

SUMMARY AND RECOMMENDATIONS  
FOR ACHIEVING GENDER EQUITY  
IN AND THROUGH EDUCATION

**Susan S. Klein\*** and Elizabeth Ann Homer,\* with Cheris Kramarae,  
Margaret A. Nash, Carol J. Burger, and Linda Shevitz

---

INTRODUCTION

---

The authors of these 2007 *Handbook* chapters documented some gains in advancing the gender-equity process and outcome goals since the publication of the 1985 *Handbook for Achieving Sex Equity through Education*. The process goals focus on what happens in education settings to eliminate sex discrimination and reduce sex and gender stereotyping. The outcome goals focus on what education can do to create a more gender equitable society.<sup>1</sup> However, none of the 2007 *Handbook* authors report that these goals of attaining gender equity in education contexts or because of education have been fully accomplished. Both subtle and complex sex discrimination continues although some of the overt types of clearly illegal sex discrimination (in education processes) such as not allowing women into engineering programs have stopped.<sup>2</sup>

Many authors have made it clear that hierarchies related to gender, race, economic, religious, or other societal stratifications and stereotyping are persistent and intertwined barriers that need to be removed to attain full equality in education and society. They point out that while there are some areas where attention to equity is important for men and boys, it is especially important to focus on equity goals for women and girls as they have

generally faced most negative discrimination as frequent occupants of the lower- or less-valued parts of this societal hierarchy.

The chapters provide insights into how both formal and informal education can be transformed to play a major role in creating gender equitable schools, programs and activities as well as insights into longer-term strategies for a more gender equitable society. This summary chapter provides recommendations for policy, practice/programs, and research for achieving gender equity both in education and through education. In doing so, it highlights some context changes over the past two decades, provides examples of gains as well as continued inequities, and discusses conundrums in the quest for gender equity.

---

KEY CHANGES IN CONTEXT SINCE 1985

---

Chapter 1 of this *Handbook* discusses how changes in U.S. society such as the continued growth of the field of gender-equity education, increased use of technology, a greater focus on global gender equity, and more attention to the intersections of gender and other education equity concerns have influenced some gains since the 1985 *Handbook for Achieving Sex Equity through Education*. After discussing some additional contextual

---

\*The bold face names are the Lead Authors.

<sup>1</sup>Gender equity process goals focus on eliminating sex stereotyping and sex differential (discriminatory) treatment in classrooms, school policies, testing, and much more. Gender-equity outcome goals include education attainment, career choices, and basic indicators of quality of life such as health, productivity, knowledge, happiness, freedom, safety, economic self-sufficiency, etc. *Handbook* authors present some evidence of positive relationships between gender-equitable processes and gender-equitable outcomes.

<sup>2</sup>As discussed in many other chapters Title IX of the 1972 Education Amendments and other federal and state laws make sex discrimination in education programs and activities covered by these laws illegal.

influences, this part of the chapter will discuss the barriers and continued challenges to achieving gender equity. Contextual influences include:

### **Increased attention to boys and men**

Over the past 20 years, there has been more attention to the role of gender equity in helping boys and men. For example, in the 1985 Handbook, 6 of the 25 chapter titles specified girls or women such as “Strategies for Overcoming the Barriers to Women in Educational Administration,” “Achieving Sex Equity for Minority Women,” and “Gifted Girls and Women in Education.” In this 2007 Handbook, no chapter titles address only women or only men. Authors of all chapters pay attention to equity issues for both males and females. In giving more attention to male gender-equity issues, some authors focus on the needs of minority boys and men since they have not been achieving equity with respect to minority girls and women or with respect to their nonminority male peers related to their academic achievement, safety, and freedom from negative involvement with the criminal justice system. Other authors discuss the study of maleness and masculinity within the field of gender studies and how gender-role stereotypes can be as damaging and limiting to men as to women.

Sometimes increased attention to boys and men has been related to backlash against the progress of girls and women such as concerns that women are overrepresented in the student bodies of many colleges. Some authors have provided evidence to counteract proponents of “gender wars” who believe achieving gender equity is a zero-sum game—if girls gain, boys must lose.

### **More attention to Title IX and other gender-equity laws**

Over the past 20 years, there have been indicators of continued ignorance and neglect by educators about their gender-equity responsibilities and knowledge of Title IX. This lack of attention is associated with decreased federal funding and leadership in implementing gender-equity education policies and laws especially since the late 1990s. Chapter 5, “The Role of Government in Advancing Gender Equity in Education,” and chapter 9 “Gender Equity in Coeducational and Single-Sex Educational Environments” document how the federal government has weakened Title IX. For example, the October 25, 2006, changes in the Title IX Regulations allow such flexible use of single-sex education that it is more likely to increase than reduce sex discrimination, which is the sole purpose of Title IX (OCR, 2006). This is especially perplexing because the Department of Education requires more rigorous evidence of effectiveness for curriculum improvements such as reading programs than it does in its uniquely federal area of responsibility: providing protection against sex discrimination under Title IX.<sup>3</sup>

### **More governmental accountability in general, but less for gender equity**

Over the past two decades, governmental education accountability policies have exerted more systematic control on many

aspects of education. However, gender equity is often omitted from these policies even in reports and discussions of progress toward education equity, which require information on race but often not race and sex. Many authors recommend that federal and state governments include specific provisions to collect gender information for accountability purposes such as the Athletics Disclosure Act discussed in chapter 18 on “Gender Equity in Physical Education and Athletics.” The authors also encourage using the Internet to collect and exchange information such as data disaggregated by sex, race, and poverty as well as contact information on the legislatively required Title IX coordinators.

### **More attention to gender equity needs of diverse populations**

The diverse populations examined in this Handbook include high poverty countries around the world as well as increased U. S. focus on the education needs of populations ranging from key groups to individuals with disabilities. A more recent societal, but not a federal, focus has been on lesbian, gay, bisexual, and transgender issues in education. Despite increased societal interest, little research or funding has focused on gender-equity issues within and for these populations.

---

## INDICATORS OF PROGRESS IN ATTAINING GENDER EQUITY

---

Since the 1985 Handbook, many gaps in education achievements between female and male students have decreased. In some cases, both men and women improved on education achievement indicators and the women improved more, sometimes surpassing their male peers. However, in many other areas the gaps favoring males continued or increased and obstacles to attaining gender equity are still formidable.

Some examples of gains with caveats include:

1. There has been increased public understanding and media attention related to gender equity in education.
  - Studies around the world show that the health, education, welfare and economies of countries are positively associated with educating girls and their mothers. However, there is a need for boys and men to understand the value of gender equity in education and in society and the ways equity frees men for a greater variety of choices in careers and avocations, opens up new household and parenting roles, and allows for more healthy lifestyle choices (by, for instance, reducing high-risk behaviors.)
  - Popular media and popular book coverage of gender-equity education issues has increased. Much of this information is fair and helpful. However, some such as discussions of “gender wars” and improper characterizations of sex dif-

---

<sup>3</sup>This will be discussed later in this chapter under the last conundrum.

ferences and gender-equity provisions of federal laws are inaccurate and misleading. This *Handbook* provides a definitive source of summary information on these complicated issues based on patterns of evidence from multiple studies.

Media coverage of the controversy generated by former Harvard University President Lawrence Summers' remarks claiming that innate differences between the sexes might help explain the dearth of women in the top science jobs has helped educate the public about the fallacy of this claim and the importance of efforts to stop sex discrimination and advance women in scientific and other leadership positions. The media and public reaction encouraged Harvard to show that it valued the full participation of women. It allocated \$50 million to counteract discrimination against women and minorities on campus and in 2007 selected Drew Gilpin Faust as its first women president. Media coverage of her appointment has helped advance gender equality by highlighting her leadership of the faculty Task Forces which requested the \$50 million, her scholarship on women, and her collaborative leadership style as director of Women's Studies at the University of Pennsylvania and Dean of the Radcliffe Institute for Advanced Study. This Institute, focuses on gender issues and interdisciplinary research, important aspects of Harvard's reform efforts. Media attention related to Dr. Faust's presidency has also helped educate the public about progress and challenges of women as academic leaders.

Despite the generally insightful media coverage of these influential Harvard activities, what the media covers and how it does so might be misleading and inaccurate. For example, there was substantial September 2006 coverage of the Dee (2006) study that found that students learn best with same-sex teachers. These findings were not substantiated by other studies completed over the past two decades. Instead, they were based on a secondary analysis of 1988 data with no classroom observations to support or refute the reported findings.<sup>4</sup> Rather than refuting popular misconceptions, most of the *Handbook* authors focus on what is known from a variety of well-documented research perspectives as seen by extensive reference lists in each chapter.

- With more women in the paid workforce in the United States and many other countries, there is a fuller understanding of the relationship of gender equity in education, the workforce, and the home, but education has not provided much leadership to other professions in developing comprehensive policies to increase gender equity such as for flexible work hours, job sharing, or child care.
2. The U.S. gender-equity laws and policies, especially Title IX and the Equal Protection Clause of the 14th Amendment to the U.S. Constitution as well as state ERAs and other laws and policies, have been used to protect women and men from sex discrimination in education.
    - This 2007 *Handbook* focuses more on Title IX and its enforcement than did the 1985 *Handbook*, which had more emphasis on positive government support for women's educational equity programs than on using Title IX to prohibit discrimination. This shift in emphasis probably was related to the 1984 Supreme Court decision on Grove City College that temporarily limited Title IX's coverage to specific federally funded programs rather than to the discriminatory actions of the whole education organization that received federal financial assistance. Due to the hard work of women's rights and civil rights organizations, especially the National Organization for Women, the Grove City College decision limiting Title IX coverage was overturned by the Civil Rights Restoration Act of 1987. Title IX and Title VII of the 1964 Civil Rights Act have been used to protect both women and men from sexual harassment, a topic that was barely mentioned in the 1985 *Handbook*.
    - There have been gains but not parity in areas like athletics where more women have learned skills and participated in competitive teams due to attention to Title IX. There has been an increase in the number of women students and faculty in some areas of science, but decreases in areas such as computer science.
  3. There have been decreases in gender gaps in education achievement tests formerly favoring men and boys and in educational attainment. In some cases, the gaps have been reversed to favor women and girls.
    - Patterns of results from meta-analyses of multiple studies show few large sex differences in key subject areas such as verbal and mathematical performance, which had often been characterized as having large gender differences. An increased understanding of gender similarities is reflected in chapter 2 on "Facts and Assumptions About the Nature of Gender Differences and the Implications for Gender Equity," chapter 8 on testing, in many of the content area chapters in Part IV, and in Hyde and Linn (2006). Decreased gender gaps are especially clear in many mathematics tests and in the increased participation and achievement in science areas, such as biology and chemistry, and in foreign language learning. The gaps favoring girls in verbal-skills tests have remained fairly consistent and small. Men are still doing slightly better than women are in the SAT critical-reading scores, but women in all ethnic groups scored higher than men in the new 2006 writing test (College Board, 2006). International data show patterns similar to the United States with most gender differences in achievement in the higher grade levels.
    - There is substantial evidence that the few gender gaps in academic indicators that continue are related to socialization and experiences and sometimes due to differences

<sup>4</sup>The accompanying web page to be developed for each chapter may be able to refute some key misinformation as it appears in the popular press. The 2006 study by Thomas Dee was disseminated in the *Education Next* journal and Web site ([www.educationnext.org](http://www.educationnext.org)) of the conservative Hoover Institution.

in the female and male populations that take the test rather than to any innate physiological or biological differences. For example, this applies to the learning of spatial skills where men and boys have traditionally scored higher than women and girls. It is also clear that experiences, expectations, and stereotypes may contribute to preferences in learning styles. Educators should not reinforce these stereotypes, but should instead help students use diverse learning strategies.

- Some chapters report that in general, girls and women try harder in school and often receive better grades than their male peers. In many countries, boys tend to repeat school more than girls, but they also complete primary and secondary school at higher rates than girls. It is likely that parents keep their sons in school longer than their daughters and that girls take their studies more seriously. In the mathematics and science areas, some of the progress of girls can be associated with increased state and local course-taking requirements for all. An additional explanation may be that girls see the value of doing well academically and getting more education to prepare them for a successful life. In most cases, this means that they will be expected to bring in an income to help the family and that they are unlikely to be an unemployed, stay-at-home full-time mother for long or at all. The authors of chapter 4 also show that women need more formal education to approach the salaries of men with less education.
  - There have been increases of women in many areas of postsecondary education, especially as students in the United States. Compared to men, women are now earning more bachelors and masters degrees in many disciplines and they apply for and receive more financial assistance to attend postsecondary institutions. (See chapter 30 on “Improving Gender Equity in Postsecondary Education”).
  - More women now work in prestigious previously male-dominated occupations, such as law, business, medicine, but not necessarily in as many high-level or high-salary jobs that would be expected based on the higher percent of degrees and credentials earned by women. (See the chapter 6 on “Increasing Gender Equity in Educational Leadership” and chapter 4 on “The Impact of Education on Gender Equity in Employment and its Outcomes.”)
  - In the past 20 years, more girls have been educated in low-income countries with related improvements in gender parity and literacy. However, the millennium development goals for gender parity in primary and secondary education have not been achieved. (See chapter 3, “Gender-Equity Education Globally.”)
4. There is some indication that women’s internalized barriers to success such as low self-esteem, attributions of success to luck, and “women’s posited fear of success” have decreased since the 1985 *Handbook* findings. (See chapter 4 on “Employment and its Outcomes” and chapter 6 on “Edu-

ational Leadership.”) Teaching people skills and conveying positive expectations is more likely to have a positive impact on self-esteem than trying to teach people to feel good about themselves.

---

## PERSISTENT OBSTACLES TO ACHIEVING GENDER EQUITY

---

Even in areas where there has been some progress in increasing gender equity, there have been related patterns of gender inequities. For example, while there is more gender parity in athletics and greater success of women at the Olympics and in some occupations, many education-related gender inequities persist.

