GENDER EQUITY IN AGENCIES AND ASSOCIATIONS:

A NEEDS ASSESSMENT GUIDE

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INTRODUCTION

To improve the way we deliver teacher education in any respect, many organizations, institutions, and agencies are interactively affected, and thus need to be included in any change effort.

The change under consideration here is gender equity. At the beginning of the twenty-first century, we have made great progress toward achieving balance between girls and boys, women and men, in education, careers, and salaries. The glass is indeed half full, but this also means it's *still* half empty. All too often, however, the progress we have made leads people to think that gender is an issue that's "been done." Educators in particular remember the attention to gender in the 80's and early 90's. Surely we can't *still* be doing gender, can we?

Well, yes. Consider these facts:

- Women earned only 14% of the Ph.D.s in engineering in 1998. [1]
- Women were only 24% of computer systems analysts in 2001, [2] and the earn only 79% of what men do in this occupation.[3]
- Female full professors at the doctoral level earn 9 percent less than male full professors, a difference of nearly $8,000 annually. [4]
- Women scientists and engineers are more likely than men to work at elementary and secondary schools and two-year colleges, and less likely to be tenured.[5]

These imbalances matter in national economic health, individual women's career satisfaction, and families' standard of living. And they do not spring full blown at the doctoral level or later. Something happens at the K-12 level that sows the seeds of, or fails to prevent, the later disparity. Researchers now know a great deal about what that "something" is — we call it the forms of gender bias — but teachers need to know it, too. And you can help make that happen.

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[1] *Digest of Education Statistics, 2001,* Table 259

[2] Bureau of Labor Statistics, 2002. Median Weekly Earnings of Full-Time Wage and Salary Workers by Detailed Occupation and Sex, Table 39.

[3] ComputerJobs.com, 1998 annual averages

[4] American Association of University Professors, 1999 average salaries

[5] National Science Foundation, 2000

Gender Equity in Agencies and Associations, because it was developed with support from the National Science Foundation, emphasizes mathematics, science, and technology for females. However, it should be easy to read it with other equity areas — for boys as well as girls — in mind as well.

Audience

The reader of this book is someone who works with one of the "partner" organizations in the teacher education establishment:

- A professional association concerned with teacher education
- A local, regional, state, or national governmental agency concerned with teacher education
- A teachers' union
- An advisory committee

Our primary audiences are those involved in pre-service teacher education, although this book should be equally helpful if you are in the in-service end.

Goal

The goal of this book is to give you the tools you need to determine if your organization is helping teacher educators deal with issues of gender equity, and suggestions for what to do if it isn't.

Process and Outcome

This book is set up as a workbook. It suggests places to look to determine the extent to which your organization's or agency's activities and operations take gender issues into account. Because groups are so variable, a scoring device would not be functional. The best process is to answer the questions and draw your own conclusions, which should be the basis for subsequent discussions and action.

Companion Volumes

Fairness at the Source: Assessing gender equity in teacher education for colleges and universities by Jo Sanders guides people in teacher preparation programs in finding out if they, too, need to deal with issues of gender equity. It is available at www.josanders.com/resources

Gender Equity Right from the Start and *Gender Equity Sources and Resources* by Jo Sanders, Janice Koch, and Josephine Urso were written for teacher educators and contain teaching activities and resource materials on gender equity in the pre service classroom. Both are available from Lawrence Erlbaum Publishers, www.erlbaum.com

Chapter 1

Issues in Gender Equity in Education

This chapter provides a brief introduction to some of the major gender equity issues in the K-12 classroom, with particular attention to mathematics, science, and technology classrooms. While these issues certainly affect girls, they also affect many boys in K-12 classrooms, particularly the less aggressive or the quieter boys. The chapter is for those who have little or no background in gender equity — being at least somewhat familiar with the issues is helpful in carrying out the needs assessment process. You may want to consult more extended coverage in sources listed in the bibliography if you'd like more information.

Embedded values, beliefs and assumptions about gender

The terms "gender" and "sex" are strongly related and often overlap in common usage. It is, however, useful to distinguish them. A person's sex refers to the biological aspects of an individual's body relative to reproduction, while gender refers to the social constructions that articulate for an individual what it means to be masculine or feminine within a given society. In other words, sex is what we're born with and gender is what we learn.

Why most gender bias is inadvertent

Many studies have established that from the moment infants are identified as female or male, the development of a gendered identity begins as they experience familial, societal and cultural interactions (Golombok & Fivush, 1994). Starting at birth, girls are rewarded for being polite, behaving well, and looking pretty, while boys are reinforced for their accomplishments, their assertiveness, and winning (Schau & Tittle, 1985; Vogel, Lake, Evans & Karraker, 1991). But are there innate differences?

