Teaching Fly Casting: Progress Report

by

Mark Herron

As published on TheCuriousFlyCaster.com

(https://thecuriousflycaster.com/)

Table of Contents

Teaching Fly Casting:Progress Report

Introduction

For some time now, I have felt ebbing enthusiasm for reading more about sports "*science*" and rising dissatisfaction with what I have consumed. As I write now it would be tempting to enter rant mode and start talking about things being intellectualised, abstracted from context and bigged up with unnecessary complication. Rant mode off. As I dug down to find the source of ***my*** dissatisfaction I realised it lay in the absence of a big picture, a conceptual and theoretical framework that organised the pieces as parts of a whole.

I happen to be someone who likes to organise my thinking and knowledge within conceptual frameworks constructed to fit defined contexts. Parts tend to frustrate me until it becomes clear how they fit together as a whole and how they can be arranged and explained with narrative continuity. An awful lot of what I've read on coaching or skills teaching in other contexts attracted my interest, aroused my curiosity but, absent a big picture of the assembled whole, I was left with a collection of jigsaw pieces.

So what is the contextual purpose of the big picture we are trying to create with the pieces of the puzzle? It's teaching people to fly cast (better). In the big picture our job is to facilitate learning – by both student and teacher. Allow me to try and paint that picture.

I've just re-read what I wrote just over a year ago in my *Interim Research Report*[1] and haven't changed my mind about the conceptual framework it presents. There are, however, some things I want to explain at greater length and depth. To begin I'll re-arrange a few simple sentences and put it this way. Teaching people to fly cast isn't an arcane or exceptional undertaking. We are teaching movement. Teaching is teaching, movement is movement and people are people. Teaching is about facilitating learning by students. Unless and until we get straight what that means and how best to achieve it, the rest, quite frankly, is a box of nails without a hammer.

1 https://thecuriousflycaster.com/teaching-fly-casting-interim-research-report/

In pursuit of a more functional conceptual framework, the structure of the big picture, I offer the following 3 step adjustment in my own understanding.

Step One: Fly Casting Instruction

Taking an historical perspective we can observe that teaching fly casting has been and is still referred to as "*fly casting Instruction*". This term is a conceptual give away. It references a sense of exceptionalism which in turn references traditional thinking about fly fishing in general as unique and defined by traditions – by orthodoxy. It signals that there is a right way to do things and anything else is a wrong way. In other words there is orthodoxy and implicitly there is heresy. Indeed there are good things about fly fishing tradition, like the ethic of restraint, which are admirable and worthy of preservation. There is also, the downside of orthodoxy, an accumulation of false belief which might once have been innovative and creative but has long outlived its usefulness and forgotten its origins.

One of the dynamic contests in fly fishing is between innovation and mindless repetition of established belief. We see it in fly tying, in angling techniques and practice as well as in casting. It's not hard to see how these notions of, and inclinations toward, orthodoxy make "instruction" the preferred and enduring characterisation of teaching fly casting. Compare, teaching people to drive cars or fly planes. There is, it is assumed, only one right way to do it. Students are instructed in performing the task the right way, to reproduce what their instructor directs them to reproduce.

Step Two: Teaching Movement

Fly fishing is a sport and fly casting is movement so it makes sense to look at other sports, especially those with enough money and players behind them to fund scientific research and analysis of how movement skills ought to be performed and how best to teach people to perform those skills. That work also examines how people learn movement in general so that teaching is appropriately adapted to optimal learning of movement.

This is definitely a step forward from instruction. However, this is also where my initial curiosity and hope began to turn toward irritation. A bit like YouTube there is an awful

lot of stuff that is there primarily to advance someone's reputation. The quality of the "science" is variable. The relevance to fly casting is likewise variable. Yes there are some gems like Gabriele Wulf's work on learning motor skills but there is also a lot of overburden to sift through before one finds those gems.

The analogy I would conjure is a vast landscape of rabbit holes for the researcher to explore, endlessly, in search of sustenance. Some holes house rabbits and many are just holes with nothing edible in them. Even when you find food it requires a lot of preparation and at best is good for consumption as part of a larger offering.

Step Three: Teaching Fundamentals – Pedagogy

For me drilling down to find the foundations of the conceptual framework leads to some fundamental aspects of good teaching regardless of the subject matter. Before I get to them I should state that teaching casting for me is about one to one. Yes, teaching small groups can work well enough, especially for novice casters but that's not part of my experience or plan for the future. Personal preference aside, what makes group teaching more problematic at higher levels of skill will become clear in the next few paragraphs.

