

Lviv State University of Physical Culture named after Ivan Boberskyj

Department of shooting and technical sports

Subject

*"Theory and Methodology of the Selected Sport
and Improvement of Sports Skill – archery"
for 4 courses students*

LECTURE:

"TEACHING AIDS AND TIPS"

by prof. Bogdan Vynogradskyi

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TEACHING AIDS and TIPS

Teaching is a many faceted practice, as different students learn things in their own way. People can learn through observation, examples and knowledge transfer, advice reinforced by mimicking, trial and error and repetition. Using a variety of different techniques will help your novices learn efficiently and correctly. Observation is an effective method of learning, and is the one used first. Demonstration allows the archer to observe. However, when demonstrating exactly what to do, use similar equipment to that which the archers will be using, i.e. elastic band, and respect the archery safety regulations. Observation implies both seeing and hearing. For it to be effective, the archers must be able to see what is being demonstrated and hear what is being said.

5.1. Prior knowledge

Ask the archers what they know about the skill being emphasized during the practice session. Allow questions before a demonstration. Do not be surprised at the knowledge the beginners have. Beginner archers have perceptions of the sport or even prior experience. Giving the archer the opportunity to express their perceptions has advantages:

- if incorrect, the opportunity to correct them, to better express your ideas, and teach with greater efficiency;
- if incomplete, fill in the missing blanks;
- encouraging their participation giving them motivation and avoiding the monotony of a single speaker;
- you may hear certain comments that present the exercise more efficiently;
- if they are correct, the advantages are the same as above and the work has already been done by others.

No method is perfect. This one is no exception. Some archers may monopolize the conversation too often and/or talk too long. Limit comments to the subjects discussed. Use this educational tool because the dynamics of analysis and exchange outweigh the difficulties.

5.2. Teaching aids

Below are introduced tools and situations to be used for demonstrations and practice. Chapter 6 covers the uses of these teaching aids and tips in greater detail.

5.2.1 For demonstration

The attention of beginner archers is often distracted by the release of the demonstrator's arrow. Furthermore, some archers judge credibility based on where the arrow hits the target.

When first demonstrating a skill, it is often better to use a dry-shot mechanism to keep the novice focused on the form element being taught. Examples include:

- an elastic band



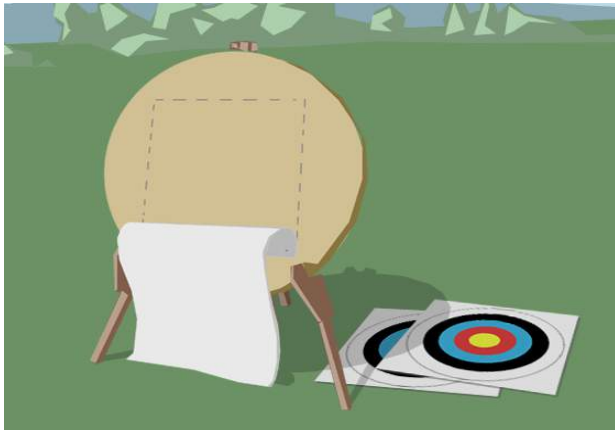
- an elastic string



- an elastic or non-elastic bow string retainer



Secondly, shooting without a target face into a bare butt, or directly into a net will also help the novice to focus on form rather than arrow location



If a target is important to the demonstration, ensure you have verified your aiming point so that your first arrow hits the centre of the target. Confirm the novices are concentrating on what you want them to observe;

- by looking at the novices during the demonstration to see if they are observing the essential points
- by forcing the focus of the novices onto a specific body part or action of the demonstrator.



An aid to force the students focus

5.2.2. For practice

The dry-shot devices and shooting without a target face also assist the novice to properly implement the technique being taught.

