Minnesota Department of Natural Resources

Firearms Safety Hunter Education Program Evaluation Report



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Executive Summary

Background & Purpose

The Minnesota Firearms Safety Hunter Education program (FAS) was established in 1955 to address a growing number of hunting injuries and fatalities. Consequently, the program's outcomes are to prevent firearms and hunting accidents and to ensure the future of hunting and shooting sports through compliance with laws, regulations, and ethics. The program is overseen and managed by the Department of Natural Resources (DNR) Division of Enforcement, Education Section. Regional training officers and conservation officers throughout the state dedicate time and resources to program operations that include assisting over 4,000 volunteer instructors. Instructors deliver over 6,000 online and classroom courses to approximately 25,000 students annually.

Currently, all individuals born after December 31st, 1979 are required to pass the FAS course in order to purchase a hunting license and hunt in Minnesota. There are several different ways to become firearms safety certified in the State of Minnesota. Youth (ages 11-17) can enroll in a 12 hour (minimum) classroom course with field day experience, or take the online course with field day experience through HunterCourse.com. Adults (age 18 and older) can take the classroom course with field day, online course with field day, online course with field day, or complete an independent workbook with field day. The virtual field day is a new option for adults as of July, 2013.

The agency requested an evaluation of the FAS program as it had not been thoroughly evaluated in the past five years. This evaluation was part of a DNR effort to advance continuous improvement of DNR education and outreach efforts. The evaluation focused on determining program strengths, areas of improvement, and identification of differences between online and classroom students.

Evaluation Methods

A mixed methods approach comprised of focused discussions, mail questionnaires, and online questionnaires was used to evaluate the FAS program. Five discussions of 6-12 participants were conducted with firearms safety instructors for 90 minutes each in Elk River and Grand Rapids, MN. Overall, 44 people participated in five discussions.

Four different questionnaire versions were created specific to student age and course offering: adult classroom, adult online, youth classroom, and youth online (Appendix E). Hunter Education program staff acquired a list of 20,954 firearms safety students enrolled in the course from June 2nd, 2012 to May 21st, 2013. Researchers randomly sampled 500 respondents from all four course categories. In July of 2013, a new virtual field day option was instituted for adults 18 and older. Evaluation sponsors determined an additional online questionnaire of these students was necessary. Snap Survey (version 10) software was used to create a modified 20-question online questionnaire. Overall, 500 students were randomly sampled from a pool of 616 students who had not yet been surveyed.

For analysis, all five discussions were recorded with an mp3 audio device and detailed note taking. Although audio recordings were not fully transcribed, notes guided identification of common themes that occurred across groups. Descriptive statistics were calculated in Snap Survey. Content analysis was used to analyze open-ended questionnaire responses; and consisted of tallying frequently mentioned words, phrases, or ideas to identify themes across comments (Appendix C). The mail questionnaire received an overall response rate of 52.9%, and the online questionnaire received a 39.3% overall response rate.

Key Strengths

1. Student satisfaction

- All respondent groups reported an average satisfaction of 4.2 or higher on a 5 point scale with the firearms safety course overall (where 1=very dissatisfied and 5=very satisfied).
- Adult classroom respondents cited the highest overall satisfaction with the FAS course (mean=4.6).
- Field day experience satisfaction was slightly lower than overall course satisfaction, with means ranging from 4.0 to 4.4 on a 5 point scale.

2. Students comprehend course topics

- Results show adult online and virtual field day respondents agreed they understood all FAS course topics, with mean satisfaction ranging from 4.0 to 4.7 on a 5 point scale (1=strongly disagree, 5=strongly agree).
- Youth online and classroom respondents also agreed on average they understood firearms safety course topics; but were neutral on archery (3.6-3.9), muzzleloaders (3.7-3.9), and handguns (3.8-3.9).
- This finding compares to responses from volunteer firearms safety instructors in focused discussions that suggest archery, muzzleloaders, and handguns are not always covered in the courses or field days.

3. Instructors are dedicated

- Focused discussions made clear many firearms safety instructors are dedicated and passionate about teaching the course (Appendix D).
- Student respondents confirm instructors' comments about dedication and passion.

