publishing companies. It then took the last set of publishers' textbooks and reprinted them unchanged. The "Rose" government had been under international pressure to promote greater gender equality, including in education. Results to date have been partial measures that were not implemented to any significant degree by either the "Rose" government or its successor.

Pakistan. A period of reform that seems to have been spurred by UNESCO in the early EFA years coincided with a more secular government. But within the Ministry of Education, many of the people who were tasked with carrying out the reforms in textbooks, curricula and beyond opposed them: they saw no problem with either underrepresentation of females or very traditional, stereotyped depictions of them in textbooks. Analyses at the end of the reform decade have found basically no change in a pro-gender equity direction: recent books appear as biased as those reviewed in a 2004 UNESCO study.

Thailand. New Rockefeller Foundation-supported research found the usual patterns of gender bias in textbooks and (fairly mild) gender bias among some teachers. The study's recommendations will be presented to the government. Political uncertainty, however, might stall policy reforms. Yet one extant policy may have undercut patterns of gender bias in textbooks: high school students with higher grades must take science/math courses. Girls tend to have better grades so more study these subjects than boys. In 2012 PISA tests, Thai girls significantly outscored boys by 12 points in math and 19 points in science (OECD 2014)[3]. And women comprise 53% of science students in higher education (UIS 2014; Thailand scores highest of the four cases on major gender indicators).

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[2] Of the four, only Pakistan has a large gender gap in enrollments, although it shrank substantially between 1999 and 20in both primary and secondary education; see below.
[3] They also outscored boys by 55 points in reading. In fact, Thai girls' 2012 – and 2006 – outperformance of boys in science is among the highest of 55 nations with data (ibid.).

The remainder of this paper is organized as follows: Part II discusses recent research on gender bias in textbooks. Part III presents cases from Chile, Georgia, Pakistan and Thailand in which such research is part of a larger policy reform effort – one that could better "ensur[e] girls' full and equal access to and achievement in basic education of good quality" (UNESCO 2000; this is the final phrase of the Dakar Framework of Action's Goal 5). Part IV presents the conclusions and recommendations. The conclusions highlight a number of factors that can complicate or stymie policy reform, whether it is confined to textbooks or extends to broader goals of gender equality in education. The recommendations, however, take a more positive approach, outlining some steps on the path to policy reform.

II. GENDER BIAS IN TEXTBOOKS: RECENT FINDINGS AND CHALLENGES TO REDUCE IT AS PART OF LARGER REFORM INITIATIVES

This section considers a few studies of gender bias in textbooks from the last decade or so. Their findings tend to be consistent with those in previous overviews (see the list on p. 1 and, e.g., Blumberg 2007; Jassey 1998). Accordingly, only a few examples are presented. With the exception of fast progress in Hong Kong (see below), no other cases were found showing rapid decline in the level of gender bias in textbooks during the EFA period. Slow improvement does seem to be taking place, however, even if it can't be attributed directly to the Dakar EFA process (see also Brugeilles and Cromer 2009).

(1) Global North/OECD nations. Searching recent studies of gender bias in textbooks in the United States turned up what has been described as the largest-scale research ever conducted, involving 5,618 children's books published from 1900-2000 (McCabe et al. 2011).The authors found general – and large-scale – underrepresentation of females: For example, males were represented almost twice as often in titles and 1.6 times more as central characters. The most extreme underrepresentation of female central characters involved animals and the least was of female children. The authors consider the relative absence of animal and human females in children's books to be a form of "symbolic annihilation": ignoring or underrepresenting women and girls in cultural products denies their existence (as first argued by Tuchman 1978). They assert that (given the level of female underrepresentation) "children's books reinforce, legitimate and reproduce a patriarchal gender system"[4] (McCabe et al. 2011:198). Tellingly, the worst period for female underrepresentation was during the 1930s-1960s – i.e., between the "first wave women's movement" and the "second wave women's movement." Among the additional findings:

- Titles: Each year, an average of 36.5% of titles involved males, vs. 17.5% mentioning females
- Central characters: Males averaged 57%; only 31% were females.
- Species: Male animals were the main characters in over 23% of books per year, vs. only 7.5% involving female animals. Combining adult humans and animals, males appear in ~100% of books vs. only a ~33% appearance rate for females.

This 2011 study merits inclusion despite its 2000 cutoff date because it shows that gender bias in textbooks was worst when there were no forces pushing for change. So even if post-2000 progress in reducing gender bias in textbooks is modest in most countries, this research implies that it might have been even slower without the EFA process.[5]

(2) Developed/Relatively Developed Asia-Pacific countries. Lee and Collins 2010 compared English language textbooks in Hong Kong and Australia. One difference is that awareness of gender issues emerged in Australia by the early 1980s, vs. more than a decade later in Hong Kong. More relevant is the

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[4] Another new wrinkle in research on gender bias in printed material
s also involved children but explored non-textbook media: coloring books were studied by Fitzpatrick and McPherson 2010; Klein and Shiffman 2009 researched cartoons. In both, the usual patterns – of relative absence of female adults or children as main characters – emerged.

[5] Also interesting is the spread of research on gender bias in textbooks to specialized fields, over and above standard primary or secondary textbooks. For example, Mattox et al. 2008 analyzed "How Gender and Race of Geologists are Portrayed in Physical Geology Textbooks." A content analysis of 15 textbooks found that they depicted men as 3.5 times more likely to be geologists, compared to women. They also suggested that Caucasian geologists were 17 times more abundant compared to nonwhites.

authors' assertion that Australia's awareness was driven by the women's movement – in addition to a set of substantial policy reforms: the 1983 ratification of CEDAW, which led to the 1984 Sex Discrimination Act; the 1986 Human Rights and Equal Opportunity Act, and adoption of guides/codes for non-sexist language in government-funded speech and writing. In contrast, awareness in Hong Kong was driven mainly by government policy changes: the 1995 Sex Discrimination Ordinance and the 1996 Equal Opportunities Commission (ibid.:121-122). Comparing 10 currently used books in both places, all published after 1997 (to show the potential impact of the recently adopted Hong Kong policy reforms), the authors found one surprise: there were significantly more mentions of females in Hong Kong textbooks (51.1%, vs. 41.6% in Australian textbooks; overall, however, more male characters were mentioned in both places). There also were some attempts to use gender-inclusive language but with rather different patterns: Whereas Australian textbooks tended to use "they," their Hong Kong counterparts used either "he and she" ("he" was almost always mentioned first in both places) or a generic "he." In fact, the Hong Kong books used generic "he" significantly more: 29 times vs. only once in the Australian volumes. Also in both sites, the usual patterns emerged of women being depicted in a narrower set of social roles and presented as more passive and home-bound than men. Although visual representations tended to reinforce traditional gender roles, there was one more surprise: Hong Kong books included more females in their visuals than Australian ones. The authors offer no explanation.

There was a similar surprise in Yang's 2011 study of recent Hong Kong English textbooks for first graders: females and males were almost equally included and depicted in a similar range of activities – and, remarkably, females were more visible than males in both illustrations and texts. Nonetheless, she, too, found that males still were mentioned first when two nouns were paired for gender.

Turning to South Korea, Song 2013 analyzed four English as a Foreign Language (EFL) textbooks that were adopted after the 2009 revision of the Korean national English curriculum. Song found that the most dominant roles in the texts were played by non-Koreans, specifically by white, mostly American, males. The author concluded that the revised textbooks reproduced racial, national and gender social inequalities by their disproportionate representation of white American males.

Finally, a study by Azisah and Vale 2008 bears mention. This is a content analysis of textbooks linked to a "Gender Mainstreaming in Islamic Primary Schools in South Sulawesi, Indonesia" effort. There are long traditions of bilateral kinship, female economic autonomy and less gender inequality in Southeast Asia than in other parts of Asia (Blumberg 2004). So it is relevant that gender mainstreaming has official government support in Indonesia, the world's most populous country that is overwhelmingly Muslim, and that the mainstreaming encompasses Islamic primary schools. Still, the findings proved to be the usual: gender bias in both texts and illustrations, with the pictures portraying stereotypically gendered social roles.