Since teaching aids help archers better understand and feel future performance, it is important that they be similar as possible to the equipment used during regular practice. Moreover, these aids cannot differ too greatly from the actual shooting context so that too much time is not wasted on progressively reconstructing it. Consistent with this idea, let's take the exercise of "push effort" as an example. To understand the string leg's participation we could create the following situations by using three different teaching aids. Even if they are similar they can be perceived differently by the archer:

- An assistant pushes directly on the archer's bow hand, forcing the archer to counter with their string leg. This demonstrates how the string leg is involved in the shot.



Human assistance only "I have to resist when I am being pushed".

- An assistant pushes on the archer's bow forcing the archer to resist with their string leg. This demonstrates that the string leg would act in a similar fashion if the bow was being drawn by the archer.



Human and riser assistance "I have to resist when my bow pushes me".

When the archer's bow is drawn, the bow pushes against the archer, forcing the archer to counter with their string leg. This demonstrates how the string leg is engaged during the shot.



Human and bow assistance.
"When my bow is drawn, I have to resist".

Notice how the different teaching aids that are above can help perceive situations differently.

Some other aids will certainly be useful to your teaching:



Shooting simulation with an elastic band allows an easier task implementation than with a bow for the novice and a good observation from the coach.



The use of a thin elastic allows a decent string grip



Standing on an elastic band allows the archer to practice their string hook



A short string loop can be added to the elastic band for a better string grip.



Using a bent plastic tube for electric cables, helps the bow hand find the correct position more easily.

A light elastic band can be used for many learning purposes:



Wrapping the elastic band around a real bow riser the novice learns to draw the bow back with the muscles of the back of the posterior part of the string shoulder



Extending an elastic band from the bow hand to under the bow foot makes the mass weight of the bow feel heavier



Full effort simulation



Using an elastic band while drawing the bow string makes the bow tension heavier



A different variation on making the bow tension heavier



Pulled the band in a lateral direction, the coach simulates windy conditions.



Making the bow tension heavier



An elastic dry-shot device



Visual feedback of the maintained orientation of the body during the expanding step (full draw).



Controlling loose clothing

And many other uses ...

Archers often benefit greatly from seeing what their form looks like. There are many ways to provide visual feedback to your novices during training, such as:



Teaching the expanding push action



Using an elastic band to teach the expanding pull action.



Use mirrors to provide an instant (and cheap) visual feedback to your students

A camera or smart phone is very useful and there are some very good coaching applications available at reasonable prices, some are even free!



Video cameras are very useful for showing the archer how they performed a certain skill.



For learning the proper bow hand position



For learning proper string hand hooking



For checking the alignment of the bow arm and shoulders



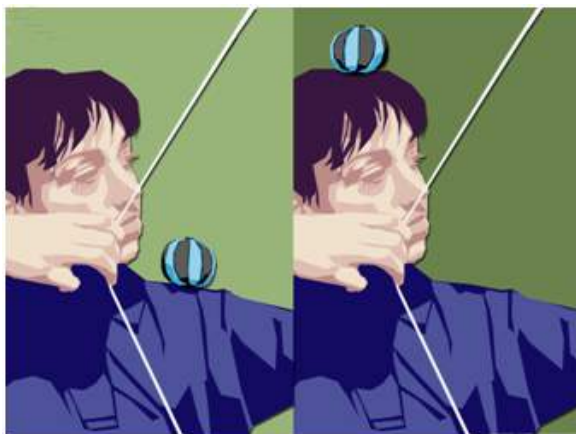
For checking the alignment of the string forearm in the shooting plane



Cut out target faces, for a progressive adaptation to the regular aiming task



For checking the alignment of the string forearm with the draw force line



Balance a soft juggling ball to check the good maintaining of some body parts.



A suspended bow to train the archer to keep their bow hand relaxed during the shot and as an introduction to using a bow sling

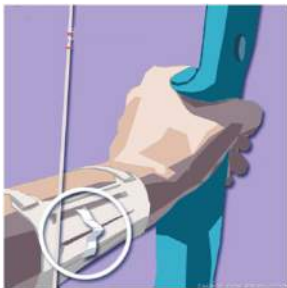
And many other uses.