Available research suggests that in most ways, especially biologically, boys and girls are more similar than different (Campbell & Storo, 1994; Hyde, Fennema, & Lamon, 1990; Hyde, Fennema, Ryan, Frost, & Hopp, 1990). It is society's emphasis on gender difference that creates two separate sets of values,

beliefs and assumptions for girls and for boys that restrict opportunities for each sex.

By referring to gender values, beliefs and assumptions as "embedded," we recognize that most gender bias, inside or outside the classroom, is inadvertent. Babies learn masculinity and femininity in the same way they learn about gravity and heat, by frequent personal experience. These lessons become embedded in children's understanding of the nature of reality. As we grow up we carry them with us throughout our lives, often without being conscious of them.

To shed some light on the origin of gender-role attitudes, a number of "Baby X" experiments have been conducted in which adults interact with a baby labeled as male or female and are asked to characterize it. For example, Seavey, Katz and Zalk (1975) told a third of the adults that a baby was male, a third that the baby was female, and a third were given no information about the baby's sex. The same baby was presented to each group. Adults believing they were playing with a girl tended to choose a female toy (a Raggedy Ann doll). Adults believing the baby to be a boy tended to choose either a gender-neutral toy (a plastic ring) or a male toy (a small rubber football). Interestingly, adults who were not told the baby's sex almost uniformly exhibited an immediate need to decide which it was, implying that they had no gender-neutral guide for interaction with a baby. These adults made judgments based on "his" strong grip or lack of hair, or "her" softness or fragility, before choosing a toy for it.

Thinking about this experiment from the baby's point of view for a moment, the implication of this and other Baby X studies is that we all experience the world differently according to the adults' identification of them as male or female. Vetter (1994) cites a study by Patricia Bauer which found that children as young as 24 months know to classify themselves as boys or girls, and that boys will not play games involving changing a teddy bear's diaper, nor will girls play at "building" a garage.

We all learn to generalize on the basis of sex, and we learn it pre-verbally perhaps even more powerfully than we learn it consciously. It is no wonder that we in turn treat others differently according to their sex, and behave in ways that are considered "appropriate" for our gender. Interests also become gender-identified: in the United States, it is assumed "natural" for girls to be interested in dance, art, reading, and writing and for boys to be interested in mathematics, science, technology, cars, and airplanes. In fact, these interests may have been learned. Because the distinction is embedded in our daily lives, we are only partially aware of our bias. (Valian, 1998)

Gender bias in the classroom, therefore, is ubiquitous, almost always unintentional, and usually unconsciously done. Accordingly, it is no surprise to learn that women, even self-identified feminists, exhibit gender bias about as much as men do. Summarizing a large body of research, Sadker & Sadker wrote, ". . . most studies have found no interaction differences in male- or female-taught classes . . . or that female instructors were more equitable" (1991, p. 297).

Clearly then, there is no place for anger, blame, or other polarizing reactions. To do so simply exacerbates an all too often polarized situation, making productive solutions for the benefit of all harder to achieve. Moreover, blame creates resistance to acknowledging and addressing biased behaviors, setting us even further behind.

Mathematics, Science and Technology as Male Domains

The constructed expectation that mathematics, science, and technology are male domains is reinforced by the obvious predominance of men in these fields, both in number and positions of responsibility. Female students are under-represented at the upper levels of these fields, and they may be less expected to excel.

Parents, friends, teachers, and the media often reflect the expectations unconsciously. Females are educated in a social environment which "knows" that women have a natural aversion to science; that the mastery of science's tools and discourse is difficult for women, and that the potential pool of capable women scientists is small (Brush, 1991; Kahle, 1990). These beliefs, while not supported by research, create their own reality for girls and women. Products of the same socialization, otherwise capable women believe the fields are inappropriate for them. These women fail to pursue mathematics, science, and technology courses beyond minimum requirements (Hill, 1995; Rayman & Brett, 1993), thus shortchanging both themselves and a society with an ever increasing need for a work force that has strong technical and scientific foundations.

Attitudinal Factors

Causal attribution theory has explored how students attribute academic success and failure, as opposed to objective measures of their performance. Following Weiner's 1974 work, attribution theory distinguishes locus of control — internal or external, and the stability or instability of control, as follows:

Causal Attribution Matrix

	LOCUS: EXTERNAL	LOCUS: INTERNAL
STABLE	Task difficulty	Ability
UNSTABLE	Environment	Effort

Examples to explain success

External/stable	The exam was easy. The teacher likes me.
Internal/stable	I am good at this. I have high ability.
External/stable	I was lucky today. I got a lot of help on this exam.
External/unstable	I studied hard for this exam.