(3) Less developed/less gender-equal countries. Two Iranian studies of English as a Foreign Language (EFL) textbooks merit discussion. In the first study, Amini and Birjandi 2012 analyzed the EFL textbooks used in the second and third year of high school. The books were created by the Textbook Curriculum Development and Planning Department of the Ministry of Education of the Islamic Republic of Iran.[6] First, concerning visibility, in Book II, males comprised about 80% of the characters (81.2% in texts and 80% in illustrations). In Book III, males were 83.4% of text characters and 62.7% in illustrations. Second,

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[6] Unlike Amini and Birjandi 2012, many authors of gender bias in textbooks analyses don't mention the publishers of the books they analyze so no government vs. private publisher analysis could be undertaken in the present study.

with respect to "firstness" (which gender is mentioned first), in Book II, males got 85.7% of first mentions. In Book III, in the only instance in which both were mentioned together, the male was mentioned first. Third, concerning use of the male generic (using "man" for all humans, though he/she and s/he constructions also appeared), Book II had one instance and there were four in Book III. Fourth, concerning occupation, 19 were mentioned in Book II; 17 of the 19s (including engineers, bus drivers, police officers, doctors and bosses) were of men. Women worked as teachers or dressmakers. In Book III, men were portrayed in 13 occupations, including as pilots, hunters, wrestlers, and in other manly pursuits; the three occupations in which women were found were nurses, teachers and one female doctor. Finally, concerning activities, only females were engaged in household chores in both Books II and III. In the second study, Gharbavi and Mousavi 2012 analyzed four current EFL high school texts (publishers unspecified) and found significant male/female differences: 71% of gender-specific text references involved men, 76% of pictures were of males and 82% of those portrayed in occupational roles also were men. In short, both Iranian studies jibe and both offer the typical patterns of gender bias (see also Yaghoob 2012).

Turning to Arab countries, Alayan and Al-Khalidi 2010 analyzed "Gender and Agency in History, Civics and National Education Textbooks of Jordan and Palestine." As the only comparative study from Arab countries found in the present research, it will be given more space. The authors assessed Ministry of Education textbooks from grades 7-12 in both places (9 Jordanian and 13 Palestinian books). They noted that Shtaiwi 1999 (in a UNESCO study in Jordan) found that males outnumbered females in textbooks and were portrayed as superior and more capable, creative, productive and generally dominant; women were seen as weaker, inferior and dominated, i.e., unable to play more than minor roles. In their current research, the authors stated that the Jordanian education system has undergone considerable reforms involving curricula and textbooks in recent years, "in cooperation with international institutions" (2012:80). The Palestinian education system developed more recently. But a reformed curriculum was adopted there in 2000 vs. in 2005 in Jordan (where Shtaiwi's 1999 UNESCO research may have paved the way). Previous studies of Arab women in textbooks (Al Ruba'i 1994; Al Sada 1993; Bahri 1985; Kallab 1981; Suleiman 1978) found them ensconced in the home and manifesting sacrifice, tenderness, loyalty, compassion and self-denial, vs. men's courage, honesty, generosity, eloquence, forgiveness and patience. Women, if depicted in a non-housewife role, were students or undefined "working women." Alayan and Al-Khalidi mainly found the usual patterns, though there were a few "outside the box" results:

Jordan. Interestingly, a 9th grade history textbook portrayed women as poets, fighters or political consultants – in leading and prominent roles – whereas the 8th and 10th grade textbooks had the usual stereotypes. That same 9th grade textbook mentioned women as having been prime ministers in some Arab and Islamic countries. But the scientists and philosophers were all men – even though one picture did show a girl using a computer and a boy standing by her side, watching her. So, a few non-stereotypic examples offer signs of change, although the usual patterns predominated. Even so, compared to the Palestinian textbooks, Jordanian history books featured 20.8% females vs. "hardly [any] women at all" in the Palestinian ones, where "the very idea of women's achievements is ignored completely" (2012:88).

Palestine. No focus on women's roles was revealed. But one 8th grade history textbook did discuss women's rights in Islam, including to autonomous ownership, acceptance or refusal of marriage, and the right to divorce. Otherwise, women in that textbook were depicted only within the contexts of family and marriage. Civics and national education textbooks revealed somewhat greater balance and fairness in portraying women – showing them not only as housewives, nurses, doctors and students, but also as street demonstrators defending women's rights, and voting. Most of the time, however, women's

domestic roles were the only ones depicted. With two exceptions, all leaders (number unspecified) were men. And only the male Arabic words for "student" and/or the male verb form were used.

Overall, the authors conclude that history textbooks seemed less balanced than the civics and national education books in both places; they offer no explanation why this should be so. But they note that Jordanian textbooks included more gender mainstreaming (e.g., incorporation of women in non-stereotyped roles) – although the textbooks were introduced before the approval of the new gender strategy in 2009. The new gender strategy involved a policy reform in the Ministry that empowered a specialized team to review textbooks from a gender perspective and submit recommendations about stereotyped images. The authors write, "The Managing Directorate of Curricula and Textbooks aims to alter these stereotyped images and include material highlighting the importance of women's participation in all walks of life" (ibid.:90). This is important: Blumberg 2007 found that having a committed "gender champion" was a factor in the success of policy reform (but if the person left or the donor funding supporting reform dried up, the policy reform could wither on the vine).

Finally, they found that Jordanian history and civics textbooks used a (relatively) more gender-balanced style addressing both male and female students. In contrast, gender-balanced language was absent in all three types of Palestinian books (ibid.:90). The only explanatory comment by the authors is that fewer women participated in writing the Palestinian textbooks. This implies that just adding women to textbook teams would reduce gender bias in textbooks. This may not always be so: In the Pakistan case study below, a substantial proportion of women – as well as men – proved opposed to pro-gender equity reforms.

(4) Challenges to governments: Did EFA influence efforts to reduce gender bias in textbooks and/or to undertake more ambitious policy and program reform? Reducing textbooks' gender bias is typically an expensive process. Blumberg 2007 found that it takes considerable donor support – and committed government leadership – to succeed in gender equality-enhancing textbook revisions. In all four case studies below, analyses of gender bias in textbooks were carried out by scholars who funded their own research and/or by international donors. The implicit goal was that the textbooks would soon be rewritten as part of a broader effort to promote gender equity. Indeed, in Pakistan (see below), UNESCO played a key role in stimulating both studies of gender bias in textbooks and policy reform. Although the reforms were not notably successful, they *were* attempted – which might not have happened without the Dakar goals and the EFA process. Whether couched explicitly in terms of the Dakar Plan of Action or not, the fact is that those EFA goals provided a "hook" on which donors could hang such initiatives. Prior to 2000, such a "hook" didn't exist and policy reforms may have had a rockier road to traverse. For example, Blumberg 2007 discussed several attempted policy reforms in Latin America in the 1990s (in Argentina, Peru and Costa Rica) that failed for various reasons. In sum, the existence of the global EFA goals – and the additional funding they elicited from donors – offer hope that post-2000 reform actions ultimately will be more successful than any of those 1990s case studies[7].

Without fieldwork in the case study countries, it is not possible to make an evidence-based argument that the pursuit of more gender-equal educational materials, policies and programs was influenced by the EFA initiative. But some clues can be found even in secondary sources. And it is possible to learn from both more and less successful reform initiatives.

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[7] Reform <u>did</u> pass in Argentina in 2008, post Dakar. Catholic conservatives who blocked the 1990s reform ebbed in power but since Argentina is a federal system, those factions
 derailed the 2008 reforms in three northern states.