Instead of a light elastic band, a piece of rope can often be used for many learning purposes:



An elbow harness is a valued aid for the archer to feel the use of the back muscles during the draw and expanding actions and also to allow a "dry-fire"

Like for the light elastic band and the string/rope, self-adhesive tape, hypodermic tape, bandages, etc. can be used for many learning purposes:



For checking the string clearance at the bow forearm level



For checking the string clearance at hem level around the armhole of the chest-guard



To help identify where the string should be on the face



To represent some specific targets; here for lateral consistency

A long stick is also useful



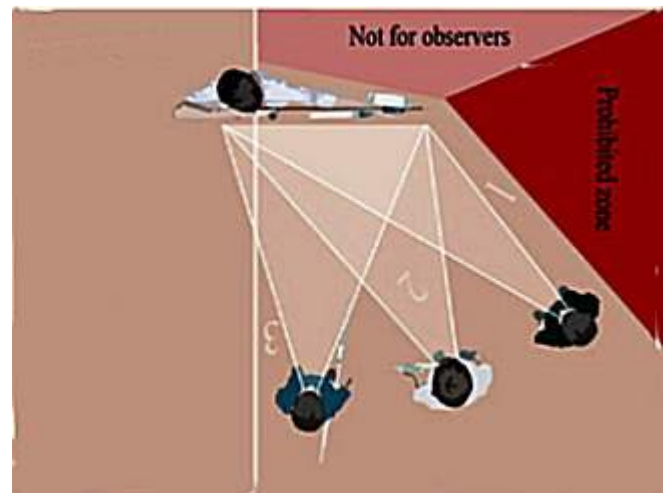
For checking the efforts in the body (low centre of gravity)



For checking the maintenance of the body orientation during the expanding action

5.3. Effective archer viewing arrangement

For safety reasons, prohibit archers from walking in front of the shooting line when someone is in the process of shooting. However, we relax this rule during demonstrations because the "3/4 front" view (or 2 o'clock - see illustration below) is the best observation angle. Furthermore the arrow resting on the side of the bow opposite to the observers; hence there is no risk.



The observers are standing on the opposite side of the bow from the arrow.

When demonstrations are done at short distances from the target, 3m to 10m, we allow the archers to be in the 3/4 front view and give the instructor the opportunity to shoot while watching if students are paying attention to the essential point of the exercise.

NOTE

Observation from 10 or 11 o'clock is not safe since students are on the arrow side of the bow and they cannot see very well.

If the demonstration is performed by someone else, be in one of the following illustrated positions to point out main areas of interest, or those deserving special attention, without blocking the archers' view:



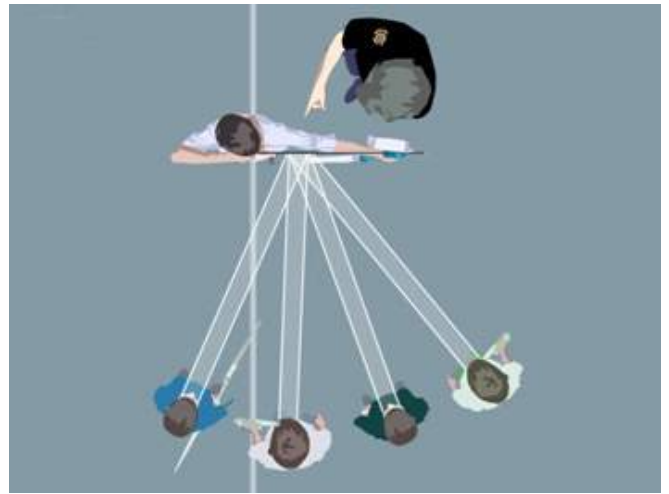
Demonstrating the archer's back.