Years of research indicate that in the aggregate, when males succeed they tend to attribute their success to ability (stable/internal), while females attribute their success to effort (unstable/internal) (Wolleat, Pedro & Fennema, 1980). Conversely, many males tend to attribute failure to external factors such as an usually hard exam or a bad day, while many females tend to attribute their failure to internal factors such as a lack of talent. Attribution theory therefore clarifies the disconnect teachers often see between girls' ability and the girls' *assessment* of their ability, particularly common in MST classes. Despite their actual academic performance, girls often underestimate their ability and boys often overestimate theirs. Moreover, there can be the implication that students who try hard, which girls are often taught to do, must be compensating for low ability, so the very act of trying hard to succeed can imply to females that they must not be very smart.

A deep discontinuity can exist between stereotypical female behavior expectations and how learning best takes place in mathematics, science and technology, creating what Orenstein (1994) identifies as "a circular relationship among girls' affection for science [and mathematics], their self-esteem, and their career plans" (p. 22). A meta-analysis of self-esteem studies found self-esteem higher among males than females (Kling, Hyde, Showers & Buswell, 1999). A girl who participates fully in a challenging MST class can experience conflict with her constructed definition of femininity, something that adolescents find especially difficult. Orenstein (1994) describes the self-limiting ways the girls she observed responded to such conflict by exhibiting behaviors that are "a flight toward traditional femininity" (p. 22). As one of them confided, " ...guys like it if you act all helpless and girly, and so you do" (p. 22). This learned helplessness is counterproductive to achievement. While some boys exhibit it, learned helplessness is primarily a female trait (Kloosterman, 1990).

Boys are often taught problem-solving skills such as anticipating obstacles and brainstorming potential solutions, but girls who face the inevitable academic roadblocks often find "help" from peers and teachers who finish tasks for them

rather than coaching them to find their own solutions. Knowledge received passively is not easily retained. The "help" girls receive carries with it a double price. Girls not only learn to doubt their ability to solve problems autonomously, but they also find they have difficulty recalling previous learning necessary for new concepts and processes (Fennema & Peterson, 1995). Both aspects erode their confidence and self-esteem, and as their confidence falters their competence follows suit, which of course confirms their initial lack of confidence.

Research has repeatedly shown that confidence is strongly correlated with achievement in mathematics, particularly in girls. Yet even when they perform as well as boys, girls' confidence drops significantly during their middle-school years, with girls who view the subject as 'male' showing consistently poorer performance than girls who do not hold that view (AAUW, 1991; AAUW, 1992; Fennema & Sherman, 1977; Kloosterman, 1977; Meyer & Koehler, 1990).

Claude Steele has drawn attention to the vulnerability of older "nontraditional" students (e.g., women in mathematics, African-Americans in academics in general) to what he terms "stereotype threat," and the way in which subtle influences can cause disproportionately severe dropout consequences for them. (Steele, 1997; Aronson, 2002) A fascinating validation of Steele's theory is a study of the math performance of Asian-American women which found that their scores went up when their ethnic identity was emphasized, and down when their gender was emphasized (Shih, Pittinsky & Ambady, 1999).

When girls do succeed in "boy stuff" such as mathematics, science and technology, constructed gender expectations may prevent the incorporation of these gains into the identity of the student. Girls often attribute their intellectual achievement to luck rather than ability, thus preserving their constructed femininity and discounting their ability. (Fennema & Peterson, 1984; Kloosterman, 1990; Fennema et al., 1990) It is difficult to base career decisions on something as undependable as "luck."

Social Pressures

Research suggests the erosion in girls' self-confidence and self-esteem accelerates in adolescence as social pressures to behave in gender-appropriate ways increase (AAUW, 1991; Harter, 1990; Orenstein, 1994; Piper, 1994; Simmons & Blyth, 1990). During adolescence, peer pressure forces many girls to choose between academic and social success, and often they end up conforming to substantial social pressures to be "feminine" by avoiding public academic out-performance of male peers, especially in the male-identified domains of mathematics, science and technology. (In the "private" realm of grades, girls tend to get higher grades than boys in most MST courses, according to national

data.) One way of doing this, of course, is by not enrolling in these courses in the first place.

Pedagogy and Gender

There are a number of fairly subtle but cumulatively powerful pedagogical issues that play a large role in retention of girls in MST courses. Dropouts that are hard to understand become more comprehensible when these pedagogical issues are clarified.

