

Teaching Every Body: Adapting Your Curriculum for Gender Differences

Posted on 17 May 2019 by JL Landels

Last month I taught the above titled workshop at the Vancouver International Swordplay Symposium. A lot of people asked for class notes, which I was just going to share as a document. But then I thought, why not put it up as a blog post? After all, it's been far too long since I posted anything here, and this may be useful for others. The workshop was aimed at martial arts instructors and practitioners, but there is much here that can be applied to any physical, typically male-dominated sport.

These are just notes — the bulk of the workshop is in my head — but feel free to ask me to elaborate on any of them.

Disclaimer: everything here is a gross generalization! No two bodies are identical, and everyone's psychosocial makeup is different regardless of gender, of which there are more than two.

Most HEMA schools and clubs are working hard to attract and retain women practitioners. However, swordplay has traditionally been a male-dominated activity in western society. The books we work from were written by and for men, and the artist models (with the exception of the Walpurgis drawings in I.33) were men. What we see as canonical positions, particularly in rapier texts, may not be the most mechanically advantageous for other body types.

Endocrine and Psychosocial Challenges

- Girls often drop sports at puberty due to body image issues, period shame, lack of feeling of safety etc.
- Adult women may be returning to physical activity having not done any since high school. They may feel awkward, out of shape, embarrassed, or incompetent.
- Monthly cycles may cause breast sensitivity, changing energy levels, or painful periods that interfere with training.
- Pregnancy & Lactation may cause breast sensitivity, risk aversion, and joint laxity. In later term pregnancy fencing is not advisable, and the time and energy involved in caring for a newborn keeps most mothers away from martial arts.
- Childcare is often expensive and hard to come by, leaving mothers with no time or little money for martial arts, especially in the preschool years.
- Menopause and Perimenopause may cause heavy bleeding, muscle and bone loss, or change in energy levels.
- Many women have never been hit. Many women have only been hit in an abusive situation. Specific actions (eg grappling) may be triggering
- Girls and women are not generally encouraged to take part in martial arts, and when they are it is usually for self-defense.

With all these challenges, it's a miracle any of us set foot inside a martial arts studio at all. Once inside the door, having an instructor that is sensitive to these issues can help. It is also important to be aware of physical differences and how to work best with them.

Physical Differences

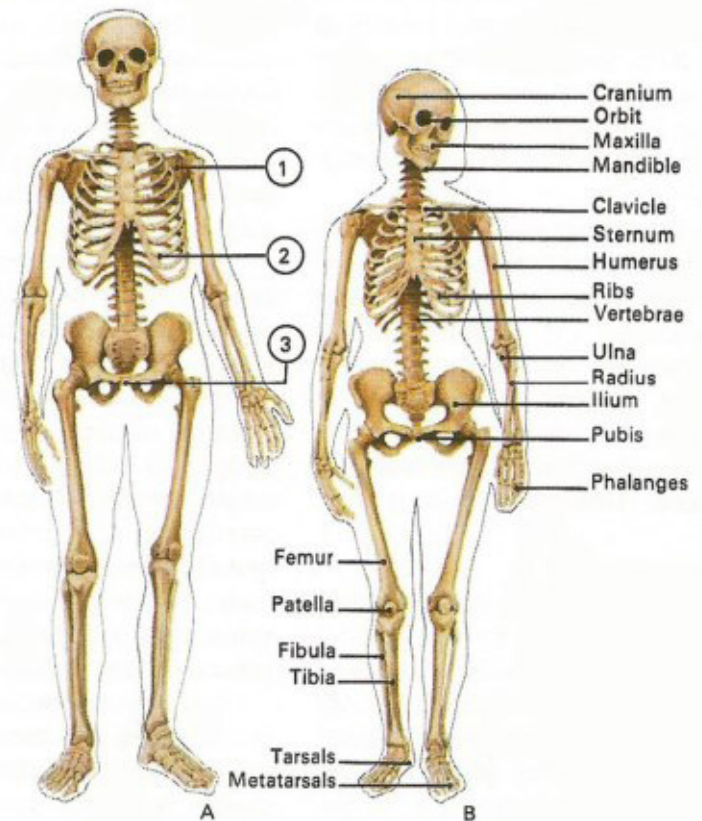
Feet

Women tend to have smaller feet in relation to their height than men. This creates a less stable base. However, women tend to have better sense of balance, which may be simply a result of more childhood activities like dance and gymnastics.

Femurs

Hip width and femoral attachment means women's femurs angle inwards toward the ground whereas men's hang more or less straight down. Thus women are more comfortable with the feet closer together, rather than the 'railroad track' stance advocated for men. Asking women to work in a wider stance creates knee stress.