1. Women still suffer negative effects of discrimination in quality of life outcomes related to their safety and employment and leadership of government and business organizations. Females, more than males, are victims of sexual harassment and school shootings. There are few women leaders or top officials especially in national politics even though their stereotyped strengths for being less likely to be influenced by corruption and more likely to advance peace and cooperation are desired by all. The authors have noted that,
  - In the labor force “Although there are racial and age inequities, the most continuous and startling inequities are between men and women” (chapter 4 p. 54).
  - Gender inequities and employment discrimination continue in education, politics, law enforcement, business, medicine, media, the military, and religion.
  - Creative contributions of women are less encouraged and recognized than are those of men in many areas such as the arts and sciences (chapters 12, 13, 17).
  - Often occupations that switch from more men to more women find decreases in prestige and even in the relative pay of both men and women compared to more male dominated occupations. Chapter 7 on “The Treatment of Gender Equity in Teacher Education” provides evidence on this trend for education professionals, which is a similar persistent challenge for psychologists and social workers.
2. Men and boys still face barriers to gender equity. These barriers are most severe among African American and Hispanic men and boys from low-income families in the United States. Many of the barriers are related to patterns of stereotyped low expectations such as being identified for special-education services or for incarceration. There is the expectation that they might be able to succeed in earning money based on attributes and skills that are often not associated with educational attainment (e.g., sports, entertainment, manual labor, or substantial technical computer abilities.)
3. There has been little recent federal attention to implementing and enforcing gender equity. In some cases, policies such as federal funding of abstinence-only education reinforce sex

stereotypes and even provide inaccurate information, which may contribute to unintended pregnancies and sexually transmitted diseases.

- Federal research, development, and dissemination support for gender equity is limited compared to other education areas where there has been higher-priority national attention, such as special education or reading. Even within these priority areas, attention to gender equity has been minimal. The story is more positive in the priority areas of science, technology, engineering, and mathematics (STEM), where there has been some increase in federal funding for an array of projects to increase equity for all groups underrepresented in STEM.
4. Most recent research related to gender equity is limited to small isolated studies or some secondary analysis of older databases. The authors of chapter 6 on increasing gender equity in educational leadership indicate that most of the gender research in their area is by women doctoral students for their dissertations, which are usually small-scale studies. Chapter 5 on “The Role of Government in Advancing Gender Equity” documents minimal federal funding especially for the development and evaluation of interventions designed to advance gender equity. Even when federal funding was available for research-based replicable gender-equity programs, it has often been discontinued and the programs were not disseminated nationally. The Women’s Educational Equity Act Program had a strong focus on developing effective models that could be used by others and good dissemination contracts with the Education Development Center, but the full promise of this strategy has yet to be met because of severely limited funding. The U.S. Department of Education refused to continue funding the dissemination contract and the related Gender Equity Expert Panel, which was designed to identify and provide incentives for evaluations of model programs to learn about their impact on increasing gender equity.
- Subtle barriers persist in the form of micro-inequities in classroom interactions, counseling, student ratings of teachers and low expectations. These subtle but cumulative gender inequities are often hard or expensive to measure. Thus, it is difficult to use them to document violations of Title IX and other nondiscrimination laws based not only on sex, but also on race, ethnicity, national origin, disability, sexual orientation, and social and economic status.

---

### CONUNDRUMS IN OUR QUEST TO ACHIEVE GENDER EQUITY

---

Since this *Handbook for Achieving Gender Equity through Education* focuses on change and action, the authors have been asked to do much more than synthesize research addressing women’s or gender issues in education. Education equity involves comparisons of diverse groups (e.g., females and males, rich and poor, majority and minority) related to values and goals. In our complex democratic society, not all paths to achieving equity are clear and unambiguous. In their analyses of these paths,

many authors identified conundrums, which are difficult problems that they have encountered in analyzing the situation and making recommendations for achieving gender equity. Where feasible, they have suggested solutions to these conundrums. The following questions and answers describe some conundrums that interfere with achieving gender-equity goals in education and provide suggestions on ways that they might be resolved.

#### Conundrums Related to Gender Differences and Gender Similarities

##### ***Why focus on gender differences when we are interested in increasing gender similarities or gender equality? Should gender differences be valued and reinforced or devalued and decreased?***

The *Handbook* provides evidence that there are both gender differences and similarities. Most people are aware of general physiological and reproductive sex differences between most women and men as well as sociocultural differences such as masculinity and femininity.

A key concern is that, if not handled carefully, a focus on gender differences and related gender stereotypes will reinforce the differences and make it harder to advance gender equality. One of the equity concerns related to a focus on differences is that attributes associated with women are often not valued as highly as those associated with men. For example, many social and religious traditions reinforce different gender roles and usually value what the men frequently do more than what the women do. Similar stereotypes apply to the study of race differences and similarities.

This gender-difference conundrum, which is a possible impediment to advancing gender equality and increasing gender similarities, can be overcome by:

- When educators learn about patterns of gender differences and similarities, they are better able to gauge the effectiveness of their teaching strategies. This is especially important when gender disparities reveal patterns of sex discrimination that violate laws such as Title IX. Statistically significant differences between males and females may be found on a wide range of meaningful measures. While these differences may not apply directly to an individual student simply based on their gender, they can help educators anticipate the numbers of males or females likely to have particular strengths and weaknesses and devise strategies to insure that students that need assistance are not being overlooked either because their needs do not fit the stereotype for their gender or, in some cases, because they do and are therefore accepted weaknesses for their gender. An example might be a reading program for students with dyslexia. Dyslexia occurs about 3.5 times more often in males than females. Knowing the pattern of gender differences for dyslexia in the population could be a guide for how many males and females would be likely to be in the program and if there was a deviation from this pattern, educators might need to look at their admission process for this program.
- Ensuring that goals valued by society are equally valued for women and men and girls and boys. For example, goals should

reinforce values often associated with women such as caring for others, and encourage men to assume more of these responsibilities. (See *Handbook* chapter 1 for this goal's framework.) Also, goals should continue to encourage women to attain equal mastery of what has traditionally been valued for men such as physical and business prowess and political leadership. Despite persistent hierarchies in many aspects of U.S. society,<sup>5</sup> chapter authors have indicated that male roles or stereotypes should not be assumed as more valuable than attributes usually associated with females. Additionally they provide evidence that the frequent valuing of men more than women is associated with decreases in prestige and compensation in occupations such as education or psychology as these occupations attract a higher percentage of females than males. Similarly, a major report by The National Academies (2006), "Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering," found that women science faculty felt that they and their work were devalued compared to their men peers. Additionally, compared to equally productive men, women faculty members were paid less, promoted more slowly, and were less likely to be recognized for leadership or honors. This report and the *Handbook* have numerous recommendations on ways to value and equally reward contributions of women and girls and men and boys. In some cases, this even involves changing the criteria and measures of what is valued as seen in the addition of the writing sample to the SAT (College Board 2006).<sup>6</sup>

- Counteracting the bias of researchers, the media, and educators to focus on gender differences rather than similarities. The authors point out that there is a media bias to look for and publicize gender differences, and that this is often inaccurate or misleading. Many discussions of gender differences tend to omit any mention that there is more variation within the male and female populations than between them. In addition, there are compounding variations related to race, ethnicity, disability, sexual orientation, age, and social economic status that should be examined. Many of the popular discussions exaggerate gender differences and their implications for learning and often attribute them to innate differences that are unlikely to be altered by education or socialization.
- Taking care to ensure that those being studied aren't encouraged to respond according to expected gender stereotypes reinforcing sex differences. Educators sometimes face this challenge related to their own beliefs about gender roles and even more often when they address the expectations of their students and communities. A key theme of this *Handbook* is that both women and men should be assisted in attaining common societal goals. Thus, the refrain "Long live the differences" should be changed to "Celebrate individual uniqueness" and "Create a gender equitable society" by eliminating

or at least decreasing the stereotyped and learned sex differences to open opportunities and benefits for all.

### ***Is it useful to compare females and males, or should they be studied separately?***

Many who study gender would prefer to focus on either women or men. However, since this *Handbook* is on achieving gender equity, it is often important to compare women and men. The following show how some of the chapter authors addressed this challenge to learn about achieving gender equity.

- The authors of chapter 6 on "Increasing Gender equity in Educational Leadership" emphasized studying women and girls in depth, often without comparing them to men and boys. They explained that past research focused mainly on men who dominate education leadership. They argued that it is important to independently study the attributes of women in these positions from their own perspectives and noted that effective women leaders may do some things differently than the effective leadership styles developed by men. They also documented increases in education administration leadership studies focusing only on women since 1985. However, in some cases, they also made relevant comparisons with men in K–12 education administration such as when they showed that a higher percentage of women are earning degrees in this area, but a higher percent of men still occupy the education administration positions.
- Although most of chapter 8 on testing and assessment focused on sex differences, the authors also explained when it was useful to develop separately normed interest tests for females and males.
- Other chapters noted problems comparing men and women in some instances. Chapter 21 on "The Role of Women's and Gender Studies in Advancing Gender Equity" suggests that rather than comparing men and women students or faculty, the key questions should focus on the attainment of gender-equity goals for both female and male students. Comparisons of women and men did not come easily to the authors of chapters 25 and 26 on "Gender Equity for American Indians" and "Gender Equity and Lesbian, Gay, Bisexual and Transgender Issues in Education" (LGBT). The authors of the chapter about American Indians point out that sex differentiation of roles for many tribes does not mean that the roles of women and men are valued differently. Also, some traditional Native American groups may be more likely to refer to three or more sexes, not just males and females. Thus, the goal of equity for men and women is not a part of the culture of most tribes and comparing females and males on various indicators is not of much interest from many perspectives. Similarly, the authors of the LGBT chapter see the issues and comparisons

<sup>5</sup>The authors of chapter 25. *Gender equity for American Indians* point out that while American Indian women and men may have different roles they are often valued equally.

<sup>6</sup>An early report indicates that some major universities do not plan to use this writing sample, perhaps because they are concerned that it would lower chances of accepting the sometimes scarce male students (Hass, 2006).

being related to sexual orientation/identity, rather than male and female biological designations and they see gender inequity as discrimination related to LGBT issues. Thus, they rarely have data on the sex of students, including the membership in student clubs to support LGBT students such as the Gay, Lesbian, Straight Education Network (GLSEN) and Gay-Straight Alliances.

These perspectives show that achieving gender equity can be much more nuanced than reducing gender gaps in what is desired by society. In addition to comparing females and males and studying each in depth, achieving gender equity may be measured by decreased sex segregation and gender stereotypes for both women and men.

### **What are appropriate and inappropriate strategies to address gender differences?**

While it garners peoples' attention, an overemphasis on gender differences perpetuates gender stereotypes and often leads to inappropriate strategies to address these inequities. On the other hand, gender blindness or ignoring gender comparisons (of differences, similarities, or stereotypes) is undesirable because it does not identify or address common gender-related needs or illegal sex discrimination. Educators need to learn to identify and address gender differences appropriately. For example:

- The evidence is strong that on the average groups of women and girls do not perform as well as groups of men and boys on tests of spatial abilities, but there is also evidence that spatial abilities are learned and that often men have more experiences that helped them learn these skills. Instruction should be provided to both males and females who have not performed well on these tests. (See Chapter 2.) It is unlikely that this instruction should be provided in a single-sex setting, unless there are no men in that location who need this instruction or unless there is evidence that the type of instruction provided is only effective with either women or men.
- Even if boys and girls say they prefer different learning styles, it is important to avoid gender-differentiated instruction that can perpetuate stereotypes such as teaching girls and boys differently when there is no evidence that it will be beneficial. For example, research results do not show that teaching boys with a competitive style and girls with a cooperative style will have a desired effect on any type of learning. (See Chapters 2 and 9.)
- Research shows that making educators and students aware of gender differences and stereotypes can work in two ways. It can sometimes reinforce or increase gender differences or it can be used to encourage students to counteract these differences and stereotypes. (These issues are covered in Chapters 1, 7, and 14). The authors of the communications skills chapter 14 note that the continued reinforcement of gender stereotypes "will require examination of textbook and other formal learning materials, but it will also include attention to gendered messages found in popular culture artifacts of all types, especially in music, television, movies, computer games and programs." (p. 46)

Conundrums Related to Changing Education and Society to Create Gender Equality for All

### **To what extent can and should governments in the United States try to change education to eliminate sex stereotyping and sex discrimination and stratification in our pluralistic diverse society?**

Global and other evidence shows that most gender roles are learned and the "Gender Equity Education Globally" reinforced by society but they can be changed. For example, chapter 3 points out that "Nordic countries have been successful in decreasing male stereotypes and improving male parenting skills through various schools interventions" (Chapter 3, p. 36). The *Handbook* authors' answer to this challenge is that federal, state, and local governments should not only ensure nondiscrimination on the basis of sex, but also should actively increase educational opportunities and gender equitable outcomes by using their resources to create a more equitable and productive society with a high quality of life for all. Many chapters especially Chapter 5 on "The Role of Government in Advancing Gender Equity in Education and Chapter 20 on "Gender Equity in Career and Technical Education" suggest ways to start this transformation in the United States. They urge the development of comprehensive strategies to prioritize and implement needed changes outside of what is covered under current laws.

### **What is the role of education in changing learning experiences to foster gender equity in desired outcomes?**

The 1985 *Handbook* summary chapter noted, "The pattern is quite clear: there are larger sex differences in outcomes in areas that are most influenced by socialization. Another related pattern is that as sex roles in society become less differentiated and as female and male students receive more similar learning experiences, the sex differences in education-related outcomes decrease" (p. 492). The current 2007 *Handbook* chapters reinforce this conclusion, but what should educators do when society or specific population groups have strong views that value certain gender-role stereotypes or when the relationship of some stereotypes to desired outcomes is confusing?

Chapter 22, "Gender Equity for African Americans" reports on common teacher and societal stereotypes. It points out that some stereotypes of African American girls as "fearless and emotionally stronger than men" (p. 17) may not have a positive impact. Just as negative stereotypes and expectations are likely to have detrimental impact on educational attainment, the authors suggest that this positive stereotype may jeopardize the Black girl's social and emotional development (p. 471). The chapter also highlights Noguera's contention that "the benefits of patriarchy, like the benefits of racism, are in many ways subtle and taken for granted with the privileged and ubiquitous dominance of men, even Black men, going uncontested. This privileged position may help to explain why the crisis of the Black male receives attention, while the continued oppression of Black females is accepted as the norm" (Noguera, 1997, p. 15 in Chapter 4 on "The Impact of Education on Gender Equity in Employment and Its Outcomes").

