NSCA Level I Instructor Certification
Candidate Course Manual
(Also used for Scholastic and Recreational Certification Courses)

A GUIDE TO THE

NSCA LEVEL I

INSTRUCTORS CERTIFICATION

(Version: JANUARY 2022)

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Dear Instructor Candidate:

On behalf of the Instructor Committee and the staff of the NSCA, welcome to the NSCA Level I Instructor Certification Course. This 3-day course is widely recognized as the finest course in North America for training shotgunning instructors. This is why over 200 shotgun enthusiasts annually, from across the country and many from around the world, seek the experience and knowledge imparted by certifying instructors in one or more of the NSCA's instructor courses. With that said, there is always room for improvement so we invite your comments on ways in which we can improve the course and program.

We hope this Level I Course will serve as a great start for your journey of introducing shooters to Sporting Clays and helping them improve their proficiency. In accepting your application to attend the Level I course, we expect that you are already familiar with the fundamentals of shotgunning. Building on your shotgunning experience, the Level I course is designed to train you how to teach novice and beginning students the fundamentals of success in breaking clay targets as well as being a more successful wingshooter.

Thank you for taking this first major step in becoming a NSCA Certified Instructor and joining the many instructor candidates who preceded you in bringing countless new shooters into our great sport.

Sincerely,

Chief Instructor
National Sporting Clays Association
NSCA Level III Instructor

II. Mission and Purpose

Mission Statement
The NSCA will deliver the most consistent and highest possible quality of instruction to sporting clays and FITASC shooters at all levels of shooting proficiency by training, maintaining and supporting a highly competent instructor corps and delivering the most effective curriculum possible, stressing safety and the fundamentals of good shotgunning.

Purpose of the Level I Course and Certification: To produce and certify instructors who can safely instruct beginning, novice and recreational shooters up to entry-level competitors in sporting clays and FITASC. Level I Instructors are encouraged to be active competitors, will encourage their students to compete in the sport and promote the sport to new shooters. The Level I instructor should be a good communicator, proficient at teaching the fundamentals of shotgunning, assessing and addressing eye dominance and basic gun fit issues as well as calling a miss. While the Level I graduate is not expected to be a proficient diagnostician, the candidate is expected to show some aptitude for diagnosing the causes of a miss on targets of basic to intermediate levels of difficulty. Additionally, the Level I program will encourage certified instructors to continue their learning process through teaching, shooting, individual study and seeking the assistance and advice of one or more instructor mentors. Successful completion of this course to the Level I standards will entitle the graduate to advertise as a Certified Level I NSCA Instructor and seek clients for instructional services.

Acknowledgements:
For as long as the NSCA's Instructor Program has been in existence, many have contributed to the information now contained in the program's manuals, not to mention the way in which the courses are now conducted. The course manuals have the flavor of many contributors sprinkled about its pages. We extend our thanks to NSCA instructors such as Vance Barnes, Peter and Wendy Crabtree, Gary Greenway, Mike Mc Alpine, Ralph Winingham, Don Currie and many others who, over the years, have had a hand in the development of the NSCA Instructor Program.

III. Adjunct Certifications

As our sport continues to mature, the NSCA has felt a strong need to maintain and even enhance the prerequisite requirements, graduation standards and consistency of our Level I Course. At the same time, we have seen an increasing demand for the Level I Instructor Course content from youth and recreational circles. NSCA remains deeply committed to being an important source of training for volunteer instructors involved in youth programs yet we also recognize that, in the interest of time and perhaps money, many volunteers have not had the opportunity to engage in much clay target shooting. We are also seeing an increasing number of resorts offering sporting clays on property, increasing demand for qualified "ambassadors" to introduce patrons to the sport.

The NSCA has developed two adjunct certifications to the Level I Course to answer the need of those desiring the experience of a highly professional shotgun instructor's course yet lack some of the shooting experience normally required of Level I Course candidates. The NSCA Recreational Instructor and NSCA Scholastic Instructor Courses provide the same course, curriculum content and rigor as the standard Level I instructor Course, but do not require the same level of shooting proficiency or performance standards for certification. Those candidates considering the Scholastic or Recreational Certification are encouraged to attend the 3-day Level I Course if they feel they might be able to pass the shooter proficiency standards or if they believe they might, at some point, want to pursue the Level I certification. Certified Scholastic and Recreational Instructors are still required to attend the Level I Certification Course in order to receive the Level I Certification. Please contact the Chief Instructor to discuss your individual situation should you have any questions in this regard.

Scholastic Instructor Certification

The purpose of the Scholastic Instructor Certification is to equip those coaching in youth shooting programs with the knowledge necessary to orient a youth shooter to shotgunning in a safe and entertaining manner. Often, the biggest challenge for youth shooting programs is the availability of trained volunteer coaches. It is not the NSCAs intent to imply that youth shooting programs require less proficient coaches than adult students, however, with the shortage of Level I Certified volunteers and the scarcity of available time for volunteer coaches to attend training courses, the Association felt it was critical to offer a path whereby volunteers could access the same information to assist them in coaching youth shooters; after all, the youth shooter is the future of our sport.

Recreational Instructor Certification

The purpose of the Recreational Instructor Certification is to equip those engaged in a recreational or resort setting with the knowledge necessary to orient a beginner to shotgunning in a safe and entertaining manner.

IV. Admissions Guidelines, Criteria and Cost

1. Applicants must be active members in good standing of NSCA.

2. Applicants should be eighteen (18) years of age and have at least two (2) years of shooting experience.

3. Candidates are expected to be comfortable working with shooting students in a one-on-one situation and have a desire to function in the role of teacher. Candidates must have the ability to empathize with their students. Previous teaching experience (e.g., Boy Scouts, 4H Leader, sports coaching) is helpful but not required.

4. Candidates must demonstrate a complete knowledge of and comply with shooting range safety protocols. Only a 100% safe shooting environment will be acceptable. Candidates are solely responsible for their personal safety, the safety of their students and the safety of range personnel. Attention to every detail is essential.

5. **§** Candidates must have taken a minimum of 2 hours of lessons from a Level I, II, III or equivalent instructor before the course.

6. **§** Shooting Proficiency Requirement – Each candidate must prove reasonable proficiency at engaging clay targets with a shotgun by either, 1) having at one time earned a minimum of an NSCA C Class rating and shot a minimum of 3,000 lifetime registered targets, OR 2) during the course, pass a Shooting Proficiency Test. By the end of the course, a Level I Candidate will demonstrate the ability to break more than 70% of targets presented from four cardinal directions: 1) a target that comes from some distance away and is thrown directly toward the shooter and stalls or starts to descend at a point above the horizon and inside of thirty yards of the shooter's position (i.e., incoming target); 2) a target that originates near the shooter (within 15 yards) and flies directly away from the shooter (i.e., outgoing target); 3) and 4) two targets that come from some distance away and passing by perpendicular to the shooter at 20-25 yards similar to a skeet low-house target and a skeet high-house target shot from just behind position #4. The recommended proficiency test consists of 20 targets, half of the targets being two crossing targets (for example, 5 pairs of crossing targets shot from just behind skeet station #4 with high-house and low house on report) and half of them being incoming/outgoing targets (for example, 5 pairs of incoming/outgoing targets shot from skeet stations 1 or 7 with high-house and low house on report). Note: Certifying instructors are encouraged to use this segment of the class to also coach candidates who are observing to call a miss.

§ Applicants for the Scholastic Instructor and Recreational Instructor Certifications are exempt from the indicated requirements

COST

Tuition is $600 for the three-day course plus shells, target costs and instructor expenses. Instructor expenses will vary with the distance the instructor is required to travel for the course as well as overnight stays required. This cost is divided equally among the instructor candidates that attend the class. Additionally, the candidates will be required to pay for any targets they personally shoot.

At the discretion of the Chief Instructor, courses made up exclusively of candidates attempting to achieve the Scholastic Instructor or Recreational Instructor Certifications may be shortened to two days in length and reduced in price to $400.00 per person.

V. THE NSCA PHILOSOPHY OF INSTRUCTION

Virtually every individual learns at an improved rate and retains more of what is being taught through hands-on and interactive learning. "Telling" simply is not an efficient, effective teaching method. This model of hands-on and interactive learning is used in both "Training the Trainer" (teaching the instructor candidate) as well as a guide for instructors and candidates to teach their students.

The four major styles of learning are as follows with the first three being the ones you will most commonly employ during your instructional sessions:

Kinesthetic - Learn by Feeling
Visual - Learn by Observing
Auditory - Learn by Listening
Visual Cognitive – Learn by Reading

Most individuals have a "preferred" learning style as well as secondary styles by which they learn. It is the instructor's job to identify the student's preferred learning styles and use this information to convey concepts using the method or methods most preferred by the student. A large majority of individuals learn best by repetitive activity or kinesthetic learning. This method is particularly useful in teaching and learning situations where skills need to be learned through personal trial and error. Another group of learners are best stimulated by visually observing (visual learners). Still a third, but relatively small group, learns most effectively by listening (auditory). A fourth and certainly very small group, learns best by reading (visual cognitive modality). The student's preferred learning style may NOT be the one that is most comfortable or easiest for the instructor. For this reason and the fact that students seeking shooting instruction are a diverse group, a highly effective instructor must be competent in utilizing all of these areas.

To illustrate the application of the top three styles of learning, let's use a scenario where an instructor is teaching a student about the Break Point, Hold Point and Visual Pick-up Point for a particular target. A Visual student will be most receptive to the instructor pointing to a visual reference for the Break Point, Hold Point and Visual Pick-up Point. An Auditory student will want to hear the activity described and will want to be told where the Break Point, Hold Point and Visual Pick-up Points are. A Kinesthetic student will want to feel where the Break Point, Hold Point and Visual Pick-up Points are. With an empty gun, the instructor may want to have the student mount the gun while he/she physically moves the front of the gun for the student to the Break Point, Hold and Visual Pick-up Point by grasping the forearm of the shotgun in front of the student's front hand.

To complement the preferred styles of learning, there are some basic teaching styles or teaching types available to you as the instructor to communicate new concepts to students. From an educational standpoint there are a number of known approaches to teaching. Here are some of the ones you might try:

A. Socratic - uses questions to perk the student's interest. "What's your plan for this target pair?"
B. Discovery learning - where the instructor arranges target presentations so that the student finds their own answers. (E.g., Take them to a new station and just have them shoot it.)
C. Communicative - uses conversation as a means of training. "What is your next goal in Sporting Clays"

D. Observational learning – (visual, demonstrative) Show a student what to do.
"Look at my foot position – my stance"

E. Verbal – Describe what is to be done.
"We are going to break this target at a different break point"

F. Psycho-motor – is the basis of our training. These are physical skills driven by the mental process.

G. Repetitive - entrenches learned processes.
"Great Job - Do It Again – Just Like That"

All of these methods work well but not all of these methods work for each student. You, as the instructor, must decide which technique fits each student. Remember, the most effective means to learn a skill is repetition.

You, the instructor candidate, will have ample time to practice the NSCA teaching model. As you will see, much of the art and science of teaching is learning to ask questions of your students in order to find the correct teaching tool. Simply telling a student what you see will usually not result in effective learning. Learning to shoot a shotgun well is best accomplished when a student and instructor learn to communicate and cooperate to solve each problem.

Effective communication also often requires creativity. As an example, and to foster creativity in your teaching methods, you may be asked to instruct a student without talking. Silent communication of an instructional concept may not be as difficult as one might think and may be as simple as moving a student's gun, while in the ready position, to the correct hold point.

VI. REQUIRED COMPETENTCIES

Unless otherwise noted below, each Level I Candidate is required to demonstrate competency in a variety of tasks across seven competency areas in order to pass the course as well as pass a course examination with a minimum score of 80%. The following tasks must be performed on a pass/fail basis to the standard(s) and under the conditions indicated for each task below. In an effort to get the Candidate to master each of the tasks required, the Certifying Instructor ("CI") will provide any and all reasonable assistance to each Candidate during the course. Discussion is provided for each competency area below to provide context and background.

COMPETENCY #1: Safety And Positive Control

Task #1-1: Individual Safety Responsibility

Candidate will, at all times, demonstrate the proper knowledge of safety procedures that are an individual shooter's responsibility while at the range to include:

A. Primary Rules of Gun Safety
B. Proper range safety and etiquette
C. Proper wearing of hearing and eye protection
D. Responding appropriately to firearm and ammunition malfunctions
E. Recognizing potential safety hazards

Condition:

In an instructional environment at a sporting clays range with one or more students under his/her control.

Standard:

1) Candidate will achieve 100% compliance with all the primary safety rules (below) and ensure that the student(s) does the same during the Candidate's instructional session with the student.
2) Candidate will properly install and use, as well as insist that the student(s) and any spectators properly use, eye and ear protection while on the range.
3) Candidate will demonstrate proper etiquette and range safety procedures at all times to include responding appropriately to firearm and ammunition malfunctions and recognizing potential safety hazards.

Task #1-2: Safety & Positive Control

Candidate will demonstrate the ability to maintain positive control of their student and their student's firearm as well as maintain a safe instructional environment during all instructional sessions.