III. THE CASE STUDIES.

These particular countries were chosen because (1) gender bias in textbooks research had been carried out in all of them, and (2) post-2000 policy reforms had been passed. (In Thailand, the process is in early stages.) The reasons why the reforms have had less than intended success to date are quite complex. At one point, a list of 20 factors that can capsize the vessels of reform was extracted from the Chile, Georgia and Pakistan cases as well as the failed 1990s Argentinian reform. A honed list is presented in the Conclusions.

To preview, government will at the top is clearly a make-or-break variable. Donor funding can launch a reform process but is not sufficient to ensure success. The balance of support vs. opposition within the Ministry of Education also clearly is critical. So, too, is having a committed "gender champion" with the clout to maintain funding and overcome obstacles within the organization – and if such a person does not exist or leaves, the whole effort can die. But there are other variables, too, that make a difference. One example is that pro-gender equality reform seems more difficult to achieve in a federal system, especially if certain provinces are more conservative. This topic, too, will be revisited in the Conclusions.

Only one of the four case studies – Pakistan – has a gender enrollment gap disadvantaging girls. Its Gender Parity Index is 0.82 for primary school[8] and 0.73 for secondary school. Appendix 1 contains two tables with gender and education statistics for primary and secondary school for all four countries. In addition, only one of the four cases – Thailand – has high female labor force participation (well above the world average) and an above-median ranking on the Gender Gap summary index. Appendix 2 presents data on these contextual gender variables.

A. Chile

As it happens, Chile was the site of the very first study of gender bias in textbooks in the early days of the "second wave women's movement"; it found females in textbooks to be underrepresented and portrayed in stereotyped roles (Magendoza 1970) – i.e., the same pattern that would recur in almost all subsequent analyses worldwide. But later studies in Chile almost all date to after democracy returned in 1990 after 17 years of military rule under Gen. Augusto Pinochet.

In a nutshell, since the restoration of democracy in Chile, the fate of educational reform affecting gender bias in textbooks and other gender equity issues rose and fell with the orientation of the governments in power. The progressive Coalition (*Concertación*) governments ruled from 1990 until March 2010, when the conservative/right government of Sebastián Piñera took power, succeeding Pres. Michelle Bachelet's March 2006-March 2010 administration. In March 2014, Michelle Bachelet returned for a second term in office (presidents in Chile can't serve two successive terms). In overview, reform initiatives vis-à-vis gender and education, including gender bias in textbooks, were launched under the first Bachelet administration. But with respect to reforming textbooks, the work remained in process at the end of her term. Those pending reforms were ended or suspended during Piñerua's presidency as policies affecting both gender and education shifted sharply to the right. Currently, with Pres. Bachelet's return, talk of education – and gender – reform are again in the air. Here are the details:

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[8] This is a significant improvement from 1999, when its GPI for primary school was only 0.67. Nevertheless, it bears mentioning that Pakistan is one of 25 countries, most of which are a long way from achieving gender parity or other EFA goals, that dedicate less than 3% of GNP to education (GMR 2013/4:113).

The story of reforms to reduce gender bias in education began in 1991, shortly after the return of democracy, when the first major women's entity in the government was created: SERNAM (Servicio Nacional de la Mujer, National Women's Service, a special unit that coordinates with the Executive branch). It conducted studies of gender bias in textbooks and began to propose reforms to reduce gender bias in education. (In fact, most recent research on gender bias in textbooks seems to have been initiated by *Concertación* government entities.)

SERNAM, in addition to its work analyzing gender bias in textbooks, promoted a policy requiring that publishers selling textbooks to the government had to include gender content but there was no specification of just what that would entail. The market was huge: this was because in 1990, the brand-new *Concertación* government adopted a free textbooks policy along with the beginning of educational reform (a 2009 UNESCO study by Uribe calculated that over 17 million free textbooks had been distributed to over three million students). In 1997, SERNAM published a manual (Araneda, Guerra and Rodríguez) on how to incorporate gender into those textbooks. Soon, bidding processes to publish textbooks began to include a "gender equality factor" to be taken into account in deciding which textbooks to adopt for free distribution in schools. But details were vague and gender bias in textbooks continued, its level little diminished.

During Pres. Bachelet's first term, her government launched a new reform wave. It included formulating policies to increase gender equity and commissioning research on gender bias in textbooks (e.g., Lopez Morales 2008; SERNAM 2008; Universidad de Chile 2010). The latter study also included something new: specific measures on how to reduce the extent of gender bias in textbooks. Its lead author, Claudio Duarte, presented a January 2010 seminar on how to ensure that gender bias in textbooks would be addressed (Duarte 2014). However, the Universidad de Chile proposals (see below) were only "works in progress" at the end of Pres. Bachelet's first term; they had not yet been implemented. Still, the research process, results and recommendations are worth presenting in more detail:

First, the Universidad de Chile/Duarte research looked at representations of gender in textbooks that had been purchased and distributed by the Ministry of Education in 2009 as well as those that were submitted in the 2010 solicitation process. The study looked at "symbolic iconography" in graphics and illustrations, use of language and the number of times men were depicted relative to women. Its findings showed that, as usual, women were significantly underrepresented. Women also proved to be selectively shown in the public sphere – mainly confined to nursing and teaching jobs. When portrayed in less stereotyped, more diverse public sphere roles, the women's personal lives – their marriages and children – were consistently mentioned. The textbooks included new discourses on universal rights and women's contributions to society but these were followed by stereotypical depictions of women.

Next, the Universidad de Chile research also analyzed extant Terms of Reference for textbook publishers and found them marginal or negative with respect to gender. For example, the only place there was an explicit directive to incorporate gender was in an annex discussing a single subject – language and communication – at a single level of education – primary school. There was no comparable discussion in the annex devoted to language and communication textbooks for secondary schools. In fact, there was no other mention whatsoever of requiring gender content, female representation and non-stereotyped depictions of males and females in attributes, roles and/or occupations. The research also found that the Evaluation Guidelines for the academics who reviewed textbooks which publishers had submitted to the Ministry for possible purchase neither specified clear goals for including gender in textbooks nor provided guidance on how greater gender equity in content should be accomplished and assessed.

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Then, the Universidad de Chile report presented recommendations on how to reduce gender bias in textbooks, including:

1. Informing publishers of the different mechanisms by which gender bias can be perpetuated, e.g., by discussing gender as biological and/or making women invisible through male-centered language or by omitting women's historical contributions.
2. Providing specific training about how to assess gender bias in textbooks to the academic specialists evaluating the publishers' submissions.
3. Specifying that all documents used in the solicitation and evaluation process need "positive grammar" – i.e., that it is not enough to tell publishers what *not* to do. This means that:
    a. Terms of Reference should be explicit in what the gender requirements are and on the indicators used to measure each requirement.
    b. The images should be consistent with the requested gender content, and
    c. The special unit of the Ministry in charge of the purchase and distribution of textbooks should clearly define what publishers have to do in terms of (i) explicit and implicit content, (ii) inclusive language, and (iii) iconography (graphics and illustrations).
4. Presenting a set of examples showing the potential modifications to the Terms of Reference.

All these reform endeavors ended or were put in abeyance under Pres. Sebastian Piñera's conservative administration (2010-2014). He advocated a highly traditional role for Chilean women, centered in the home. The frozen reform initiatives included those pertaining to decreasing gender bias in textbooks by changing the TORs for publishers. The present research found that although gender studies and policy papers from the first Bachelet government still were listed on the Ministry of Education's website during the last months of the Piñera administration, the links no longer worked: they could not be accessed or opened (this was confirmed by various others).

To recap, the first Bachelet administration underwrote research on gender bias in textbooks and solicited policy suggestions, such as changed TORs, but had no time to implement these innovations. Throughout the just-ended Piñera period, little gender information was made available and, apparently, no pro-gender equity programs were attempted. But Chile has a centralized textbook and curriculum system so reforms advocated from the top have a good chance of being implemented – so long as the relevant education professionals also are behind them. Pres. Bachelet's first term government, all key informants agreed, attracted a cadre of committed professionals who supported reducing gender bias in educational materials and in education more generally (this is quite a different situation from that to be encountered below in the Georgia and, especially, Pakistan cases). It's very likely that her new second term administration will again include Ministry leaders and specialists who favor greater gender equity in education. In addition, international donors (e.g., the Inter-American Development Bank) already have indicated interest in backing renewed initiatives toward these goals. Thus, the potential for meaningful reform in Chile seems to be higher than in the next two countries analyzed.

