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Training quality coaches
around the world.

Fishing for Better Jumps: Get your jumps faster and safer!

By: Chris Conte

What's the deal with that fishing pole thing? What the heck is a "Dartfish"? Well, each one is a terrific tool that can speed the learning process. Recently, I found that combining the tools revealed a powerful new jump acquisition paradigm. Put simply, learn quicker with fewer falls.

The 300/ 3000 Rule

When a skater falls repeatedly learning a new skill, bad habits often develop. Over time they may even develop the movement pattern of a fall. I have heard the 300/ 3000 rule many times at different seminars. 300 correct movements = good muscle memory, 300 incorrect movements = bad habit, and unfortunately in theory, 3000 correct movements to undo a bad habit! The use of these tools while learning a new skill may reduce the risk of injury while facilitating faster acquisition of good technique.

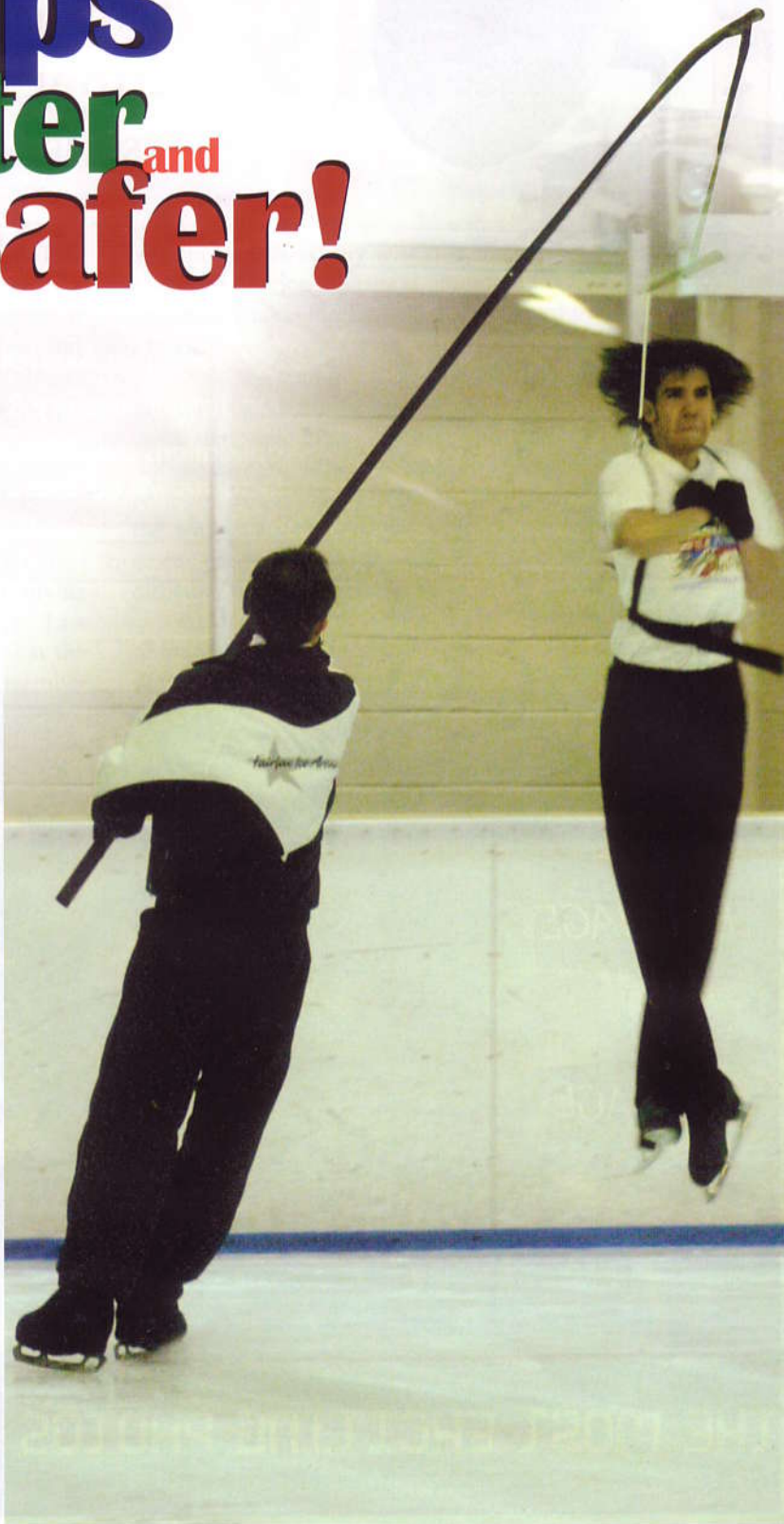
The Fishing Pole

The Promotion pole harness has been around for about 20 years. It consists of an aluminum shaft with a rotating swivel/

bungee system and two braided cables attached to a torso harness that supports the skater from the shoulders. This allows the coach to make adjustments to the skater's axis and airtime on the fly and on any pattern. This is a finishing tool and represents a remarkable advance from traditional fixed harness systems.

For the most part the coach will skate directly behind the skater during jump entry and place the top of the pole above the skater's head on the jump axis. The coach then uses the back end of the pole to create leverage and resist the descent of the jump. It is a common misconception that the coach should "lift" the skater; this will do nothing but strain the coach. The key is to let the bungee do the work!

The coach can assist a skater to an appropriate airtime, prevent a catastrophic axis failure or make small adjustments to the axis. It will not save the skater from falling, but it will protect against a disastrous or fear producing fall. It will also assist a more correct jump landing as technique is further refined.