Condition: In an instructional environment at a sporting clays range with one or more students under their control.

Standard:

1) Candidate will deliver a safety briefing to every student at the beginning of a lesson.
2) Candidate will demonstrate safe operation of firearms.
3) Candidate will be in the proper position to control each student's firearm and ammunition at all times by:
    a. Positioning himself/herself in the proper location in relationship to the student: Within arm's reach or less and immediately behind and to the right of a right-handed shooter, or, within arm's reach or less and immediately behind and to the left of a left-handed shooter, whether in or outside of a shooting stand.

b. Personally controlling ammunition.

4) Candidate will continue to discuss safety, as appropriate, throughout the lesson.
5) Candidate will ensure that student is 100% compliant with all safety rules and that the student operates firearms safely during the instructional session.
6) Candidate will insure the proper use of hearing and eye protection throughout the course.

Discussion:
Safety is of paramount concern to everyone involved in the shooting sports. One lax moment and disaster is likely to strike. This is especially true during an instructional session wherein the student is dividing concentration between listening to you and attempting to break targets and you are dividing your attention between observing the student, observing the targets, diagnosing the shooter's problems, loading the gun and releasing the targets. That division of concentration alone, even with an experienced shooter and instructor, can be the basis for a safety problem. Given the higher safety risks inherent in an instructional session, you, the instructor, are responsible for the safe conduct of the session and must assume a posture of "hyper-awareness" in order to prevent safety violations and avoid a potentially life-altering accident. This involves strict personal compliance with primary safety rules (below) as well as maintaining positive control of your student or group and the instructional session as a whole. Nothing less than 100% awareness and 100% compliance is required.

<u>Individual Safety Responsibility</u>
Instructors, during the course of an instructional session, have a higher level of responsibility for insuring a safe environment for themselves, their students, other patrons, shooters and range personnel. In addition to their personal compliance, instructors must ensure that the students under their care are 100% compliant as well. As an instructor on a sporting clays range, patrons and range staff will look to you to set an example and, on occasion, request your assistance. This is a lot of responsibility. You must remain vigilant and maintain a posture of "hyper-awareness"; guaranteeing safety for all concerned while at the same time adding value to the student.

The primary rules of gun, range and instructor safety are as follows:

A. Always keep firearm pointed in a safe direction.

B. Always keep finger off the trigger until target is called for.

C. Always keep gun unloaded until ready to engage targets.

D. Treat every gun as if it were loaded. Visually inspect chamber and barrel for obstructions.

E. Never mix shot shell ammo gauges
Note: Instructors will control ammo while teaching beginners (and at all times during the Level I Course).

F. Whenever possible, students should shoot from inside a stand or cage.

G. The action of a shotgun is to be kept open when it is in hand and student is not in the shooting stand. Actions may be closed on Over/Under shotguns when they are in a gun rack. Auto and pump actions should be kept open.

H. Gun carry: Over/Under shotguns should be carried with the action open in one of two ways: 1) with the barrels facing downward/forward and action resting on the shooter's forearm and at the side of the shooter, 2) with barrels facing downward/forward and action resting on the shoulder of the shooter. Semi-automatic shotguns should be carried "military style" with the action open, butt of the gun in the shooter's hand and barrel pointing skyward and resting on the shooter's shoulder. The action should face forward, away from the shooter, such that anyone in front of the shooter can see that the action is open. When moving a gun to or from the carry position to a gun rack or other location, the shooter should use care not to "sweep" bystanders or point the shotgun in an unsafe manner.

I. Instructor must stay within arms reach of the student. This proximity is particularly important if the instructor is working outside a cage or shooting stand.

J. Eye and ear protection are mandatory: Instructors will utilize and insist that their students and nearby spectators properly utilize hearing and eye protection.

Every instructor should have a safety plan. This amounts to a mental notebook regarding what to do in each shooting situation. Instructors should be well versed in the methods of controlling a student's gun movement. Always inspect a student's firearm prior to beginning the shooting part of the lesson. Some students will come to a lesson with either a borrowed gun or perhaps one that has been in storage for some time. A quick inspection of the student's firearm during your initial encounter is essential. "*Ole Betsy could have a charge in her." Additionally, the gun barrel/chamber should be inspected in the event of an unusual report (noise) to ensure that the barrel is free from obstruction or blockage.*

Talk with the student regarding the primary rules of gun safety…. and continue to talk with the student about the primary rules of gun safety throughout the lesson. Always control the ammunition when instructing beginning students. This means you, the instructor, need to carry the ammunition and issue it shot by shot. (Mandatory throughout the Level I Certification Course). Should you be in the position of instructing two students who are shooting different gauges (try and prevent this if you can) have two very distinct shooting bags to keep the different shells separated.

An area of safety that is sometimes downplayed involves what to do in the event of a misfire. First, reloaded shells are not permitted in NSCA Instructor Courses. Secondly, you, as an instructor, should understand that reloaded ammunition is a risk that should be avoided. The risks of a misfire and or barrel obstruction are increased many fold in such cases. Always have your students use "factory" ammo. In the event of a 'hangfire' or misfire, after waiting 30 seconds and holding gun securely with both hands and gun pointing down range, open the gun tilted away from instructor and pupil to eject cartridges away from people into a safe area. (Yes, even factory ammo can misfire) It is critical that the firearm be maintained in a muzzle-safe direction and in control of the student or you.

Students will come to a lesson with a variety of firearms. The instructor should discuss with the student the safe operation of the type of firearm the student has brought to the lesson. Should the instructor be supplying the firearm, the same will hold true. NSCA restricts the use of firearms in its instructor courses to modern guns and prohibits the use of exposed

hammer guns or other antique shotguns due to the potential hazards. Cartridges MUST be checked to be of the correct length to suit chamber depth. Additionally, you should make sure that the ammunition that the student carried to the lesson is appropriate for the firearm being used.

Concerning hearing protection, it is important to understand a few basic facts about hearing loss: 1) Hearing loss is cumulative. Damage to your hearing occurs over a person's lifetime. 2) Hearing loss can be somewhat hereditary. 3) A clay shooter using hearing protection (plugs or muffs) *reduces* exposure to potentially damaging sounds from the shotgun but no hearing protection can *eliminate* the risk of damage. 4) The only way to completely eliminate the risk of hearing loss or damage is avoidance of exposure to sounds exceeding 90 decibels. A shotgun blast emits impulse noise to the tune of 140 to 155 decibels each time you pull the trigger. This varies depending on the barrel length, shell, porting, etc. The very best hearing protection available will reduce these decibel levels by about 26 decibels; by 31 or 32 decibels if you wear double protection (plugs and muffs). Since most of us only wear a single hearing protection device (plugs or muffs, not both), this means that even if you use the best hearing protection available, you are still exposing yourself to around 120 decibels of impulse noise with each blast. So how can you best protect yourself and your students? 1) Wear, and insist your students wear, approved hearing protection. All hearing protection is rated with a number in decibels (dB) called a NRR, Noise Reduction Rating. The NRR for a given device is disclosed on the packaging or in the technical data available on the product. 2) Make sure you and your students properly install and wear hearing protection. Many shooters do not insert foam earplugs properly. Molded earplugs, whether electronic (ESPs) or silicone, will make proper insertion a bit easier. 3) Consider wearing double protection, particularly if you are an instructor or high-volume shooter. Sporting clays is a wonderful sport and we certainly want to encourage everyone to enjoy it, however, your obligation as a participant and instructor is to wear, and insist others wear, hearing protection properly.

Remember this: You are ultimately the person in control. Your student must obey your rules regarding safety or go home. No ifs, ands or buts!

Safety & Positive Control of Instructional Session and Student(s)

One of the most important first questions of a beginning instructor is often, "where do I stand and why?" As an instructor, we have to have (or quickly develop) eyes in the back of our heads. Well, not really. But you have to assume a posture of "hyper-awareness" about everything that is going on around you. First and foremost, your priority is safety: yours and your student's as well as the safety of other shooters, spectators and range personnel. When teaching novice and beginning students, that means you have to control the ammunition AND be in a position to control the student's gun. From a position immediately to the rear and just to the outside of the student (just to the right of a right-handed student and just to the left of a left-handed student) you are within a quick arm's reach of the receiver of your student's gun. There are any number of reasons why a student, while in the shooting stand, might make a sudden move with a loaded gun: They are excited about hitting a target, they are upset at missing a target, or they get distracted by your conversation, turn toward the golf cart and forget that there is a shell left in the chamber of their semi-automatic. Controlling your student's ammunition helps but there are still plenty of opportunities for the student to make a wrong move with a loaded gun. You, as the instructor, simply must be in a position to control the student's gun at all times in order to respond to any eventuality that might occur with a loaded gun. If you are too far away from the student to control the gun, you have put yourself, your student and everyone else around you in potential jeopardy.

Another good habit to get into as an instructor teaching novice students is to take control of the firearm during discussion times. This can and should be done gracefully. This alone will greatly reduce the possibility of an incident and actually give the student's arms a rest at the same time.

Another great reason to stay within arm's reach and immediately behind and to the outside of your student is that this is the best location from which to call a shot and diagnose flaws in the student's ready position and movement. You will find that this distance can be modified as you grow more familiar and comfortable with the student and the student's style.

Should you work with your student while *in* the stand/cage or *out* of the stand/cage? This is an area of discussion that frequently comes up in the Level I course and even in Level II. Some instructors like to move the student around a good bit during a lesson, particularly if the student is being rapidly successful. Some students, during their first lesson, feel confined by a stand/cage and are distracted from the task at hand. You may need to be a bit creative here. Before moving your student outside the stand, you should always make sure that the range owner is comfortable with it. At the beginning of a first lesson with a student, it probably makes sense to have the shooter in a stand. This just helps you, the instructor, maintain positive control.

Remember, while we require that you position yourself where you can control your student's firearm, you should try to maintain a *zone of comfort* between you and the student, particularly when teaching youth shooters and students of the opposite sex. A professional approach to this area of concern should be paramount. Also in this regard, never put your hands on a shooter without first asking permission and then try never to make physical contact with your fingers. Always use the palm or back of your hands. You will feel more comfortable with this as time goes on. However, do not get so comfortable that you allow these guidelines to relax. If you are trying to help the student "into" a proper gun mount or adjust the position of the gun butt in their shoulder, try to keep your hands on the gun without making physical contact. If this is unavoidable, ask for permission first. A strong suggestion here might be to demonstrate the mount in order to give the student a visual by placing the gun in your shoulder while the female student watches closely and you explain the positioning.

Please understand that these suggestions are presented in good faith in an effort to alleviate possible problems.

COMPETENCY #2: Assessing Eye Dominance
Task #2-1: Determine a shooter's eye dominance status
Candidate will check several students for eye dominance using a choice of methods and accurately assess the student's eye dominance status.

Condition: The Candidate will be presented with a shooting student in a field/range setting.

Standard: The candidate will correctly identify the student as one of the following to the certifying instructor:

1. Left eye dominant
2. Right eye dominant
3. Center Ocular / Center Vision
4. Primarily left / primarily right with some center ocular shift

Task #2-2: Employ appropriate response to eye dominance issues effecting performance

If the Candidate, together with the certifying instructor, determines that a student has cross-dominance, center vision or a significant center ocular shift and requires corrective action, the candidate will employ one or more corrective methods as appropriate:

1. Close the non-shooting eye prior to executing the shot
2. Shutter the non-shooting eye prior to executing the shot
3. Changing shoulders
4. Tape / spots / dots
5. Lip balm
6. White board marker

Condition: Given a student with a well-fitting gun and a confirmed eye dominance anomaly verified on specific targets.

Standard:

Occlusion of the non-shooting eye should be approached with extreme caution, whether the solution might be blinking or an occlusion device (device to interrupt or inhibit the non-shooting eye like tape, spot, dot, lip balm, etc.). **Binocular shooting, with no occlusion, is always preferable to one-eyed shooting.** The non-shooting eye plays an important role in feeding important target information to the brain. This target information guides the shooter's initial move to the target. Before advising a shooter that the long-term solution is occluding the eye or having them blink or shudder the non-shooting eye before executing the shot, every effort should be made to have the shooter apply intense binocular visual focus to the target. If, in consultation with the certifying instructor, the determination is made that occlusion, blinking or shuttering the eye is the best avenue for the shooter; the candidate will then properly and conservatively employ one or more of the above strategies to help the student. When applying an occlusion device (dot, occlusion foil, lip balm, etc.) the devise should be positioned on the shooting glasses such that the devise inhibits the ability of the non-shooting eye to see the front bead of the shotgun when the shooter has the gun fully mounted.

Discussion:

Among clay shooters, as well as instructors, there is perhaps more confusion and controversy surrounding the subject of eye dominance than around any other topic in our sport. Eye dominance is important because the dominant eye is "driving the train". The dominant eye drives the hands and placement of the gun to the target in clay target sports. Some shooters face challenges with their shooting performance because, for one reason or another, they have never had their eye dominance status accurately assessed and anomalies properly addressed. Thus, the student is precluded from reaching his or her full potential as a shooter. Most will agree that it is always preferable for a clay shooter to: a) shoot off the side of his or her dominant eye, and b) shoot "binocularly", with both eyes open and no occlusion (no tape, dots, etc.). Once past these two essential truths, the controversy begins.