B. Georgia

Background. On the one hand, Georgia's educational enrollment statistics are close to gender parity (see table in Appendix A). On the other hand, both recent research (Asatoorian et al. 2011) and a key informant (Janashsia 2014) who spent years as a professional in the curriculum and textbook center of the Ministry of Education and Science, describe (1) textbooks that are gender-biased, and (2) very partial efforts at policy reform that stalled due to lack of support at the top of government, as well as among many key Ministry professional staff who were supposed to implement the changes.

Indeed, according to both sources, efforts to reduce gender bias in textbooks and carry out recent laws and plans aimed at curbing gender bias are on hold due to multiple complexities – including political ones. So, before discussing the educational reform efforts, a short summary of Georgia's recent political history is in order.

Georgia regained its independence when the USSR fell in 1991. After years of ineffective, corrupt and authoritarian-leaning post-Soviet governance, the peaceful "Rose Revolution" led to the election of Pres. Mikheil Saakashvili in 2004. He put the country on a more pro-Western path. But a brief August 2008 conflict with Russia led to the de facto loss of two break-away regions and the arrival of European Union monitoring teams. The EU became its top trading partner and began pushing for various reforms. Pres. Saakashvili's policies tended toward the pro-market/laissez faire; the World Bank recognized Georgia for fast reforms that increased the ease of doing business and reduced high levels of corruption (Asatoorian et al. 2011:13). In education, private publishers began to produce the textbooks. The government gave free books only to students below the official poverty line. According to the School of International and Public Affairs (SIPA) team of Columbia University graduate students who researched and wrote *Gender Mainstreaming in Education in Georgia* (Asatoorian et al. 2011), the textbooks were biased (in the usual manner), with underrepresentation of females and highly stereotyped presentation of the roles, attitudes and attributes of males vs. females. Janashia (2014) confirmed that the Ministry provided no explicit criteria to the private publishers for curbing gender bias. There was just a general article in the instructions that textbooks should represent all citizens, including religious minorities, gender, etc.

Pres. Saakashvili was defeated in November 2012. He lost to a new coalition, Georgia Dream, organized by Bidzina Ivanishivili, a billionaire philanthropist who unexpectedly entered politics in 2011 and briefly served as prime minister (CIA Factbook 2013). The present Georgia Dream government is still much influenced by Ivanishvili and is more statist than the Saakashvili administration.

This has had consequences for education. One example is that the Georgia Dream government quickly stopped using the private book publishers. Now the state publishes the last set of textbooks they got from the private publishers and distributes them free to ALL children, vs. Saakashvili's policy of providing free books only to children below the poverty line. The publishers' last set of books was approved in 2010-11, under Pres. Saakashvili (Janashia 2014). Janashia indicated that the Georgia Dream government will most likely keep reprinting and distributing these texts (which had never been changed to reduce gender bias by either the Saakashvili or Georgia Dream governments) for the next 5-6 years. He also noted that there was – and is – no special training for Ministry officials or curriculum/textbook specialists about gender issues. During all his time in the National Curriculum, Textbook and Assessment Center, starting in 2004, he added, gender was not a focus of concern.

Asatoorian et al. (2011) described how the Georgian parliament began to promote gender equality. Encouraged by the EU and international agencies and donors, in March 2010 it "enacted its Law on Gender Equality, which created a permanent Gender Equality Advisory Council and led to a National Action Plan (NAP) for Gender Equality" (ibid.:6). The SIPA team studied "the extent to which this Law is implemented in the education system" and gave recommendations on how to improve its "effective application" (ibid.). They prepared their report for an NGO, the Women's Political Resource Center.

The thorough Asatoorian et al. report reveals a picture of Georgian policy reform on gender undertaken under external pressure. Interviewees queried by the SIPA team concerning the Law on Gender Equality said that technical guidance from UN agencies and prodding from the EU and US were behind the

passage of the Law and the NAP – they were adopted to make the government seem "more European" (ibid.:31). Furthermore, they claimed, "[s]ince the Law's adoption, the government has not taken its implementation seriously" (ibid.:32). The team also wrote that "the final version of the Law included only a small portion of the original draft" (ibid.:33). For example, parliamentary quotas were removed. Moreover, the NAP also was "dramatically reduced prior to passage. Beginning with 17 components, the final version passed with only four. When NGOs protested the scaling back of the NAP, a gender expert recounted a male official telling her 'you can have these four, or nothing at all'…Although the Law ultimately passed, it did so with weak accountability and limited funding mechanisms" (ibid.).

The Dakar goals are not mentioned. But the report does note, for example, that in 2004, gender experts analyzed Georgian textbooks and gave recommendations to the Ministry on ensuring greater gender equality (ibid.). It found, however, that these and similar recommendations were not taken up. Since they were externally rather than internally driven, this is not surprising.

Findings. Here are the most germane results of the Asatoorian et al. 2011 study that further illuminate the reasons behind the minimal Ministry attempts at implementing gender reform:

1. First, the SIPA team wrote that key professionals at the National Curriculum, Textbook and Assessment Center neither understood the problem of gender nor supported reform. For example, "[a] leading Ministry official of the Center…stated that she did not currently see any problems in existing textbooks, demonstrating a lack of gender understanding" (ibid.:29). Furthermore, "most authors and publishers do not actually know what it means to be gender sensitive, especially since gender is a relatively new concept among Georgians" (ibid.).

2. Much farther down the pyramid, teaching is an almost all-female, very low-paying profession – the main reason there are so few men – but most school directors are male. The majority of teachers and directors said boys and girls were treated equally and they had the same expectations for both. But gender experts consulted by the team said that teachers are the "heaviest carriers of…traditional attitudes" and "they create and perpetuate the gender stereotypes in the classroom unconsciously" (ibid.: 27). At all levels of the educational establishment, the SIPA team found, "Many dismissed gender equality as being a problem, bringing up the fact that the majority of teachers are female" (ibid.:34).

3. Concerning gender bias in textbooks, the team noted that "many gender experts have documented the presence of gender inequalities in existing textbooks" (ibid.). And Janashia 2014 described a secondary school history textbook used for grades 7-12 where 77% of illustrations were all male, 7% were all female and 16% were both. The gender experts interviewed by the team also stated that gender stereotypes were rife and that there were stories and pictures in some textbooks that depicted women as "less intelligent and less creative" (ibid.: 28). The SIPA students' research found a lack of attention to the achievements of women in both curriculum and textbooks and asserted that the invisibility of women "may contribute to female students' low self esteem and lack of self confidence" (ibid.:31).

4. On the potentially positive side, both Asatoorian et al. 2011 and Janashia 2014 noted that the fairly new civic education program has some focus on human rights and gender equality even though it has no mandatory gender-related component. On the negative side, both sources stressed the resurgence of the Eastern Orthodox Church as a growing conservative influence on women's roles; it prefers women to be homemakers and advocates for textbooks that reinforce traditional stereotypes.

Recommendations. Asatoorian et al. 2011:40 end their study with extensive "Recommendations for Policymaking." Most seem strikingly expensive and logistically tough to implement. Since few in power see gender equality as a problem, it is unlikely that they will be adopted. Three examples of the recommendations illustrate their ambitious objectives – and their potential overreach:

First, they propose to strengthen the (reluctantly passed) Law on Gender Equality and the NAP, and also "[m]andate funding and identify and hold specific entities responsible for each component of the NAP" (ibid.). Given an economically strapped government, such funding set-asides for gender are not likely.

