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## **“A PANE IN THE GLASS”**

### **Eye Dominance: Fact or Fiction**

by Bill Tschirhart

We play, instruct and coach a hand/eye co-ordination sport. As a result, as coaches and instructors, we need to be aware of “eye dominance” and the role it plays in curling.

Right off the top I want to be very clear that an athlete will do this correctly by nature. This article is for coaches and instructors so that we don’t create a problem. When I present this topic I characterize it as though one was completing an application form. As far as the athlete is concerned this is for "office use only". First, some background is necessary.

Even though we have two eyes rather than one, it’s for the purpose of seeing multi-dimensionally. For us it means three dimensions. But we really only "see" (i.e. target) with one eye and it may be either one. In fact, over varying distances, the eye that really does the seeing (targeting) may change from one to the other. In sport, most skills are performed by one appendage (i.e. left or right hand, arm, leg, foot). And, most sports demand accuracy in distance and direction. There are some interesting combinations. A dart player may be right handed but left eye dominant. The way in which that athlete holds the dart relative to his body will reflect that. Seeing the target is what this article is all about. Remember, athletes don’t dwell on this situation. It happens automatically. It’s when a well-meaning instructor suggests a change that inadvertently positions the athlete incorrectly and in essence forces the athlete to "see" the target incorrectly that causes the problem. In curling, when an athlete misses, he/she wants instant "visual" feedback that he/she has done so. One of the most unsettling feelings for a curler is to "think" he/she has hit the brush when in fact, that is not the case!

To get right to the point relative to curling, for many years most instructors would have encouraged athletes to "get right behind the stone" in the slide portion of the delivery. If the athlete were right handed and right eye dominant (i.e. "same side" dominant) then that might have forced that athlete to see the target incorrectly. If that athlete were technically successful, they would be "triangulating". In other words, they would have been guessing that they either were, or were not, on the line of delivery. When viewed from the front, if the athlete were to slide towards an instructor, he/she would be seen as "off to the side" of the path of the stone but closer observation would reveal that the dominant eye, in this case the right eye, is really the only part of the body, from a visual perspective, that the athlete cares about and as a result, it is right behind the stone. He/she still must slide in a straight line but the sliding foot will be visible to the side of the stone. As long as it remains parallel to the stone in the slide, the athlete is sliding correctly. Obviously the same would be true for a left-handed and left eye dominant athlete.

Curlers who are "opposite side dominant" (i.e. right-handed, left eye dominant or left-handed, right eye dominant) will be more likely to want to get the body right behind the stone in order to "see the target". There is an easy test for eye dominance for curlers.

- *Stand facing a target that is approximately the same distance as the length of a sheet of curling ice.*
- *Hold you arms outstretched in front of you with palms facing forward, fingers together but thumbs separated. (It's important that the arms are "outstretched"!)*
- *Now, bring your hands together so that a small space is created where thumb meet the index finger.*
- *With both eyes open, shape the space so only the selected target is visible. Now, alternately close one eye. If you have trouble with this, have a partner shield first one eye then the other.*



A variation of this test is to slowly, with the object held in sight through that small opening you created, bring the hands toward your face until your hands touch your face. The opening will be in front of one eye, your dominant eye.

Regardless of the variation used, you will see the target with only one eye through the space. Of course, that's your dominant eye! But, although this test has been approved by an ophthalmologist, he was quick to point out that it does NOT determine the degree of eye dominance. A person doing the test might be right eye dominant but the degree of eye dominance might be very slight. There is a clue though.

With the non-dominant eye, you might be able to estimate where the target is even though it's blocked by one hand and not visible.. If, on the other hand, the target really "moves" to such a degree that it can be seen to the side of the palm when viewed with the dominant eye, then the degree of eye dominance is greater. A curler who is only slightly eye dominant (and that's most of us by the way) will want to be behind the stone (i.e. sliding foot not visible when viewed from the front save for the toe if the athlete toes out). For those who have significant eye dominance, and eye dominance has absolutely nothing to do with visual acuity, then the position of the body relative to the stone in the slide will also be significantly different from athletes with only slight eye dominance as explained earlier.

As a sidebar, it's interesting to note that eye dominance can be altered. If one is same side or opposite side dominant and for whatever reason chooses to change, it IS possible through eye training.

Before I close, a note of caution; **DON'T DO THE TEST WITH YOUR ATHLETES JUST FOR FUN OR IN A HAPZARD FASHION!** It's only to help you, the instructor, understand what is happening with your the athletes. If it's not an issue, don't make it one!

For another test for eye dominance, go to <http://www.usaeyes.org/lasik/faq/lasik-monovision-dominant-eye.htm> . For more information on eye dominance, the internet has professional sites with detailed explanations. Can you say "google"?

Enjoy working with your athletes!