A commonly held myth about eye dominance is that a person is either left-eye dominant or right-eye dominant, with no in-between. The truth is that only about a quarter of the population is solidly dominant in one eye or the other. The rest of the population has some degree of influence from the other eye. It is critical to note however, that this influence from the non-dominant or non-shooting eye (assuming the shooter is shooting from the side of the dominant eye) MAY or MAY NOT influence shot placement. Additionally, the degree

to which an eye dominance anomaly may effect a shooter's shot placement may vary throughout the day depending on the student's eye and mental fatigue.

The most important rule regarding eye dominance is, there are no rules…. except that a shooter should ideally shoot from the side of the dominant eye in order to maximize long-term performance. Eye dominance involves the neuro-pathways between the eye and the brain. The way in which each shooter responds to a clay target will be different because everyone's "visuo-motor system"[1], including the eyes, brain and body, work differently. It is not uncommon for shooters, or their well-meaning instructors, to put a piece of tape on the shooting glasses to help in hitting targets when the reason for the miss could be something else entirely. Corrective action should NEVER be undertaken by an instructor without: 1) testing the student, and 2) seeing the student attempt to engage targets, and 3) seeing the student miss on certain "telltale" targets on which eye dominance anomalies would normally cause a miss. **An instructor should never "assume" an eye dominance problem but should instead presume that the student is either mounting incorrectly or is not applying intense binocular focus to the target.**

For a beginning student, failure to apply primary and intense visual focus to targets is very common. A beginning student typically does not understand what it feels like to apply sharp visual focus to a target. During this "beginner phase" of a shooter's development, it is quite possible for an instructor to misdiagnose a student who is not applying sufficient intensity of focus to the targets. It is also possible to falsely diagnose a shooter with an eye dominance problem when the real issue is improper gun fit (typically excessive drop-at-comb). On the other side of the coin, there are some very experienced and influential figures in our sport that believe a shooter should NEVER occlude, shutter or blink their non-shooting eye for any reason. As a result, there are many shooters who, after years of struggling with unresolved eye issues, either quit the sport, develop unnatural strategies to compensate for their anomalies or settle for lower performance levels when they could be very happy and successful two-eyed shooters with some slight occlusion. It is also important to realize that, even if a shooter has significant eye dominance issues, it is sometimes possible to "retrain" the neural pathways of the brain using eye exercises and working with a professional vision therapist. This, however, is beyond the scope of this course.

As you assess and work with more students of different genders and ages, you should keep a few other phenomenons in mind with regard to eye dominance. First, eye dominance can change throughout a person's lifetime. For most of the population, eye dominance status tends to stabilize at some point during puberty and may then change again in the persons late 40s into ones 50s. Ladies are more likely to be center ocular or have center ocular drift than men. While some shooters have the ability to train the brain to adjust to interference from the non-shooting eye, many cannot. As a result, not everyone can shoot well with both eyes open.

We all know that we will discover eye dominance problems in our students and resolving them is as much an art as it is a science. We do not want to make the student feel like they are different in a negative manner. Nor, if we confirm that the student has an eye dominance anomaly that requires some corrective measure, do we want to "over-correct". The short-term, easy fix is not always the right way for the student, long-term. Our ability to accurately assess and, when necessary, creatively and constructively assist the student, will mean the difference between success and failure.

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[1] Vickars, Joan. The Quiet Eye in Action: Perception, Cognition and Decision Training. Human Kinetics, 2007. Print.

Testing for Eye Dominance:
You should always start each lesson by administering a simple eye dominance test. While you will NEVER take any corrective action based solely on the test, and without seeing the student break (or miss) specific targets, the test results will provide you, the instructor, with invaluable information about your student. This information could help you eliminate eye dominance as the possible cause of a pattern of misses that creeps up on a certain target presentation during your lesson. Remember, the results of an eye dominance test may or may not be a predictor of shooting performance and is only a piece of diagnostic information. IT IS CRITICAL that we avoid drawing attention to the issue of eye dominance or any anomalies we might find with the student. Even suggesting to the student that there might be any issues with their eye dominance can cause them to second guess themselves as they are executing their shot.

THE ASSESSMENT
There are a number of ways to check for eye dominance status. Some, like the card test, work well for assessing whether the student is MORE right-eye dominant or MORE left eye dominant but are not as good an indicator of HOW DOMINANT a shooter is in one eye or the other. Knowing HOW dominant your student's dominant eye is may become very useful to you as each lesson progresses. Remember, the result of an eye dominance test alone is never a good predictor of whether or not the student has an issue. It is, however, a helpful piece of diagnostic information.

Card Test -
The most common method of testing for eye dominance, but not always the most informative method, is the "Card Test". For self-testing however, this is the preferred method. Take an 8½" x 11" sheet of paper or a 3"x5" index card and cut a ¼" hole in the center. Have the student hold the paper in front of them with arms extended and look through the hole with both eyes open focusing on a spot at a distance or on an adjacent wall. Have the student slowly draw the piece of paper towards their face, while maintaining focus on the spot or object. Again, both eyes should remain open. As the paper nears the face you will notice that it is being directed more towards one eye than the other. When the paper finally comes to rest against the face it should be directly over the *more* dominant eye.

Pointing Test -
One of the more informative ways for an instructor to perform an eye dominance check on a student is the "Pointing Test." Instruct the student to put his or her shotgun in the gun rack and shooting glasses to the side. Position yourself about 6 feet away from and facing the student with right index finger pointing skyward and touching the lower eyelid of your right eye, with your left eye closed (See Image A). Ask your student to point at the very tip of your right index finger while looking only at the tip of your finger. Have him/her point at the tip of your finger with the index finger of one hand then the other, rapidly alternating back and forth but always returning each hand to the side of the body before raising the other hand. As you look over the tip of your finger, observe the alignment of the student's index fingers with their eyes. The diagnosis becomes clear. If the student's index fingers align with the student's right eye, then the student is right-eye dominant (see Image B). If the student's index fingers align with the student's left eye, then the student is left-eye dominant (see Image C). If the student's index fingers align somewhere between the students' right eye and nose, the student is said to be right-eye dominant with center ocular shift. If the alignment is somewhere between the left eye and the nose, the student is said to be left-eye dominant with center ocular shift (Image D). Finally, if the student's index fingers line up perfectly with the bridge of the nose, with no favoritism to one side or the

other, the student is said to be center ocular (Image E). Unlike the Card Test, the Pointing Test not only indicates which eye is *more* dominant than the other, but also *how dominant* the dominant eye is. The closer the shooter's index fingers align toward the nose and away from one eye or the other, the more likely it is that the shooter's gun placement may be negatively affected.

So, what does this mean? **Again, an instructor should never "assume" that the shooter has an eye dominance problem.** At all costs, avoid making the student feel weird, subconscious or abnormal. After you give them a quick test, give them a "thumbs up" and say, "looks great!" Simply note your findings and move on to gun fit. Again, you should NEVER take any corrective action until you see the student shoot actual targets. It is quite common for students, with significant center ocular tendencies, to have NO ISSUES breaking targets, even those targets that are most likely to engage the non-dominant eye. In these cases, the familiar rule applies: "If it ain't broke, don't fix it." However, shooters who have center ocular shift often have challenges engaging targets that come from the non-dominant side so the mere awareness of the anomaly may help you identify the cause of a consistent miss on a particular target presentation during your session. On the other side of the coin, a student may test with a miniscule amount of center ocular shift yet have a terrible time with crossers from their non-shooting side or outgoing targets emerging from high and behind, off their non-shooting shoulder.

Now what? Assuming your testing goes well, your student should be more dominant on the same side from which he/she shoots. If this is not the case you have a few decisions to make and some work to do. Let's look at a few scenarios.

Scenario #1 – Cross Dominant (Chris)
Chris told you that he is right-handed yet the card test indicated that he is left eye dominant (If you used the Pointing Test, Chris' index fingers lined up with his left eye). We now have a situation: cross dominance. You have several options available to you. First you can talk with Chris about changing his shooting side over to the left side. This means that Chris will literally be a beginner, no matter how much he has previously shot. While switching Chris over to the left side may be the best thing to do, it will take some work on his part. If he is a bird hunter who hunts a few times during the season and rarely shoots his shotgun until just before each season, this may be far too much work for him. You may also run across a student who is very "one-sided" meaning that the student is resistant to changing sides. In these situations, your best option may be let the student continue to shoot from the non-dominant side but control the use of the dominant eye. In Chris' case, this might be accomplished by having Chris wink his left eye after he initially acquires the target and before he delivers the shot. Or, you can assist him by "occluding" or covering his left eye using some tape, a dot, lip balm or creating a dot pattern on his shooting glasses using a white board marker.

There has always been a great deal of discussion among instructors regarding the appropriate "fix" for cross dominance. The proper corrective action may be different for one shooter than it is for another. As stated above, if your shooter is brand new, it might well be prudent to try and convince the shooter to move to the side of the dominant eye. The ability of younger shooters to adapt to this situation is really amazing. A shooter with a bit more age and/or of certain personality type may be less receptive to this suggestion. If this is the case, you will need to revert to mechanical modifications for the "fix" (winking or an occlusions devise) in order to limit the influence of Chris' non-shooting eye while the gun is mounted and moving to the target.

For the following two scenarios, the solution may be even less straightforward.

Scenario #2 – Center Ocular / Center Vision (Kathy)
You discover that Kathy, a right-handed shooter, is center ocular (has center vision). You know this because when you tested her using the card test, as she drew the paper back to her face, the hole in the card drew directly back to the bridge of her nose. (If you used the pointing test, Kathy's index fingers lined up between her eyes and directly to the bridge of her nose. We now have a "center ocular" or "center vision" shooter. What do you do? NOTHING YET! Her center vision MAY BE NO ISSUE. Check Kathy's gun fit and start shooting!

Scenario #3 – Right eye dominant with Center Ocular Shift (Mark)
Our third scenario is one that will take some time and experience for you to understand how to address. Mark is a right-handed novice shooter. In administering the card test to Mark, he pulled the paper to his right eye, although it seemed to waiver a bit on the way there. (In using the pointing test, Mark's fingers lined up just inside of his nose, between his right eye and his nose.) This tells you that Mark is MORE right eye dominant and should be shooting from his right side, which he does. He likely has some "center ocular shift" however. What do you do? NOTHING YET! His center ocular shift MAY BE NO ISSUE. Check Mark's gun fit and starts shooting!

For Kathy and Mark, their situations are not straightforward. Remember, the first rule of eye dominance is, there are no rules except that a shooter should be shooting from the side of their dominant eye (or more dominant eye). Kathy is more likely to encounter a problem with her shooting particularly on any targets coming from her left side to include left to right crossers, left to right quartering and high outgoing targets off the left shoulder. When you start shooting with Kathy, you may notice that she tends to roll her head over the comb of the gun. This is very common in center ocular shooters. As for Mark, he MAY show a pattern of misses on certain "telltale" targets: missing high and behind on left to right quartering targets and high outgoing targets off the left shoulder, but you will not know for sure until you start him shooting and have him engage a variety of targets.

In the case of shooters like Kathy and Mark, you must be thoroughly convinced that you have eliminated any other possible explanations for their pattern of misses on certain types of targets before using an occlusion devise or recommending that they wink. Again, other issues could be masquerading as an eye dominance issue such as insufficient visual focus on the target; gun fit or simply hold point.

When applying an occlusion device, like a dot or lip balm, the devise should be as small as possible (but no smaller than 11mm – the average size of the human iris) and positioned on the shooting glasses such that the devise inhibits the ability of the non-shooting eye to see the front bead of the shotgun when the shooter has the gun fully mounted.

We will be discussing eye dominance and the various methods you can use to help your students during the course.

Image A
(Instructor Testing)

Image B
(Right-eye Dominant)

Image C
(Left-eye Dominant)

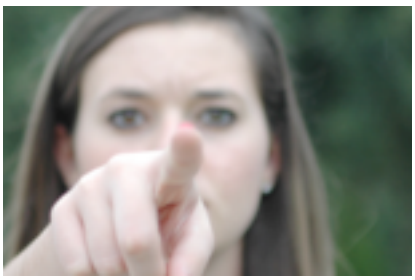


Image D
(Left-eye dominant with center shift)

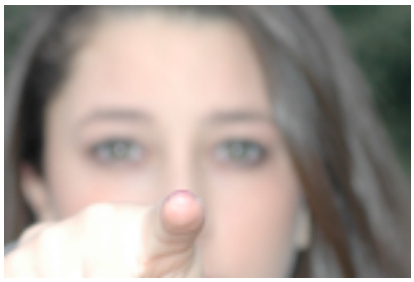


Image E
(Center ocular / Center vision)

COMPETENCY #3: Assessing Gun Fit
Task #3-1: Check Gun Fit - The Instructor Candidate (CANDIDATE) will recognize the proper and improper fit of a shotgun and take corrective action to ensure that the shooter is paired with a properly fitting shotgun.