Points out that education achievement has little to do with the gender-wage gap, *Handbook* authors suggest that this conundrum can be resolved by learning what works to ensure educational opportunity and achievement without regard to sex-role stereotyping and bias. The authors would not approve reinforcing cultural bias and gender inequality by groups such as those advocating sex segregating African American males. Such groups must avoid discriminating even if they think it will help them. Research and legal opinions regarding the 14th Amendment and Title IX do not support their beliefs. The *Handbook* authors argue sex segregated programs should be restricted to educational approaches that meet the standards in the 1975 Title IX regulations.

### **How can education change values and rewards in society to promote gender equality?**

Chapters 3, 4, 7, 17, 20, and 29 provide evidence that in the United States and globally, activities associated with women receive less pay and prestige compared with similar activities by men. These chapters also note that when women become a majority in occupations such as psychology, child care and elementary-school teaching, the autonomy, pay, and prestige of the occupation is likely to decrease.

Educators working with nontraditional occupations face a values conundrum. Should they encourage more women to go into higher-paying and prestigious occupations that have been traditional for men? Should they encourage men to go into low-paying occupations that are traditional for women? Or for the more ideal solution, can education help change society so that occupations requiring comparable educational preparation, skill, and risk become similarly valued and rewarded? Should education try to eliminate gender-based differential education aspirations and career choices?

Chapter 4 authors Richardson and Sandoval suggest that society would be more gender equitable if:

- There was an increase in the value of female-stereotyped roles. Now, “the closer the job is to mothering young children, the lower the pay” (chapter 4, p. 46). And, “When we look at how jobs are valued, it seems clear that technology is valued more than caring” (chapter 4, p. 54).
- And if there is widespread use of men assume more of the family-care responsibilities, but also implement family-friendly policies to help women and men who assume caring responsibilities (pp.12–13). For example, increased flexibility in hiring, tenure, and promotion policies to account for needs of faculty members as they go through various life stages was a key recommendation in the 2006 report of the Committee on Maximizing the Potential of Women in Academic Science and Engineering (National Academies, 2006).

The *Handbook* authors realize this is an area where gender-equity advocates in education need to develop consensus strate-

gies in conjunction with their peers working on gender equity in employment.

### Conundrums Related to Defining Desired Gender Equity Outcomes

#### **What is Parity/Equality/Equity? Should close to 50/50 female and male distribution of all that is valued be the goal for most education process and outcome statistics?**

The authors of the *Handbook* raise more questions than answers about tipping points to guide the use of specific remedies to increase gender equity or equality in outcomes. A key consideration is to cause no harm to the achieving group while enhancing the outcomes of the group in need. Generally, the authors discuss, but don't recommend, when to declare gender equity achieved or even at what point a gender disparity is illegal.<sup>7</sup> The exceptions to this lack of specificity occur when there are governmental standards such as the three-prong test of compliance related to athletics under Title IX (See chapter 18) and federal definitions of nontraditional occupations as having “individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation” (chapter 20, p. 424). The following are some questions related to gender-parity goals that the *Handbook* authors have discussed:

- Should the current slight dominance of women students in U.S. postsecondary education be valued and purposefully retained because women need the postsecondary credentials more to compete in the biased job market that still favors men? Or should affirmative action for undergraduate men prevail along with affirmative action to get women and men in specific programs such as engineering where women are underrepresented or nursing where men are underrepresented?

Chapter 30 on postsecondary education noted that some private undergraduate colleges try “to keep at least a 60/40 ratio of women to men on their campuses” (p. 641). However, attention to admissions ratios should not result in quotas that block the aspirations of either women or men. Sex discrimination in undergraduate admissions is allowed under Title IX for private colleges even if they are prohibited from sex discrimination in all other areas of Title IX coverage, but it is not allowed for public institutions or graduate programs in private colleges. The following example describes how knowledge about patterns of gender differences have been used to help create a gender-balanced student body.

Admissions criteria have been developed to use knowledge about typical sex differences such as that women receive better grades and men receive better test scores. Instead of following the trend to give preference to good grades more than high SAT scores because grades are more predictive of college success, Towson University, a public institution in Maryland, has a program to admit some students if they have SAT scores

<sup>7</sup>While true gender equality in achieving what is desired by society would be a 50/50 distribution related to the proportion of girls and women or boys and men in the population, society's tolerance for reaching the final equitable outcome goals may differ for different outcomes and these may even change over time as progress is made. As some of the authors suggest, an analysis of needs and costs and benefits can also be included in determining acceptable gender ratios in attaining specific goals at any given time in any part of society.

that are better than the university average, but high-school grades below the University average. In “Affirmative action for white C+ guys,” Jaschik (2006) raised questions about both the effectiveness and legality of this type of affirmative action.

What does gender equity mean in these cases? Should there be full gender parity (affirmative action for males) in college admissions even if women meet the criteria more fully than men? To what extent is it legal or wise to put more efforts into the recruitment of the less-represented group or provide incentives or activities that might be especially attractive to the underrepresented group such as starting a football team at a formerly women’s college to attract men students? Supreme Court decisions related to affirmative action such as the 2003 University of Michigan cases (*Grutter v. Bollinger* and *Gratz v. Bollinger*) can also provide some guidance on these goals and fair ways to achieve them.

- Does decreasing the gender gap in writing mean that fewer women will excel in writing? In addressing this conundrum, all must remember that reducing gender gaps is not a zero-sum game—the goal should be to help all boys and girls improve to the full extent possible. The authors of the “Gender Equity in Communication Skills” chapter 14 explain “Given that the entry-level jobs most open to women have higher need for literacy than those jobs that are male identified and less open to women, if schools were to treat girls and boys in ways to try to insure no differences in literacy outcomes, then such treatment would, in its effect, be inequitable” (chapter 14, note 4, p. 283). This potential “remedy” is raised to stimulate thought about long-term outcomes, but in the authors would agree that when boys are underachieving in writing, they along with all the girls who are underachieving in writing should have their educational needs met. It may be that a remedial writing class may have more males than females, but females should not be neglected. The same process should be followed in math or physics where strategies are developed to decrease gender stereotyping in content and improve the performance of ALL underachievers.
- Should women continue to invest in schooling more than men even if there is less economic payoff for them to attend school? This is related to stereotypical career choices and continued sex discrimination in employment especially when employers do not provide more equitable rewards for individuals with more education. The chapter 4 authors do not suggest simplistic responses to this question. Instead, they more often suggest structural changes as described in Homer’s recommendations to change the nature of many vocational courses so they are more likely to be a good solution for both girls and boys. This was done with the reorientation of “the office training program that used to be 90 percent female, with the girls training to be secretaries and the boys in accounting and computing,” to “one comprehensive Business Services Program that all office students take, and 35 percent of these students are male” (Homer, 1997, p. 13). Similarly, job descriptions and classifications can be based on education levels, experience, abilities, and knowledge in ways that value the relevant typical strengths of both women and men, so that they can be selected in non-sex-discriminatory ways. No one should

be recruited into programs that do not provide a living wage and they should also realize the high likelihood of having multiple careers over time.

- To what extent should United States societal goals include gender parity in athletics, military, law enforcement, nontraditional occupations, political leadership, etc? How should societal needs and goals to overcome barriers related to discrimination, sex bias, and stereotyping be factored into establishing specific gender-equitable outcome goals?

Many argue that determining what is equitable is difficult to establish as long as barriers related to discrimination, bias, and stereotyping exist. Each woman and man should have an equal opportunity to reach their potential without facing these barriers. Gender-equitable outcome goals need to be developed based on knowledge about discrimination, stereotyping, and effective strategies to meet societal needs.

#### Conundrums Related to Inequities in Educational Processes that May Lead to the Creation of Gender-Equitable Outcomes

The process and outcome conceptual framework for examining gender equity in and through education is detailed in chapter 1, “Examining the Achievement of Gender Equity in and Through Education” and referenced in numerous other chapters. It is useful in addressing many of the issues raised by these conundrums.

***Should special recruitment activities be provided to encourage men to enter lower prestige traditional women’s occupations such as education of young children or nursing? Similarly, should women be recruited to enter fields where they are underrepresented such as engineering, the military, police work, etc?***

The relationship of the laws and research and evaluation to address the issues related to this process and outcome conundrum are discussed in chapter 4, “Impact of Education on Gender Equity in Employment and Its Outcomes,” and in chapter 20, “Gender Equity in Career and Technical Education.” Special incentives and bonus offers for entering a field are illegal under Title IX and Title VII.

***Is sex discrimination in educational processes allowed for some purposes if it is not exclusionary?***

Aside from privacy reasons (such as contact sports and discussions of human sexuality or other exceptions in the Title IX Regulations), is it sometimes okay to treat girls and boys differently in the same coed class or in a single-sex class? (They should not be treated differently on the basis of their sex, but individuals can be treated differently for other reasons such as ability.) Is it fair to have special facilities or resources (such as women’s centers) primarily for girls or boys or for women or men? (Yes, this is okay, but both women and men must also be allowed to use the single-sex-focused facilities and services.) A

common solution is to provide education that meets the needs of women or men such as women's studies courses all of which are also available to men who want to participate although they may be a minority group in the class. (See chapter 21, "The Role of Women's and Gender Studies in Advancing Gender Equity.") Sheila Tobias, whose early work identified and addressed math anxiety, said it was common to allow men as well as women who felt they needed help with math anxiety to come to the math-anxiety clinics.

***In some cases are risks of sex discrimination in educational processes worth taking to decrease sex differences in outcomes valued by society?***

This justification has been made to allow experiments with sex-segregated programs for girls or boys under the 1975 Title IX Regulations. In the following discussion, sex-segregated educational processes, such as schools, classes, or extracurricular activities, will often be referred to collectively as single-sex or sex-segregated education interventions. The conundrums here are especially challenging because of the new controversial October 25, 2006, Regulations implementing Title IX, (Office for Civil Rights, 2006). These 2006 Title IX Regulations weaken the legal protections against sex discrimination in single-sex classes, schools, and extracurricular activities in nonvocational K–12 education institutions receiving federal financial assistance.<sup>8</sup>

The following four questions and answers related to this conundrum are discussed in detail because they are important to the future of gender equity in the United States and because they address important conceptual and practical issues relevant to many of the *Handbook* chapters.

1. Is sex segregation in education a risk?

Yes, single-sex interventions are generally a risk to gender equity and many other education improvement goals. The *Handbook* authors provide much evidence that single-sex education or sex segregation<sup>9</sup> even if it is voluntary is likely to be associated with increased sex discrimination in educational processes and outcomes. In fact, goals of this *Handbook*, which are outlined in chapter 1 and elsewhere, specify the importance of decreasing both sex stereotyping and sex segregation to achieve gender equity. The research reviewed in this *Handbook* reinforces the conclusions in the 1954 Supreme Court *Brown v. Board of Education* decision that separate segregated education is not equal. This applies to sex as well as race segregation. There is substantial evidence that sex segregation is more likely to reinforce than combat stereotypes and that the lower-prestige or lower-valued group almost always gets fewer resources than the dominant group.

Single-sex education is only permitted in some specific cases such as for remedial or affirmative purposes according to the 1975 Title IX Regulations. Part of the conundrum re-

lated to determining the risks associated with sex-segregated education for specific purposes is that some single-sex groupings may be used to decrease sex discrimination and sex stereotyping in education processes and in the outcomes. For example, there is some evidence that specific model single-sex programs that address inequities in the experiences and expectations related to girls and women in some areas of science where they have been underrepresented may contribute to decreased gender gaps in science achievement. There is also evidence that the gender gap in science achievement is closing without the use of single-sex programs or schools. Additionally, there is little information on the effectiveness of single-sex compared to coeducational or nonexclusionary programs (such as women's studies programs) that are designed to address the needs of the less-represented group but are open to all qualified participants. It is even harder to find examples of equally effective single-sex interventions to help boys increase gender-equitable outcomes.

As just discussed, educators contemplating single-sex instruction should first look for information on coeducation programs or policies associated with closing the gender gap. They also may find that specific aspects of an effective single-sex program can be effectively included in a coeducational program. Finally, if they have evidence that it is best to have a program focused on the frequent needs of women (or men) can it be modeled on the nonexclusionary strategies used in many math-anxiety programs that also allow men with similar needs?

2. Are educational processes in sex-segregated environments more likely to perpetuate sex discrimination than if they are provided in a coeducational environment?

As documented in chapter 9 "Gender Equity in Coeducational and Single-Sex Educational Environments," there is plenty of evidence that there is sex discrimination in coeducational classes, but little evidence that single-sex classes are better at eliminating any types of sex discrimination and stereotyping than coed classes. The research shows that teachers and classes in either environment may be perpetuating or, in some cases, doing a good job at eliminating sex stereotyping and discrimination. However, it is often easier to identify inequities in all types of education-process indicators or resources when schools or classes are sex segregated. For example, even in the California Dual Academy study described in chapter 9, the researchers found that the qualifications and expectations of the teachers for the girls and boys academies were different and inequitable even though the facilities in the same campus were usually comparable. Similarly, when the Brighter Choice Charter Schools for boys and girls Albany, NY, had to split into two buildings in 2006, the boys were moved to the new school down the block from the old school (Office of Innovation and Im-

<sup>8</sup>The October 2006 Title IX regulations are discussed in more detail in chapter 9.

<sup>9</sup>As discussed later some well-designed single-sex interventions might be desirable in some circumstances because they are effective in increasing gender-equitable outcomes. However they are most likely to be a good strategy to advance gender equity if they are operated in a nonexclusionary way like college women's studies programs that always are open to men.

provement, 2006). With the focus on increased educational accountability, it should be easier to document and use Web sites to distribute information on gender inequities in single-sex environments than in mixed-sex environments where it is often essential to have observers to document the subtle micro-inequities in the treatment of girls and boys in the co-educational classroom.

3. Are single-sex intervention programs aimed at increasing gender equity being effectively monitored and evaluated to show that they advance gender equity?

No, the U.S. Department of Education (ED) has not included adequate accountability and evaluation requirements in the 2006 regulation changes. And it has failed to provide any other assistance or guidance to assure that risky sex segregation would be limited in accordance with the exceptions allowed in the 1975 Title IX Regulations.

