

Gender Issues in Tertiary Education

Barrington H. Brennen, November 20, 2003

Speech presented at the Association of Tertiary Education Annual Conference
Held in Nassau, Bahamas at Breezes Hotel

Gender issues and tertiary education. I bring to this presentation today, the point of view of a relationship specialist, counseling psychologist and marriage and family therapist and pastor. However I did spend some years as an educator and counselor both in high school and college. My point of view may be very important because gender issues have more to do with beliefs, assumptions, pre-suppositions, philosophies, attitudes, teacher skills that cripple the educational process than just the dissemination of knowledge.

When I was asked to speak on the topic, "Gender Issues in Tertiary Education," here are the thoughts that came to my mind:

- The major differences in male and female enrollment in tertiary institutions
- Course selection based on gender
- Career selection based on gender
- The ratio of male to female graduates in tertiary institutions
- Perceptions of what careers or courses of study are masculine or feminine
- How religious beliefs empower or cripple the educational process from birth to the grave
- How the patriarchal system has stifled the growth and development of the very persons who promote it
- How the pay structure empowers men financially, but disempowers them educationally; thus creating a lack of males in careers that require higher education and which are the backbone of national development

How have educators and society caused or perpetuated these issues? Here are a few examples:

1. Poor teaching methods
 - a. *Methodologies which are not sensitive to the learning styles of genders*
2. Educators are unaware of the psychological and emotional differences between the genders
3. Socialization
 - a. *Nurturing practices and treatment of the genders at home and the society*
4. Cultural and societal promotion of one gender over another
5. False religious belief system

Although this presentation focuses on tertiary education, it is important to look at the correlation between pre-tertiary and tertiary gender issues. The issues in tertiary education did not evolve in a vacuum. I believe that they are embedded in that attitudinal, causal, methodological behavior of teachers, first in early childhood education, and more so in secondary education. Also, there are the parental and religio/socio teachings and practices that most definitely affect the educational process.

As a marriage and family therapist, it would be regrettable if I ignored what is the foundation of responsive and effective learning at all levels of education. It is the involvement, influence and attitude of the primary educator, THE PARENT. It is important to understand that parents are truly the PRIMARY EDUCATORS. They are the first in contact with the student. They transmit the first information that is permanently retained. They set the foundation for effective learning through the attitudes and behaviors modeled before their children.

The truth is that school teachers, lecturers, or professors, at all levels of education are building on the foundation set by the PRIMARY EDUCATORS. When PRIMARY EDUCATORS lack the skills needed for effective parenting, and the SECONDARY EDUCATORS (teachers) are not properly trained to deal with gender differences in the classroom, and/or they are totally ignorant about the psychological differences between the genders, then educational inequity is inevitable. The ugly head of gender inequity is visible more so on our college campuses.

Before I go any further, I want us to look at some statistics to understand the whole scope of gender issues. The figures I will present are for the purpose of showing trends and are not intended to provide an intense empirical support for the topic. First what are the statistics for male and female in the national population?

In the Bahamas our population stands at 310,000 (2000 census).

The Bahamian Sex ratio:

At birth, there are 1.02 males to 1 female

Under 15 years, there are 1.01 males to 1 female

Between 15-64 years, there is 0.96 male to 1 female

From 65 years and over, there is 0.72 male to 1 female

In the total population, there is 0.96 male to 1 female

The Figures

The 2000 census shows the breakdown of the number of males and females in each group.

0-14 years represent 27% of the population with 39,271 males and 38,740 females

15-64 years represent 67% of the population with 92,830 males and 96,814 females

65 years and over represent 6% of the population with 6,696 males and 9,354 females.

Let's compare this with an international overview of sexual differences. From his book "First Class Male" Dr. Len McMillan present these facts:

125 males embryos are conceived for every 100 females.

105 baby boys are born for every 100 females.

There are 100 males aged 18 for every 100 females.

There are 68 males aged 85 or older for every 100 females.

There are 44 males aged 85 or older for every 100 females.

Note carefully the decline of males as age increases.