Condition: The Candidate will be presented with a student and a shotgun that the CANDIDATE has PHYSICALLY CHECKED to ensure that the gun is unloaded.*

Standard:
1. The Candidate will personally and visually verify that the student's shotgun is unloaded.

2. The Candidate will ask the student to mount his/her shotgun to a specific spot in the distance as the student's visual attention is directed to that spot.*
3. The Candidate will coach the student into a good ready position, to include proper posture and balance, and ensure that the student properly mounts the shotgun (also see Task 4-1).
4. Candidate will inspect the shooter from the side to verify the proper length-of-pull (tip of nose is approximately two fingers – 1 to 2 inches - behind the base knuckle of the thumb on the trigger hand).
5. Next, the Candidate will inspect the shooter from the end of the muzzle to verify proper cast and drop-at-comb by observing the exact position of the student's eye vis-à-vis the barrel rib such that the lower edge of the student's iris is positioned on or above the same horizontal plane as the top of the barrel rib, and in near proximity to the center of the rib.
6. If the shotgun does not fit the shooter, the Candidate will take measures to ensure that the student has a properly fitted shotgun provided that either the proper equipment (e.g., slip-on butt pad extension, comb riser) or an alternative shotgun is available.
7. Candidate should be able to discuss and describe the four basic fit dimensions:
    a. Length of pull
    b. Drop-at-comb
    c. Cast
    d. Pitch

Note: At Level I, and with novice students, we are interested in **BASIC** fit. A novice student will typically lack a consistent mount so an exact fit is not necessary and sometimes impossible. Correcting a minor fit flaw is fine; however, we should leave the true fitting to professional gun fitters.

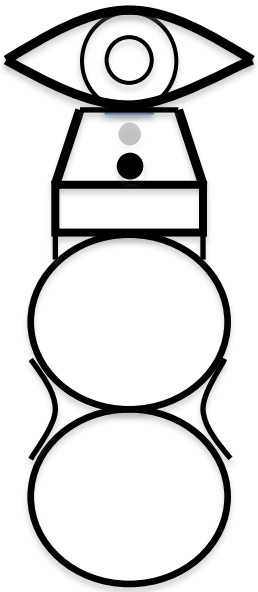
* The Candidate will ensure compliance with local range safety rules regarding the closing of a gun in a location other then the shooting stand.

Discussion:
Aside from visual focus, good gun fit may be the most important facet of shotgun shooting. When the shotgun fits, the gun shoots where the shooter is looking. A shotgun that does not fit the shooter correctly may be uncomfortable and perhaps even painful to shoot. Such a poor fit can certainly slow a student's development and lower their enjoyment level not to mention causing inconsistencies when attempting targets. Your ability to assess basic gun fit and "doctor up" a shotgun enough to achieve a "close enough" gun fit for your student may mean the difference between success and failure for both you and the student.

Again, the purpose of shooting with a well-fitting gun is three-fold: 1) comfort, 2) visibility, so the student can see the target over the gun, and 3) so that the shotgun shoots where the shooter is looking. In shotgunning, unlike rifle shooting, the shooter must naturally raise the gun to the cheek while maintaining sharp visual focus on the target. Instead of visually lining up the "sights" with the dominant eye, barrel-eye alignment must be achieved naturally, without visual verification during the mount.

Point-of-aim ("POA") is defined as the spot or point on which a shooter is visually focused at the moment of shot execution. Point-of-Impact ("POI") is defined as the center of the two-dimensional pattern created by the shot (BBs) on a flat surface, such as a pattern plate, when a shotgun is fired at it. The objective of proper gunfit is for the POI to be precisely on, or slightly above, the POA. In other words, we want the gun to shoot where the shooter is

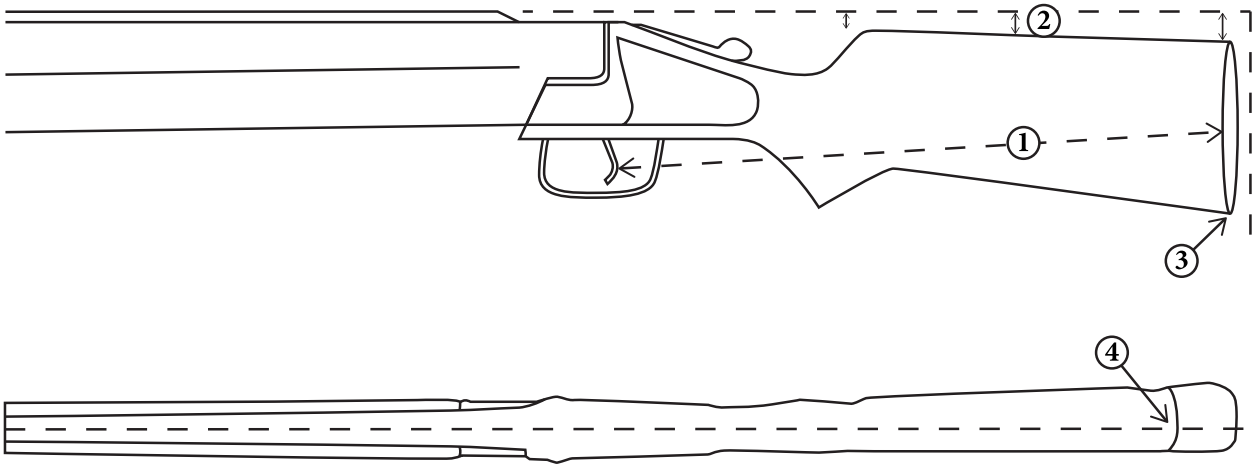
Minimum height for the Iris



looking. The POI is usually expressed as a comparison to the POA. For example, when we say that a shotgun "shoots 50/50" it means that the distribution of the shot is equally divided vertically above and below the POA. So, if a shooter stands 16 yards away from a pattern plate, focuses on the center point of that patten plate and fires, the shot will make an impression on the pattern plate that can be described by the percentage of shot that appears above and below the POA.

When a shooter with a well-fitting gun mounts a shotgun properly, the iris (colored portion of the eye) is centered horizontally on the barrel rib, and the bottom edge of the iris is at or above the horizontal plane of the rib (see diagram). This is the essence of a fitted shotgun. For an experienced shooter with a consistent gun mount, a formal gun fitting and investing in a customized stock that precisely fits the shooter makes great sense. A gun fitter will typically observe the shooter using an existing stock, a pattern stock or an adjustable gun such as a "try gun" and make adjustments to bring the shooter's dominant eye into the proper position over the gun. Because a novice or beginning shooter has not normally developed a consistent gun mount, the placement of his or her cheek and dominant eye on the gun tends to be inconsistent and does not to come to rest in the same position on every gun mount.

So, what can you, as an instructor, do for a student who comes to you for a lesson with an ill-fitting gun? The short answer is, evaluate gun fit at the onset of your lesson and attempt to get your novice student shooting a gun that fits "close enough". We will be demonstrating in detail the proper way in which to evaluate gun fit during the course and you will be evaluating the gun fit of your students during the second half of the course. One of the most critical elements of evaluating gun fit is making sure that your student has a proper gun mount, with proper stance, posture and balance. During the Level I Course, we frequently have candidates diagnose a gun fit problem when the real problem is improper mount, posture and balance.



① **Length of Pull**
② **Drop at Comb**
③ **Pitch**
④ **Cast**

While there are almost a dozen or more detailed dimensions that stock makers use to craft a custom stock, we are concerned only with the four major dimensions to achieve a "close enough" fit. They are "Length of pull", "Drop-at-comb", "Pitch" and "Cast".

Let's discuss each and discuss why they are important. It is important to note that most "off the shelf" guns are designed for "Mr. Average": a 5'10" male, weighing between 160 lbs. and 180 lbs. and with a size 40 suit size. If you happen to have a student that falls significantly out of that range, you will need to have a contingency plan – particularly for ladies and youth shooters.

Length of Pull (LOP):
LOP is the measurement from the face of the trigger to the back of the butt plate or recoil pad. While this measurement can be taken at three points (the heel, the tow or the butt), when the term "Length of Pull" is used it commonly refers to the measurement to the middle of the butt. If a gun is too short, the shooter's nose is too close to the base knuckle of the thumb on the shooter's trigger hand. If a gun is too long, the shooter will find the gun unruly and difficult to handle and mount. Perhaps most importantly, a student shooting a gun that's too long will experience more felt recoil and more than likely be the recipient of a nice purple welt on their arm and shoulder. Ideally, when the shooter properly mounts a well-fitting shotgun from a proper ready position and with good balance and weight distribution, the tip of the shooter's nose should be about 1" to 2" from the base knuckle of the thumb on the shooter's trigger hand. While length of pull certainly has an impact on the position of the shooter's eye above the rib, it also has a significant impact on the shooter's comfort. Most "off the shelf" guns have between a 14-3/8" to 14-5/8" LOP and will generally fit a person that's about 5'10" tall. Making a gun a bit longer to fit a taller student can be easily accomplished by using a slip-on or Velcro butt pad extender. If your student is a 5'2" female, you might want to start looking for a shorter gun before the day of the lesson.

Drop-at-comb:
This is a measurement from an imaginary line or plane that extends along the top of the shotgun's rib and over the top of the peak and heel of the comb. Like LOP, drop-at-comb can be measured to three locations (the peak, the heel, and the center of the comb, aka "the face"). This dimension, together with the shooter's facial dimensions, determines where the shooter's eye comes to rest over the horizontal plane of the rib when fully mounted to the shotgun. If the drop-at-comb is excessive, the shooter's eye may fall below the rib as the gun is mounted, causing the shooter to visually "disconnect" from the target as the shot is executed. If, on the other hand, the drop-at-comb is too slight for the shooter, and the shooter's eye comes to rest too far over the rib for that particular shooter, the gun will shoot high. It is important to note that there is no ideal measurement for the distance between the top of the rib and the bottom of the shooter's iris when he is fully mounted to the gun. This is because one shooter may see more or less subconscious "float" than another shooter. By "float" we are referring to the perceived distance, from the shooter's perspective, between the top of the rib and the target at the precise moment that the shot is executed. There are a good number of very notable shooters who use a float distance that is much larger, with the iris positioned much higher above the rib, as compared to other shooters. This wide variation in float from one shooter to another simply reflects the difference in the way the brains of different shooters process visual imagery. So, while the proper vertical position of the eye abo e the rib varies from shooter to shooter, all shooters must be able to see properly over the gun. Therfore, the diagram above depicting the proper position above the rib is the minimum standard. The bottom of the iris should not fall below the plane of the rib when the gun is fully mounted.

Most sporting clays shooters prefer one of two Points-of-Aim (POA) settings as determined by the distribution of shot or shot pattern on a patterning board: 50/50 (half of the pattern above the POA and half below) or 60/40 (60% of the pellets in the pattern will be above a horizontal line transecting the POA and 40% below). In other words, the center of the shot pattern of the gun set to shoot 50/50 will be on the POA, whereas the center of the pattern of the gun that shoots 60/40 will be higher than the POA. For those occasions when you have a student with a high cheekbone, and the shooting eye falls below the rib when the gun is mounted, you might want to add a comb riser to your range bag.

Cast:
This is the horizontal "bend" or cast of the stock off of center. A gun that has "cast off" has the stock bent or "cast" away from a shooter's face. "Cast on" means that the stock is bent or "cast" toward the shooter's face. It is important for a shotgun to have the proper cast so that the shooter's shooting eye is properly aligned over the center of the rib when the shooter is fully mounted to the shotgun. If the shooter's dominant eye is in position over the center of the sight plane of the shotgun, the pattern of the shotgun (or Point-of-Impact, a.k.a. POI) will be on the same vertical plane that the shooter is looking (sometimes called "point-of-aim", although this term can be misinterpreted because we don't ever want to "aim" a shotgun). If, when the shooter mounts the shotgun properly, the shooter's dominant eye is too far to the right of the centerline of the rib, the gun will pattern to the right. If the eye is too far to the left, the gun will pattern to the left. In the event you get a student with a face like the Pillsbury Doughboy or one with narrow facial structure, there is not much you can do unless you happen to have a shotgun with an adjustable comb. Again, for novice shooters, "close enough" may be good enough.

Pitch:
Pitch is the angle of the gun butt compared to an imaginary line that is perpendicular to the line of sight or the top of the barrel/rib, and is measured in degrees. Pitch determines how the butt stock will conform to the shoulder pocket of the shooter. Ladies, and men with larger pectoral muscles (like a weight-lifter), tend to need more pitch. Typically, the problem is too little pitch rather than too much, which causes the toe of the butt to stick into the shooter's shoulder, sometimes painfully so. Novice shooters have a tendency to lean back making the pitch problem look worse than it really is. If you can adjust the shooter's posture a bit such that the student is in a good stance with "nose over toes," this may help alleviate the problem (see "Stance" in the section on "Teaching the Fundamentals").

It is important to note that LOP and Pitch are factors that contribute to a shooter's comfort and do not have any effect on POI. Drop-at-comb and cast, on the other hand, will effect the POI.