Although sex segregation is allowed under the 1975 Title IX regulations if it results in decreasing sex discrimination in the outcomes, ED provides no guidance on identifying programs that do this. In fact, ED discontinued its Gender Equity Expert Panel which had criteria and procedures to identify promising and exemplary programs that were effective in increasing gender equity.<sup>10</sup> (Also see in Chapter 5, “The Role of Government in Advancing Gender Equity in Education”)

4. Why are organizations that support gender equity concerned that the October 25, 2006, Title IX Regulations will increase rather than decrease sex discrimination in education?<sup>11</sup>

Organizations that support gender equity see many problems with the U.S. Department of Education’s inappropriate weakening of Title IX protections against sex discrimination to allow for increased risky sex-segregated schools, classes, and extracurricular activities. In addition to lack of evidence that single-sex education is more effective than comparable coeducational education, there are important legal, technical, and practical criticisms of the October 2006 Regulations.

**Legal objections.** The new regulations violate the regulations they are replacing and do not further any government interest that is more important than ending sex discrimination, the sole purpose of Title IX. There is no exceedingly persuasive legal justification for allowing more than the remedial or affirmative single-sex education exceptions already allowed under the 1975 Title IX Regulations (Office for Civil Rights, 1975).<sup>12</sup> The justification by Secretary Spellings in announcing the October 2006 Regulations that “Research shows that some students may learn better in single-sex education environments”

(Secretary Spellings, October 24, 2006) falls extremely short of meeting the exceedingly persuasive standard used in the Supreme Court Virginia Military Institute (VMI) decision and would be in violation of the Equal Protection Clause of the Fourteenth Amendment. (See Stone, 2004 for the legal reasoning and chapter 9 for a review of the inconclusive research findings on the value of single-sex education.)

**Technical objections.** Compared to the 1975 Title IX Regulations these confusing 2006 Regulations pay less attention to the risks of sex discrimination in both the education process related to the use of the single-sex interventions and in the types of outcomes that are sufficiently worthwhile to justify taking this risk. The 1975 Title IX Regulations contain a few exceptions to allow some types of single-sex education in classrooms and schools such as if there is evidence that this sex segregation is being used for affirmative or remedial purposes to end sex discrimination in the desired outcomes. The 2006 Title IX Regulations did not remove this “affirmative” justification language, but they also allow risky single-sex education for purposes that are not related to ending sex discrimination.

The 2006 Title IX Regulations also have no active accountability provisions to determine if there is sex discrimination or even if they accomplish “important governmental or educational objectives” such as improving educational achievement. The Regulation’s guidance on evaluation is passive since organizations implementing single-sex education are only supposed to keep a two-year evaluation on file in case they are investigated instead of actively publicly sharing their evaluation design, plan, and results for public scrutiny.

While the 2006 Title IX Regulations contain vague suggestions of compliance with nondiscrimination provisions of Title IX and the Equal Protection Clause of the 14th Amendment, there is no clear procedural or substantive guidance on how potential implementers of single-sex education should provide evidence to show that they are not discriminating in education processes or outcomes. The 2006 Title IX Regulations fail to help educators know what indicators should be compared to show nondiscrimination and also what *substantially equal* process activities and resources mean. A key concern is that substantially equal is not equal and that this change does not maintain the equality standards that were established in the Brown decision and that can be used to show that separate is not equal. The 2006 Title IX Regulations also eliminate the need to justify the single-sex intervention on the grounds that it will be likely to decrease sex discrimination in the outcomes. In summary, although the 2006 Title Regulations suggest that segregated instructional activities for girls or boys should be as equal as possible to conform to the standards<sup>13</sup> in the VMI decision with the exception of re-

<sup>10</sup>Of the 11 programs recommended by the Gender Equity Expert Panel as promising or exemplary, only two were single sex and they were both developed for single-sex environments such as a program on orientation to nontraditional careers for women in correctional institutions and a program for Girl Scouts in science museums.

<sup>11</sup>The following reasons relate to this conundrum. There are also many more reasons outlined on the Web sites of organizations such as [www.feminist.org/education](http://www.feminist.org/education) and [www.ncwge.org](http://www.ncwge.org).

<sup>12</sup>Many also note that these 1975 Title IX Regulations have greatly contributed to advancing gender equity for the past 30 years and see no reason why they should be reversed at this time.

<sup>13</sup>This means that schools or classes for boys and girls or the comparison coed class or school should have equitable tangible and intangible resources such as facilities, endowments, qualified teachers and career networks for their graduates.

questing that evaluation information be on file, there are no on-going requirements to insure accountability for equality.

**Practical and logical education resource allocation objections.** The gender-equity organizations believe that the highest standards of evidence of effectiveness should be used to determine the risks of any single-sex interventions since all single sex programs, especially those that are exclusively for girls or boys, require some sex discrimination in the education process.

The gender-equity organizations argue that it is unwise to view sex segregation as a potentially important tool in improving any aspect of education when there is no evidence that it is anything more than a potentially damaging fad. For example, even the few programs that have some evidence that they help girls attain desired outcomes in science rarely have evidence that they are more effective than coeducational programs addressing these same needs. Since there is limited funding for gender equity and education in general, gender equity organizations often remind those who may want to try sex segregation with the expectation that it will help either boys or girls that sex-segregated education is generally more expensive than a high-quality coeducational alternative. Most of the single-sex charter schools, for example, receive additional resources. The same is also true for even dual-academy-type schools as shown by the California experiment described in chapter 9. The dual schools for girls and boys received extra money from the state and, even though they were in the same school campus or building, dual academies incurred additional expenses such as paying for two sets of school administrators. The next section describes the additional expenses needed for an adequate evaluation of single-sex interventions and the possibility of high legal fees from litigation when students find that they are being discriminated against.

5. How can research and evaluation be used to resolve this conundrum?

Most educators want to do what will most likely help all students, and they do not want to follow fads that might help some students if there is evidence that the risks of helping some students will likely harm others. They also do not want to waste their valuable education resources on legal defenses for their actions and, in many cases, they would rather not spend their funds for expensive high-quality evaluations to prove that their risky single-sex intervention has positive results even if these positive results are not related to *decreasing* sex discrimination. However, they will still have to prove that their process indicators and their outcomes/results do not *increase* sex discrimination. Since the 2006 Regulation says that the single-sex intervention still has to comply with Title IX, educators still might lose a lawsuit if there is any evidence that the process indicators in the interventions for girls and boys are unequal. For example, the VMI Supreme Court decision found inequities in many types of resources available for men at VMI compared to what was available for women in the supposedly comparable single-sex college).

Researchers and evaluators can play important roles in addressing this conundrum and providing guidance to educators.

- They can help the education decision makers obtain and examine evidence related to the likely success or failure of the proposed single-sex intervention for students in attaining important goals by comparing what happened to the participants in the single-sex intervention with comparable students who received similar instruction in a coeducational setting or in a three-way comparison with (boys only, girls only and coeducational). Researchers and evaluators can also help the decision makers learn if the previous use of the single-sex intervention was associated with increased sex discrimination in the education process and in the outcomes.
- If the organization decides to proceed with the single-sex interventions, the researchers and evaluators can help design and implement an evaluation that will meet the criteria of effectiveness established by the U.S. Department of Education's What Works Clearinghouse to determine if the intervention is responsible for the outcomes. They should also work with the institution's Title IX Coordinator and federal program accountability staff to make sure that there are no aspects of sex discrimination or sex stereotyping in the implementation of the single-sex intervention that would discriminate against students who are participating in the intervention or who are participating in other alternatives. If there are separate interventions for boys and girls, it would be necessary to keep records on the resources and activities for each compared with students who choose a coeducational alternative. (See chapter 9 for descriptions of challenges in related comparative research on single-sex schools.)
- The researchers and evaluators should prepare annual reports that should be posted on the institution's Web sites to allow all constituents to learn about the success and problems in the single-sex intervention as it relates to all the process and outcome indicators and any instances of sex discrimination. As with all other research and evaluation, short- and long-term results should be provided and disaggregated not only on the sex of the students, but also on other key characteristics such as race, ethnicity, parental income, age, and ability.
- Researchers and evaluators should help interpret the findings from the annual report and, at least every two years, make recommendations about the cancellation or continuation of the single-sex intervention based on the results and evidence of patterns of sex discrimination. Part of this information should examine relative costs of the program and the evaluation compared to the benefits. These recommendations and related information should be posted on the institution's Web site and compliance with the recommendations should be checked by the U.S. Department of Education every two years to justify the continuation of this risky type of sex discrimination.

The reviews of research and evaluation in various chapters in this Handbook,<sup>14</sup> have helped develop some answers especially

<sup>14</sup>Chapters 1, 5, 7 and 9 have provided us with substantial insights to address this conundrum.

related to this conundrum about whether risks of sex discrimination in educational processes are worth taking to decrease sex discrimination in outcomes valued by society.

*However, we would also like to point out a related disturbing conundrum that is broader than gender equity. Department of Education would promulgate policies such as the 2006 Title IX Regulations that counteract research evidence and that fail to apply their own research and evaluation standards to an area where they have unique responsibility—protecting civil rights in education throughout the nation. This is especially disturbing since the Department applies these standards of effectiveness to other curriculum subject areas where states typically have more responsibility than the federal government, such as programs to improve student achievement in reading*

The *Handbook* authors hope these last conundrums will be resolved soon by withdrawing these harmful 2006 Title IX Regulations and by educating decision makers covered by Title IX to avoid single-sex education unless they have evidence that the specific intervention they plan to use works to increase gender-equity outcomes and that it works much better than a coeducational option. The limited allowance of sex segregation under the 1975 Title IX Regulations as one means to achieve gender equitable outcomes can be maintained only when it decreases sex discrimination in outcomes. However, if educators focus on high-quality gender-equitable coeducation for all, they will avoid obvious threats to equity as well as the loss of valuable resources since single-sex fads are more costly in terms of operation, evaluation, and litigation than high-quality gender-equitable coeducation.

---

## SOLUTIONS OR SELECTED RECOMMENDATIONS TO ADVANCE GENDER EQUITY

---

Authors of each chapter developed recommendations for policy, practice, and research to advance gender equity. Table 31.1 “Key Chapter Recommendations” shows chapter numbers to indicate chapters containing the recommendations. The rows are organized according to the six parts of the *Handbook*. In general, the chapter recommendations are in numerical order from the top to the bottom of the table—with chapter 30 on postsecondary education in the bottom row. The recommendations for more gender-equitable practice have been separated into two columns to indicate the practices and programs that are primarily focused on helping students and those that are focused on educators. Authors of chapters have noted that many of the recommendations from the 1985 *Handbook* still merit implementation and that as in 1985 “progress on implementing these recommendations has been sporadic and not necessarily enduring” (chapter 7, p. 43). Recommendations have been shortened and consolidated if they were similar in multiple chapters. For example, many chapters recommended that Title IX be specifically applied to their focus area. We consolidated these recommendations in Part II

on administrative strategies but indicated multiple-chapter numbers, so that readers can obtain increased understanding of the importance of these recommendations in different contexts. On the other hand, if the recommendation was related to chapter 19 on formal sexuality education, but also mentioned in chapter 5 on the role of government, we put it with the sexuality education chapter. Often recommendations specified for one chapter would be equally worthwhile in many other chapters even if they were not mentioned by all the authors.

---

## CONCLUSION

---

We hope that this updated *Handbook for Achieving Gender Equity through Education* will help readers understand the importance of this area of inquiry and action for students, educators, and the public, and will help create a more equitable global society. We have learned that key gender gaps and overt discrimination can be diminished especially in educational processes identified as having negative consequences for specific populations such as women or men and that are covered by civil rights laws. However, we have also been disappointed that many of the promising efforts to systematically eliminate gender inequities via educational programs and federal support for research, development, evaluation, and dissemination have greatly diminished. We recommend that the community of gender equity advocates use what has been learned in this *Handbook* to obtain federal and other resources to make much more systematic progress in purposefully using education to create a more gender-equitable society.

We hope that the authoritative information from over 200 authors and reviewers will help readers address their own goal-related conundrums or specific practical questions about achieving gender equity both in and through education. Finally, we invite you to work with colleagues on implementing some of the many recommendations in Table 31.1 as well as others stated implicitly or explicitly in the chapters. As you do so, we encourage you to visit and contribute to the Web page that is being designed to accompany this *Handbook* and keep the ever-changing research-based information on achieving gender equity education as current, accurate, and useful as possible to a wide range of *Handbook* users.

---

## ACKNOWLEDGMENTS

---

Special thanks to Feminist Majority Foundation summer 2006 interns Kamaria Campbell from Duke University and Jennifer Lee from the University of Virginia who helped prepare the initial version of Table 31.1 “Key Chapter Recommendations” and to the Feminist Majority Foundation’s Shana Carignan for improving the Table format. Also, thanks to reviewers Eleanor Smeal, Feminist Majority Foundation, Arlington, VA and Bernice Sandler, Women’s Research and Education Institute, Washington, DC for their helpful suggestions.