A second example involves their recommendations on how to "Promote Gender Equality in the Georgian School System." One recommendation proposes "mandatory yearly gender-sensitivity training for all Ministry staff members" and also gives detailed advice on how this should be done (ibid.: 42). Their plans would seem to require a huge cadre of trainers and expensive logistics. Other recommendations are equally ambitious. But their study found a lack of political will at the top and meager support within the Ministry. Again, implementation would seem extremely unlikely under those circumstances.

Finally, a third recommendation is to "Ensure gender neutrality in all textbooks" (ibid.). It is written in terms of guidelines for private publishers. This recommendation has been overtaken by events: the present Georgia Dream government took control of the publishing of textbooks, eliminating the role of private publishers, and it is unlikely that new textbooks will be commissioned in the next few years.

Summing up, the short-term prospects for a reduction in gender bias in textbooks – or implementation of the report's recommendations about promoting gender equality in the schools and the curriculum – are bleak. To give just one illustration, it would take major resources to carry out yearly gender training in the manner they propose, resources that would require significant outside donor funding. The current government does not seem likely to request assistance for these purposes.

C. Pakistan

Background. Jabeen and Ilyas (2012:81) cite a proverb from a Pakistani schoolbook to provide an indication of females' low status in the country: "A hundred sons are not a burden but one daughter bows our heads." As Appendix B shows, Pakistan is, in fact, one of the world's least gender-equal nations.[9] This case shows the limits of reform under such circumstances.

Pakistan has the largest gender gap of the case studies although there has been some progress since the adoption of the Education for All goals. The country is a nuclear power as well as the 6th most populous in the world, at just over 186 million (Government of Pakistan 2014). In 2011, it had about 18 million primary students enrolled and almost 10 million secondary students (*GMR* 2013/4, Tables 5 and 7; about 30% of those students were in private schools). But an estimated 3 million additional students studied in the *madrassa* religious school system, which has yet to be brought under effective government control, despite periodic efforts.[10] An important complicating factor is that it also is coping

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[9] The exception is politics, where a quota system results in over 20% women in parliament; it also had a woman head of state (who was assassinated). Overall, however, it ranks next to last among 136 nations on the Gender Gap Index (2014).

[10] The latest attempt is the first "National Internal Security Policy," presented to Parliament in March 2014. It plans to bring all 22,000 *madrassa*s under government control within a year (Al Jazeera English 2014).

with insurgencies from conservative tribal people and militant jihadist groups, some of which oppose educating females, period. Even so, for more than a half-century, the government has had official policies promoting female education and greater gender equality. After approving the Dakar EFA Goals during the secular Musharraf administration, it passed various reform acts and began special efforts to reduce gender bias in textbooks (see below). But to this day, its textbooks remain quite biased.

Pakistan's policy response to the EFA goals. To begin, it is useful to review Pakistan's education policy initiatives after it became a signatory to the Education for All goals. UNESCO may have played an influential role in what happened next. For example, in one initiative, it funded a study by Mirza, published in 2004, about gender bias in textbooks (described below).   At the same time, Pakistan reiterated its concern about gender equality in the Pakistan Education Sector Reforms 2001-2005 (Government of Pakistan 2002) and National Plan of Action Concerning Education for All 2001-2015 (Government of Pakistan 2003; see also Ministry of Education 2003). The Ministry of Education further asserted that "efforts will be made to eliminate gender bias in textbooks and curriculum" (ibid.:22). Next, in 2005, came a comprehensive review of school curricula by the Curriculum Wing of the Ministry of Education. By 2007, revised curricula for 23 core subjects were approved at the national level and provincial textbook boards created new books conforming to the Curriculum Wing's guidelines. After Curriculum Wing approval, the new textbooks were printed and distributed free to all public schools in each province (Ullah and Skelton 2013:184). The Ministry specifically indicated that more balanced gender representation in textbooks was to be a major component of addressing gender bias in Pakistan's education system. Yet, as Hussain and Afsar (2010) concluded, "the current practices in [the] education sector in Pakistan do not speak for [these policies]."

Content analyses of gender bias in textbooks. Recent content analyses of a sample of the new textbooks concluded that they "are still embedded with gender stereotypes…[and] the dominance afforded to masculinity and 'male knowledge' continues to be both naturalized and legitimated (Ullah and Skelton 2013:184; see also Jabeen and Ilyas 2012 and Dean 2007).[11] Nor was there improvement in female representation (Naseem 2010:87). Essentially, the new studies found the same patterns as those uncovered by Mirza's 2004 UNESCO-funded gender analysis of Pakistan's textbooks and curriculum.

A review of Mirza's efforts is in order. She analyzed 194 textbooks from Pakistan's four provinces for six subjects: English, Urdu, Science, Mathematics, Social Studies and Islamiat, for grades I-X. Her findings left no doubt about how poorly women and girls fared in the country's textbooks and curriculum: Her data showed that females were 23.1% of total characters, 25.7% in pictures and 20.9% in the textbooks reviewed (ibid.:10). The proportion of females declined by grade level: it was 27.4% in primary school textbooks but only 17.6% at secondary level. According to Mirza, "This finding is consistent with the overall treatment of females in…real life" (ibid.). Furthermore, few women were shown in non-domestic pursuits, with women comprising 15% and 9.8% of professional characters in primary and secondary textbooks, respectively, "[e]xactly consistent with society" (ibid.:11). Mirza also found it

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[11] It is relevant that the authors of the Pakistani gender bias in textbook studies have strong views about the importance of textbooks. Almost all extolled their central role in shaping students' future roles and lives. For example, Jabeen and Ilyas 2012:77 write: "Textbooks also represent models of people, behaviours and thought patterns. They preach conformity to ideology and ideas to a captive audience. In the absence of a neutral approach in textbooks it is difficult to establish a society that practices and believes in equality of rights for men and women."

notable that no women were shown doing farm work, "the burden of which they share nearly 50:50 in real life" (ibid.). But it's not surprising, since urban characters were 6-7 times more common than rural ones in textbooks (ibid.:12).

Her findings on male and female stereotypes also correspond to the worldwide studies, including the attributes of each gender (modest, helpless, pious and beautiful for females vs. and the usual noble traits for males, e.g., brave, truthful, generous, wise and kind) (ibid.:12). When female characters were included, she found, they were confined largely to traditional spheres (absent from leadership positions, usually associated with household duties), and often depicted in supporting roles to male characters.

Still, she found one positive note in the fact that women comprised about a quarter of the professional staff in various aspects of textbook writing and production and that the share of women in the textbooks is nearly 25%, vs. only 7.7% in the formal curriculum. (Below, results from a newer study (Ullah and Ali 2012) indicate that being female does not necessarily mean supporting a stronger, more equal role for girls and women in either Pakistani textbooks or in the larger society.)

It is worthwhile comparing Mirza's results with those of the studies of the revised textbooks, starting with Ullah and Skelton 2013. They focused on the quite conservative Khyber Pakhtunkhwa (KPK) Province (formerly known as the Northwest Frontier Province), examining 24 textbooks of Urdu, English and social studies for grades 1-8 in public and private schools. Pakistan, it should be noted, has a central Ministry of Education but also provincial education bureaucracies that don't always adhere to national Ministry of Education initiatives (this is similar to the situation in Argentina, discussed in note 7). Ullah and Skelton measured progress based on both quantitative and qualitative analyses of male/female representation and stereotyping. Their results showed that gender biases remained firmly embedded in the textbooks. Their new data, for example, demonstrated that males continue to dominate. For example, they comprised fully 75% of those represented in 30 biographies (ibid.:187). Their research also draws on other studies and content analyses – all of which were undertaken after Mirza's UNESCO's report was released in 2004. Overall, these findings indicate that the Ministry's initiatives have done little to improve the quantity or quality of female representation in Pakistan's textbooks.