COMPETENCY #4: Teaching the Fundamentals

Task #4-1: Teaching the Ready Position
The Candidate will coach the student into a good Ready Position (starting position)

Condition: The candidate instructing a student in a shooting stand or otherwise controlled area with the student having a reasonably well-fitting shotgun.

Standard:

1) Candidate practices "verbal conservation" and does not talk too much - Effectively and readily uses silent instruction.
2) In observing the Candidate work with the student, the certifying instructor concludes that the candidate understands the appropriate location/positioning of each of the following for the specific target or target pair that the student is engaging:
    A. Break point (BP)
    B. Stance / balance
    C. Hold Point (HP)
    D. Visual Pick-up Point (VPP)
    E. Barrel Orientation
    F. Draw length (distance between comb and cheek)
        1. Pre mount/high gun – no draw (sometimes best for beginners)
        2. Low gun – full draw
        3. Somewhere between pre-mount and low gun - Half draw

Task #4-2: Teaching the Fundamentals of good shot execution

The Candidate will successfully communicate the fundaments of good shot execution to students by emphasizing "EYES, MOVEMENT and TRUST" as it applies to the specific target or target pair the student is engaging:

1. EYES - Fixing on the target visually (intense visual focus) through the break point.
2. MOVEMENT – Mount and movement of the shotgun to the target, to include:
    a. Head still (nose moving with the target)
    b. Forward hand moves first
    c. Move at the appropriate pace
3. TRUST - A well-timed execution of the shot by trusting the natural hand-eye coordination (student is executing the shot when the student has sharp visual focus on the target).

Condition: The candidate instructing a student in a shooting stand or otherwise controlled area with the student having a reasonably well-fitting shotgun and engaging targets.

Standard:

1) Candidate practices "verbal conservation"; does not talk too much and delivers only that amount of verbal information necessary to affect the proper execution.
2) Candidate effectively and readily uses silent instruction to accomplish the task.
3) Candidate only addresses the student's more significant opportunities to improve (one or two AT MOST) so as not to overwhelm the student.
4) Candidate encourages the student when and where necessary to:
    a) Apply sharp focus to the target
    b) Head still (moving with the target)
    c) Move with the front hand first
    d) Move at an appropriate pace
    e) Execute the shot when good visual focus on the target is achieved at the break point and when student has good contact between the comb and the lower cheek ledge.

Discussion:

Teaching the fundamentals of good shotgunning is perhaps the most important aspect of what we, as instructors, must do to get our students to break targets (or more targets). Just as every student learns differently and at a different pace, every student has different physical aptitudes. For some shooter's, getting the body to conform to what the brain is telling it to do may be easy. For others, it may take time. Also, every student is built differently and may have different physical limitations and handicaps. All this should be

taken into consideration when coaching a student into the proper ready position and movement to the target.

The best thing you can do for a novice shooter is to start breaking targets early and often. One of the worst things you can do is to overwhelm a student with too much information. LESS IS MORE. When teaching a beginning or novice student, "feed them" the fundamentals in small "bite-sized" portions. Shooters do not need to know all of the fundamentals of shotgunning in order to break targets. You, as an instructor, should know the fundamentals so that you can use them judiciously and deliver them in easily digestible doses.

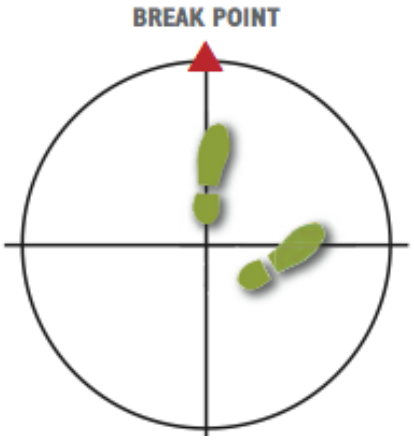
Ready Position:

The ready position, or starting position, is the position from which the shooter calls for the target and starts his/her move toward the break point. The ready position should always be determined by the anticipated break point of a target or target pair. The **Break point** is the anticipated spot at which the student feels they can best see, and most readily break, the target. Give some latitude to students regarding their break point selection. Each student will evaluate the optimal break point differently because every shooter is unique in terms of their visual acuity and the speed at which they can acquire and move a shotgun to a clay target. Students who are more controlled in their delivery may establish a break point that is further along the target's flight line; while a more attuned shooter may have a break point earlier in the flight of the target.

A consistent ready position is one of the keys to consistent performance and scores. If, for a given station, a shooter starts his/her movement from the proper ready position for all three or fours pairs, there is a much higher probability of a consistent performance. The elements of a shooter's Ready Position are:

- Stance – the position of the feet and the body over the feet.
- Hold Point –position of gun from side-to-side (along horizontal plane).
- Barrel Orientation – angle of the muzzle to the target line (along vertical plane).
- Draw Length - the distance between the comb and the cheek.
- Visual Pick-up Point – where the eyes are oriented.

Stance is the positioning of the feet, and the body over the feet, in relationship to the target area. The basic shooting stance for shotgun shooting is similar to any other fundamental athletic stance used in sports such as boxing, golf, tennis, football and martial arts. It is important to recognize that the ideal stance for an individual shooter may vary slightly from that of another shooter based on the shooter's build, athleticism and natural stance. It is also important to note that, throughout the history of shotgun shooting, prominent instructors have advocated different approaches to stance (e.g., Percy Stanbury/West London versus Robert Churchill). The key objective for a good stance is for the shooter to experience no tension at the breakpoints of a target or target pair and that the shooter be well balanced over his feet. The shooter should stand comfortably with feet about shoulder width apart, head forward ("nose over toes"), shoulders directly over the balls of the feet and waist slightly rearward ("buckle back") such that the shooter is well balanced. The knees should not be locked, but should not be overly bent either. The shooter's weight should be distributed somewhere between 60/40 and 50/50 (i.e., 50% of the weight on the left foot and 50% of the



weight on the right foot). This stance provides a comfortable starting position from which the student can move with the target. *This is a **demonstration** area that is always best learned through repetition (tactile-kinesthetic…i.e., repeat, repeat, repeat.)* Proper stance is important so that the shooter can comfortably move from the starting position to the break points of both targets with a minimal amount of bodily tension, or "torque", at the break points. Assuming the break point of a target is at 12 o'clock, the feet of a right-handed shooter would normally be positioned with the left foot between 1 o'clock and 2 o'clock and the right foot at between 2 o'clock and 3 o'clock with balls of the feet approximately shoulder-width apart. For the left-handed shooter, the feet would normally be positioned with the right foot between 10 o'clock and 11 o'clock and the left foot between 9 o'clock and 10 o'clock. The tendency of a novice shooter is to set up a bit too oblique to, or turned away from, the break point causing them to either over-rotate or lose balance through the break point.

We should not necessarily "jump on" a student for bad stance if the shooter is breaking targets with a reasonably adequate stance. Let him/her shoot. The shooter will eventually have difficulty on a target that will provide the appropriate "teaching opportunity" for you to coach the shooter into a better stance. Remember, building initial confidence in the novice shooter is more important than immediately correcting every minor flaw and, because assuming a proper stance is best mastered through repetition. Practice makes perfect. Many novice students will slip back into poor posture with head back and waist forward. Using gentle reminders as the student is assuming the ready position will help: "boxer's stance", "nose over toes", "nose forward" and "buckle back" work quite effectively. After a few reminders, the student will start to understand what the proper shooting stance feels like and repeat it without prompting.

Hold Point is where the muzzle is placed horizontally (side to side) when the bird is called for. Proper placement of the hold point enables the shooter to achieve the proper amount of gun movement to the break point. If the hold point is too close to the break point, the student may be unable to achieve proper "flow" with the target. Too close to the trap, and the shooter will generate excessive gun movement to the break point. The tendency of a novice shooter is to orient his/her body to the hold point instead of the break point, causing the shooter to over-rotate at the break point. Another tendency for novice shooters is to establish a hold point that is too close to the trap, causing the target to outrun the shooter's eye and/or shotgun. This will often cause the shooter to move the gun erratically to the target.

Barrel Orientation, or muzzle angle, is where the muzzle is placed vertically (up and down) in relationship to the target line when the bird is called for. Proper placement enables the shooter to achieve the proper approach to the break point without excessive "barrel wobble" or "see-saw" movement to the break point. A ready position with a barrel orientation that is too high will result in the muzzle blocking the target line and requiring the shooter to lower, then raise, the muzzle to the target line in order to see the target clearly. This is known as a barrel wobble or seesaw move. On the other hand, a ready position with a barrel orientation that is too low may result in excess upward movement through the break point, causing in a miss over the top of the target.

Draw Length is the distance between the comb of the stock and the shooter's lower cheek ledge when in the ready position. It may be best to start a beginner from a high gun position (zero draw length) to compensate for the fact that the beginner's mount and movement is not yet efficient enough. Starting from a high gun position may help the beginning shooter to mount and move to the target more smoothly and better facilitate sharp visual focus through the break point without interruption.

Visual Pick-up Point is the visual transition point, where the target transitions visually from a blur to a solid. It is the first spot along the target line, nearest to where the target emerges from the trap, where the target may be viewed as a solid object *and not* "a blur". Positioning of the eyes on this point allows the shooter to see the target emerge from the trap as early as possible out of his/her peripheral vision, yet visually acquire and merge with the target comfortably. Merging the eyes with the target smoothly allows the shooter to more easily achieve sharp visual focus or "a fix" on the target prior to and through the break point. Research into the "gaze control"[i] of elite athletes indicates that acquiring the target at the point at which it can first be seen clearly is critical to higher performance[2]. "The blur" we see with our peripheral vision, as the target emerges from the trap and approaches the visual pick-up point, is still used by our brains and is critical to the accuracy of our initial burst of movement from the hold point. However, the eye delivers the most important "target guidance" information to the brain during the interval of sharp, fixed visual focus. As a result, getting our eyes in the best position to visually fix on the target requires that our visual pick-up point be close enough to the trap to see and use the "blur", but not too far back towards the trap whereby the target "beats" or outruns our eyes.

The Stance, Hold Point, Break Point(s), Draw Length and Visual Pick-up Point for a given target or pair of targets should be based on the shooter's analysis of the specific character and presentation of the target or target pair (…or the instructor's analysis, if the student doesn't yet have the ability to effectively plan the execution of a target or pair). A novice shooter may lack the experience to determine the proper hold points for example. You, as the instructor, will most often be getting the student in a position to succeed which, in most cases, means starting from the correct ready position. Starting from the right place makes a broken target much more likely. Again, repetition is the key.

Shot Execution:

EYES – Visually "fixing" on a target, applying intense visual focus is quite different from "looking" at a target. In order to optimize our natural hand-eye coordination, and our ability to accurately point our shotgun at a target in such a way as to intercept it, we must visually "fix" on the target, applying sharp visual focus. In Joan Vickar's book, the Quiet Eye, she suggests that peripheral vision is a critical part of the "visuo-motor system[2]" in that it guides our hands in the initial phase of recognizing and initiating movement to a moving target, but it is the sharp visual focus, using only 3% of the visual field, that is critical for precise interception of a moving target such as a 90-mph fastball screaming across home plate. At the visual pick-up point, a loose peripheral focus is beneficial because it allows our eye to acquire and smoothly merge with the target. In order to feed the most critical target guidance information to the brain however, intense visual fix on the target is crucial.

Many newcomers to clay target sports don't really understand what *intense* visual focus on the target feels like. Don't assume that, when you ask the student to focus intensely on the target through the break point, that the student understands what you mean. Take the opportunity to show the student how to focus on the target, perhaps without the distraction of a shotgun in the hands. Sometimes, encouraging the student to focus on a "dime size piece" on the target will help the student understand the visual intensity required to reliably

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[2] Vickars, Joan. The Quiet Eye in Action: Perception, Cognition and Decision Training. Human Kinetics, 2007. Print.

break targets. That is not to say that you can't break a more forgiving target with loose peripheral focus, but sharp visual focus is more likely to result in a broken target. Fixing on a target is more likely to result in a "puff ball", or cloud of dust, whereas loose lazy focus is more likely to result in a loose break of the target. Just as in baseball, coaches encourage batters to "focus on the threads," so too a shooter should "focus on the dime" of each target. Peripheral focus at the visual pick-up point is important because it gets the hands and gun initially moving in the right direction. But intense visual focus on the target through the break point is required to break targets reliably and consistently.