TABLE 31.1 Key Chapter Recommendations

	Policy Recommendations As They Relate to Organizational Improvement	Educational Practice Recommendations As They Relate to Learners	Educational Practice Recommendations as They Relate to Educators (teachers, administrators, parents)	Recommendations for Research, Development, Dissemination and Evaluation
I. Facts & Assumptions about the Nature & Value of Gender Equity (chs. 1, 2, 3, 4)	<p>Identify &amp; enforce international as well as national, state, and local policies that are likely to advance gender equity education. This includes funding and support for gender equity provisions in Education for All &amp; the UN Millennium Development Goals. (ch. 1, 3, 4, 5)</p> <p>Work with NGOs that promote women's rights and support education programs that foster empowerment (ch. 3, 5, others)</p> <p>Support comparable worth policies to decrease gender-related pay gaps in traditionally gendered occupations with equal educational requirements. Don't continue to value technology more than caring. (ch. 4, 20)</p> <p>Change U.S. policies to allow women and others receiving public assistance to obtain education and job training to improve their status in the labor force. Increase support for education and training in TANF and WIA programs (ch 4–5, 20)</p>	<p>Teachers should not use gender or other stereotypes in expectations for student achievement or in advising students. (chs. 2, 7, 9-10, 14, 20, 22–30)</p> <p>Educators should use nonsexist materials and challenge cultural stereotypes such as those that heighten the perceived conflict between family and workplace roles for both sexes. (chs. 3–4, 7, 9, 11, 20, others)</p> <p>Teachers should teach in gender-free ways to expose both sexes to a wide range of instructional styles and careers. (chs. 2, 4, 7, 9)</p> <p>Teachers should teach an "explicit curriculum in spatial skills" to help all the girls and boys that need them. (chs. 2, 12–13)</p> <p>Teachers should teach self-efficacy and "the how/why of political action. (ch. 2, others)</p> <p>Teachers should teach students to recognize common forms of bias including bias in the media (chs. 7, 14, 29)</p>	<p>Educators should change from beliefs that ability is innate to beliefs that hard work and perseverance will help eliminate gender inequities. (ch. 2, 3, 4, others)</p> <p>Educators should convey to parents that most gender differences, especially in math, are small or nonexistent and thus they should be wary of and resist single-sex education arguments based on this premise. (chs. 2, 9, 12)</p> <p>Encourage educators at all levels and in all countries to understand their responsibilities to advance gender equity using national and international laws. (ch. 3, others)</p> <p>Educate students, educators, &amp; the public about gender-equity rights &amp; responsibilities. (chs. 1, 3–5, others)</p> <p>Provide financial support and training to Title IX coordinators so they can participate in national meetings on gender-equity education and learn from each other.</p>	<p>Encourage the use of specific gender equity definitions ; use the process &amp; outcome framework in research and legislation. (chs. 1, 9)</p> <p>"Researchers should be aware of the bias toward finding gender differences and ignoring gender similarities. They should strive for balanced reporting of differences and similarities." (ch. 2, p. 33)</p> <p>Collect and report higher quality and more sex-disaggregated statistics. Information should cover :</p> <ul style="list-style-type: none"> <li>–student attendance, retention, and progress over time for a wide variety of populations.</li> <li>–large-scale longitudinal data sets to track historical and demographic changes in women's status in the labor force and subgroup populations. (chs. 4, 6–all chapters)</li> </ul> <p>Sample topics for global and U.S. research include:</p> <ul style="list-style-type: none"> <li>–children's perceptions of discrimination and the development of healthy ways of coping with it</li> <li>–supportive roles for family members &amp; educators to prepare students to address discrimination and harassment.</li> <li>–career aspirations vs. actual choices</li> <li>–entry into and success in non-traditional jobs for both women and men</li> <li>–links between educational achievement and status in the labor force by gender, race, etc. (chs. 4, 20, 26, others)</li> </ul> <p>Restore and expand federal support for the research, development, evaluation, dissemination and implementation of effective high-quality replicable gender equity programs, practices, and resources. (chs. 5–7)</p> <ul style="list-style-type: none"> <li>–Conduct research on the implementation of civil rights laws (chs. 7, 9).</li> <li>–Conduct and report on equity audits that focus on gender.</li> </ul>
II. Administrative Strategies for Implementing Gender Equity (chs. 5, 6, 7)	<p>Maintain full strength of Title IX/other federal and state civil rights laws and regulations &amp; fully implement them. (chs. 5–11, 13, 18, 30)</p> <p>Increase proactive activities, funding and technical assistance, and enforcement of federal and state civil rights laws. (ch. 5)</p>	<p>Teach all to recognize and combat common forms of gender bias ranging from invisibility to stereotyping. (ch. 7)</p> <p>Raise awareness of Title IX protections for students, parents, &amp; educators. (chs. 5–7, 9)</p>	<p>Education leaders at all levels need to be thoughtful about social justice &amp; strategic in promoting equity. They should ensure the full implementation of Title IX &amp; appoint &amp; support active, effective Title IX coordinators to institutionalize and monitor gender equity in their schools. (chs. 5, 6)</p>	<p>Restore and expand federal support for the research, development, evaluation, dissemination and implementation of effective high-quality replicable gender equity programs, practices, and resources. (chs. 5–7)</p> <ul style="list-style-type: none"> <li>–Conduct research on the implementation of civil rights laws (chs. 7, 9).</li> <li>–Conduct and report on equity audits that focus on gender.</li> </ul>

<p>Increase efforts to make the public aware of compliance with the provisions of the Title IX regulations: Have GAO study national awareness and compliance with the Title IX coordinator regulations by:</p> <ul style="list-style-type: none"> <li>-Extensive use of monitoring/accountability practices to judge progress in decreasing sex discrimination in athletics, career and technical education, and many other areas at state, local, and institutional levels.</li> <li>-Supporting the development of a vigorous NGO led network of Title IX coordinators and their gender-equity allies.</li> <li>-Requiring Title IX coordinators to use Web sites to post information on their services &amp; provide annual reports with disaggregated data on students' and employees' challenges and progress in achieving gender equity. (chs. 3, 5, 8-9, 13, 18, 20, 30, others)</li> </ul>	<p>Use programs to help students learn to interact in nonstereotypic, gender equitable ways with their peers, teachers, and others.</p>	<p>Every school should have at least one highly qualified Title IX coordinator with sufficient resources and support to implement the law. Interested teachers should also volunteer to become Title IX coordinators in their schools and serve on Title IX Committees. (chs. 5, 7, 9)</p> <p>Involve Title IX coordinators and committees of students and staff in reviewing education policies and practices related to gender. This periodic evaluation could include curricular materials and syllabi to see if gender issues, sex differences, gender bias, and discrimination and other similar issues and topics are part of a new teacher's preparation. (chs. 5, 7)</p> <p>Develop, improve, share and evaluate gender-equity resources and models to help Title IX coordinators and other educators work with each other as well as other gender equity advocates (chs. 5, 7)</p> <p>Education students, administrators, and faculty should be familiar with Title IX protections, and implement those protections in their own teaching, coaching, etc. This should just be one part of gender-equity training in teacher and administrator education programs. They should also ensure that teacher and administrator education texts and resources provide substantial information on Title IX as well as strategies to combat sex stereotyping. Examples of pre- and in-service programs that address gender equity include: "Succeeding at Fairness: Effective Teaching for All Students" and "A Women's Place Is in the Curriculum" and a new text <i>Gender in the Classroom</i>, Sadker and Silber 2006. (ch. 5-7, 9)</p>	<ul style="list-style-type: none"> <li>-Collect baseline &amp; then periodic information on Title IX implementation &amp; activities of Title IX coordinators.</li> <li>-Ensure that NCLB &amp; other federal programs &amp; activities include gender analysis in all data reporting as well as the AYP calculations, the work of the What Works Clearinghouse, etc. (chs. 5, 8).</li> <li>-Continue &amp; expand NCEES reports on education equity for girls &amp; women.</li> </ul> <p>Conduct research on:</p> <ul style="list-style-type: none"> <li>-how to "build the gender equity education infrastructure with a focus on Title IX Gender Equity Coordinators"</li> <li>-how states are holding local educational agencies accountable for state and federal civil rights laws through Title IX reviews, Office of Civil Rights Memorandum of Agreement</li> <li>Compliance reviews and other monitoring and technical assistance efforts.</li> <li>-successful women and minority administrators to provide models for career choices"</li> <li>-the challenges minority women face and the "intersection of race, culture and gender"</li> <li>-the relation of leadership and family responsibilities on men and women</li> <li>-the distribution of senior administrative positions in relation to gender</li> <li>-gender differences in teacher evaluations of students and student evaluations of teachers (chs. 5-8, 22-25)</li> </ul> <p>Require accreditation bodies to evaluate teaching programs on gender equity (chs. 7, 9)</p>
<p>Expand coverage, guidance, and support for gender equity (for example: pass ERA, stronger state laws, appoint and support Title IX Coordinators, U.S. ED Special Assistant for Gender Equity, Commissions on gender equity, gender, equity counselors, etc.) (chs. 5, 18, 20, 23)</p> <p>Restore and expand federal-gender equity programs such as WEEA, Equity Assistance Centers, State CRA Title IV funding, Gender-Equity Research, Gender-Equity Expert Panel, Vocational Education Sex-Equity Coordinators and program funds, NSF Gender-Equity Programs, MID gender-equity education work, etc. (chs. 5, 7, 9, 18, 20)</p> <p>Strengthen and attend to gender-equity provisions in administrator, teacher certification and institutional accreditation requirements. (chs. 5-7)</p>			

(continued)

TABLE 3.1.1 Key Chapter Recommendations

	Policy Recommendations As They Relate to Organizational Improvement	Educational Practice Recommendations As They Relate to Learners	Educational Practice Recommendations as They Relate to Educators (teachers, administrators, parents)	Recommendations for Research, Development, Dissemination and Evaluation
	Institutionalize attention to gender equity in education associations via programs, awards, and organizational policies and activities. (chs. 5–7)		School of Education accreditation visitation teams should review gender-equity protections to ensure compliance with Title IX and the 14th amendment. (chs. 7, 9)	
			Work to end the gendered nature of teaching. Recruit underrepresented men and women into education fields. (ch. 7)	
			Women and men in positions of power in educational systems must deliberately mentor more women and especially more women of color. Additionally they must help all successfully balance family responsibilities and job demands. (chs. 4, 6)	
III. General Educational Practices for Promoting Gender Equity (chs. 8, 9, 10, 11)	Maintain the goal of gender equity in coeducational schools (ch. 9)	Use exemplary and promising programs that have some indicators that they advance gender equity. (Most chapters)	Use professional standards and guidelines for equitable use and interpretation of test scores. (ch. 8)	More attention needs to be paid (by researchers, test makers, and test users) to test-related psychological factors including, stereotype threat, and possibly factors associated with anxiety in testing situations and risk taking that differ by gender. (ch. 8)
	Enforce the 1975 Title IX regulations that limit single-sex schooling and rescind the 2006 Title IX Regulations because they weaken protections against sex discrimination. Require adequate evidence to ensure that single-sex education does not increase any aspect of sex discrimination including the outcomes (ch. 9)	To create more gender-equitable assessment –administer tests in environments that are familiar or friendly –teach self-assessment skills to students. –teach students test-taking skills & teachers to use strategies to eliminate bias in tests. (ch. 8)	Teacher education and materials should decrease sex-stereotyped classroom interactions and learning. (chs. 7, 9, 14)	Research the new technological approaches to assessment to ensure that they are gender-fair (ch. 8)
	Continue federal grant programs for gender equity such as the NSF programs in science, mathematics, engineering & technology. (chs. 5, 10, 12, 13).	<b>10</b> Use direct interventions to encourage girls to use/like technology and to dispel myths and fears about technology in general. Use peer interaction and embed technology in	Publicize protections against sexual harassment under Titles VII & IX so that parents, teachers & administrators will use them as needed.  In addition to taking courses on preventing sexual harassment, administrators, teachers, & parents should work with Title IX coordinators & sexual harassment counselors to ensure that this behavior is not tolerated. (ch 11)	Research on teacher classroom assessment practices in relation to student subgroups such as gender, ethnicity, and special education status. (ch. 8)

	<b>11</b>	the curriculum content areas in which all students are likely to be successful. (ch. 10)	<b>9</b>	Conduct further studies on gender equitable classroom interactions. (ch. 9)
	<b>11</b>	Use comprehensive effective sexual-harassment prevention training programs appropriate for the assigned students. (ch. 11)		Use clear research based guidelines for implementing and evaluating single sex interventions to optimize the likelihood that they will decrease sex discrimination. (ch. 9)
	<b>11</b>	Victims of sexual harassment must be guaranteed effective protection by teachers and administrators including protection from retaliation. (ch. 11)		Examine all education institutions covered by Title IX to determine their compliance with the 1975 Title IX regulations relating to single sex schools and classrooms. (ch. 9)
IV. Gender Equity Strategies in the Content Areas		Identify, disseminate, and replicate successful effective programs to encourage, recruit and retain women in mathematics, science, engineering, and technology. (chs. 12–13)	<b>10</b>	Conduct research on the Net Generation of students to learn about gender differences and similarities. (ch. 10, 53)
	<b>14</b>	Instruction should attend to students' individual differences without perpetuating sex stereotypes. (chs. 14 and others)		Learn what applications of technology make the largest impact on student learning and if there are gender differences. (ch. 10)
		Curricula need to include overt attention to gender norms, attitudes, patterns, and outcomes to make sure students understand and can evaluate and counteract the gendered expectations found in all sources, academic, social, and cultural. (ch. 14)	<b>14</b>	Continue to collect and analyze data on sex, race and ethnic differences in mathematical, science, engineering and technology achievement, persistence, and attitudes and contrast variability and mean scores as they relate to differences in achievement, persistence, and attitudes between females and males and in racial and ethnic groups (chs. 12–13)
	<b>15</b>	Reading materials should portray females and males in nonstereotypical situations, including reading as something that boys do and leadership as something girls do. (ch. 14)		Conduct research using gender analysis to learn about barriers as well as likely causes of progress for women. Use case and ethnographic studies to increase understanding of challenges such as women's lower persistence in continuing in mathematics, physics, engineering and computer science (chs. 12–13, others)
		Instruction should promote sex-equitable language and communication patterns for all students. (chs. 7, 9, 14)	<b>14</b>	Assessment related to communication skills needs to attend to differences within gender
IV. Gender Equity Strategies in the Content Areas		Continue to require key mathematics and science courses for all in K–12 so that girls and boys will obtain needed skills and credentials. (chs. 12–13)		
		Continue to identify underrepresented groups and barriers they face in science areas such as physics, engineering, and computer science and use multiple strategies to increase gender parity. Transform science so that it is appealing to and includes everyone. (ch. 13)		
		Continue to increase federal funding for gender-equity efforts in science and technology areas where women and minorities are underrepresented. (chs. 5, 10, 13)		
	<b>15</b>	Provide periodic national gender analyses of foreign language and English-as a second language students and teachers at all educational levels. (ch. 15)		
		Encourage bi-literacy for girls and boys so that skills in both languages are valued. (ch. 15)		

(continued)