Life expectancy at birth:

In the Bahamas, the life expectancy for the population is 74.25 years, the life expectancy for males is 70.94 years, and the life expectancy for females is 77.64 years.

Note that at the crucial time of life when most people go to college (between ages 17 and 30), there is an equal number of males and females in the population. However, in college enrollment we see a disparity in gender enrollment and in course selection.

GENDER DIFFERENCES IN SCHOOL ENROLLMENT

The figures from the schools in our country are significant. Note the comparison between males and females. Let us look at Canada First:

CANADA	1998
Males	76,470
Females	101,604
SOCIAL SCIENCES	
Males	30,700
Females	38,369
EDUCATION	
Males	9,093
Females	21,276
HEALTH PROFESSION	
Males	3,475
Females	8,708
ENGINEERING AND APPLIED SCIENCES	
Males	10,285
Females	2,312
MATHEMATICS AND PHYSICAL SCIENCES	
Males	6,697
Females	2,854

College of the Bahamas 2003		
	First Semester	Second Semester
Females	3,167	3,359
Males	1,043	1,105 (33%)
TOTAL	4,196	4,454

Northern Caribbean University Main Campus Mandeville 2003	
Males	884 (36%)
Females	2405
FRESHMAN ENNOBLEMENT	
Males	176
Females	529
COURSES OF STUDY	
Information Science	
Females	107
Males	222
Hospitality Management	
Females	104
Males	10
Teacher Education	
Female	516
Male	76

Bahamas Technical and Vocational Institute 2000	
Male	510
Female	768
COURSES	
Cosmetology	
Females	89
Males	1
Plumbing	
Females	6
Males	50
Electronics	
Females	5
Males	56
Office Systems and Administration	
Females	354
Males	34

In the year, 2000 the University of the West Indies graduation class consisted of 2,358 males and females. However, only 554 or 23.5 per cent were men.

For a myriad of reasons men and women have been socialized to believe that certain courses of study and careers are only for a certain gender. Society has compounded the issues by providing a salary scale that supports this point of view. Some teach that women do not have the brains to become scientists or mathematicians and men are not good nurturers or care-givers. This is why females teachers are overly represented in the elementary schools, and in engineering males are overly represented. I have before me a list of hundreds of women mathematicians over the past centuries who have done pioneering work

There are no simple answers to the dilemma we are facing today in education. However, I will present what I believe are some of the reasons for the dilemma.

MONEY AND SEX

We notice that more women are seeking college education than men. Why is this? Is it because men prefer the industrial fields with the many jobs which usually require no more than a high school education and offer pretty good salaries? "Why go to college?" they ask themselves. Other jobs that require more than high school education and skills are where women lead, but that offer less attractive remuneration. I've discovered that there are more

illiterate men in our society than women. The 2000 statistics show that the illiteracy rate among Bahamian men is 5.5% and among women 3.7%. (United Nations Statistics)

The irony is that although the women are more concerned about educating themselves, the same women seem to have an inept ability to choose their social partners with discretion. It is disturbing to notice after classes, on college campuses, the expensive sport cars owned by jobless males who wait patiently for their girlfriends. These college females are aware that their boyfriends are unable to qualify for a bank loan. They are also aware that their boyfriends may have difficulty reading or have been unable to secure a permanent job. Yet these seemingly intelligent girls would throw themselves at the feet of these men perhaps for just two reasons: MONEY AND SEX. It may also speak to something else that controls the mind: POWER. Power is perhaps the most powerful sex stimulant. The females may see the sport cars, fancy clothes and lots of money as POWERFUL, thus they are turned on because of them.

What is the problem here? What causes this? Is it a lack of intelligence? No. I believe it is more the LACK OF UNFULFILLED NEEDS.

Many of these females who latch themselves on uneducated males are from homes where mom or dad has not developed a positive, productive relationship with them. Many of these parents do not appreciate the value of education. These females knowingly or unknowingly seek to meet their unmet needs however they can. They need to be appreciated, loved, to be listened to, and feel secure in a relationship.