MOVEMENT – Mount and movement of the shotgun to the target includes:

1) READY POSITION
2) HEAD STILL (moving the head with the target)
3) FRONT HAND MOVES FIRST
4) MOVE AT A COMFORTABLE PACE

Unless shooting from a pre-mounted position, the process of mounting and moving to the break point of a target should be executed as one fluid movement. Keeping the head moving with the target enables the eyes to focus with more intensity. One way to convey this concept is to get a student to focus on a very small object at a distance, and then jump up and down while trying to maintain that focus. The student will see that it is much easier to apply sharp visual focus on a distant object with the head still and oriented on the object. Moving the front hand first and keeping the weight of the gun in the hands will allow the hands (and the shotgun) to respond more freely to the signals being transmitted by the brain and nervous system. A shooter with a shotgun crammed into the shoulder while attempting to move to a target is like a batter in baseball holding the butt of the bat in his hip. The bat, or the shotgun in this case, is not nearly as responsive to the signals from the brain. Lastly, the pace or movement speed of the gun should be at a comfortable pace as compared to the target. A shooter swinging a shotgun wildly in an attempt to intercept a target will meet with only limited success. The shooter's eyes are drawn off the target and onto the barrel…. the closest, fastest moving object in the visual field…making it impossible for the shooter to apply intense visual focus to the target. The best and most reliable way to achieve success in sporting clays for the overwhelming majority of shooters, particularly novice shooters, is to establish proper target "lead" by achieving sharp visual focus on the target through the break point and allowing the "on-board computer" to establish the lead. Another critical element of proper movement that frequently gets overlooked is the relationship between the line of movement and the target line. It is critical that the shooter maintain the connection between the eye and the target through the break point in order to maintain an uninterrupted flow of target information to the brain. There will be times when the target setter forces the shooter to occlude or cover up the target through the break point (e.g., springing teal). Every attempt should be made to preserve the connection between the eye and the target through the break point. This usually means keeping the barrel just below (in the case of a crossing or quartering target) or off the target line until the gun reaches the break point. This can most often be accomplished by approaching the break point at a slight angle off the target line.

TRUST - A well-timed execution of the shot usually indicates that the shooter is seeing the target clearly and trusting the sub-conscious (hand-eye coordination) to put the gun in the right place to break the target. Standing behind the student, you can get a sense of the student's shot rhythm. Does it "feel" to you as if your student is executing the shot at the precise moment of sharp visual focus? Or is he trying to "make the picture look right"? Did the student kill the target at the planned break point? Do you see the student's muzzle moving deliberately to the target? Or do you see the barrel doing a bit of wiggling on the way to the target, as if the student is aiming? If may take a bit of practice, but you should see the student move directly from the hold point to the break point and execute the shot

without hesitation when sharp visual focus on the target is achieved. Depending on the experience of the shooter, having a good plan (hold point, visual pick-up point) and executing a shot based on that plan, will help the shooter's confidence level and thus their "trust" and shot execution.

COMPETENCY #5: Understanding Lead and Lead Types

Task 5-1: Candidate will demonstrate the ability to identify and teach five primary lead types used by and taught to students. (see diagrams below)

A. Pull Away
B. Pass through
C. Sustained
D. Intercept
E. Diminishing Lead

Condition:

Candidate will be asked to either demonstrate lead types or observe a shooter and correctly identify the above lead types as the shooter engages actual targets.

Standard:

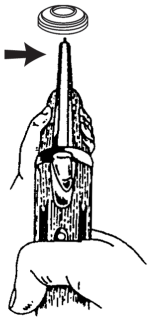
Successfully identify or demonstrate each lead type with emphasis on the first three: Pull Away, Pass Through, Sustained Lead.

Discussion:

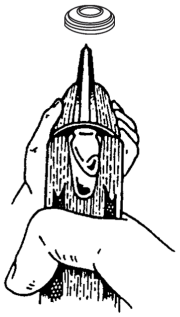
For beginning shooters, going into detail on the variety of lead types and why and when we use them will be too much information for the student to absorb, and largely unnecessary. Rather than overwhelming a beginning shooter, keep it simple. If the shooter starts in the right place (good Ready Position) and applies the fundamentals, they will likely break anything inside of 35 yards. As each student advances, and starts to engage more challenging targets, possessing a variety of tools and techniques with which to break targets will become essential.

PULL AWAY

This is the official CPSA shooting method. With pull away, the gun is mounted directly at the target. This method uses our natural ability to point. Pull away enables a shooter to judge speed, distance and line of the target very effectively. Stance, timing and rhythm of the shot, as with all shooting techniques, are determined by the pre-planned break point. After the stock touches the face, the gun is smoothly moved ahead of the target until the correct lead picture is seen and felt. Pull away is excellent for long-range shots and can improve shooter timing and consistency on many types of target presentations.

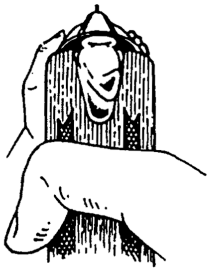


pull away
hold position

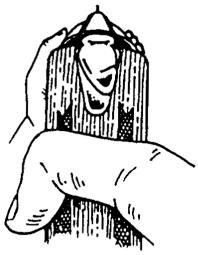


pull away
half mount

pull away
mount



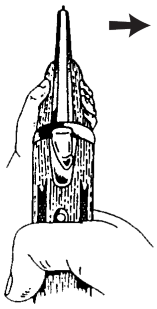
pull away shot



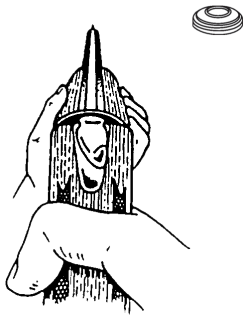
pull away
follow through

PASS THROUGH

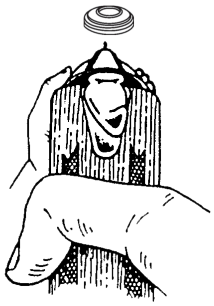
Pull Through–Swing Through (are all one and the same). The pass through method of shooting is very popular with hunters and those who are self-taught and shoot instinctively. REMEMBER–successful, instinctive shooting comes as a RESULT of good technique. With pass through, the gun is always inserted behind the target. The bird is allowed to pass the line of the muzzle before any move is made. Control of speed of swing and timing are generally more important to the pass through shooter than any lead picture. Some pass through shooters with good timing and a fast swing see little or no lead on most targets. The trigger is pulled on, or very near, the bird as the mounted gun swings past the target.



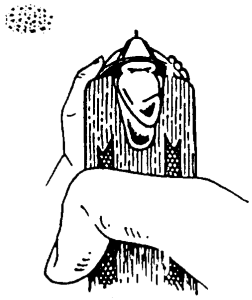
swing through
hold position



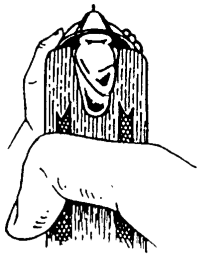
swing through
half mount



swing through
mount



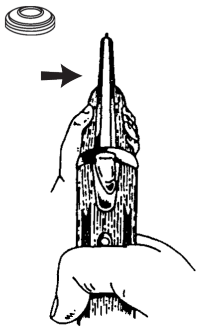
swing through
shot



swing through
follow through

SUSTAINED LEAD

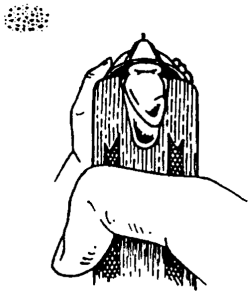
Maintained–Constant Lead (are all one and the same). With sustained lead, the bird is generally never allowed to pass the line of the muzzle of the gun, even when the gun is out of the shoulder. The gun is mounted ahead of the target. The shooter's pre-planned lead picture is placed directly in front of the target as the target appears, always remembering never to look at the gun. Choosing the target break point before calling for the bird helps to prevent the shooter from riding the bird. The trigger is pulled when the correct lead picture is seen and felt. This usually happens a second or so after the gun touches the face.



sustain lead
hold position

sustain lead
half mount

sustain lead
mount

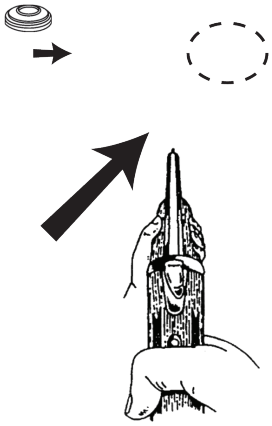


sustain lead
shot

sustain lead
follow through

INTERCEPT

With Intercept, Direct Intercept or "cut off," the shooter visualizes and pre-plans a breakpoint and mounts the gun to a point off the target line and approaches the breakpoint at a different angle than the angle of the target line. This method is often used when a target is in transition or descending at the breakpoint. In this case, if the shooter were to follow the line of the target, the shooter would break the connection between the eye and the target through the breakpoint as the target descends below the barrel by covering up the target with the barrel of the gun. Approaching the breakpoint at a sharper upward angle allows the shooter to preserve the connection between the eye and the target through the breakpoint. To properly execute Intercept, the shooter must look at the target and as the target approaches the pre-planned breakpoint, move the gun to a point on the line ahead of the target and execute the shot when the proper perceived lead is achieved.



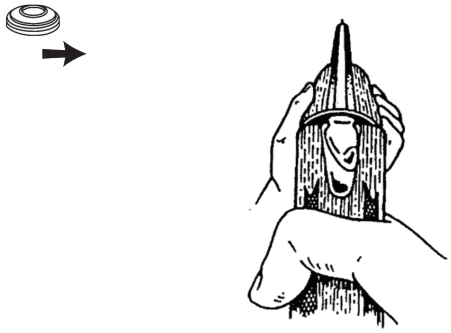
hold position

mount & shot execution

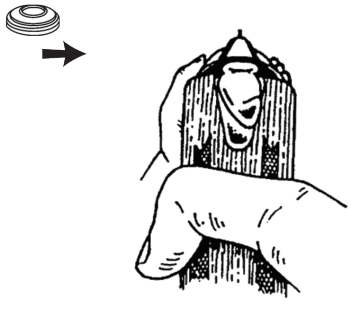
follow through

DIMINISHING LEAD

With diminishing lead, or "Come to the Gun," the shooter mounts the gun close to the line but ahead of the target and allows the target to come to the gun while maintaining visual focus on the target. The shooter pre-plans a certain breakpoint, engaging the target with the eyes at the visual pick-up point, then allows the perceived gap between the target and the gun to diminish until the point at which the proper lead is achieved and the shot is executed. Just as in the other methods, lead is "felt" rather than visually verified. As the target comes to the muzzle of the gun, the lead therefor decreases from "too much" to "just right" and the shooter executes the shot as the proper perceived lead is felt.



half mount



mount

shot

follow through

COMPETENCY #6: Problem Solving - "getting the student to hit the target."

Task# 6-1: Identify Placement of a miss
Candidate will correctly identify the placement of the student's shot in relationship to the target.

Condition: Candidate instructing a student and the student exhibiting difficulties engaging a target.

Standard:
Candidate will correctly identify to the Certifying Instructor the placement of the student's shot string in relationship to the target using either:

A. Observation of shot string or pattern
B. "Reading the barrel" method

Student will use a description such as "high and behind", "in front", "over top", a clock direction or other terms to accurately describe the placement of the miss to the certifying instructor.

Task# 6-2: Identify the cause or reason for a miss (not mandatory for Level I)
Candidate will correctly identify the reason(s) for a student miss of a target.

Condition: Candidate instructing a student and the student exhibiting difficulties engaging a target.

Standard:
Candidate will accurately attribute student's miss of a target to one or more causes, to the Certifying Instructor:

A. Insufficient focus on the target / Failure to visually fix on the target.
B. Poor ready position
C. Wrong lead picture
D. Gun off line / "spoiled the line" (gun got between the eye and the target)
E. Comb not in contact with cheek
F. Poor movement / mount
G. Pain

Task #6-3: Candidate will effectively communicate with the student to resolve the student's challenges in engaging and breaking targets. (i.e., demonstrate the ability to solve problems, improvise, and think outside the box)

Condition: Candidate providing feedback and direction to a student exhibiting difficulties engaging a target.

Standard:
Candidate will effectively….

1. Lead student to break the "missed target"
2. Demonstrate effective problem-solving skills
3. Demonstrate and utilize effective communication
    A. Using just enough verbal communication to get the job done.
    B. Avoiding intimidation (especially with youth and new shooters)
    C. Avoiding technical explanations or using unfamiliar nomenclature

D. Relating the correction to information the student is familiar with (other activities or sports they engage in)
E. Recognize and correctly interpret student's body language.

Discussion:
Instructors must remember that there will be different types of students that seek their help: youth, adults, male, female, new shooters and those with some experience. As if that weren't challenging enough, your students will have different learning styles. This variety of student types will require each instructor to approach problem solving from different angles.

The first thing instructors must remember is to avoid intimidation, particularly with youth shooters and newcomers to shotgunning. Youth shooters can absolutely shut down when an instructor's approach is a bit too forceful. Try and keep your delivery light and motivating…not demanding. Avoid communicating in a condescending manner when responding to a question or presenting information. Whatever you do, don't try and "youth speak" (talk in their jargon) to a youth shooter. The youth shooter knows that you are an adult. Trying to change the dynamics of your relationship as an adult instructor by pretending to be something you are not simply won't work. You will gain neither respect nor a better rapport in doing so.

Technical information, though interesting to some, is not needed with many shooters and most youth shooters. Too much information may turn the shooter away and prevent him or her from concentrating on the matter at hand. As you continue to teach and learn, you will accumulate more information about shooting. Deliver that information to your students in small doses. Limit your delivery of information to only what is needed to get the job done. Remember, the most important thing your student should be thinking about when they are calling for the target is visually focusing on it. The more information you cause them to think about will only serve as a distraction. No "brain dumps." Keep it simple.