TABLE 3.1.1 Key Chapter Recommendations

Policy Recommendations As They Relate to Organizational Improvement	Educational Practice Recommendations As They Relate to Learners	Educational Practice Recommendations as They Relate to Educators (teachers, administrators, parents)	Recommendations for Research, Development, Dissemination and Evaluation
<p><b>16</b></p> <p>At the national level, No Child Left Behind legislation should be revised to require that states assess social studies knowledge that is gender inclusive and require that states disaggregate data on social studies tests by gender, race/ethnicity, and family-income levels. (ch. 16)</p> <p>A program like the Women’s Educational Equity Act, which funded much gender equitable social studies curriculum development in the 1980s, needs to receive sufficient funding to encourage substantial curriculum development on topics that reflect a gender-inclusive perspective. (ch. 16)</p> <p>At the state level, as social studies curriculum standards, frameworks &amp; tests are revised, authors should give serious and sustained attention to gender-related issues. (ch. 16)</p> <p>Professional organizations such as the National Council for the Social Studies need to take the lead in addressing issues germane to gender and the social studies in their annual meetings, publications, and organizational structures, such as committees and commissions. (ch. 16)</p> <p>Connections between universities and colleges and K–12 social studies educators should be strengthened to support curriculum transformation based on new knowledge. For example, at the university level, feminist economists have made recommendations about how university courses in economics can more adequately address issues of gender equity. (ch. 16)</p>	<p><b>15</b></p> <p>Understand issues in language that may cause problems for K–12 students learning English or adults learning a foreign language. For instance, many languages other than English assign gender to nouns. (ch. 15)</p> <p><b>16</b></p> <p>Social studies lessons, curriculum units, and textbooks, and curriculum standards need to more accurately reflect women’s contributions to society and to address gender-related issues. The need is especially acute at the elementary level and in courses on economics and civics/government. For example, civics classes should investigate overcoming barriers to women in political leadership. (ch. 16)</p> <p>Materials on women in diverse cultures, such as those produced by the Upper Midwest History Center and the Wellesley Centers for Women, need to be continually revised and updated to reflect contemporary women’s experiences globally in an accurate manner. (ch. 16)</p> <p>Explore self, community, and context through the arts. (ch. 17)</p> <p>Concrete steps must be taken consistently to avoid gender, ethnic, class, sexual preference, or other bias in curriculum, staffing, and treatment of arts and dance students. (ch. 17)</p> <p>Adopt feminist pedagogy stressing the individual and community and reciprocity between the artist and the viewer. It also involves gender as a conscious variable, uses diverse teaching approaches,</p>	<p>More women and minorities need to be hired for university communication faculties and administrations, appointed to publication selection committees, encouraged to submit articles for publication, and nominated for awards. (ch. 14, others)</p> <p><b>15</b></p> <p>Help language teachers understand differences in culture, language, and gender that may impact language learning and attitudes. (ch. 15)</p> <p><b>16</b></p> <p>Social studies curriculum developers should give more attention to the diverse experiences of women and girls by class, race, ethnicity, and sexual orientation. (ch. 16)</p> <p>Increase attention to the impact of social studies curriculum on gender equity for girls as well as boys and how it can decrease gender gaps in attitudes and experiences. (ch. 16)</p> <p>Increase teachers’ knowledge of gender-equity issues by requiring teacher-education students to take courses on the history of women or gender studies. Teachers should also learn how to include this information in their courses especially if it is not adequately included in their textbooks. (ch. 16)</p> <p>Help pre- and in-service teachers learn about beliefs related to gender and social studies. (ch. 16)</p> <p>At the district level, teachers should be encouraged to plan instruction and experiences for Women’s History Month in March and throughout the year (see <a href="http://www.nwhp.org">www.nwhp.org</a>) and include gender issues</p>	<p>groups, and it should encompass the full range of communication skills (listening, reading, speaking, writing, computer, and media literacy). It is important to attend to within-sex group differences, especially those of race, ethnicity, class, culture and any other factors likely to significantly affect both what communicative competence means within that group and how gendered expectations may vary from the mainstream. (chs. 14–15)</p> <p>Much scholarship will be needed to fully understand the links among gender attitudes, teacher behaviors, school curricula, social and cultural factors and student life outcomes. (ch. 14, others)</p> <p>Especially needed is longitudinal work that can examine 1) students’ interactions with each other; 2) students’ interactions with the wide variety of popular media in which most are immersed; and 3) how and what social/cultural influences enhance their communication and gender competency (chs. 9, 14, 16, others)</p> <p><b>15</b></p> <p>Routinely analyze and report on gender of students and teachers of Foreign language and English as a second language in the U.S. (ch. 15)</p> <p>Although the research on gender differences in learning second languages is inconclusive, additional efforts to regularly use gender analysis might provide insights on how to better help girls and boys improve their language skills. (ch. 15)</p> <p>Learn more about how to promote gender equity in language learning in study abroad programs which is often a gendered experience that may be especially discriminatory for women. (ch. 15)</p> <p>Data on gender, race and ethnicity of teachers at all levels in all content areas should be collected and reported at the local, state and national</p>

<p>Policy makers, practitioners, and scholars need to eliminate structural problems in school systems and classrooms that create barriers to gender-equitable social studies. For example, K–12 teachers’ avoidance of controversial issues it often results in gender-related topics being omitted from social studies. (ch. 16)</p>	<p>encourages empowerment and collaboration, and promotes social change. (ch. 17)</p>	<p>in special celebrations, such as including the long struggle for the Equal Rights Amendment to the U.S. Constitution in celebrations of Constitution Day (September 17). (ch. 16)</p>	<p>levels for pre K and postsecondary education. (chs. 15–16, others)</p>
<p><b>17</b> Work toward social change through political awareness and action in the arts (ch. 17)</p>	<p><b>18</b> Continue work toward increased parity of girls and boys in sports and increase appealing daily coeducational physical education activities for all students. Ensure that there is equity in this health-promoting physical activity by gender and race. (ch. 18)</p>	<p><b>17</b> Help future teachers learn how gender inequities are developed and reinforced by the arts. (ch. 17)</p>	<p>Study on how K–12 children learn about gender in social studies as it relates to how they construct meaning about social and political issues (ch. 16)</p>
<p><b>18</b> Centralize free public web access to accurate data on high school athletics similar to provisions of the Athletics Disclosure Act for collegiate data. Increase physical education and make gender-integrated nonsexist physical education classes a reality. (ch. 18)</p>	<p><b>19</b> Make sure that sexuality education is accurate and effective and that it does not teach stereotypes as a fact, that it focuses on pleasure as well as dangers, and that it attends to the needs of LGBT individuals. (ch. 19)</p>	<p>Encourage art-education leaders to use gender-equitable practices and to correct gender inequities related to their faculty. (ch. 17)</p>	<p><b>18</b> Encourage greater focus in sport science research on gender equity questions relating to physical education and sports. (ch. 18)</p>
<p><b>19</b> Provide government support for effective, accurate comprehensive sexuality-education programs, but eliminate all requirements &amp; federal funding for abstinence only programs. (ch. 19)</p>	<p>Encourage a focus on health as well as prevention of illness and give attention to the social construction of gender. (ch. 19)</p>	<p><b>18</b> Educate school administrators, physical educators, and coaches about their obligations under Title IX. (ch. 18)</p>	<p><b>19</b> Prepare consumer information on effective comprehensive sexuality education programs and their impact on girls and boys. (chs. 5, 19)</p>
<p><b>20</b> Increase the number and frequency of compliance reviews that the U.S. Department of Education’s Office for Civil Rights conducts in CTE programs, using Title IX and its implementing regulations, as well as the Department’s Vocational Education guidelines for eliminating discrimination and denial of services on the basis of race, color, national origin, sex, and handicap, to ensure that all CTE programs provide equal access and opportunity for all students. (ch. 20)</p>	<p><b>20</b> Support programs that provide students with experience in nontraditional careers. (ch. 20)</p>	<p>Emphasize gender equity in physical-education teacher-education programs. (ch. 18)</p> <p>Encourage coaches associations, sport governing bodies, and athletic departments to adopt grievance procedures related to sexual harassment. (chs. 11, 18)</p>	<p><b>20</b> Conduct research on effective strategies for increasing the participation and completion of underrepresented students in nontraditional CTE programs. –Design research to compare different approaches to achieving gender equity goals. For example, program length, instructional presentation approaches, single sex education, primary age of influence, types of role models. –Design longitudinal research studies that follow students who participated in nontraditional CTE programs in high school to determine the impact of these experiences on postsecondary success, workforce participation and career selection. (ch. 20)</p>
<p>At the middle-school level, educators should take advantage of the fluid quality of this developmental stage and require both boys and girls to explore a wide array of nontraditional career- and technical-education programs in a safe and supportive environment. (ch. 20)</p> <p>At the high-school level, all courses in career &amp; life planning should include accurate &amp; realistic information about wage-earning potential and economic self-sufficiency based on desired family composition and residence location. (ch. 20)</p>	<p><b>19</b> Encourage medical school administrators and faculty to broaden existing sexuality curricula. (ch. 19)</p>	<p><b>19</b> Encourage medical school administrators and faculty to broaden existing sexuality curricula. (ch. 19)</p>	<p>Conduct research on women in the 21st century workforce and what education reform efforts need to be supported to help reduce workplace bias. (ch. 20)</p>
<p>Vocational Education guidelines for eliminating discrimination and denial of services on the basis of race, color, national origin, sex, and handicap, to ensure that all CTE programs provide equal access and opportunity for all students. (ch. 20)</p>	<p><b>20</b> Review gender-equity competencies for teacher educators in CTE and multicultural education and include as part of the teacher certification and accreditation requirements. (ch. 20)</p> <p>Teacher associations need to include gender equity as part of their strategic goals and should develop grant programs to fund these activities within the association. (chs. 7, 20)</p>	<p><b>20</b> Conduct research on the impact of pre-service and in-service education with CTE teachers in gender equitable instructional methods on student achievement, course selection, postsecondary transition, college major selection and career entrance. (ch. 20)</p>	<p>(continued)</p>

TABLE 31.1 Key Chapter Recommendations

Policy Recommendations As They Relate to Organizational Improvement	Educational Practice Recommendations As They Relate to Learners	Educational Practice Recommendations as They Relate to Educators (teachers, administrators, parents)	Recommendations for Research, Development, Dissemination and Evaluation
<p>Restore the full-time gender-equity coordinator position in the State</p> <p>Departments of Education to provide technical assistance and professional development to local education agencies to help them meet the core CTE performance indicators &amp; succeed in serving special population students. (ch. 20)</p> <p>States and accrediting institutions should establish policies that mandate gender-equity training and competence for all educators involved in counseling and in career and technical education. (ch. 20)</p> <p>States should strategically use the Perkins accountability data that they collect on the participation and completion of students in career- and technical-education programs nontraditional for their gender. (ch. 20)</p> <p>States should use the flexibility given them in the Perkins Act to fund state and local gender-equity initiatives that are data driven and focused on results. (ch. 20)</p> <p>Federal funding (i.e. new legislation, Perkins, WEEA, Elementary and Secondary Education Act, Higher Education Act, etc.) should be provided for research and development to promote gender equity in career and technical education activities and funds should be provided to evaluate the effectiveness of their gender-equity activities in these areas. (ch. 20)</p> <p>Strengthen programs and increase funding for the Women's Bureau and other programs to improve working conditions, climate, discrimination, and pay equity for women and men in nontraditional careers. (ch. 20, 5)</p>	<p>Career guidance and counseling should be integrated into all instructional strategies throughout the school taking advantage of teachable moments when a student can be exposed to the advantages and benefits of a particular career choice. (ch. 20)</p> <p>Career guidance and counseling processes must include career exploration that encourages boys and girls to learn more about nontraditional careers and behaviors, but teachers and counselors should be careful not to discourage students from choosing the more traditional careers and behaviors. (ch. 20)</p> <p>Educators should make sure career-education materials are representative of a broad range of social classes and minorities. (ch. 20)</p> <p>Schools need to address gender equity as an institution wide priority by making an overt effort to support students nontraditional choices, providing career guidance and counseling that highlights the positive aspects of nontraditional career selection especially for women and girls, taking affirmative actions to hire CTE teachers that are nontraditional role models, and recognizing students of the underrepresented gender who succeed in nontraditional CTE programs. (ch. 20)</p> <p>Schools must take a proactive role in educating parents about nontraditional career options for their sons and daughters. (ch. 20)</p> <p>Students should be aware that the interdisciplinary nature of the fields related to women's studies present both challenges and opportunities. The typical</p>	<p>Associations should develop professional support systems for teachers of nontraditional CTE courses to share best practices and exchange strategies. (ch. 20)</p> <p>Support systems should be put in place for those teachers who themselves are nontraditional role models in nontraditional CTE programs to provide them with a forum for personal and legal support. (ch. 20)</p>	<p>Conduct research on social security and retirement program reform and its impact on women's long term economic security based on career participation and career selection. (ch. 20)</p> <p>Continue to test theories of career development and update them to reflect the world of rapidly changing environments, personal values, and needs. (ch. 20)</p> <p>Implementation of the 2006 Perkins law must include significant and rigorous research on the elimination of sex bias and stereotyping in CTE and on identification of proven practices to positively impact performance on increasing the participation and completion of students in nontraditional CTE programs. (ch. 20)</p>
<b>21</b>			
<p>Women's and Gender Studies programs need more data on such topics as program size, funding, enrollments, faculty, leadership, institutional location, curricular offerings, graduation rates, and placement of graduates and on programs in middle schools, high schools, community colleges, women's service centers and research centers. (ch. 21)</p> <p>Increase research on the structure and content of the programs, the outcomes for students and institutions, &amp; the impact of this work on society at large. (ch. 21)</p> <p>This research should document the growth, positive contributions, and effective strategies used at all levels from high school women's studies courses to community colleges &amp; adult education.</p>	<p>Educators should make sure career-education materials are representative of a broad range of social classes and minorities. (ch. 20)</p> <p>Schools need to address gender equity as an institution wide priority by making an overt effort to support students nontraditional choices, providing career guidance and counseling that highlights the positive aspects of nontraditional career selection especially for women and girls, taking affirmative actions to hire CTE teachers that are nontraditional role models, and recognizing students of the underrepresented gender who succeed in nontraditional CTE programs. (ch. 20)</p> <p>Schools must take a proactive role in educating parents about nontraditional career options for their sons and daughters. (ch. 20)</p> <p>Students should be aware that the interdisciplinary nature of the fields related to women's studies present both challenges and opportunities. The typical</p>	<p>Associations should develop professional support systems for teachers of nontraditional CTE courses to share best practices and exchange strategies. (ch. 20)</p> <p>Support systems should be put in place for those teachers who themselves are nontraditional role models in nontraditional CTE programs to provide them with a forum for personal and legal support. (ch. 20)</p>	<p>Implementation of the 2006 Perkins law must include significant and rigorous research on the elimination of sex bias and stereotyping in CTE and on identification of proven practices to positively impact performance on increasing the participation and completion of students in nontraditional CTE programs. (ch. 20)</p> <p>Women's and Gender Studies programs need more data on such topics as program size, funding, enrollments, faculty, leadership, institutional location, curricular offerings, graduation rates, and placement of graduates and on programs in middle schools, high schools, community colleges, women's service centers and research centers. (ch. 21)</p> <p>Increase research on the structure and content of the programs, the outcomes for students and institutions, &amp; the impact of this work on society at large. (ch. 21)</p> <p>This research should document the growth, positive contributions, and effective strategies used at all levels from high school women's studies courses to community colleges &amp; adult education.</p>