HISTORICAL AND RELIGIOUS PERSPECTIVE

The present battle between the sexes and the inequity between the genders, resulting in what some call male marginalization and male underachievement was created by men themselves.

In my research I have never seen any governmental policy, family tradition, cultural norm, college course, institution, or philosophy that systemically demeans, devalues, or dehumanizes men.

On the other hand, over the millenniums, there have been countless governmental policies, laws, philosophies, and even institutions that were designed for the direct purpose of stifling the growth and development of women.

Hence, the stage was set for competition between the sexes, and women have been forced to break through the giant barriers of discrimination at all levels. Ironically, nothing has kept the women back. But on the other hand, men are protesting that the laws and practices they recommended and voted for are preventing them from having the same privileges and rights as women.

The very system men thought would strengthen and enhance the human race has weakened it and has directly affected the modern man and his views and approach towards education. Our society in the western world is based on futile, twisted ideologies, and practices of gender inequality. Now we are reaping the harvest of marginalization, illiteracy, violence, and family destruction.

Aristotle, Socrates, and Plato developed teachings and established institutions that

demoted women to no more than a “deformed male.” Aristotle taught "Being born a woman is a divine punishment, since a woman is halfway between a man and an animal" (John Temple Bristow, “What Paul Really Said About Women,” 1998)

On July 19, 1848 at the beginning of the modern women liberation movement, Elizabeth Cady Stanton, one of its founders, stood before hundreds of women and men to make a presentation to the government of the United States about the issues of gender equality. Hundreds of women came to sign the **Declaration of Sentiments**, a suggestion to change the wording of the American Constitution to be all inclusive. Here are a few lines from her speech:

She began this way:

“We have met here today to discuss our rights and wrongs, civil and political, and not, as some have supposed, to go into the detail of social life alone. We do not propose to petition the legislature to make our husbands just, generous, and courteous, to seat every man at the head of a cradle, and to clothe every woman in male attire. None of these points, however important they may be considered by leading men, will be touched in this convention. . . .”

“But we are assembled to protest against a form of government existing without the consent of the governed -- to declare our right to be free as man is free, to be represented in the government which we are taxed to support, to have such disgraceful laws as give man the power to chastise and imprison his wife, to take the wages which she earns, the property which she inherits, and, in case of separation, the children of her love; laws which make her the mere dependent on his bounty.”

She exclaims:

He has compelled her to submit to laws, in the formation of which she had no voice.
 He has withheld from her rights which are given to the most ignorant and degraded men — both native and foreigners.
 He has made her, if married, in the eyes of the law, civilly dead.
 He has denied her the facilities for obtaining a thorough education — all colleges being closed to her.”

These teachings were so widely taught that even the most intelligent minds accepted them as reality.

For thousands of years men tried to keep women down, but they were not always successful. Tradition has us to believe that women are incapable of thinking for themselves and to be productive. Aristotle taught: **“Women are unable to learn.”** The truth is this adverse circumstance against women has really caused women to shine. There have always been outstanding women even thousands of years ago and even in the sciences.

(Photos about first computers)

What is the point of all of this. That the disenfranchisement of men has been their

own doing, and it is compounded with the practices and beliefs of women themselves who have been taught by men.

The Tribune editorial (Bahamian Newspaper 2003) a few months ago said: "The phenomenon of young women out-performing young men in academic and professional achievements has been so persistent, pronounced and prolonged that it now seems part of the structural and cultural feature of our society."

Once again, it is my belief that men are where they are today in education because they made it so. Women are the way they are today because they were determined not to be kept down, but to prove that they were made "equal in God's sight." Hence a reason for the ongoing decrease of the male presence in the classroom as student or teacher.