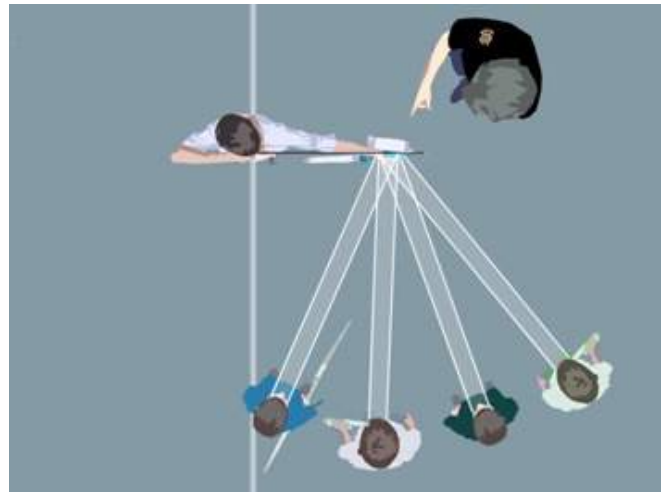
Demonstrating body alignment / draw force line.



Demonstrating the string hand or face.



Demonstrating the bow shoulder.



Demonstrating the bow hand.



Demonstrating the bow hand.

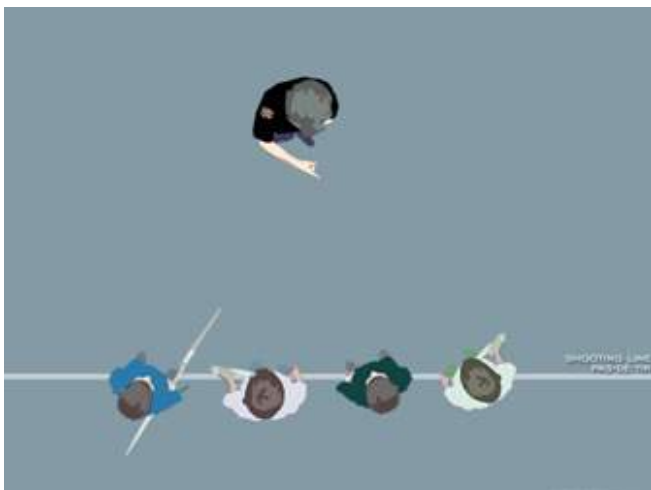
5.4. Instructions

5.4.1. During a demonstration

Instructions are essential to the learning process and group activities. If you perform the demonstration, give instructions before, during, and after the demonstration.

5.4.2. During the practice time of the beginners

- Instructions should be given just before shooting begins. If they are given earlier, they could be forgotten while shooting.



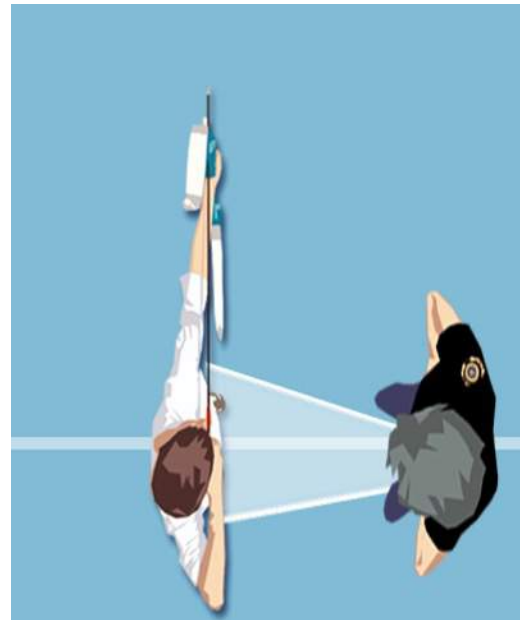
- Speak loudly enough to be heard by everyone, and use understandable language;
- Use positive language, explaining what the archer should do and feel rather than what to avoid.
- Use wording consistent with the archer's manual so the archers can consult it later to become familiar with the terminology;
- Only provide relevant instructions, avoid those not related to the archer's needs;
- The most productive instructions go with an expressive gesture. When the archer can feel the action, and note the results, they are more motivated to do it correctly;
- Use the archer's name while instructing for a more positive reception of the advice.