As a good friend and highly qualified teacher put it to me, pedagogy requires deep understanding of both the subject matter and the student. As previously written:

"*The teacher is responsible for their depth of knowledge about the relevant subject matter and they are also responsible for knowing and understanding the person they are teaching and their preferred ways of learning – so far as that is possible. Without a happy combination of deep subject knowledge and empathetic attunement to the student, the learning experience will suffer.*"

In other words we need to know, deeply, what we are talking about, demonstrating and communicating. We also need to shape what and how we teach, not for the reproduction of that knowledge, but for the benefit of the student. ***It's their learning*** we are tasked with facilitating. Consequently, our teaching needs to be student centred and in turn that requires that we adjust our teaching to suit them – both in planning lessons and in the moment of presenting them. Instruction, of course, is very different; it's teacher centred and encourages limited flexibility or adaptive

responsiveness from the teacher.

Teaching, as I'm describing it, is founded on a human relationship which is primarily for the benefit of only one of the parties involved. That has many important implications very few of which are explored or even noticed explicitly in much of the literature I've seen on teaching movement skills in a variety of settings.

Pedagogy: Deeper Dive

Large sections of big libraries are occupied by books and articles on pedagogy. We can either read endlessly or choose a model wisely, one which contains the fundamental principles and concepts. My initial and continuing choice is *The Spectrum*[2] as set out in Mosston and Ashworth, *Teaching Physical Education (2008)*[3]. I wrote about it in my *Interim Research Report*[4]. Repeating part of what I reported earlier, it is a somewhat complicated analysis of teaching and teaching styles. The complexity, however, should neither surprise nor intimate us. Rather, it opens up many creative possibilities. It is founded on the very important insight that instead of competing ideas about teaching we should embrace ***the variety of styles*** and adopt a non versus approach in considering, choosing and utilising them.

The Spectrum defines teaching as a series of decisions – before a lesson (pre-impact) during one (impact) and after one (post impact). It also organises teaching styles into two clusters – **reproduction** (student learns/reproduces what teacher says) and **production** (student learns/produces with teacher facilitation). Moving from one and closer to the other involves crossing a student discovery threshold.

At one end of *The Spectrum* we have Command Style A – instructor issuing instructions and supervising drills. At the other end, we have entirely self taught learning Style K. This arrangement is not simply linear. It is a whole with parts or sectors, a bit like a pie chart of colours. *The Spectrum* is not about what is good or bad teaching in this or that context. It's rather a tool kit useful for a wide variety of teaching contexts and student preferences. Sometimes, we need a hammer and sometimes we need a delicate paint brush. Fly casting teachers who spend most of their time with raw beginners will

2 https://spectrumofteachingstyles.org
3 https://spectrumofteachingstyles.org/assets/files/book/Teaching_Physical_Edu_1st_Online.pdf
4 Refer to note #2 above for link to the Interim Research Report web page

probably be teaching in the reproduction cluster and might benefit from considering the range of Styles in that cluster – i.e. Styles A-E. They can be found in *Teaching Physical Education linked in note 4 above* and see p.11 for the authors recommendations. Note that this does **not** preclude using styles from the production cluster.

Fly casting teachers who are teaching students with intermediate to advanced skills might find more useful teaching styles in the "*production*" cluster. In this cluster, we will teach in a more collaborative rather than directive manner. Overall, we are always working together with the student. As individuals and with varying skill levels the teaching styles will probably migrate from the reproductive to the productive clusters. In every case, we need to observe and respond to the students learning needs. If something we thought would work clearly isn't working, it's time to change the offering. Likewise, if something works better than expected it may offer a few clues on the type of teaching we emphasise. It's not hard to see the lights go on, or for that matter when they dim or switch off completely. That is just what happens when we focus on the student.

If we want to learn to be better teachers then, like casting students, there are numerous ways of going about it. You, like me, might prefer to start with relatively simple, core principles – such as student centred teaching, facilitating their learning, being responsive to what works and to what does not, having a plan but being open to changing it if things aren't going according to the plan. Alternately, you might prefer to scour the literature on learning movement and accumulating pieces of the puzzle for your teaching inventory. The two need not be mutually exclusive. Let me offer an example.

This link[5] takes you to the abstract of an article by Gabriele Wulf et al which considers influential factors in motor skill learning. I haven't read the whole article but the factors listed in the abstract are what I want to draw attention to. They are:

Observational practice – (in company with others) so people can learn from watching each other as students.