In Biblical history we trace the devaluation of women. Proverbs 31 speaks about the virtuous woman who was able to obtain an education, own property, vote, and could be seen in public with her husband. However, one thousand years later we come to the book of Ephesians where we see the apostle Paul trying to undo the centuries of devaluing women. He brings this out by emphasizing the "Husbands should love their wives as Christ loves the church." According to Greek philosophy, men were not to love their wives, but only marry them for procreation. Therefore, they had for lovers females and males slaves. During this time women were prevented by law to go to school, vote, own property, or go to the market without their husbands. A male child had more value and importance than a mature adult wife. Men were, by written law, superior to their wives and the supreme head over them. This is the background against which Jesus said "adultery is the only grounds for divorce" and Paul said "Husbands are the heads of their wives as Christ is the head of the church and gave himself for it."

Interestingly this very practice of gender inequality existed in the Bahamas until 1962. I was eight years old when Bahamian women were allowed to vote for the first time, to own property, or get a loan from the bank.

Women refused to allow themselves to be kept down even when the odds were against them. The field of medicine is another example where women were discriminated. A strange story is recorded by the Roman historian **Hyginus**, telling of an incident, which is supposed to have occurred in fourth-century Athens. According to his report, the women of Athens (presumably those of the wealthier classes)- too modest to see male doctors- were fast dying out in childbirth.

A young Athenian maiden called **Agnodike** (or Hagnodike, which translates as 'Chaste in Justice'), wishing to resolve the problem, cut off her hair, dressed up as a man and went to Alexandria, in 300 BC, where she studied medicine and midwifery under Herophilus, a famous doctor. On her return to Athens, still disguised as a man, she set up a practice and in order to put her reluctant patients at their ease, would lift up her cloak and reveal her true sex. She became so popular among female patients, however, that the male doctors - jealous of her success and eager to protect their profession-had her prosecuted on charge of corrupting men's wives.

What is my point. The answer to the problem of gender inequity in tertiary education

is complicated and multifaceted. However, I believe issues exist because of false beliefs in gender inequality and male superiority. Let me look further for other explanations to this conundrum.

BRAIN DIFFERENCES

What really complicates the matter is that there are significant differences in the brain of the male and the female students. Two important studies provide information on this topic. They are: **Brain Sex** by Anne Moir and David Jessel; and **Boys & Girls Learn Differently** by Michael Gurian.

This research indicated that the brain looks different in most males and females, e.g. the "corpus callosum, the bundle of nerves that connects the right and left hemispheres is up to 20 percent larger in females than in males, giving girls better cross-talk between the hemispheres of the brain." In the cerebral cortex which "contains nerves that promote higher intellectual functions and memory, and interprets sensory impulses", the right side is thicker in most males and the left side is thicker in females.

The research reminds us that maturation progresses at different rates. In most aspects of development chronology, girls' brains mature earlier than boys. Michael Gurian writes:

" One of the last steps in the brain's growth to adulthood occurs as the nerves that spiral around the shaft of other nerves of the brain, like vines around a tree, are coated. This coating is myelin, which allows electrical impulses to travel down a nerve fast and efficiently. Myelination continues in all brains into the early twenties, but in young women it is complete earlier than in young men."

So girls, because of maturity differences, acquire their complex verbal skills at much earlier years than boys. There are also differing amounts of brain chemicals in the male and female brains. For example, the male brain secretes less serotonin than the female's, making males generally more fidgety.

Hormonal differences are well known, but less well documented until recent research, which indicates the significant impact these differences have on male and female behaviour. With the use of P.E.T. scans and magnetic resonance imaging, the different functioning has been established. Ruben Yaw of the University of Pennsylvania says: "*There is more going on in the female brain.*" This is presumably not a value judgement. Us men don't come out well in all this."

These differences are not the reason for the gender inequity. They only provided the facility through which the philosophical concepts of a superior male over an inferior female can flourish.

THE CLASSROOM

What happens in the classroom is crucial. We are faced with a few issues: (1) The differences in the learning styles of men and women. (2) Teaching methodologies that are sensitive towards these differences. (3) Teachers' attitude and behavior toward the genders.

The challenge we face is that very little is being done to apply what research has found

out and is continuing to find out about the different learning styles of men and women.