Biased Teacher/Student Interactions

Gender-biased behaviors are often expressed and reinforced through unconscious behaviors on the part of teachers. Teachers of good intent often unintentionally bias their interactions with students (Sandler, Silverberg & Hall, 1996). Even teachers actively espousing ideals of gender equity often privilege male students over females because of their unconscious patterns of interaction (Sadker & Sadker, 1980, 1994). Small and often subtle behaviors serve to discourage girls and young women from educational excellence, especially within mathematics, science and technology classrooms. Both male and female teachers have repeatedly been shown to exhibit gender-biased interactions with students, (Sadker & Sadker, 1991).

While grossly overt acts of gender bias do sometimes occur, the majority of incidents are subtle. Individual incidents of this sort are trivial, but their accumulated impact emphatically is not. By the 12th grade, girls receive 1800 fewer hours of teachers' instructional interaction time (Kahle, 1994). Research shows that especially in traditionally male subjects such as mathematics, science, and technology, teachers more often call on boys, give boys longer response times, probe boys' responses with higher-level questions, and reward boys' assertive behaviors when they call out while reprimanding girls and reminding them to raise their hands (Grossman & Grossman, 1994; Lockheed & Klein, 1985; Sadker & Sadker, 1994). Research also shows that with training in recognizing and changing these biased behaviors, gender imbalances can be remedied (Kahle & Meece, 1994).

Physical Environment

The physical design and affective climate of the classroom can influence instructional patterns and student activities. (Rosser, 1990; Rosser & Kelly, 1994) Consider these environmental factors in the MST classroom:

Traditional	*Female- (and male-) friendly*
Desks attached to floor	Desks movable for small group work
Desks in rows, which promotes only teacher/student interactions	Desks in clusters, a U-shape, or a circular shape, which promotes student/student interactions also
Equipment hard to access	Equipment easily accessible
Little or no decoration on walls or only abstract or boring materials	Visually interesting and colorful (but age-appropriate) wall decorations
Bulletin board materials that show only or mostly males in MST	Bulletin board materials that feature women's achievements in MST
Institutional environment: • Walls painted a cold or institutional color • Only fluorescent lights (cold light) • No living things • Venetian blinds over the windows	Welcoming environment: • Walls painted a warmer, more interesting color • Some incandescent lights (warm light) • Plants • Curtains over the windows

Collaborative Learning

Many females, as well as a sizable proportion of males, learn best in cooperative, collaborative learning environments which foster positive interdependence among group members (Dillow, Flack & Peterman, 1994; Streitmatter, 1994) — a model not unlike the real-world work environments of mathematicians, scientists, engineers, and technologists, where the work is often in project form and carried out by teams. To the extent that instructional strategies foster isolated, competitive models of learning and interacting, female as well as male students will be unnecessarily disadvantaged and unprepared for the world of work. Teachers who create opportunities for truly cooperative and collaborative learning support the preferred learning strategies of most of their students (Kahle & Meece, 1994).

Collaborative groups may be necessary, but they are not sufficient: it is important to ensure that a few dominant boys are not directing the others, using more than their fair share of the equipment, or acting as the problem-solver while asking a girl to act as note-taker. All of these developments defeat the purpose of collaborative learning groups. (Horgan, 1995)

Peer Aggression

Research has shown that during periods of classroom instruction, males who exhibit more aggressive behaviors receive more attention and therefore more help than females (Streitmatter, 1994). Aggression is a culturally sanctioned behavior for boys ("boys will be boys") as is polite passivity for girls ("she's such a little lady"). Within elementary grades this aggression is often physical, while in secondary settings it is usually verbal. In both settings the object of such aggression is usually girls and less assertive boys.

We are talking about scale here. While teasing and put-downs can be considered a normal part of adolescent culture, the point at which the behaviors interfere with other students' self-confidence and learning is the point at which teachers must intervene. When classroom teachers fail to label and address such behavior, a "survival of the fittest" climate prevails in which the voices and talents of less assertive students, including many girls but some boys as well, are silenced.

Teachers who fail to intervene and stop boys (and occasionally girls) who engage in aggressive or hostile speech or behavior — which includes teasing and put-downs — toward their quieter classmates inadvertently create a classroom climate where students feel unsafe and thus refrain from expressing their opinions or answering questions for fear of ridicule (Graduate Program in Public Policy and Administration, 1996). This is especially true for girls who may already doubt their abilities in traditionally male domains such as mathematics, science, and technology.

Social Relevance

A number of researchers have observed that girls find the content of mathematics, science, and technology to be disturbingly distant from real-world concerns (Rosser, 1995; Harding, 1985; Bernstein, 1992). Since girls are often socialized from early childhood on to be sensitive to other people's needs and wants, K-12 girls have tended to envision for themselves careers in the helping professions that are traditionally female, such as nursing or teaching. In recent years, girls have expanded their career horizons substantially but still tend to gravitate toward career plans that will permit them to help people and contribute to the solution of the world's problems. For this reason, medicine is often a popular career choice.