In the hands of a master pole harness expert like Nick Perna it is amazing to watch the progression. As the element gets "warmer" Nick will remove the shoulder straps to lessen his assistance in the axis correction. Once the stability of the axis is ascertained the support hand moves up the pole until help is no longer necessary. Nick has even demonstrated a one-hand/ one-clip technique that basically lets the skater do the skill with an absolute minimum of assistance. When this point is repeatedly achieved, the "training wheels" come off and the skater lands the jump for the first time after very few attempts. The end result is fewer falls, increased confidence, better muscle memory and less risk of injury. Wow! That's better than chocolate!

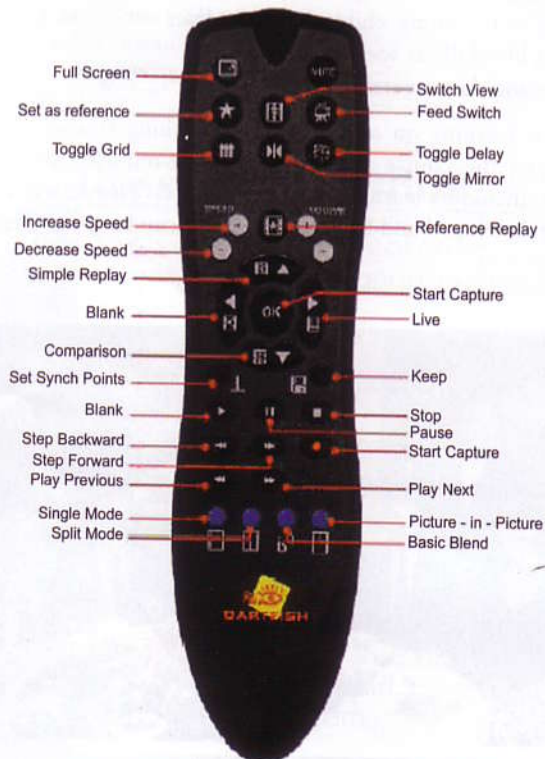


Dartfish

Do you like video review chunky or creamy? Well, chunky would be your traditional DV or 8mm camera: small screened, awkward, time consuming and with little or no slow motion capability. Creamy would be the new Dartfish ProSuite 4.0 remote controlled digital instant replay system. I had the awesome opportunity to attend the USOC technology summit earlier this year with four other notable Dartfish coaches. The benefits of visual evidence in an athlete's training have been studied for some time and the findings are irrefutable. Virtually every other Olympic sport has been using this stuff at the elite levels for years. We are behind but catching up fast.

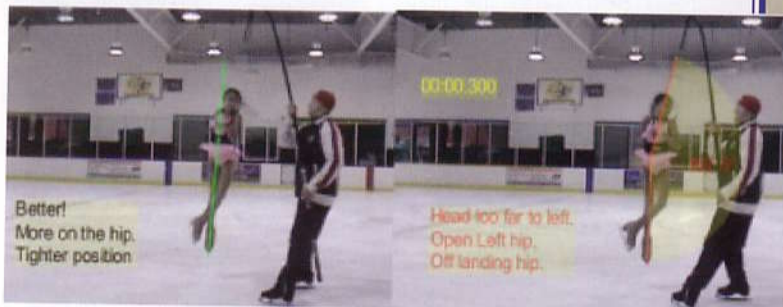
How it works

Boot up your laptop rink side. A DV camera connects with a cable and a little remote sensor (like the one on your TV) hooks up to the USB. Many techno phobic coaches can rest easy with this assertion: if you can do email and operate a VCR, you can




use Dartfish software. Using the "In the Action" mode of my Dartfish before a lesson on double axel, I will choose a video clip of a successful jump from my jump library. Setting that video as a "reference clip", the press of a single button on the remote allows us to refer back to that clip throughout the lesson. The student and I view the clip before the first attempt. This puts the skater in a positive frame of mind. Next, we walk through the jump to solidify their understanding of key positions and timing. After a progression of exercises designed to ready them for an attempt in the harness, the touch of the "L" button sends Dartfish into live mode, providing me with the video feed of the area where the skill will be attempted. Adjusting the camera's zoom so I will see all four jump phases across the screen, I then set the pre-roll (time delay) to twelve seconds. With Dartfish you capture the video *after the event occurs!* Using 6 second clips for jumps will give us approximately six seconds to glide back within 30 feet of the laptop to trigger the system. Putting the Dartfish remote in my pocket, I snap the skater into the pole harness and we begin fishing for a better jump.

Gliding back to the laptop after the first attempt, my remote comes out and I press the "OK" button. The skater instantly sees their attempt being played back in a loop at various speeds (you can program any replay scenario you want). Using the remote I can freeze video and advance it forward or backward frame by frame to look at key positions and the time intervals between them. A clock on the screen lets me measure airtime and special tools allow me to draw on the screen as well. The coolest thing is to see the time intervals between key positions. Over time the recipes become very apparent. This enables you to give pinpoint corrections such as, "Your ankles touched at .217. Let's try to get them together by .165 on the next attempt".



The real magic of Dartfish is that with the touch of the "C" button you can "quick compare" your skater's attempt side by side with the reference clip or even superimpose them into one video. When ready for the next attempt click the "live" button and you are good to go again. The skater does not get cold and knows exactly what to do. There is also the added incentive to make the correction since the skater wants to see how close they got to the new number. Studies show video feedback is most beneficial on 80% of attempts when first learning a skill, 60% after landing it in the pole, 40% off pole to build consistency, and 10% of attempts for maintenance. You can also publish the video from the lesson to the students email with your audio comments and drawings added in!

Results have been excellent using this synergistic method. Two great tools that work even better together and both are easy to learn at the basic level. 

For more information visit: www.dartfish.com, www.promotionharness.com, www.chrisconte.com, and www.grass-rootstochampions.com