Adult shooters are different than youth shooters in a number of ways. You still must avoid intimidation and speaking to them in a condescending way, however, with an adult shooter the response can be more direct than with a youth shooter. Adults will also shut down but they are more likely to tell you about it. Body language is something you should learn to read and understand. This silent language will tell you a tremendous amount about how the student is reacting or feeling during your lesson and in response to your feedback and direction.

In providing corrections, adhere to the KISS Principle ("keep it simple silly"). Do not communicate so much information that the shooter has trouble finding the answer among the verbiage. Do not overload the fix. Fix one thing at a time and deliver the fix in a concise way. Focus on the shooter's biggest opportunities first and limit your fixes to one at a time.

Your ability to solve shooting problems will be based on your ability to communicate, think in a line that the student understands and maintain a positive attitude while doing all of this. The good instructor makes a realistic assessment of the abilities of a student and is able to lead the student to a positive outcome.

All in all, the instructor should try and keep things FUN

You will hear your Certifying Instructor use the term "tool kit" throughout their presentation. So, let's talk about that "kit"…or more accurately, those kits.

As an instructor, you bring certain unique teaching techniques to an instructional session. Let's call this your "technical tool kit." These are the little techniques and methods you will learn throughout your instructional career that enable you to guide a student onto a previously missed target. This tool kit might also include mental notes on how to get a student to conceptualize, utilize and demonstrate their ability to break a target. The more you instruct and educate yourself about shotgun instructing, the more tools you will accumulate in your tool kit. Additionally, your method of instruction and your assortment of "lesson plans" becomes a part of your tool kit, as they are all part of the variety of tools you use to make your students successful at breaking targets.

You should also have a second type of tool kit that we will call your "physical" tool kit or your "bag of tricks." These tools can be visual aids like a small clay glued to the end of a pointer. Some of the most common items found in an instructor's tool kit are: tape, lip balm, comb riser kit, butt pad/Length-of-Pull extension, tools for changing shims in a semi-automatic shotgun, measuring tape….the list goes on and on. One instructor likes to tell his students that he can send a man to the moon with his tool kit!

i. Identifying placement of a miss on a target:

So, here is the fun part. When your student has difficulty engaging targets, you need to know what's going on in order to correct the miss and get the student back on target. This requires that you pay very close attention to what the student, and their gun barrel, are doing as the student engages targets. In many cases, it might be best to simply let the student take another shot at the target. This may also give you the opportunity to confirm the shot placement and reason for the miss.

There are a couple of different ways to "read a miss". Reading the miss off the wad is not one of them. Reading the wad is going to show you absolutely nothing except perhaps the wind direction. There are two good ways to read a miss. The first is to train your eyes to see the shot cloud/string. The second is to read the miss off the gun barrel.

Seeing the shot:

You will start learning how to do this at the range with your fellow candidates. First off, set yourself up so that you can read the swing of the student's gun from their shoulder. As mentioned earlier, the correct position for the instructor is immediately behind the shooter and just to the outside of the student's shooting shoulder. Now, do not intensely look at the target. Rather, you should look *around* the target using your peripheral vision. The shot cloud, if you see it, will be a grey "puff", distortion or flash near the target. Obviously, you will see a broken target if the student connects. The trick here is to keep your eyes relaxed rather than applying a hard focus to the target area. This allows your eyes to pick up the shot. It may surprise you. Some folks just suddenly see it. Admittedly, some folks just cannot see shot and thus must rely on reading the barrel, but if you can see shot, this is a great way to get the job done. The only potential stumbling block here is when your background changes and suddenly you can't see shot. Then what?

Reading the barrel:

Reading the barrel takes a bit of practice as well. Being a shooter yourself, you should have some idea of the necessary and proper lead on a target. By engaging your peripheral vision to simultaneously see both the orientation of the barrel and the location of the target as your student executes the shot, you should be able to properly call the miss. You should be able to reliably call a miss before you leave this certification program. If you feel that you need help in calling a shot, seek help from your certifying instructor *early* in the class. The third day of the course is too late to ask for individual assistance.

NOTE: The best approach is to use both techniques at the same time: Engage your peripheral vision to see both the barrel and the target, rely on the barrel method, but try to see the shot string.

ii. Identifying the cause or reason for a miss:

There are a number of form or mechanical mistakes that cause a target to be missed and a miss on a target can manifest itself in many ways from the instructor's perspective. The most common causes of a miss are:

A. Insufficient focus on the target / Visually "disconnected" from the target through the break point (most common)
B. Poor ready position (Hold point, etc.)
C. Wrong Lead
D. Off line / Spoiled the line
E. Cheek ledge not in contact with the comb
F. Poor mount / movement
G. Pain

So, let's see what we can do about these problems as well as address a few more of the more common causes and symptoms.

*Insufficient focus on the target:

The connection between the shooter's eye and the target through the break point is critical. If for any reason, this connection is compromised, the brain stops receiving the critical target guidance information it needs from the eye to achieve proper gun placement for the shot. This will often result in a stopping of the gun or a sudden reduction in gun speed as compared to the target. Encourage the student to *visually follow-through* as they execute the shot….see detail on the target through the break point.

*Poor Ready Position:

If the issue is stance, we can help a student make a minor adjustment. Frequently, when working with new students, we want to let them find their own "neutral position" based on their individual physique. The optimal stance, however, is one where there is no physical tension or "torque" at the break points. The student will sometimes "misplace" the stance to the point that they run out of swing room and reduce their ability to move to the target. Always check stance…Don't make a big deal out of it, just move them a bit. Incorrect hold points may also play into the cause of a miss. Too close to the trap may generate too much gun speed and prevent good focus while a hold point too close to the break point can cause a "dead gun" or a failure to achieve proper "flow" with the target. A ready position with a barrel orientation that is too high for the given target can also cause a miss by interrupting the visual connection between the shooter's eye and the target. This is known as "spoiling the line".

*Wrong Lead:

This one is a bit more complicated. Just as most people have the innate ability to catch a ball being thrown to them, most new shooters have an innate "database" or set of "subconscious lead pictures" to allow them to break many targets within close range. So, the most important thing you should get a novice shooter to understand is that visual focus on the target through the break point is the most critical element of their shot execution. For first time shooters, if you have coached them into the proper ready position and walked them around that first floppy incoming or outgoing bird, they should naturally understand

that there is a need for lead. Initially however, many students will want to measure lead instead of looking at the target and allowing the natural overthrow of the gun to establish the necessary forward allowance. There are a number of analogies or illustrations that you can use as an instructor to illustrate to the student their innate ability to "feel lead" without looking at the front bead of the shotgun. Some examples are:

- Knowing where to put your hand to catch a ball while only looking at the ball.
- Returning a tennis ball with a racket while looking only at the ball.
- Catching a shotgun shell without "picturing lead".
- Hitting a baseball with a bat while only looking at the ball.

With a bit of thought, you should be able to come up with other illustrations to help your student understand "sub-conscious lead." That does not mean that a shooter never consciously perceives lead. However, in most cases, and particularly when trying to get novice shooters to successfully engage shorter range targets, a conscious perception of lead, otherwise known as "measuring" or aiming, will result in insufficient visual focus on the target, a slowing or stopping of the barrel and a miss behind. Should the student show a certain preference for one method of attaining lead over another, we need to show flexibility and let the student use the method that he or she feels most comfortable with and is most effective. When the student engages longer range targets, the student may be unable to achieve the appropriate lead on a target. In these situations, there are a number of trigger phrases you can use to increase or decrease a student's lead on a target while still maintaining intense visual focus on the bird.

Need more lead?:
"stretch the shot"
"bump the lead"
"keep your eye on the target but FEEL a bit more lead"
"push the shot"
"miss in front for me"
"whatever you are FEELING for lead, double it"

Less lead:
"feel as if you are shooting right at it"
"match the speed of the bird a bit more"
"miss behind for me"

Once your student starts breaking the target, they will start to feel the appropriate lead and break the target more consistently (and think you are a genius!)

* Off line / spoiled the line:
Another very common cause of a miss is when the shooter's gun gets in the way of the target. In these cases, the gun blocks, or occludes, the visual connection between the eye and the target through the break point. When this happens, the shooter's view of the target is momentarily interrupted, which also means that the flow of target information to the brain is interrupted, usually causing the gun to fall behind the target and a miss behind. The most common remedy for "spoiling the line" is to have the shooter move the hold point a bit closer to the break point and a bit further away (or offset) from the target line so that the shooters move to the break point is at a sharper angle to the target line. This greater angle of approach to the break point makes it less likely that the shooter will occlude the target before reaching the break point. It is also common for the shooter to simply misread the target line or misperceive what the target is doing at the break point, causing a gun

movement that is inappropriate for the given target. This is especially common for more technical target presentations, where the target is descending or in transition at the break point. In this case, have your student take another look at the target and the target's trajectory at the break point.

* Cheek not in contact with the comb through the break point:
This is a very common cause of a miss and, typically, the miss is over the top of the target. This is usually a concentration or mount problem. The shooter wants to see the target break in the worst way and, if a student mounts the gun to the shoulder instead of the cheek, there may be a temptation to lift the head. Explain that this is also part of the follow-through and that the head should be kept in contact with the stock until the shot is completed. Have the student keep the weight of the gun in the hands throughout the shot and lift the gun to the cheek. This eliminates the problem of lifting the head off of the gun. If the shooter keeps the weight of the gun in his/her hands and lifts the gun to the head, there is no need to worry about lifting the head off the gun.

*Poor mount:
The instructor should ensure that the beginning student has the firearm properly placed in the cheek and shoulder. Whether the student pre-mounts ("high gun" - zero draw length), starts from a low gun ready position, or somewhere in between, the student must get the comb of the shotgun to the cheek and the butt of the gun to the shoulder as the shot is executed in order to be consistently successful.

A proper mount should allow the student to see over the top center of the rib to acquire the target visually. Anything else is a poor mount or an ill-fitting shotgun. Even if your student is shooting with a well-fitting gun, it is possible that an improper mount will cause the shooter's eye to dip down below the rib. Shooters will sometimes "dig in" or cram their head down into the comb, thus positioning their eye where they cannot see the target over the rib.

*Pain:
Pain can be another cause for a miss. Use caution when pairing a younger, smaller or female student with a gun and shell combination that has a bit of kick. Talk with your student about how they feel.

Each of these causes of a miss, and more, will be covered in class. Each of these is very particular to the individual student and should be addressed as such. There is no "cook book" approach to addressing causes of a miss. In fact, each cause of a miss has a number of possible solutions and the right one will depend on the student, the situation and your ability to communicate the solution. Once again, your toolbox will expand as you learn and work through various problems with your students.

COMPETENCY #7: Observation, Motivation and Communication Skills

Task# 7-1: Effectively observes the student in order to recognize the causes of misses
Candidate will correctly position himself/herself in order to control the gun and will effectively observe the student to recognize flaws in fundamentals.

Condition: Candidate instructing a student and the student exhibiting difficulties engaging a target.

Standard:
Candidate will correctly position himself/herself to control the student's gun and will demonstrate sufficient observation skills to recognize flaws in the fundamentals of the student's shooting.

Task 7-2: Effectively communicate with the student to affect positive change

Condition: Candidate instructing a student and the student exhibiting difficulties engaging a target.

Standard: Uses clear and concise means to convey ideas and concepts to include the use of "silent instruction" (tactile kinesthetic), visual aids (clay target) and analogies as appropriate.

Standard: Demonstrates an understanding of how students learn, both generally and as it applies to an individual student, by using an appropriate mix of teaching methods (predominantly tactile kinesthetic, followed by visual, then verbal)

Task 7-3: Encourages student throughout lesson

Condition: The Candidate will be presented with a shooting student in a field/range setting.

Standard: Reassures the student/displays sense of caring about the student.

Standard: Provides positive reinforcement throughout the lesson.

Discussion:
This area of your certification is so important that it could well comprise this entire manual. A good instructor must be capable of communicating information in numerous ways to every student. Kinesthetic learners will need to feel what you are directing (think muscle memory). Visual learners will need to see the explanation of a target situation while auditory learners will need to hear you talk them through it. Remember; **Less is More** and the **KISS** Principle (keep it simple silly) should be guiding principles in your delivery of instruction.

Remember, holding the gun in the mounted position for an extended period can tire a beginning student. This will lead to problems. Should you need to have a quick discussion with the student or make a correction, at least step up and take the weight of the gun in your hand? Each instructor candidate comes to the certification with the potential for a different style of teaching. These styles are outgrowths of their personalities and their own preferences for a teaching method, whether the candidate knows it or not. This is good!

The instructor must be able to observe the student and via observation make evaluations as to the student's problems, needs and rank them as to which 2 or 3 offer the greatest opportunity for improvement in breaking more targets. At level I we are teaching the very basics of shotgun shooting. We are instructing a person desirous of "learning" to shoot. (beginner or novice)

The instructor's next move is to motivate the student to attempt new and different methods for breaking a target or fixing a problem. Here is the time to share your passion for the sport. If *you* are having fun most of your students will have fun as well.