In this sense, then, mathematics, science, and technology that are taught abstractly as contextless algorithms can seem pointless to many girls (and boys).

Presenting students with an application of an arbitrary precision arithmetic problem in programming sounds very different from presenting them with a population growth /resources problem even though they illustrate the same issue. Teaching MST in terms that have real-world applications can be far more meaningful and attractive to many girls (and boys).

Experience Gap

Secondary and postsecondary MST teachers have often noticed that girls tend to enter their classes less experienced with the subject matter than boys (Seymour & Hewitt, 1997, p. 242; Margolis & Fisher, 2002). A national study of science education (National Assessment of Education Progress, 1990) found a clear discrepancy between boys' and girls' hands-on experience of common science equipment, especially in the area of electrical equipment. Fisher, Margolis & Miller (1997) found that women beginning a computer science major had considerably less prior experience with computers than their male counterparts. Sanders (cited in Koch, 1994) points out the frequency with which computers are placed in boys' rooms at home rather than girls'.

The actual experience gap is exacerbated by the culturally sanctioned tendency of many boys to have difficulty admitting ignorance. Girls therefore all too often assume that the boys know more than they do in reality, especially when specialized language is involved, as in the case of computing. One important social function of technical lingo is to demarcate who is knowledgeable — who is in — versus who is not. All this can add up to a considerable level of discomfort on the part of girls who have not had the advantages their male peers have had.

While the experience gap isn't necessarily determinative —Margolis and Fisher (2002) learned for example that actual performance in a computer science major was not correlated with prior experience — it can cause a number of girls to doubt their ability to continue and result in dropping out.

Gender Bias in Curriculum Materials

Over the years, equity researchers have documented several areas in which gender bias is often found in instructional materials (Sadker & Sadker, 1994).

- *Linguistic Bias*

Sex-biased materials which use predominantly (or exclusively) masculine terms and pronouns create a linguistic landscape that does not recognize or validate half its population of readers. References to the generic scientist, mathematician, or computer professional as "he" render the contributions and even the presence of women invisible, as do such masculine occupational titles such as *fireman, businessman,* and *policeman*. The ubiquitous use of the generic pronoun "he" or "man" actually makes maleness the norm: when readers read "he" or "him" they surely do not envision a skirt. (Try: "The scientist in his laboratory.") This form of sex bias is among the easiest to recognize and eliminate.

More subtle linguistic bias occurs when a woman who is a scientist, for example, is referred to as "a female scientist." This implies that the real kind, which requires no qualifier, is male. Even citation and bibliographic styles which list initials for the first names of cited sources suggest a male author, since male is in effect the default setting. Both obvious and subtle linguistic bias create biased curricular materials. When we accept the language, we accept the embedded ideas as well.

- *Gender Stereotypes*

Gender stereotypes, the assumption that perceived characteristics of men or women as a *group* are always true of *individual* men or women, can appear in curriculum materials. They include stereotypes about physical appearance, attitudes, interests, psychological traits, social relations and occupations. In mathematics, science, and technology texts and supplementary materials, females and males may be stereotypically depicted in traditional roles and demeanors, reinforcing distinct sets of "appropriate" behaviors and cultural expectations for each sex in these fields. Textbooks have improved considerably in the past fifteen years or so, but males are still more likely to be mentioned, portrayed, and shown in text and problems in mathematics, science, and technology.

- *Invisibility*

Despite significant contributions to all aspects of political, intellectual, social and creative life, women's accomplishments are often omitted from textbooks used in schools, and their experience subsumed under male experience. This form of gender bias creates the erroneous impression that men

and their accomplishments are the norm, and outstanding women the exception. When Zittleman and Sadker (2002) evaluated the content of newer editions of teacher education textbooks, they found "minimal progress compared to their analysis 20 years earlier.

- *Imbalanced presentation*

Curricular materials can perpetuate gender bias by presenting monolithic interpretations of issues, situations, and events which ignore the role of gender. For example, when textbooks explore the concept of "Man the Hunter" without simultaneously investigating the complementary role of "Woman the Gatherer," or when textbooks routinely devote more text to women's skirt lengths and the fashion of "Gibson Girls" than to women's suffrage (Trecker, 1977), students are given a distorted perspective of the contributions, struggles, and participation of women.

Some critics have maintained that sexism and androcentrism have shaped research in science, and especially biology (Kahle, 1996; Valian, 1998). A good example is the field of primatology, in which major advances were made because women, new to the field, found topics worthy of study that had been ignored by most male primatologists. Barbara McClintock won her Nobel Prize because she developed a way of working, a way of asking questions and understanding, that differed from traditionally male definitions of scientific objectivity.