5.5. Observation

The commonly recommended sequence of observing is:

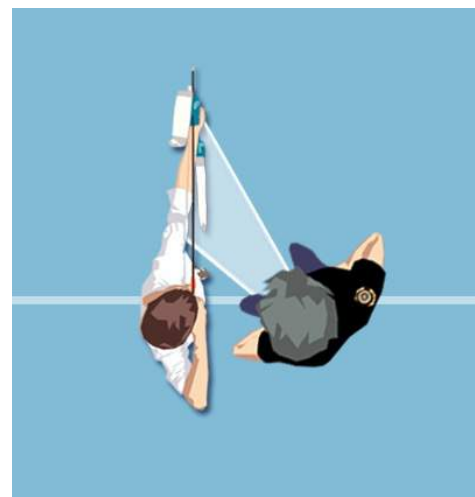
1. Stance
2. Body
3. Shoulders and head
4. Arms
5. Hands

Below we present some positions where the coach can stand to observe particular components of the shooting technique.



From this position the coach can observe:

- Body verticality
- "T" shape
- Shoulder height
- Head position and movement upon release
- Facial reference point (anchor)
- String hand
- Release



From this position the coach can observe:

- Bow hand position and relaxation
- Bow arm movement upon release



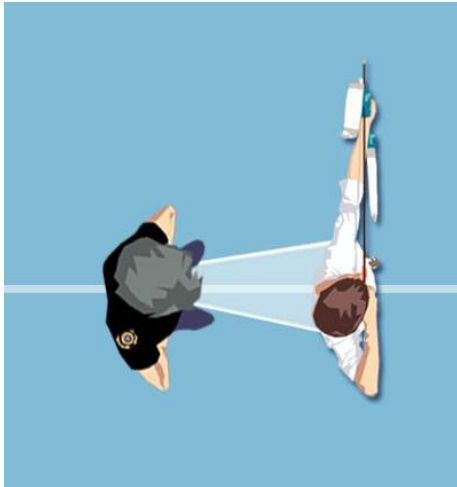
From this position the coach can observe:

- Feet alignment
- Body verticality
- Body alignment
- chest height
- Shape of the back
- Stance alignment
- Head position
- Bow verticality
- Draw force line
- String arm movement



From this position the coach can observe:

- Feet alignment
- Body verticality
- Body alignment
- Chest height
- Shape of the back
- Stance alignment
- Head position
- Eye orientation with the target
- Facial reference point (anchor)
- Draw force line
- Keep face impassive during the release
- Bow arm movement



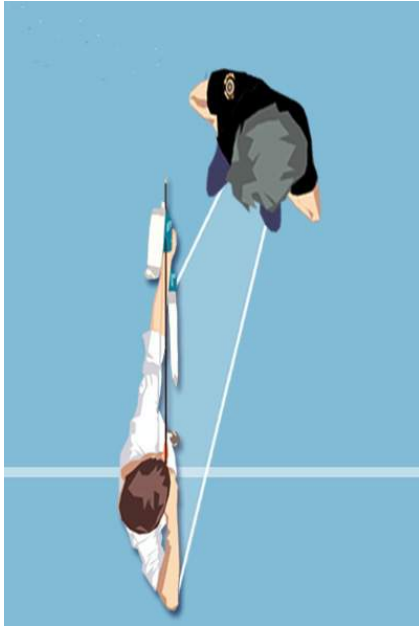
From this position the coach can observe:

- Body verticality
- "T" shape
- shoulder height
- Head position
- Scapular movement



From this position the coach can observe:

- Head position and movement upon release
- String hand
- Release



From this position the coach can observe:

- Chest height
- Head position
- Eye orientation with the target
- Facial reference point (anchor)
- Keep face impassive during the release
- Bow arm movement
- String hand and release

Conclusion:

The ideas provided in this chapter are a starting point, but with a little creativity you will discover many more ways of helping novices learn. Learning from other coaches and from your athletes will keep your techniques fresh and engaging. By using a variety of teaching aids combined with observation and active participation from your novices, you will find they progress quickly towards good form and good results.