Motivating a student throughout the lesson, and during your association with that student, is important in order to keep the student in the learning curve.

Here are some ideas on motivating your student:

1. Make your point as active and enthusiastic as possible.

2. Celebrate student success in their learning style. A verbal "well done". A visual "thumbs up". A kinesthetic "high five" or fist bump. Remember students learn and communicate in different styles. Positive reinforcement in their learning style will motivate the student to new heights.

3. Take into account individual goals and experience.
   What are the student's goals?:
   To try a totally new sport?
   To become a more proficient bird hunter?
   To beat their buddies at a charity or corporate event?
   To compete and win in their class at registered NSCA events?

4. Do everything possible to satisfy the student's needs;
   physiological, safety, belongingness, esteem.
   a. Allow for the physical condition of your student: Water, Rest & Bathroom breaks. Carry the student's ammo or their gun.
   b. Make your teaching venue physically and psychologically safe: Watch for safety hazards where a student could trip & fall. Make your student comfortable at the range (it could be their first ever visit to a gun range).
   c. Show your students that you take an interest in them and that they belong. Call them by name (write it on your hand if necessary)
   d. Arrange learning experiences for each student so that they may gain a degree of esteem. Start and end each session with targets you know they will break.

6. Direct learning experiences toward feelings of success.
   a. Make the objectives challenging but attainable.
   b. Emphasize the positive.
   c. Permit the student to partially direct his or her own training.

7. Try to send your students away from your instruction anxious to use what they have been taught and eager to learn more.
   a. Encourage the student at every opportunity ("You Can Do It")
   b. Provide information on how often and where to practice.

Communication skills must be at the highest level in order to convert instructional techniques into a student's success.

On average, most of your students will remember no more than two or three things that you teach them during a given lesson. It's important, therefore, to make sure that you focus in on the two or three biggest opportunities for each student to hit more targets. In

most cases, you should be able to determine what the top two or three opportunities are for each student within the first ten to twenty minutes of your lesson.

Silent instruction and "verbal conservation" is important for two reasons: 1) Remember, you do not want to overload the student or get them thinking about too many things consciously as they are trying to execute the shot. 2) They may need to see or feel what you want them to do. Remember, different students learn differently. Try fixing a student's miss without talking……. This is communication at its basic level.

VII. Other Topics:

A. Reading the Targets

The three most important things a shooter must do is: 1) Place EYES on the target, 2) execute sound MOVEMENT to the target, and, 3) TRUST that when the eyes fix on the target at the break point, the target will break. Some shooters believe that the key to success is all in looking at the target and pulling the trigger, but a little planning will go a long way toward establishing the appropriate ready position and movement to the target. As shooters, if we conduct pre-shot planning properly, we will better understand the character of the targets and more accurately determine the ready position and pace of movement before engaging the targets. In essence, pre-shot planning develops the roadmap for executing a shot pair and feeds our subconscious the correct "program" for good movement to the break point. It is like loading a computer program before inputting the information on the keyboard. The pre-shot planning process is at the heart of consistency and one of the keys to competing and scoring at a higher level.

If your student happens to be a bird hunter, getting deep into the subject of pre-shot planning may be the wrong move. Whether you are instructing a bird hunter or a competitive shooter, however, you will be using clay targets as your primary medium for instruction. That being the case, we recommend that you help your student establish some basic "landmarks" before loading the shotgun and moving into the ready position on a given station. You don't have to deliver a 15-minute dissertation at the beginning of the lesson. You can introduce shot planning gradually, as the lesson progresses. Your student's shooting experience, commitment to improving and the extent to which he or she competes, or wants to compete, should all factor into your decision on how deeply or quickly you dive into the subject of pre-shot planning. Know, however, that if your student has a good idea of where the target is coming from, where the eyes will be positioned as the target is launched, where the gun will start and where the shot will be executed, your student will have a higher probability of success in breaking targets. Since the success of *your* lesson will be largely determined by how successful your *student* is, it may be a good idea to introduce the concepts of visual pick-up point, target line, hold point/set up and break point.

While observing the flight of the first target, identify the visual pick-up point - the area closest to the trap where the target is first visible as a whole as it emerges from the trap arm. Now identify the break point. Ideally, this should be the point along the target line at which the student is most comfortable breaking the target AND where the target is moving at a constant speed and direction (not in transition). The area where a shooter feels most comfortable breaking a target may be different for one shooter than it is for another. Experience, confidence and visual acuity will determine your student's ability to break a target at certain locations along the target's flight path. Your student's focus on the visual pick-up point should be very loose and diffused, thus maximizing peripheral vision and the

ability to visually acquire the target as it emerges from the trap. Unlike focus at the pick-up point, visual focus on the target just prior to and through the break point should be very narrow and sharp. The moment of strongest focus on the target should be the point at which the shot is executed.

The hold point, or set-up, is perhaps the most critical element of the move because it is the point from which the move starts. Right or wrong, the hold point largely determines the speed and angle of the gun to the target at the break point. In order to breed consistency into execution and achieve higher scores, intentional and repeatable hold points are critical.

Careful pre-shot planning will determine the leading edge of each target as it passes through the break point. Determining the direction of travel of each target at the break point will help determine the angle at which we need to approach the break point as well as the specific area on the target to which we will apply sharp visual focus ("focusing small") through the break point.

B. Beginner Targets and Shooter Ability

It is important to start beginning and novice shooters out slowly, establishing the fundamentals, then moving on to more difficult targets when they are ready.

Remember, at Level I we are trying to make the shooter successful and happy. The targets at this level should be presented to allow the student this success.

There are three basic presentations which can/should be used for the beginner.

High, slow, floppy incomer:

This should generally be your first target. It allows the student to be successful quickly. The instructor should set the student so that the target is coming directly at, but high above, the student. As the target hits its apex the student can shoot. Realistically, there is little or no lead picture here. The student literally moves the shotgun to the target. The catch here is that the gun is actually moving and the student will eventually realize this. If not, then the instructor can enforce this activity via explanation. This target presentation provides the ability for quick and early success. It thus boosts the student's confidence while removing fear of recoil and all those other preconceptions that the student may have brought with them.

Once the student has successfully broken several targets at this presentation the instructor should move the student slightly (10 ft.) to the left or right. This will mean the student now needs to feel some space (lead) and still keep the gun moving to break this target. This provides the opportunity for the instructor to begin talking about lead without totally changing targets on the student. The confidence level from the first targets can be carried over into these presentations.

Going away:

The second basic target is a going away trap type target. Start the student close to the trap and throw the bird directly away from the shooter. After some breaks move the shooter back and then slightly to the side. Take your time.

Slow crosser:

The third target presentation should be a slow crosser. Set your student up 90 degrees to the central track of the target and explain to them that this target is going to require them to feel some lead.

C. CHOKES AND LOADS, OPEN CHOKES, LIGHT LOAD

Chokes and Loads

As an instructor, you should have a solid understanding of gauges, chokes and loads as they pertain to clay shooting.

A. Choke dimensions based on bore
B. Types of chokes
C. Ammunition types, manufacturers
D. Gauges

At Level I we are teaching the student the mechanics of breaking targets. We should not immediately overload them with choke and load information but, as instructors, we must set them up for success. A good load and choke combination in a 12 ga. gun for a beginner is skeet (.005) and 1 ounce of #8 or #9 shot. Should the student come with something else, like a 20 or 28 gauge gun, the same chokes and loads will work. Remember, a 20-gauge gun can develop more pressure than 12-gauge gun and, in the case of a 20-gauge field gun, the felt recoil can exceed that of some 12-gauge guns.

A good rule of thumb regarding chokes and loads for beginning students is; "as little choke and as much shot with as little recoil as possible". As an example, the Illinois Department of Natural Resources, in their introductory wing shooting clinics, use all 28 ga. auto loaders and #8 shot. Their success rate and return rate are excellent.

There are several ammo manufacturers that produce a light or trainer load. They can remove recoil as a problem for your beginning students and keep their mind off of it and on more important things like the fundamentals and looking at the target. The only drawback of lighter loads is that they may not reliably cycle an auto loader.

Just like gun fit, choosing the right chokes and loads for your lesson with a beginning student can contribute to your success so don't overlook the importance of starting with the right choke and load combination to ensure success. It is not uncommon for a beginning student to show up for their first lesson with some horrendous load and extra full choked gun that their husband or parent sent them with. Fix this before it causes a problem.

Here is some pocket info on chokes and loads. Use it as you see fit:

Choke	***Constriction***
Cylinder	***.000***
Skeet	***.005***
Improved Cylinder	***.010***
Light Modified	***.015***
Modified	***.020***
Improved Modified	***.025***
Full	***.030 and above***

Note: Figures are based on a 12 ga. bore size!!

Shot Pellets in various weight loads:

Shot size	***Shot diameter***	***7/8 oz***.	***1 oz.***	***1 1/8 oz.***
9	***.08***	***512***	***585***	***658***
8	***.09***	***359***	***410***	***462***
7.5	***.095***	***306***	***350***	***393***

D. LESSON PLAN

A lesson plan is a vital part of your teaching. The plan itself need not be "engraved in stone" but rather should have built-in flexibility. While the conduct of a lesson should depend greatly on the opportunities and challenges you uncover as your lesson progresses, there are a number of essential elements that should occur at the beginning of each lesson with a new student. The initial segment of a first lesson with a student should include the following:

1) Get to know the student.
2) Understand the student's experience, goals and purpose in coming to you for a lesson (what does the student want to accomplish).
3) Test for eye dominance (see Competency #2).
4) Assess for gun fit (see Competency #3).
5) Patterning board or Point-of-Impact exercise (for beginning students).

As you teach more, you will get an idea of how best to structure your lessons. Start out by getting to know the student. Where do they live? How far was their drive? What sports do they play (or did they play in their youth)? Why did they decide to take a lesson with you? It is critical that you get to know the student so that you can better relate to them and connect with them throughout the lesson. Learn what the student's goals are so that you can align with them, instead of imposing your own. What is their shotgunning discipline? Are they a bird hunter? A recreational shooter? A competitor? Knowing a little about your student will help you relate to them and communicate with them more effectively.

Every student will be different and learn at a different speed or rate. Having a plan before going into a lesson will allow you to maintain a focus on the direction of your instruction. Set achievable goals for both you and the student. **Again, and we cannot stress this enough, do not overload the student.** Don't make them drink from a fire hose. Keep your progression smooth and be ready to modify your lesson plan if you need to.

Most instructors start out with very simple targets to get a feel for the student and to begin to develop a line of communication. This is a good thing! Remember, you are teaching beginning and novice students.

A good plan will provide you with time at the end to review the big "take-aways", comment on the student's performance and solicit feedback and comments from the student. You should provide the student with "homework" or practice based on the student's goals and where they intend to go with their shooting. Over time you will smooth out the rough spots as well as have a deep list of probable "teaching points" to address with new shooters.

E. Marketing

How you market your instructor business will depend on a number of different questions: Where do you intend to instruct? Who do you intend to instruct? What days and hours do you intend to instruct? What is your budget for marketing your instructor business? What is your target market in terms of types of shooters and geography? The following is a list of marketing options you might consider from least to most expensive:

- Speaking at meetings of local organizations (church, rotary club, etc.)
- Volunteering to coach/instruct at no charge:
    - -youth shooting programs
    - -coaching youth team
    - -instructing at a local charity corporate events
- Groupon
- Business cards
- Post an ad or business card at your local club (get permission first!)
- Create your own website
- Advertise in one or more magazines or newspapers.

VIII. POST-GRADUATION

Graduating from the NSCA Level I Instructor Course is a big accomplishment but we hope it's just the beginning of your journey to introduce novice students to the fundamentals of shotgunning. As discussed during the course, your progression as an instructor will be determined by three factors: your eagerness to learn, how much you teach and the information you seek and receive along the way. How aggressively you pursue continuing education and mentoring by one or more senior instructors will directly contribute to your progression. Among the senior instructors that you know and respect, identify one or more mentors and regularly seek their advice and assistance. Additionally, read a lot. There are some great books on our sport….both in print and out of print….that will enhance your knowledge base and boost your value as an instructor.

A question often asked by Level I instructors after graduation is, "What do I need to do to retain my certification?" The answer is, remain an NSCA member in good standing and continue to conduct yourself in a manner that brings credit upon the NSCA. In order to be listed in the Association's website, we ask you to fulfill any obligations that the NSCA may require from time to time to include shooting a minimum number of registered targets each year and fulfilling any continuing education and mentoring requirements*. Participation in a minimal number of competitions and expanding your knowledge as a certified instructor will add value to your students, particularly those students who compete or might want to compete. Congratulations on your decision to attend the course and, as always, we look forward to your feedback.

Thank you again for taking the course and for your interest in the NSCA Instructor Program.

* Instructors who graduated from the Level I Instructor Course prior to 1999 or are 65 years or older are exempt from any and all retention requirements to maintain their listing but are encouraged to participate, particularly in mentoring. Additionally, if a Level I fails to meet any of the retention requirements, the instructor will continue to be certified as a Level I and the instructor may continue to market accordingly, however, they will not listed as "active" and therefore will not be listed on the association's website.