- Women should keep feet together rather than shoulder-width for narrow-based work.
- For wide based work (eg horse stance), turning the knee and toe out slightly alleviates stress. Make the inner line of feet rather than the outer line of feet parallel.
- Don't scold female practitioners for a walk that 'plaits' or crosses the centre line. While it may seem less 'efficient' it is more comfortable and natural, and will lead to less awkward footwork.



Hips

Aside from being wider, women's hips are deeper and rounder than men's, often with larger glutes in proportion to our height. This means women will look like they are sticking their butts out when their pelvises are actually in a neutral position. Be sure to use skeletal markers like iliac crests, pubic bone, and coccyx to determine whether or not the pelvis is neutral.

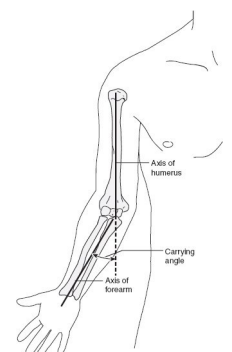
A benefit of wider, more open pelvises (plus, for many women, ballet classes at some point in their lives) is the ability to comfortably open the hips for a more profiled rapier stance.

Elbows

Women and men have different carrying angles to their elbows. This is due to the differing points of attachment of the radius and ulna. The carrying angle of women is generally between 10 – 15 degrees, whereas in men the angle is usually around 5 degrees.

A larger carrying angle makes the rapier guard of *seconda* considerably weaker and more difficult to hold. To compensate, students can engage the lats and triceps, but this needs to be taught.

However, a larger carrying angle makes *terza-quarta* incredibly strong and easy to hold (so useful for suppressing the swords of your taller opponents).



Manually rotating the biceps & triceps with the other hand can mimic the effects of differing elbow angles, and give students an idea of what the other people experience.

Carrying angle affects the optimal planes for cuts as well, but I have been unable to determine specific advantages or disadvantages, outside of individual experimentation. I need more data on this. For how it affects other activities see this video on yoga and carrying angle, and this post on violin-playing for women.

<https://www.youtube.com/watch?v=e01twmnuF4M>

Hands

It's a common complaint that most tools are made for men's hands. This is just as true for swords. Most swords have ricassos, handles, and pommels that are too wide for women to hold comfortably. Sometimes changing to a better sword for the hand is all that's needed to improve a student's game. If that's not possible, accept that the student may need to alter the grip — eg, 2 fingers over the ricasso of the rapier, hand not closed around the pommel of the longsword — to make an ill-fitting tool work.

Breasts

Depending on their size and sensitivity, breasts can range from an inconsequential difference to a definite hindrance. Large breasts can get in the way when forming rapier off-hand positions. Lifting the elbow in a more Fabris than Capo Ferro style will help.

In guards like *posta frontale* it may be helpful to carry the hands slightly higher than portrayed in the diagrams in order to put the elbows above the breasts. In *breve* they may need to be set lower than is canonical.

Breasts vary in sensitivity during the menstrual cycle, during pregnancy and lactation, and post-lactation. If a woman tells you her breasts aren't sensitive and she doesn't need a chest protector, believe her and don't insist she wear one. If she doesn't want to fight without one, respect that too. We all know our own bodies best.

Neck

On the whole, women's necks are narrower in width than their heads, whereas men's are close to the same width as their skulls. Women are more prone to whip-lash from 'bell-ringer' hits and can benefit from training that strengthens the neck.

Muscle Mass & Endurance

Thanks to testosterone, men grow larger muscles, and have a higher proportion of lean muscle than women. This is simply an advantage in sparring when you have more explosive muscle power. However, muscle burns a lot of calories, as does moving a large body around, so women tend to have an endurance advantage. Many women develop an excellent defensive game and wait till their opponents tire before going on the offensive.

Height

Of all the physical differences, height is the most significant when it comes to sparring. A taller person has longer arms, a longer lunge, needs to take fewer steps, has an easier time keeping their sword on top, and has easier access to the head as a target. A fighter who is 5 tall is working 20% harder than one who is 6 tall, just to move in and out of measure and reach targets.

Fortunately, since there are both short men and tall women in the world, this one only partially falls along sex-difference lines, and is the easiest to understand. At the end of the workshop I have half the participants stand on stacked gym mats to give them a one-foot height difference. It's an 'aha' moment for both tall and short fencers when they discover how much of an advantage height confers, even without longer arms and legs. If you've never done this before find yourself some higher ground and try it out. If you're tall, it will give you a greater understanding and empathy, and if you're short, you'll enjoy the feeling of power.

This nutshell version comprises about 25% of the full workshop, 'Teaching Every Body: Adapting your Curriculum for Gender Differences'.