	<p><b>21</b></p> <p>Increase disaggregated national U.S. data on women's and gender studies and related programs. (ch. 21)</p> <p>Gender issues in education should receive greater attention within Women's and Gender Studies academic programs. (ch. 21)</p>	<p>set of core women's studies courses focuses on the humanities and social sciences. Gender Studies, Masculinity Studies, Queer Studies, Gay and Lesbian Studies, and related programs have less defined core courses. As they select their courses and activities, students should consider how the options will help them benefit from interdisciplinary perspectives. (Ch. 21).</p>	<p>Women's &amp; gender studies faculty, students, &amp; activists need to expand efforts to promote the positive impacts of these interdisciplinary fields, &amp; share strategies for building and sustaining programs. National organizations and publications such as Ms. Magazine can play a role in doing this. (ch. 21)</p>
<p>V Gender Equity Strategies for Diverse Population (chs. 22, 23, 24, 25, 26, 27, 28)</p>	<p>Improve access to all levels and types of educational opportunities for the multiple population groups. (chs. 22–25)</p> <p><b>22</b></p> <p>States and school districts should require schools to conduct separate studies of the rates of retention, suspension, expulsion, academic achievement, grade attainment, and participation in extra-curricular activities for African American girls and boys well as other racial and ethnic groups in the U.S. (chs. 22–25)</p> <p>An accountability system should be developed to enable school districts to present and compare pupil information along race-gender divides, across grade levels, within individual schools, and across the district. (chs. 22–25)</p> <p><b>23</b></p> <p>Eliminate tracking of Latina/os into stereotypical programs by:</p> <ul style="list-style-type: none"> <li>–providing more high-quality bilingual education—not discriminating on the basis of documentation status,</li> <li>–improving guidance counseling, and access to academic enrichment and special education. (ch. 23)</li> <li>–increasing access of Latina/os to higher education (ch. 23)</li> </ul>	<p>School-based programs must be developed that encourage understanding of the roles gender has played in African American culture and history. (ch. 22)</p> <p><b>23</b></p> <p>Support Latina students by cultivating gender and ethnoracial conscious curricula, and address the hidden curriculum that continues to support racist and sexist assumptions. (ch. 23)</p> <p>Develop programs to increase parents' effectiveness in supporting their children's educational aspirations and use a Latina/o appropriate sex education curriculum. (ch. 23)</p> <p><b>24</b></p> <p>To change Asian and Pacific Islander American women's overrepresentation in low-wage, dead-end jobs, more and improved programs are needed that develop job skills, provide continuing educational opportunities (focusing especially on Southeast Asian women as the group at highest after risk), and that provide information on workers rights, self-advocacy, and labor organization. (ch. 24)</p> <p>Accelerate recruitment and support of Asian and Pacific Islander American women in the fields of math, science,</p>	<p>More attention must be given to developing teacher awareness of the role of teacher expectations and perceptions on the academic performance of African American males and females. (ch. 22, pp. 39–41)</p> <p>Stories of successful African American women and men should be included in the curricula of teacher and principal preparation programs. (ch. 22)</p> <p>In addition to pedagogical proficiency, professors in teacher and principal preparation programs must present research results to aspiring teachers and administrators that help them to develop initiatives to help African American girls and boys succeed. (ch. 22)</p> <p><b>23</b></p> <p>Require educators to have updated cultural competency training that includes issues related to gender and diversity among Latino populations. (ch. 23)</p> <p><b>24</b></p> <p>Attract and support more Asian and Pacific Islander American men and women to the full range of careers in education because of the proportionally smaller representation of these populations in education. (ch. 24)</p>
	<p>Educational interventions striving for academic excellence for these diverse students are not truly research-based until rigorous evaluations show what interventions are especially effective for girls and boys in each group. (chs. 24–28)</p> <p><b>22</b></p> <p>Research is needed to identify possible reasons for the race-gender gap among African American students. For example,</p> <ul style="list-style-type: none"> <li>–Study motivational factors for African American girls and boys and their possible relationship to poverty, violence, and health care access.</li> <li>–Conduct follow-up studies on disaggregated standardized test data to look for gender, race, and within-group comparisons (i.e., disabilities categories, socio-economic status, or educational contexts such as urban, suburban, and rural) and identify possible reasons for increases or decreases in performance.</li> <li>–More research should be conducted on race and gender equity among African American teachers and principals at both the pre-service and in-service levels.</li> <li>–Longitudinal studies are needed documenting how gender impacts African American students' educational achievement and attainment as well as their resilience, psycho-social development and coping strategies.</li> <li>–Evaluate the effects of Afro-centric education on the academic achievement of African American girls and African American boys.</li> <li>–Study the negative effects of gender role stereotyping of African Americans in education,</li> </ul>	<p>Research is needed to identify possible reasons for the race-gender gap among African American students. For example,</p> <ul style="list-style-type: none"> <li>–Study motivational factors for African American girls and boys and their possible relationship to poverty, violence, and health care access.</li> <li>–Conduct follow-up studies on disaggregated standardized test data to look for gender, race, and within-group comparisons (i.e., disabilities categories, socio-economic status, or educational contexts such as urban, suburban, and rural) and identify possible reasons for increases or decreases in performance.</li> <li>–More research should be conducted on race and gender equity among African American teachers and principals at both the pre-service and in-service levels.</li> <li>–Longitudinal studies are needed documenting how gender impacts African American students' educational achievement and attainment as well as their resilience, psycho-social development and coping strategies.</li> <li>–Evaluate the effects of Afro-centric education on the academic achievement of African American girls and African American boys.</li> <li>–Study the negative effects of gender role stereotyping of African Americans in education,</li> </ul>	<p>Research is needed to identify possible reasons for the race-gender gap among African American students. For example,</p> <ul style="list-style-type: none"> <li>–Study motivational factors for African American girls and boys and their possible relationship to poverty, violence, and health care access.</li> <li>–Conduct follow-up studies on disaggregated standardized test data to look for gender, race, and within-group comparisons (i.e., disabilities categories, socio-economic status, or educational contexts such as urban, suburban, and rural) and identify possible reasons for increases or decreases in performance.</li> <li>–More research should be conducted on race and gender equity among African American teachers and principals at both the pre-service and in-service levels.</li> <li>–Longitudinal studies are needed documenting how gender impacts African American students' educational achievement and attainment as well as their resilience, psycho-social development and coping strategies.</li> <li>–Evaluate the effects of Afro-centric education on the academic achievement of African American girls and African American boys.</li> <li>–Study the negative effects of gender role stereotyping of African Americans in education,</li> </ul>

(continued)

TABLE 31.1 Key Chapter Recommendations

Policy Recommendations As They Relate to Organizational Improvement	Educational Practice Recommendations As They Relate to Learners	Educational Practice Recommendations as They Relate to Educators (teachers, administrators, parents)	Recommendations for Research, Development, Dissemination and Evaluation
<p>Provide financial incentives to recruit Latina/os educators. (ch. 23)</p> <p><b>24</b></p> <p>Federal policy should continue and improve development of economic, educational, and research databases on Asian and Pacific Islander subgroups, as modeled by the 2000 U.S. Census Bureau detailed race/ethnicity reports. (ch. 24)</p> <p>Use policy incentives and regulatory requirements to influence greater representation and equitable treatment of Asian and Pacific Islander Americans in management positions in public- and private-sector organizations, where they are currently underrepresented. (ch. 24)</p> <p><b>25</b></p> <p>Change curriculum to reflect the real diversity of Indian Nations and to include historical, cultural, educational, and linguistic conflicts regarding Native Americans. (ch. 25)</p> <p><b>26</b></p> <p>Federal, state, and local policymakers must institute and enforce policies that include "sexual orientation and gender identity" as protected classes along with existing categories such as race, religion, and ability, at all education levels as such policies can improve the climate and chances of success for LGBT students. (ch. 26)</p> <p>Federal, state, and local policymakers must enact nondiscrimination policies on the basis of sexual and gender orientation in matters of hiring, tenure, promotion, admissions, and financial aid as well as hiring openly LGBT and/or LGBT-sensitive faculty, staff, and</p>	<p>and engineering where, like the general population, they are underrepresented compared to males. (ch. 24)</p> <p>Create educational environments and practices that positively address the affective development of Asian and Pacific Islander students: tending to career aspirations and choice in the early years of education; explicitly confronting and correcting the negative and limiting assumptions and expectations of stereotypes about the diverse Asian and Pacific Islander American subgroups; actively nurturing their self-concepts, with appropriate parental involvement and input; implementing research-based, comprehensive, antibias curriculums that prevent harassment and violence at school against Asian and Pacific Islander Americans. (ch. 24)</p> <p>Use culturally appropriate educational practices tied to the specific Asian and Pacific Islander subgroups, such as pedagogy that is aware of gendered cultural attitudes and traditions. Textbooks should make a clear distinction between U.S. communities, colonized Pacific Islands, and Asian countries, as well as nuanced representation of female and male biracial or multiracial Asian and Pacific Islander Americans. (ch. 24)</p> <p><b>25</b></p> <p>Teachers and administrators must create classrooms that American Indian parents feel comfortable entering (ch. 25)</p> <p>Teachers and their professional organizations should take a firm stance against societal and institutional forms of racism confronted daily by American</p>	<p>Professional organizations and Indian Nations must promote professional development opportunities, which offer teachers and administrators the opportunity to interact with tribal and urban American Indian communities. (ch. 25)</p> <p>Non- Indian scholars, teachers, agencies, and institutions need to understand the issue of sovereignty as it relates to the teaching of heritage language and cultural knowledge within schools. (ch. 25)</p> <p>Teachers and administrators must know the American Indian communities, both urban and reservation, from which their students come and use teaching methods that are especially effective for their students. (ch. 25)</p> <p><b>26</b></p> <p>Title IX coordinators must educate their LGBT constituents, including students, about how they can be a resource for victims of discrimination and harassment. (ch. 26)</p> <p>Accrediting bodies for educational institutions must implement standards and policies to provide equal access to education and promote empowering environments for LGBT faculty, staff, and students. (ch. 26)</p> <p>Preservice teacher education programs and school districts must include information about sexual orientation and gender identity/expression in their curriculum and prepare teachers and others on ways to support LGBT students. (ch. 26)</p>	<p>particularly at the elementary and secondary levels. (ch. 22)</p> <p>At the postsecondary level it is important to learn more about African Americans in majority and HBCU institutions. Examine the implications of the race gender gap at both types of institutions related to race, gender, sexual orientation, disability and other important demarcations. (ch. 22)</p> <p><b>23</b></p> <p>Examine the impact of new immigration policies on Latina/os enrollments, the impact of high stakes testing on graduation rates for Latina/os, the impact of increasing sexualization of girls and young women on Latinas' educational outcomes, and conduct longitudinal studies to examine the relation between school disengagement and pregnancy among Latinas. (Ch. 23)</p> <p><b>24</b></p> <p>The research agenda must include topics focusing on affective constructs such as self-concept, individual and group identity, resilience, and how limitations placed on the motivations, aspirations, and opportunities of Asian and Pacific Islander girls and women can be lifted so they may achieve their potential. (ch. 24)</p> <p>Along with school programs that are equally effective for females and males, basic and applied research is needed to understand and counteract the persistence of negative gender and racial stereotyping, discrimination, and harassment of Asian and Pacific Islander students in public education environments. (ch. 24)</p> <p><b>25</b></p> <p>American Indian scholars and citizens need to work with their communities in conducting research in a respectful manner and in a way that benefits the community as much as it benefits the researcher and results in increased knowledge. (Ch. 25)</p>