It is also notable that in Srivastava's 2006 comparative study of upper primary social studies textbooks in Pakistan, Bangladesh and Nepal, the author found that although all three countries' treatment of females in textbooks was negligible and stereotyped, Pakistan fared the worst.[12] For example, Pakistan's "social studies' textbooks have virtually no illustrations on women" (ibid.:93) – the lowest number of the three countries – and historically prominent women are mentioned only minimally in discussions of history and civics. More generally, in Pakistani texts dealing with religion and history, male characters move the story along and shape the environment, with female characters peripherally included to either test or support male characters (ibid.:89).

Also worth mentioning are the recent studies that analyze gendered language, whether in textbooks on language or on other subjects (e.g., Hussain and Asfar 2010). Repeatedly, words are used that associate male and female characters with certain distinct and stereotyped characteristics. Males are described

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[12] Nepal's textbooks ranked best because they "allude to some crucial problems faced by women of this region" (ibid.:94). Bangladesh came in second in positive mentions of females, since its textbooks (correctly) note that women were the first gatherers and cultivators and also that women occupied a favorable status in society in the Rig Vedic period. In addition, the Bangladeshi books discuss female historical figures as well as women's reform movements in the 19th and 20th centuries.

as "doers"; females are depicted as dependents. Furthermore, females frequently are described as beautiful, calm, quiet, silly or terrified; in contrast, males are often referred to as strong, brave, smart, etc. (ibid.:35). They studied the Intermediate English textbooks of Punjab Province, but the same gender-stereotyped adjectives are found in schoolbooks in the other provinces (and around the world).

<u>Why the reforms failed to transform the textbooks</u>. The study by Ullah and Ali 2012 is important enough to summarize in detail – because they delved deeply into <u>why</u> so much effort produced so little progress over nearly a decade. They did so by exploring the gender views of the key players/stakeholders in the educational reforms. Specifically, they interviewed a purposive sample of 28 "educationists" (11 females and 17 males). Participants included textbook publishers, Ministry officials, and others involved in production of the most recently published state textbooks. These professionals included curriculum designers from the federal Ministry of Education in Islamabad, subject experts and authors from the KPK textbooks board, as well as "executive education officers" and head teachers in selected public and private schools (ibid.:222). They found what they described as a remarkable degree of "gender blindness" in the very group that oversees the development of textbooks or runs the schools. On the whole, the women they interviewed were not notably more devoted to eliminating gender bias in education than their male counterparts. Many viewed current female representations as accurate depictions of Pakistani society, with some citing the very stereotypes Mirza's 2004 UNESCO study recommended eliminating from textbooks.

Regardless, some key figures championed reform, even though they acknowledged that their success was limited. The male Chairman of the KPK textbook board, for example, favored equal representation of females and males. But he acknowledged that "textbooks development is not [a] one man show but a complex activity played among [the] curriculum wing of the federal Ministry of Education, provincial textbook board, partner NGOs – each with its own interest." Further complicating the situation, "social threats make it difficult to include certain stuff in textbooks that I think should be…" (ibid.:224). A "senior female educationist" from the KPK textbook board was another advocate of reform. She described how the curriculum wing (of the federal Ministry of Education, Islamabad) pressured them to remove a picture of a girl riding a bicycle – because "girls don't ride bicycle[s] in our culture" (ibid.:224-225).

Their reformist views, however, were a minority in Ullah and Ali's purposive sample. Among the strong opponents were a male curriculum designer and a male principal of a boys' senior high school in Peshawar. Both thought that "wasting time" considering gender-biased material – "these…trivial things" – was wrong. Even some women firmly opposed broadening women's opportunities. One woman subject specialist on the KPK textbook board, for example, saw female public sphere involvement as a source of "too many moral evils in our society" (ibid.:228).

The average interviewee did not see the need for change. For example, Ullah and Ali found that most men and women in their sample thought the extant gender division of labor was "natural and inevitable" (ibid.:227). The sample did split more evenly on whether boys and girls should study any subject in which they had an aptitude. Even so, the great majority saw teaching school and medicine as females' best professions. (Many applauded the fact that teaching hours were compatible with women doing all domestic chores.)

In a country which had a notable woman head of state, it is quite telling that almost 2/3 of the educationists thought women <u>shouldn't</u> be political leaders (ibid.:235). Three of 17 males and four of 11

females believed that Islam doesn't permit women to be political leaders.[13] In the same vein, the majority of both males and females in Ullah and Ali's sample believed in the "hymen myth" – specifically, that it could break if a girl participated in sports – so they opposed their involvement. Given these attitudes and beliefs on the part of the people behind the textbooks and curricula, or running the schools, it is not surprising that despite a decade of effort, gender bias is still firmly embedded in Pakistan's textbooks.

Finally, there is another obstacle to reform: In Pakistan, as in many nations, it can be stalled if it lacks a measure of public support (Mustapha 2012:249). And in Pakistan, as in many countries, correcting gender bias in textbooks is neither a public nor a political priority (ibid.:254).

Summing up, prospects for change look doubtful, given (a) the high proportion of central figures in textbook creation and adoption who see no need to change either the textbooks or the status quo, (b) the lack of strong public support or a political priority for such change (Mustapha 2012:249, 254), and (c) the government's struggle to contain the Taliban, the Haqqani network and other groups seeking to take over the state and impose extremist forms of Islam.

D. Thailand

Background. Thailand is far more gender-equal than Pakistan. It has basically eliminated the gender gap in enrollment, reversing it in secondary and tertiary education, where in 2009, women comprised 51% and well over 55% of enrollees, respectively (Thailand Ministry of Education 2009). It also has high female labor force participation (64%, well over the world average of 53%; see Appendix B). And many women are important entrepreneurs, managers and executives. Yet, a just-completed Rockefeller Foundation-funded gender bias in textbooks analysis found the usual pattern: "Gender stereotypes in textbooks are overwhelmingly evident. Girls and women are relegated to the private (domestic) domain, whereas boys and men… have more visibility…[and] are also represented in positive roles, e.g., in important public positions; in better paid, prestigious careers, and doing important tasks" (Vichit-Vadakan 2014:4). The textbooks also have the typical underrepresentation of women and girls (ibid.).

Girls are shortchanged in other areas as well, according to the data. The Rockefeller Foundation funded other phases of the research besides gender bias in textbooks. In particular, a random sample survey was carried out concerning the attitudes and beliefs of (a) kindergarten teachers, (b) primary teachers, (c) upper secondary teachers and (d) upper secondary students. The results of the survey indicate that teachers are, in fact, slightly biased in the usual direction. For one thing, they are a little more likely to see boys as leaders and to assign them to leadership roles in the classroom. On average, they also see boys as naturally a little more competent in math and science (Assawasirisilp 2014).[14] Ironically, though, girls significantly outdo boys in both subjects on PISA scores: by 12 points in math and 19 points in science (OECD 2014).

The pattern of Thai girls' higher performance in math has been found in some of the world's most gender egalitarian countries (Guiso et al. 2008). They found that the gap in math gets smaller as the

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[13] When a woman is a prominent political figure (e.g., Fatima Jinnah), she is depicted in textbooks not as a leader but as feminine, "loving, sacrificing and kind," with her political role in Pakistan's early days of independence masked (ibid.:236; see also Ullah and Skelton 2013).

[14] In comparison with the attitudes of the Pakistani educators described above, the Thai teachers' slight tilt in the direction of stereotyped views appears very mild.

countries' level of gender egalitarianism rises, until it reverses in the most gender-equal (e.g., Iceland). Thailand provides another example of this reversal phenomenon. In such countries, one could argue, girls are not disadvantaged even if their textbooks are biased.

But that may not be the case. First, the Thai survey data show that teachers mildly attribute to girls and boys many of the same stereotyped characteristics found in their textbooks concerning leadership as well as math and science abilities. Their attitudes may affect how they treat boys vs. girls in the classroom with respect to both leadership and, test scores notwithstanding, math and science.

One could further argue that any bias in textbooks and teachers' attitudes and behavior are negated by the fact that Thailand channels high school students into science and math high school courses based on their grades. So, Thai girls – with higher grades, on average – are disproportionately required to take those courses. And the PISA results show that they do better than boys.