The influence of imbalance in curricular material is significant, for "misrepresentations and omissions can negatively affect the self-image, goals and philosophies of girls" (Sadker, Sadker & Long, 1993, p. 4).

The Impact of Gender Bias

Some people think that doing a needs assessment on gender equity means looking for overt bigotry. Is someone in our organization actively promoting sexism? Is someone refusing to accept conference presentation proposals on gender equity? Is someone ordering only sexist books? Let's find them and stop them!

If out-and-out sexist bigots are what you're looking for, I can almost guarantee you won't find them. Really ugly gender bias *by commission* is hard to come by in these relatively enlightened days. But there is a more subtle kind of gender bias by commission, and it's easy to find if you know what to look for.

Let me give you some school-based examples. A teacher tells Katie her paper looks nice and says nothing about its content. A professor calls on may more of the male students by name than female students. A computer lab assistant shows the females how to solve their problems but gives the males suggestions for solving them on their own An instructor says to a mixed class of students, "Okay, guys, who has the answer?"

Gender bias *by omission* is also common. An organization publishes a brochure containing photos of lab work in which mostly boys are shown handling the equipment, and a brochure about technology showing mostly men as the technical specialists, and they are distributed to teacher education programs. Another organization highlights one educational issue every year as particularly significant, yet has never chosen gender equity.

Another kind of bias by omission is when knowledgeable people in positions of influence fair to challenge gender stereotypes. This behavior in effect conveys tacit approval. If a board member says the organization should hire a female consultant because "they come cheaper" and the board chair remains silent about the implication, that is gender bias, too.

I would like to stress that none of these incidents takes place to deliberately harm women or girls, and most people who are guilty are unaware of what they are doing. A single instance of gender bias, including the examples I just mentioned, is usually no big deal. However, when the incidents are repeated, especially over years of schooling — when materials are frequently biased, when professors and teachers regularly exhibit biased behavior by commission or by omission — the messages accumulate powerfully in girls' minds.

What you then have is a system that discourages many girls and women from achievement in MST and yet is invisible to nearly everyone, including girls and women themselves. The fact that most gender bias takes place in subtle messages makes it *more* potent, not less. Open bigotry is recognizable and outrageous, so it is easier to resist. The very subtlety of "modern" gender bias means we are not consciously aware of it. Girls and women internalize gender bias, and it looks for all the world that they are exercising their free choice to take up literature, art, French, history — and indeed, education. It can even look, like girls and women are "naturally" untalented in math, science, or technology.

For a choice to be truly free and respond to one's genuine interests and abilities, it has to be liberated from the distorting influence of gender bias. Teacher educators need your help in teaching new classroom teachers how to recognize gender bias and how to counteract it for all our children.

Chapter 2

Ways to Assess Your Organization's Activities

Chapters 2 and 3 contain a variety of ways for you to assess the extent to which your agency or association has addressed issues of gender equity or bias. Why should you do this?

There are two reasons why it makes sense to bother.

The first is that ultimately, a good part of the issue comes down to numbers. Gender equity in education, beyond its role in contributing to people's quality of life, has tangible consequences that can be seen in education and employment statistics, as we saw at the beginning of the Introduction and Chapter 1.

The second reason it makes sense to bother with these needs assessment techniques is that education personnel change all the time. This is true especially of teachers — new teachers come into the field every year, but is also true of those who serve them such as the staffs and advisory groups of education agencies and professional associations. If your organization hasn't done any gender work for the past few years, there are assuredly many people who are not aware of the subtle gender issues described in Chapter 1. And if they are not aware of the issues, they can't do anything to deal with them.

In the next few pages are a number of ways that can be utilized to determine if your agency organization addresses gender equity, both in terms of activities you carry out with or for members/constituents, and about your own internal organizational functioning. I have included a variety of methods to choose from according to variations in time, interest, and circumstances. Moreover, you will have to decide how many years you want to review to find out your organization's history with a particular method. Do you want to examine the conference program books for the last three, five, or ten years?

As you know, however, the more methods you choose, the more reliable your conclusions will be. And the more methods you choose to carry out, the more time will be needed. I strongly suggest approaching your needs assessment as a team activity. Gathering a like-minded group to share the data-collection tasks makes sense in all ways. And because a diverse group has many

more options than a narrowly focused one, consider inviting people from a range of positions within your organization.

Once you and your team have met to decide which needs assessment techniques to carry out, you may choose to carry out some of the activities in this book or to create others entirely of your own devising. I encourage you to do that: organizations are so individual in terms of history, circumstances, resources, and personalities, that creativity is often **best**.