“Research shows that in the classroom there are differences in how male and female teachers react to the different genders. The research indicates that the presence of female instructors apparently has an inspiring effect on female students. In one research they spoke almost three times longer under instructors of their own sex than when they were in classes led by male instructors (Kruskal-Wallis, $P=0.025$). This led us to speculate about the importance of same-sex role models, but the enormous diversity of personalities and behaviors in our sample made it impossible to derive firm conclusions on this question. The data suggest that a teacher's gender can play a role in classroom discussion, in the sense that it appears to influence the extent to which male students dominate classrooms. The advantages of classroom discussion, long considered to be an integral part of education in sections and tutorials, are unequally distributed between the sexes.

The finding that male students tend toward greater talkativeness than female students led us to question whether male instructors might be more talkative than female instructors. They are not. Both sexes talk about the same amount of time: that is, instructors occupied 42% of the class hour on average, speaking about 4500 words. Modes of verbal behavior that are allegedly gender-based, such as self-subordination (supposedly a female trait) or competitiveness (supposedly a male trait) depend less on an instructor's gender than on particular personalities and the number of years that instructors have taught. Contrary to popular notions, no speech characteristic we examined revealed itself to be typical of either gender.” (Sited from Learning Styles. ERIC Digest. Claxton, Charles S. - Murrell, Patricia H., 1988)

WHAT CAN TEACHERS DO?

What can instructors do to make coeducation equal education? First, they need to keep in mind that their own gender may influence classroom dynamics. More specifically, they need to become close observers of their own classrooms by keeping notes on who contributes to discussions -- at what length, at what depth, and in what order, as well as what kind of response these students got (especially if they were interrupted).

For accuracy, these notes should be made immediately after class, so that dominant and subordinate contributors can be identified as they change from meeting to meeting. Teachers who find they have a poor memory for classroom interactions can get a videotape made, or they can ask a colleague to sit in on a class and take careful notes. The point is to cultivate a memory for, and an internalized sense of, the participation of individual students, so that inequalities can be avoided.

In addition, there are certain guidelines which may reduce the likelihood of inequalities developing. These will provide a learning situation in which all class members have an equal opportunity to develop confidence, judgment and ability. Teachers should hold all students responsible for assignments, and be willing to call on them directly even if they don't raise their hands. In order to increase the chance that students will raise their hands, however, the teacher should allow a significant pause -- not a pause of .5 seconds, as is typical of many teachers, but a pause of two, three or even four seconds, counted silently to oneself while looking around the room. Looking around the room has valuable pedagogical functions: it enables teachers to solicit the involvement of

students who, at that moment, are likely to make valuable contributions. It also permits teachers to choose contributors with an eye towards gender equality.

Further, teachers should listen to all students with equal seriousness, challenging when appropriate, correcting or praising when correction or praise is due. Teachers should learn each student's name and make sure to use names frequently, so that all students know they are recognized members of the class. Teachers should be careful to ask male and female students the same kinds of questions: not, for instance, reserving all abstract questions, or all factual questions, or all hard questions, for one gender. Teachers should sequence participants' responses, so that neither gender develops a monopoly. Moreover, they should take pains to prevent interruptions, and intervene when comments occur too rapidly to permit individual students to complete their contribution to the discussion.

Instructors who decide to monitor and direct their classes with the aim of giving each student equal education can do so if they keep these general guidelines in mind. In so doing, they will not only prevent inadvertent discrimination against women, but they will also create a richer and more equal learning environment for all students." (Sited online from Pedagogy: Learning Styles, updated by Jessica Blackmore, 1996)

CONCLUSION

What can we do about gender inequity in tertiary education?

- Have more male teachers in the classroom, especially from elementary school
- Change the pay scale to attract more males to the classroom
- Conduct seminars or other educational programs to educate or to raise an awareness of the differences between the genders
- Teach that difference does not mean inequality but simply what it is called – difference.
- Tertiary institutions should be involved in more parenting classes to help parents of all levels to understand the differences between the genders and how they should raise balanced, well-educated, self-governing children.
- Tertiary institutions can also train its own staff to be equal partners. We have discovered that many female CEO's do not know how to manage males on their staff.