Focus of attention – the greater effectiveness of external clues, the focus of the

5 https://pubmed.ncbi.nlm.nih.gov/20078758/

performer on the effects of their movements rather than internal focus, the focus on what the bits of the performer's body are doing.

Feedback – It has both an informational function and motivational properties that have a significant influence on learning. Self-controlled practice, including (teacher) feedback and model demonstrations controlled by the learner, has been found to be more effective than externally controlled practice conditions.

It's certainly useful to have these things put forward in a scientific fashion and, without diminishing that importance, to consider whether a teacher attuned to their students and to what helps their learning in a collaborative human relationship would have missed some or all of those points. Perhaps the greatest value is offered to such a teacher by encouraging them to rely on *external cues* instead of trying to get the students to perform casting movements correctly – *internal cues*. That said, there will certainly be times when a teacher can help rather than hinder learning by observing that, for example, a bit less effort or a bit less rotation might be advisable. And then, the teacher might wait for a good result and affirm it with more positive feedback.

If I wanted to take advantage of the learning together scenario, I might sometimes share some of the things in my own casting that took a lot of work or on which I was still working – not to the extent of distraction but in passing and at a suitable time. Overall, I would take the findings as a reinforcement of the idea that learning needs both information and motivation. Facilitating learning asks us to provide both. Attunement to the individual student will guide us in determining the right balance or emphasis and when to offer either and when not to intervene at all.

To choose another example. The sports science literature is often replete with its own terminology. For example some of its contributors talk about "constraints", the factors limiting the performance of a movement which are inherent in the task, imposed by the environment in which it is performed and within the person performing the movements. I confess to finding this analytical framework somewhat artificial. Yes, I understand that a teacher should be aware of individual capabilities, environmental conditions and the complexities and technical demands of the movement task at hand. I heartily agree with the notion of framing the task for the student so they self discover and self organise to perform it to the greatest extent possible. My preference,

however, is to accentuate the positive by thinking of creating a facilitative learning space, within which the student can succeed. Only in part would that space be defined by being aware of the many things that might limit their success. What happened to the things that drive success? For sure, we don't set them up to fail but also we don't get in the way of them discovering solutions that work and don't work. Students might come up with a wholly or partly novel solution that works for them. Noted for possible future use also.

For all that I or we need attunement and observation rather than a different terminology much less a reliance on standard operating or analytical procedures. Scientific analysis can be a useful tool but I'm yet to see it explain attunement and observation without which teaching is bereft.

In my *Interim Research Report*[6], I offered the following:

"*Teaching and pedagogy are not subjects amenable to glib reduction and summary much less rigid, ideological thinking. However, there are some simple and fundamental things that I can put forward now with a fair amount of confidence that I will not later have to retract them.*

Teaching and learning are best pursued as a flexible, adaptive and creative collaboration between teacher and student(s). When that relationship works productively:
- *The student learns how to do and how to learn to do*
- *The teacher learns how to (and how not to) facilitate student learning*"

I haven't changed my mind about those simple and fundamental things, if anything my confidence has increased in their applicability.

Lastly, I want to be clear about where I think "sports science" fits in. The last thing I want you to leave here with, is the idea, that it is a simple either or choice between "science" and "pedagogy". I believe strongly that it is important to organise our thinking about teaching. For me "pedagogy" comes before "sports science" – it is the root system and trunk of the teaching tree. Other things like focus of attention, cuing, cognitive processing limits and sensory motor learning are branches and decorations on the tree and not an alternative tree. It is the difference, if you like, between what

6 Refer to note #2 above for link to the Interim Research Report web page

are core casting skills and what are tips, tricks and traps. Knowing the latter will not necessarily produce the former.

Deep knowledge of casting, including mechanics and biomechanics, is foundational for a casting teacher but it is neither necessary nor sufficient to pass all of that on to a student. Indeed, an unsolicited attempt is likely to be quite counterproductive. Casting competence is fundamental because without it a teacher will be unable to convincingly demonstrate skills and techniques to a student or coach them in learning to perform those skills. Having casting knowledge and competence are necessary for teaching but they are not a substitute for pedagogical knowledge, much less competence. They are necessary but not sufficient.

It is well past time that the teaching of casting focussed a lot more on how to teach and probably a lot less on what we should be teaching our students to do and what movements their body parts should be making.