With this, let's turn to how you can learn what the gender equity situation is in your agency's or association's activities.

1. Accreditation or Approval

A. Has your organization taken gender issues into account in the process of formally or informally evaluating teacher education programs for program approval purposes?

___ We don't accredit or approve programs.

___ We do accredit or approve programs but we don't take gender issues into account.

___ We do accredit or approve programs and we take gender issues into account.

B. Has your organization taken gender issues into account in the process of formally or informally evaluating teacher educators?

___ We don't evaluate teacher educators.

___ We do evaluate teacher educators but we don't take gender issues into account.

___ We do evaluate teacher educators and we take gender issues into account.

NOTES

2. Conferences

A. Has your organization focused on gender in the conferences it sponsors?

___ We don't sponsor conferences.

___ We do sponsor conferences but we don't focus on gender issues.

___ We sponsor conferences and some of them focus on gender issues.

B. If you have sponsored a conference with a diversity strand, was it made clear that "diversity" applied to gender as well as other equity issues?

___ We don't sponsor conferences with diversity strands.

___ We do sponsor conferences with diversity strands, but do not include gender.

___ We sponsor conferences with diversity strands that do apply to gender equity.

C. If you sponsor conferences, do you invite speakers to address gender equity?

___ We don't invite speakers.

___ We do invite speakers but not on gender equity.

___ We invited speakers on gender equity years ago.

___ We invited speakers on gender equity recently.

NOTES

3. Contests for students

Has your organization looked to see if the entrants and finalists in contests it sponsors are roughly equal by sex?

___ We don't sponsor contests.

___ We do sponsor contests but have not looked at the gender dimension.

___ We sponsor conferences and have looked at the gender dimension.

- ___ We found equality.
- ___ We found inequality but have not addressed it.
- ___ We found inequality but it remains a problem.
- ___ We found inequality and have addressed it successfully.

NOTES

4. Grants

Has your organization sought grants concerned with gender issues?

___ We don't seek grants.

___ We have sought grants but not on gender equity.

___ We sought grants on gender equity years ago.

___ We sought grants on gender equity recently.

NOTES

5. In-service training, workshops, clock-hour courses

A. Has your organization held professional development sessions for members on gender issues?

___ We don't hold professional development sessions for members.

___ We provide professional development sessions for members but not on gender issues.

___ We provided professional development sessions for members on gender issues years ago.

___ We provided professional development sessions for members on gender issues recently.

B. Does your organization have teachers, cadre members, or employees who specialize in gender issues?

___ We don't have such specialists.

___ We have such specialists but not on gender issues.

___ We had such specialists years ago.

___ We have specialists on gender issues now.

NOTES

6. Policy Development

A. Has your organization initiated policies concerning gender equity or bias?

___ We don't do policy.

___ We do policy but not on gender.

___ We did policy on gender years ago.

___ We have done policy on gender recently.

B. Has your organization initiated rules, requirements, or mandates concerning gender equity or bias?

___ We don't do rules, requirements, or mandates.

___ We do rules, requirements, or mandates but not on gender.

___ We did rules, requirements, or mandates on gender years ago.

___ We have done rules, requirements, or mandates on gender recently.

C. Has your organization initiated guidelines concerning gender equity or bias?

___ We don't do guidelines.

___ We do guidelines but not on gender.

___ We did guidelines on gender years ago.

___ We have done guidelines on gender recently.

NOTES

7. Pre-Service Teacher Education

Has your organization focused in any way on the issue of gender in teacher education programs for pre-service teachers?

___ We don't focus on pre-service.

___ We focus on pre-service but have not considered gender.

___ We focus on pre-service and considered gender years ago.

___ We focus on pre-service and considered gender years recently.

NOTES

8. Publications

Has gender been a topic of your organization's publications, such as newspapers, newsletters, brochures, journals, books, posters, web sites, videos, etc.?

___ We don't publish.

___ We do publish but have not included gender.

___ We publish and included gender years ago.

___ We publish and included gender recently.

NOTES

9. Public Profile

Has your organization brought up gender issues with the public or the greater educational community in any way, such as through the media or collaborations with other groups?

___ We don't have a public profile.

___ We do have a public profile but have not brought up gender.

___ We do have a public profile and brought up gender years ago.

___ We do have a public profile and brought up gender recently.

NOTES

10. Speakers Bureau

Does your organization have, list, and promote members who can speak knowledgeably on gender topics?

___ We don't have a speaker's bureau.

___ We do have a speaker's bureau but not on gender.

___ We had speakers on gender years ago.

___ We have had speakers on gender recently.

NOTES

11. Surveys

Has your organization surveyed its membership and/or staff about their knowledge of or need for education or other services related to gender issues?