<p>administrators in all segments of the school community. (ch. 26)</p> <p>Federal, state, and local policymakers must ensure equal access and equality of all benefits and privileges granted to students and employees, including their same-sex partners. (ch. 26)</p>	<p>Indians. This includes stopping the use of American Indian symbols, objects, and peoples as mascots for sports groups and other school-related organizations. It also includes not representing facts based on Euro-American philosophical traditions as "truth" and instead emphasizing multiple "values" systems within classrooms where multiple ethnic groups are represented 25. (ch. 25)</p>	<p>Education administrators must assess their own institutions with regard to school or campus climate and supportive resources for LGBT students. (ch. 26)</p>	<p>Use informal Internal Review Boards of Indian Nations to maintain quality research (ch. 25)</p>
<p><b>27</b></p> <p>Implement more programs for the gifted and talented at every educational level and ensure that they pay attention to gender equity not only in the selection of participants, but also in the content of the programs. (ch. 27)</p> <p>28**</p> <p>Include strong provisions for equality between men and women in the proposed UN Convention on the Protection of the Rights and Dignity of Persons with Disabilities. (ch. 28)</p>	<p><b>26</b></p> <p>Create and support programs such as gay-straight alliances and other student clubs addressing LGBT issues, which can significantly increase students' sense of belonging at school and thereby their likelihood of furthering their educational attainment. (ch. 26)</p> <p>Provide inclusive curriculum that includes representations of LGBT people, history, and events. (ch. 26)</p>	<p><b>27</b></p> <p>If within class differentiation of students by ability is used, provide better training for teachers in ways to work with gifted students, and track, report, and compare the results for girls and boys. (ch. 27)</p> <p>Publicly criticize "popular" books on young children, gender, and learning if they find misrepresentation of research findings. (ch. 29)</p>	<p><b>26</b></p> <p>Research on LGBT issues in education should focus on examining:</p> <ul style="list-style-type: none"> <li>-the role of sexual orientation (actual and perceived) and gender identity/expression especially in studies of school climate.</li> <li>-the effectiveness of teacher training programs that address LGBT issues and how such training may affect the school climate for LGBT students,</li> <li>-the relationship between teachers' LGBT-related beliefs and their action/inaction when anti-LGBT harassment occurs in school,</li> <li>-the experiences of transgender-identified students in school,</li> <li>-the relationships among school harassment, supports and academic achievement for LGBT students</li> <li>-the intersection of sexual orientation and gender with regard to access to education, educational aspirations, and attainment, including examination of gender differences within the population of LGBT students: how males and females may differentially be affected by and cope with victimization experiences, and an examination of potential differential effects by gender of interventions for creating safer schools. (ch. 26)</li> </ul>
<p>Provide access to better disaggregated information on students by sex, race, and disability under NCLB and other legislation designed to help individuals with disabilities. (ch. 28)</p> <p>Provide federal support for more replicable programs focused on helping students with disabilities and -sensitive evaluations that do not rely only on RTC designs, which are often inappropriate for diversity in terms of disability. (ch. 28)</p> <p>Continue funding and evaluation of programs that seem promising for students with disabilities such as mentoring programs. (ch. 28)</p>	<p>Implement curricular programs in all K-12 aimed at reducing name-calling and bullying such as GLSEN's No Name-Calling Week (<a href="http://www.nonamecallingweek.org">www.nonamecallingweek.org</a>), a curriculum for middle schools or Get a Voice, a comprehensive character education program for K-8 grades (<a href="http://www.getavoice.net">www.getavoice.net</a>). (ch. 26)</p> <p>Colleges and university as well as private K-12 institutions must actively recruit openly LGBT prospective students and staff.</p> <p>Use research and examples of programs which work to develop policy which ensures programs that are gender fair. In doing so, develop specific rubrics to evaluate access for girls and minorities or other culturally at risk groups that provide equitable admissions for all. Use</p>	<p><b>27</b></p> <p>Since research on gender equity and gifted students is minimal. It is important to provide national data on students being served in the various programs, the criteria for their selection, their outcomes, etc. All this information should be broken down by sex and ethnicity, education level, and type of school;</p> <p>Research should also examine:</p> <ul style="list-style-type: none"> <li>-barriers to gifted students participation in programs such as AP related to sex, race, SES;</li> <li>-underachievement among gifted boys and girls and what program models have been most effective in eliminating this problem?</li> </ul>	<p><b>27</b></p> <p>Since research on gender equity and gifted students is minimal. It is important to provide national data on students being served in the various programs, the criteria for their selection, their outcomes, etc. All this information should be broken down by sex and ethnicity, education level, and type of school;</p> <p>Research should also examine:</p> <ul style="list-style-type: none"> <li>-barriers to gifted students participation in programs such as AP related to sex, race, SES;</li> <li>-underachievement among gifted boys and girls and what program models have been most effective in eliminating this problem?</li> </ul>

(continued)

TABLE 31.1 Key Chapter Recommendations

Policy Recommendations As They Relate to Organizational Improvement	Educational Practice Recommendations As They Relate to Learners	Educational Practice Recommendations as They Relate to Educators (teachers, administrators, parents)	Recommendations for Research, Development, Dissemination and Evaluation
<p>this approach to develop programs which focus on counseling and career education, especially for girls and minorities in gifted programs. (ch. 27)</p>			<ul style="list-style-type: none"> <li>-experiences at the college level that enhance effective decision-making for gifted students in terms of advanced degrees and career choices?</li> <li>-How gifted and talented students are using technology in ways that foster their talents and is it the same or different by sex?</li> <li>-What types of assistance do gifted men and women need in terms of child care and flexible work schedules in order to promote career success and life satisfaction? (ch. 27)</li> </ul>
<b>28</b>			
<p>These research questions relate to disabilities:</p> <ul style="list-style-type: none"> <li>-What are the implications of the possible over-identification of boys and racial/ethnic minorities in special education?</li> <li>-What are the implications of the possible under-identification of girls in special education?</li> <li>-To what extent do girls and boys with different types of disabilities have access to various types of curricula, e.g., math, science, vocational education? (ch. 28)</li> <li>-For all education levels, what pedagogical strategies are effective in teaching girls and boys with different types of disabilities (ch. 28)</li> <li>-What factors affect sexual harassment for people with disabilities? How is it similar or different for girls and boys? (ch. 28)</li> <li>-What is the potential of programs like Positive Behavior Support systems to enhance the capacity of schools to educate all students, especially those with challenging social behaviors? What is its differential effectiveness by gender?</li> <li>-What are effective instructional practices for students with disabilities whose native language is not English?</li> <li>-What gender equity issues need to be addressed in terms of instructional practices? (ch. 28)</li> </ul>			

<p>VI. Gender Equity From Early Through Post-secondary Education (chs. 29, 30)</p>	<p>Use association and other guidelines for gender-fair practices and language, since there is agreement that gender stereotypes interfere with children's learning. (chs. 29)</p> <p>Implement policies to increase equitable salaries for educators working with young children and make it a more desirable activity for men. (ch. 4, 20, 29)</p>	<p>Provide more gender-equitable resources for young children and their parents. (ch. 29)</p> <p>Use activities and experiences for girls and boys that counteract gender stereotypes. For example,</p> <ul style="list-style-type: none"> <li>–encourage children to read children's books that break gender-role stereotypes</li> <li>–encourage children to explore nontraditional areas of interest.</li> <li>–encourage girls, as well as boys, to question stereotypes,</li> <li>–praise demonstrations of daring and curiosity. Resist rescuing girls or providing ready answers for them. Help foster an environment where girls know it is acceptable to get sweaty and dirty in pursuit of a goal.</li> <li>–suggest activities for girls such as practice in large muscle coordination that may have been more emphasized for boys.</li> <li>–avoid pitting boys against girls in competitive activities, such as word games, races, and the notorious "quiet game" (a game in which children are often admonished for being the first person to make a sound after an extended period of time).</li> <li>–do not line up by gender.</li> <li>–create opportunities for nurturing and caring activities that are in a problem-solving mode and that invite all children's involvement.</li> <li>–choose girls for leadership positions as often as boys</li> <li>–present gender-equitable examples by alternating girls and boys names when calling on students. (ch. 29)</li> </ul>	<p>Individuals working to improve education should rely on research based evidence from this <i>Handbook</i> and carefully question contradictory messages and assumptions that come from the media and other sources. (chs. 1, 7, 29)</p> <p>Become a media critic and encourage others to do so as well. Discuss the portrayals of girls and women on television, in movies, in magazines, and in popular music. (chs. 14, 29)</p> <p>Visionary leadership in early education environments is needed to structure discourse around the social justice issues that include gender inequities facing children, parents, and other caregivers as well as educators. (ch. 29)</p>	<p>Publish and disseminate authoritative information relating to gender-fair practices, activities, books, and interactions for parents and other caregivers. Develop online accessible links to these materials at gender equity organizations, governmental and early childhood organization websites. (ch. 29)</p>
<p><b>30</b></p>	<p>Make explicit policies to address individual campus inequities related to race/ethnicity and socio-economic status and gender related to for students, staff, and faculty. (ch. 30)</p>	<p>Since all but two colleges in the U.S. are covered by Title IX, ensure the appointment and support of Title IX coordinators and publicize their roles and responsibilities as well as gender-equity policies on the school's Web site. (ch. 30)</p>	<p>Gender-equity training for early childhood educators, including both certified and noncertified personnel is critical. It should be part of the credentialing and selection criteria. (ch. 29)</p>	<p>The fragmented global research on gender equity in early childhood education and developmental issues of young children may be ripe for meta-analyses. (ch. 29)</p>
<p>Develop and use a gender-equity institutional self-assessment with the assistance of Title IX campus coordinators, and other offices with accountability responsibilities. It should cover faculty, staff, and students. Also use an equity scorecard that provides useful feedback to campuses about the outcomes of their current practices and fosters organizational learning. (ch. 30)</p>	<p>–avoid pitting boys against girls in competitive activities, such as word games, races, and the notorious "quiet game" (a game in which children are often admonished for being the first person to make a sound after an extended period of time).</p> <p>–do not line up by gender.</p> <p>–create opportunities for nurturing and caring activities that are in a problem-solving mode and that invite all children's involvement.</p> <p>–choose girls for leadership positions as often as boys</p> <p>–present gender-equitable examples by alternating girls and boys names when calling on students. (ch. 29)</p>	<p>Insist that early childhood textbooks on teaching methods include gender-fair practices and research on the effects of gender-bias activities in the classroom. (ch. 29)</p>	<p>Develop and activate campaigns to support children's media and toys that promote images of girls and minorities with a positive, gender-fair view that push for the elimination of violent, racist or sexist media and toys. (ch. 29)</p>	<p><b>30</b></p>
<p>Improve campus climates by creating policies that are explicit and effective in helping women where they often face discrimination such as parental leave and tenure-clock modifications associated with childbirth. (ch. 30)</p>	<p>Attend to special needs of students especially related to their gender such as</p>	<p>Develop and use exemplary and promising programs with gender-fair language that have evidence that they promote gender-fair interactions between teachers and children and increase gender-equity outcomes. (ch. 29)</p> <p>Gender-equity teacher/caregiver training should</p> <ul style="list-style-type: none"> <li>–provide guidance on avoiding treating girls and boys as possessing stereotypical gendered attributes and as needing to be prepared for stereotypical jobs or roles.</li> </ul>	<p>Learn more about the effectiveness of various types of strategies (women's centers, child care, student support groups, recruitment efforts, etc. to improve the climate and advance gender equity in various types of campuses and in non traditional areas of study (ch. 30)</p> <p>Learn about fair ways to increase gender parity in administrative and tenured faculty positions especially in areas where there have been unequal proportions of men and women such as in engineering or nursing. (ch. 30)</p>	<p>Learn what strategies are feasible to not only create more gender equitable employee hiring and promotion but to create more equitable compensation for faculty in women dominated</p>

(continued)

TABLE 31.1 Key Chapter Recommendations

Policy Recommendations As They Relate to Organizational Improvement	Educational Practice Recommendations As They Relate to Learners	Educational Practice Recommendations as They Relate to Educators (teachers, administrators, parents)	Recommendations for Research, Development, Dissemination and Evaluation
Develop fair legal policies on the gender balance on campuses. For example, should institutions be allowed to ensure that there is no more than a 60/40 ratio of women to men students? (ch. 30)	need for child care facilities, security, freedom from sexual harassment, equal pay, equitable participation in sports, athletics, campus leadership and make sure that they know their legal rights. (chs. 4, 11, 18, 30)	-increase the use of strategies such as teacher proximity and structured play time to involve children in activities they may otherwise avoid. -develop verbal and physical interaction patterns that make all children equal participants in non-sex-segregated activities (ch. 29)	specialties such as education versus engineering or even community colleges. (chs. 7, 30)  Research is needed on increasing feminist leaders in postsecondary education who will actively advance gender equity for their entire communities. (ch. 30)
<b>30</b>			
Postsecondary institutions and organizations should educate faculty members civil rights. They should also provide mentoring for faculty & clear & reasonable expectations for success. (chs. 13, 30)			

---



---

## References

---



---

- College Board. (2006). *College Board announces scores for new SAT(r) with writing section* (Press Release Aug. 29, 2006). Retrieved October 1, 2006, from <http://www.collegeboard.com/press/releases/150054.html>
- Dee, T. S. (2006). The why chromosome: How a teacher's gender affects boys and girls. *Education Next*. 2006 No. 4, 69–75. Palo Alto, CA: Hoover Institution. Retrieved September 20, 2006, from [www.educationnext.org.html](http://www.educationnext.org.html)
- Hass, N. (2006, November 5). Revisiting SAT essay: The writing section? Relax. *New York Times*, p. 14.
- Homer, E.A. (1997). *Title IX in Michigan 1972–1997*. Michigan NOW Education Task Force.
- Hyde, J. S., & Linn, M. C. (2006, October 27). Gender similarities in mathematics and science. *Science*, 314, 599–600.
- Jaschik, S. (2006, November 2). Affirmative Action for White C+ Guys. *Inside Higher Ed*. Retrieved November 2, 2006, from <http://insidehighered.com>.
- Klein, S., Blackwell, P.J., Campbell, P.B., Dwyer, C. A., Murray, S. R., Russo, L. N., et al. (Eds.). (1985). *Handbook for achieving sex equity through education*. Baltimore: Johns Hopkins University Press.
- Klein, S., Dwyer C. A., Fox, L., Grayson, D., Kramarae, C., Pollard, D., et al. (Eds.). (2007). *Handbook for achieving gender equity through education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- National Academies (2006) *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*. Washington, DC: National Academies Press.
- Office for Civil Rights (1975). *Final Title IX regulation implementing education amendments of 1972 prohibiting sex discrimination in education*. Washington, DC: U.S. Department of Health, Education and Welfare (1975, June).
- Office for Civil Rights (2006). *Final regulations non discrimination on the basis of sex in education programs or activities receiving federal financial assistance*. U.S. Department of Education, Washington, DC: Retrieved October 30, 2006, from [www.ed.gov/legislation/FedRegister/finrule/2006-4/102506a.html](http://www.ed.gov/legislation/FedRegister/finrule/2006-4/102506a.html)
- Sadker, D., & Silber E. S. (Eds.). (2006). *Gender in the classroom: Foundations, skills, methods, and strategies across the curriculum*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Secretary Spellings announces more choices in single sex education Amended regulations give communities more flexibility to offer single sex schools and classes. (Press Release. U.S. Department of Education, Washington, DC, October 24, 2006). Retrieved October 24, 2006, from [www.ed.gov/news/pressreleases/2006/10/10242006.html](http://www.ed.gov/news/pressreleases/2006/10/10242006.html)
- Stone, L. (2004). *Turning back the clock: How the Department of Education's proposed amendments to increase single-sex schools and classrooms violate the Constitution and undermine the purpose of Title IX*. Retrieved November 14, 2006, from <http://www.feminist.org/education/SexSegregation.asp>
- U.S. Department of Education. (2006, August 14). "Companion Charter Schools Bring Brighter Choices to Students and Families in New York." *The Education Innovator Number 9* [Electronic Newsletter]. Washington, DC: Office of Innovation and Improvement. Retrieved November 5, 2006, from <http://www.ed.gov/news/newsletters/innovator/2006/0814.html>