Perhaps a relevant question is: What happens at the tertiary level? There, although there are more women studying sciences than men, the difference is small: women comprise 53% of science students in higher education (UIS 2014). It is possible that the proportion of women majoring in any of the sciences is held down by a combination of (1) underrepresentation of girls and women in STEM fields in textbooks, and (2) teachers' attitudes slighting girls' abilities in science and math. After all, the Rockefeller-funded research found both to be the case (Vichit-Vdakan 2014).

If so, not only the girls but also their country may not be achieving full potential. Thailand's GDP could rise appreciably if it were able to climb the value chain in the global economy. Economic activities requiring STEM expertise have been found to be more likely to lead to greater – and sustainable – growth than those based on, say, unprocessed commodity exports. If gender bias in textbooks and in teachers' attitudes and behavior depress the proportion of capable women who go into those fields *after* high school, when they are not required to study them, then both the women and their country may lose out. Other findings from the research (Vichit-Vadakan 2014) are in line with this "loss of potential" hypothesis. Two other areas where girls were constrained were sports and leadership. The school and teachers encourage boys' participation in active sports as well as in leadership, easing the path for boys to "further expand and extend [their] dominance in the school [and] to gain prominence as star sportsmen and leaders of extensive networks" (ibid.:5). Other common teacher attitudes and behavior might further pressure girls to adopt traditional roles: promoting the color pink for girls and their wearing skirts from kindergarten on "allows little boys to tease and bully them into passivity" (ibid.:6).

In sum, with no reinforcement from textbooks, and encouraged to adopt traditionally feminine behavior by teachers, an unknown proportion of high-achieving girls may opt out of a career based on the science and math their high grades require them to study in high school. More empirical research is needed to explore this issue.

Meanwhile, the report concludes with recommendations that start by appealing to the political will of top government and education ministry leaders. Other recommendations include "bringing the media and civil society on board…to achieve gender equality in schools"; utilizing gender experts to transform teachers' and administrators' values and beliefs, backed up by an "incentive and reward system" to promote such a transformation. Additional recommendations are that "girl leaders be given high profile and support" and that female role models in different sectors of society be incorporated into textbooks

and other teaching materials. A final recommendation is that special model schools be set up as examples and their success publicized throughout the educational system (ibid. 2014:7).

Of the four case studies, these may be the most ambitious recommendations. They also may be more likely to be realized, given the generally higher level of gender equality in Thailand. But here, too, as discussed in the next section, Conclusions and Recommendations, government stability and the degree of gender egalitarianism of a given administration must be taken into account. With Thailand once again under military rule as this is written (in May 2014), the road to reform may be affected – once again showing the link between the fate of policy reform and the particular government in power during critical periods of policy formulation and implementation.

<u>V. CONCLUSIONS AND RECOMMENDATIONS</u>

A. Conclusions

<u>Some initial considerations: factors affecting the success of reforms</u>. The literature review turned up a large number of factors that could enhance or undercut attempts to reduce gender bias in textbooks and in education more generally:

1. Topping the list is political will to recognize and try to combat gender bias. If it is absent at the top, major transformations are unlikely.
2. Similarly, political will at the top of the Ministry of Education is almost or perhaps equally as important.
3. The combination of a "gender champion" and donor support might be sufficient for smaller-scale reforms – provided that the champion stays on the job and the support continues.
4. The attitudes of those on the "front lines" of textbook reform, i.e., the education professionals in the curriculum and textbook departments of a Ministry of Education, also need to be congruent with those proposing the reform, lest it be undermined from within.
5. Conversely, more flexible systems may allow for greater experimentation while also having greater potential for those who disagree to opt out.
6. Three different dimensions of gender bias in textbooks must be addressed: (a) underrepresentation, (b) stereotyped depictions of gender roles, occupations and attributes, and (c) presentation of positive gender content and role models. This last aspect has received the least emphasis in the studies reviewed.
7. Girls are not a homogeneous group and if privileged, urban girls comprise the great majority of females in textbooks, poorer and/or rural girls may be further disadvantaged and alienated.
8. Ascertaining the gender attitudes of the major stakeholders prior to promoting gender reform may be crucial for success vs. failure: If any group (e.g., traditional religious authorities) is opposed to more gender-equal textbooks, the reform is more likely to succeed if they can be brought into the process, even if this might dilute some of the proposed content.
9. Gender training might reduce opposition to reform. But this is most likely to occur if the training is aligned with trainees' specific jobs and expertise so that they can see how considering gender might help them ("one size fits all" training on sex vs. gender is unlikely to be effective).
10. In the absence of a large corps of trainers and a generous budget, the most effective, economical training is probably a "training of trainers" model (as recommended below), where a small number of initially receptive people are trained in both the content area and in how to present it to their peers.
11. The overarching level of gender stratification in the society (e.g., with respect to major indicators, especially female labor force participation) also must be factored into account in conceptualizing how progressive a reform might be: where women lack economic power, their "voice and vote" on household and public matters is usually muted (Blumberg 1984, 1988, 2004, 2009, forthcoming) and achieving successful reform of educational materials is likely to be more difficult. This is linked to the level of public support: as Mustapha 2012 emphasized, if there is no public support, the road to reform is much less likely to be traversed.
12. Governance factors also are crucial, as emerged in the case studies: is the government that proposed the reform the one in power when implementation begins? If not, is the new administration more or less receptive, i.e., how do the gender and education attitudes and priorities of the previous and present administrations differ?
13. Reform may be more difficult in a federal system if some of the provinces are more conservative.

14. Whether textbooks are published in the private vs. the public sector and at the provincial vs. the national level also can be important: If a national Ministry of Education is promoting greater gender equality but does not produce textbooks, it needs to be able to issue guidelines, such as Terms of Reference, to those that do, and be able to enforce those guidelines.

15. It matters if a reform is a law or just a regulation and whether there are (a) enforcement provisions, trained enforcement staff and legal "teeth," and (b) budget for enforcement personnel and actions.

16. Finally and obviously, there may be idiosyncratic factors that must be taken into account in each place where reform is attempted. On the ground research is needed and there is no single template for reform.

Further considerations. Reforming a country's textbooks to reduce (and, hopefully, eliminate) gender bias does not come cheap. It goes beyond routine updating of textbooks and needs input from that nation's gender as well as gender and education specialists. Major overhauls of textbooks usually require international donor support. Although the initial studies of gender bias in textbooks sometimes are done by academics or activists with no or limited local funding, more often than not an international donor or government entity provides some support. The following points focus on patterns relevant for reforms of gender-biased textbooks and beyond that emerged in the case studies.

1. In Chile and Pakistan, UNESCO played an important role in funding early and influential research on gender bias in textbooks. In Georgia, a team of graduate students from Colombia University's School of International and Public Affairs (SIPA) undertook the study for a women's NGO but they didn't clearly identify their main funding source.[15] In the Thai case, the Rockefeller Foundation funded an integrated study, starting with an analysis of gender bias in textbooks. The average study of gender bias in textbooks is not expensive. Assuming that the research finds the usual pattern of underrepresentation of females and stereotyped depiction of both genders, the next step can be far more costly. This would be a larger initiative to reduce gender bias in educational materials, including in new textbooks and curricula, and possibly in teacher interactions with students. Here, donor support almost surely would be needed.

2. But, as found in all four cases, in phases beyond an initial content analysis of gender bias in textbooks, the specifics of the country's situation come into play. The most critical seems to be the extent to which there is political will at the top as well as committed people in the Ministry if Education's textbook and curriculum department who would provide strong support to any initiative to reduce gender bias in textbooks and in education in general.

3. In turn, political will is usually linked to a government's – and a nation's – level of gender stratification. Where the position of women is low, garnering support for even a moderately costly revision of textbooks will be difficult to obtain even if a few high level people are strong champions of the effort. This seems to have been the case in Georgia and definitely so in Pakistan. Conversely, it would appear that promoting greater gender equity in textbooks and classrooms in a more gender-equal country such as Thailand might be an "easier sell" to key stakeholders, including those running the government, Ministry of Education officials and professionals, and rank-and-file teachers.