___ We don't survey our membership or staff.

___ We have surveyed our membership or staff but not about gender.

___ We surveyed our membership or staff about gender years ago.

___ We surveyed our membership or staff about gender recently.

NOTES

Chapter 3

Ways to Assess Your Organization's Internal Operations

1. Professional Development

Have your organization's Board, staff, advisory, and/or policy-making groups received professional development about gender issues?

___ We don't provide professional development to these groups.

___ We do provide them with professional development but not about gender.

___ We provided them with professional development about gender years ago.

___ We provided them with professional development about gender recently.

NOTES

2. Site Visits

Have members of your organization's staff included gender issues when they visit colleges, universities or schools for accreditation, monitoring, or technical assistance purposes?

___ We don't make site visits.

___ We make site visits but do not include gender.

___ We made site visits that included gender years ago.

___ We made site visits that included gender recently.

NOTES

3. Policy Discussions

Have gender issues been raised at Board meetings at which new organizational activities or policies are discussed?

___ Our Board doesn't address activities or policy.

___ Our Board addresses activities or policy but not about gender.

___ Our Board addressed activities or policy about gender years ago.

___ Our Board addressed activities or policy about gender recently.

NOTES

4. Standing Committee

A. Has there been a standing committee that deals with equity issues?

___ We don't have standing committees.

___ We have standing committees but not about gender.

___ We had a standing committee that addressed gender years ago.

___ We have a standing committee that addresses gender now.

B. Has gender ever been addressed by other standing committees?

___ We don't have any other standing committees.

___ We have other standing committees but none have considered gender.

___ We had one or more other standing committees that addressed gender years ago.

___ We have one or more other standing committees that address gender now.

NOTES

5. Leadership Positions

Has your organization had men and women equitably represented in leadership positions?

___ We have no leadership positions.

___ We have leadership positions but they are unequal by sex.

___ We have leadership positions and they are approximately equal by sex.

NOTES

6. Work Groups

Have there been task forces or ad hoc work groups that dealt with gender issues?

___ We don't have such groups.

___ We have such groups but they don't address gender.

___ We had such groups and they included gender years ago.

___ We have such groups that include gender now.

NOTES

7. Appointments and Liaisons

When your organization makes appointments, such as to advisory committees or as liaisons with other organizations, has gender equity expertise been taken into account?

___ We don't make such appointments.

___ We make these appointments but have not considered gender equity expertise.

___ We made these appointments and they considered gender equity expertise years ago.

___ We make these appointments and consider gender equity expertise now.

NOTES

8. Grant Funding

Has your organization funded grants dealing with gender equity?

___ We don't fund grants.

___ We do fund grants but they do not address gender.

___ We funded grants that addressed gender years ago.

___ We funded grants that addressed gender recently.

NOTES

9. Collaborations

Has your organization had active contacts or collaborations with other organizations or associations that do notably good work in the area of gender equity?

___ We don't have contacts or collaborations with other groups.

___ We have contacts or collaborations with other groups but they do not address gender equity.

___ We had contacts or collaborations with other groups that addressed gender equity years ago.

___ We have contacts or collaborations with other groups that address gender equity now.

NOTES

10. Gender Equity Implications

Has your organization considered whether other, non-gender issues with which it is concerned might have a gender equity implication or dimension?

___ We are not concerned with any other issues.

___ We are concerned with other issues but have not considered their gender dimension.

___ We are concerned with other issues but considered their gender dimension years ago.

___ We are concerned with other issues and consider their gender dimension now.

NOTES

11. Gender Equity Advocate

Does your organization have at least one staff or Board member who can be counted on to raise gender issues?

___ We have no Board or staff members.

___ We have Board and/or staff members but they do not raise gender issues.

___ We had Board and/or staff members who raised gender issues years ago.

___ We have Board and/or staff members who raise gender issues now.

NOTES

12. Gender Equity Research

Does your organization have at least one Board or staff member who is familiar with the research on gender equity in education?

___ We have no Board or staff members.

___ We have Board and/or staff members but they are not familiar with gender equity research.

___ We did have Board and/or staff members who were familiar with gender equity research years ago.

___ We have Board and/or staff members who are familiar with gender equity research now.

NOTES

13. Mission, Goals, and Objectives

Is gender addressed in your organization's mission, goals, or objectives?

___ We have no mission, goals, or objectives.

___ We have a mission, goals, and/or objectives, but they do not address gender.

___ We had a mission, goals, and/or objectives that addressed gender years ago.

___ We have a mission, goals, and/or objectives that address gender now.

NOTES

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