4. Chile's example of specifying Terms of References for publishers and then having outside academic evaluators carry out an assessment of a textbook's compliance with its Terms of Reference seems

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[15] The research was for their Workshop in Development Practice; the NGO helped with logistics and some funds.

promising.[16] If the evaluators – who would be required to have a gender specialist on the team – found that the book did not meet the gender-explicit Terms of Reference about (a) positive and non-negligible gender content, (b) fair representation of females, and (c) the avoidance (or, at minimum, reduction) of gender stereotypes, it would be sent back to the publishers for revisions to make it responsive to the TORs.

5. It seems necessary to train relevant Ministry staff in gender issues related to their particular area of expertise, vs. "generic" gender training (e.g., about the difference between sex and gender). Here are some other considerations about training that emerged from the Georgia and Pakistan cases:

> a. Especially if a "training of trainers" model is used, training need not be costly or require a budget-breaking increase in the number of training staff – the two main objections of a key informant in Georgia. In every country, there will be some people with knowledge of both gender and education issues who could be enlisted to work with education professionals to create the combined gender and education content for reform initiatives.
> b. The more conservative the country, the more important that some of the trainers be **men**. In even the most conservative places, there are some men who are forward-looking about assuming such a role. (Training for both genders might have helped in Pakistan, where no efforts by those promoting reform to win the "hearts and minds" of the 28 male and female "educationists" in Ullah and Ali's sample were mentioned.)
> c. Even if some education professionals remain hostile, good gender training that is linked to their jobs should win over many of those who just never thought about the gender status quo or prevailing gender stereotypes in their society. At minimum, such training should reduce attempts to undermine or water down gender equity-enhancing educational initiatives, including curbing gender bias in textbooks, as occurred in Georgia and Pakistan.

6. If less gender-biased textbooks were to be generated, teachers also would have to be trained in the aims and nature of the more gender-equitable books. Here, a combination of a "training of trainers" model combined with modest Conditional Cash Transfers (CCTs) might be explored, if a donor is willing to experiment. If certain teachers were trained in how to teach the new textbooks in a way that reinforces their gender-inclusive, non-stereotypical messages, and given small incentives for training their colleagues, this could multiply the positive impact of any such reform.

7. Finally, as an interim – and almost cost-free – measure, Ministries of Education could explore using the "gender bias-busting" techniques of Sadker and Sadker (n.d.) and Kalia (1986). Both delineate concrete methods on how teachers – with minimal training – can use gender biased textbooks against themselves, i.e., teaching students how to recognize gender bias in their textbooks so that they can transcend their current educational materials.

B. Recommendations

1. It is recommended that, where possible, reforms promoting gender equity in education be preferentially undertaken in countries where political will exists at the top as well as within its Ministry of Education.

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[16] Textbook evaluations are not expensive; in the U.S., publishers pay academics very little – sometimes only a few free books from their catalog – for evaluating a new textbook or manuscript.

2. It is specifically recommended that the first step toward reform be a study of gender bias in textbooks. It is further recommended that a lead donor be enlisted at this stage to help fund the study and to help mobilize support (including donor coordination) for subsequent steps.

3. Since any such study will find varying degrees of gender bias, it is recommended that the next step is to train Ministry of Education textbook and curriculum department staff – from the head to the rank-and-file professional staff – in gender and education issues that are relevant to their work, in order to build support for going beyond the study of gender bias in textbooks to adopt concrete reforms. It is further recommended that the lead donor be part of this process and that the training model be a "training of trainers" approach in order to reduce costs as well as the need for a substantially larger training staff.

4. Once the training has been done, it is recommended that in more conservative/gender-stratified nations, some male – as well as female – "champions" be enlisted to present the proposed reforms to top government officials. Males are especially recommended to contact conservative religious and/or community leaders. It is also recommended that the lead donor be part of this process.

5. Following the training described above, it is recommended that the Ministry of Education, especially its textbook and curriculum department, design new Terms of References for book publishers in countries where these firms write the textbooks, and for teams of authors in countries where the Ministry is in charge of textbook production. These would require them to include (a) increased representation of females, (b) less gender stereotyped portrayals of the attributes, activities and occupations of males and females, and (c) explicit – and positive – gender content. It is further recommended that this effort include local gender experts with experience in education (especially gender and education) as consultants.

6. It is recommended that the Ministry of Education consider enlisting small teams of outside academics – including at least one member with expertise in gender and education – to evaluate the publishers' or team of authors' compliance with the revised Terms of Reference. (This should not be expensive since it involves merely checking new books against the criteria in the Terms of Reference that the publishers or authors' team and Ministry had agreed to previously.)

7. In order to keep costs of the reform at viable levels, it is recommended that the system to produce less gender-biased textbooks be phased in, with different donors supporting a particular level of education (primary, 1st cycle of high school, 2nd cycle of high school) and/or different subjects (e.g., language, social studies, mathematics, etc.) taught at one or more academic levels.

8. Use the "training of trainers" model, where initially receptive people are selected to train their peers in aspects of gender equity most closely related to their actual jobs. This should help create a positive climate for gender reform. Especially in more conservative nations, it is recommended that there be special recruitment of suitably open-minded *men,* not just women, from about the same hierarchical level as the intended trainees; these might be more likely to be effective with their same-gender peers.
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9. Until the phased reduction in gender bias in textbooks is complete, it is recommended that teachers be trained – by a relatively inexpensive "training of trainers" approach – on how to use gender biased textbooks *against themselves*, using methods designed by Sadker and Sadker (n.d.) and/or Kalia (1986).

10. Finally, where less gender-biased textbooks actually are produced, it is recommended that a relatively inexpensive "training of trainers" methodology also be adopted to teach instructors how to use them as intended. Small incentives might facilitate the process. Accordingly, it is further recommended that donors be encouraged to fund a comparative study about the impact of very modest incentives/Conditional Cash Transfers in helping teachers to best utilize new, less gender-biased books.[17]

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Appendix A

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Table 1: Gender and Education Statistics: Primary School

Country	Gross Enrollment Rate, 2011		GPI (F/M)
	Male	**Female**	
Chile	103	100	0.97
Georgia	110	110	1.00
Pakistan	101	83	0.82
Thailand	91	90	0.99

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Table 2: Gender and Education Statistics: Total Secondary School

Country	Gross Enrollment Rate, 2011		GPI (F/M)
	Male	**Female**	
Chile	89	91	1.03
Georgia*	NA	NA	NA
Pakistan	40	30	0.73
Thailand	75	81	1.08

* In 1999, Georgia reported 80 for male enrollment, 78 for female and 0.98 for the GPI ratio

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Appendix B

Comparing education with other key gender indicators, the data show that all the countries except Pakistan have advanced farther toward achieving gender parity in primary and secondary education than they have with other main gender indicators. But Pakistan does better than the other three countries in proportion of women in parliament, thanks to a quota system:

- With respect to female labor force participation, the proportions of women age 15+ in the labor force in 2012 were: Chile 49%; Georgia 56%; Pakistan 24% and Thailand 64% (World Bank 2014a). The world average was 53% (calculated from World Bank 2014b).

- With respect to female participation in national parliaments, the proportions of women in the lower house as of January 2014 were: Chile 15.8%; Georgia 12.0%; Pakistan 20.7% and Thailand 15.8% (Inter-Parliamentary Union 2014). All four were below the world average, which in January 2014 was 22.2% (Inter-Parliamentary Union 2014)

- With respect to the overall gender gap index for 2013, which ranks 136 countries, only one of the four – Thailand – proved to be above the median: Chile #91, 0.6670; Georgia #86, 0.6750; Pakistan #135, 0.5459 and Thailand #65, 0.6928 (Gender Gap 2013).