4. Administrative personnel are appreciated

• During focused discussions, instructors consistently complimented hunter education administrative personnel on their efficiency, helpfulness, and friendliness.

Key Opportunities for Improvement

1. DNR's approach to and clarity of communication

- Instructors showed interest in more varied ways of communicating with the DNR to receive information about the course, understand expectations, and access resources.
- Between 88 and 95 percent of online students completed the self-certification process, while only about 49 to 59 of classroom students did so.
- Many instructors seem concerned the online course does not provide sufficient opportunity for hands-on firearms practice. Peer-reviewed literature (Appendix A) shows there is no practical difference for knowledge retention between online and classroom education.
 - O Survey results indicate that online students have the highest rates of past firearms experience, with virtual field day respondents reporting the highest overall past experience (86.5%).
 - o In addition, 75.1 percent of virtual field day respondents reported they felt "very prepared" to hunt or target shoot after completing the course.
 - Of the 26 (13.5%) virtual field day respondents indicating they have no past firearms experience, responses indicated future firearms experience would largely come from family members (84.6%) and friends (57.7%).

o Four respondents whom indicated they would "teach themselves" or viewed the "virtual field day to be sufficient" also indicated they would get future experience from family, friends, or at a local gun club/range.

2. Consistency of course structure and content

- While the differing formats for field days among instructors is not new information, focused discussions further revealed the inconsistency in how field days and courses operate.
- Focused discussions proposed that the student to instructor ratio is often inconsistent.
- Most respondents practiced .22 rifle shooting, field walk with firearm carry positions, muzzle control, and zones of fire. However, because not all respondents are practicing .22 rifle shooting (a minimum requirement), inconsistency in field days is apparent.

3. Student final exam questions

- Focused discussions revealed that some instructors will abbreviate course topics such as wildlife management, wildlife identification, and hunting regulations.
- Several problems with question wording were the main concern among participants.
 - o It seems the exam's vocabulary may still be confusing for students whether the topics were adequately covered or not.
- Focused discussions proposed that "double negatives on the test are confusing."

4. Instructor certification process

- Focused discussion participants generally perceived the instructor training and certification process to be too easy, with too many assumptions about prior firearms experience.
- Further, some participants were confused about how to find other instructor teams for additional mentorship or training after becoming certified.

Differences Between Online and Classroom Respondents

1. Firearms and hunting experience

- Virtual field day respondents have the highest rates of past experience with firearms or hunting (86.5%) compared to other groups.
- The group with the least prior firearms or hunting experience is adult classroom (63.4%).
- Specifically, results indicate adult classroom respondents are less intent on hunting this year (65.9%), compared to online and virtual field day groups that are the most intent on hunting this year (85.6-89.3%).

2. Motivations for taking the firearms safety course

- When asked why they chose a particular course option, over three-fourths of online students reported due to convenience.
- Convenience was still a factor for classroom respondents, but "learn more from this option" seemed to be a primary motivator for classroom respondents.
- A majority of virtual field day respondents also indicated they already had firearms experience, but needed certification to hunt (51.3%).

3. Logistics

- About 90 percent of online respondents completed the self-certification process through the DNR website while less than half of classroom respondents completed it.
- Three-fourths of online respondents printed their certificate, while only about 12 percent of classroom respondents did so.

• Adult online respondents reported to experience higher rates (12.0%) of instructors charging over \$7.50.

4. Demographic differences

- The majority of adult classroom respondents were female (54.5%), while all other groups had a male majority.
- More notably, adult online and virtual field day respondents were quite a bit younger than the adult classroom respondents, with a median age of 28 and 26 respectively as opposed to 40 years.

Recommendations

The following are a series of recommendations that may benefit the DNR's Firearms Safety Hunter Education Program. Recommendations are based on the survey, focused discussion findings, and observations. While many of these recommendations are easily implemented, additional funding and staff may facilitate more effective and efficient implementation of the below suggestions.

1. Overall

- A. Define official scope of DNR's responsibilities regarding intended program outcomes and meaning of "certification"
- B. Collaborate with cities and counties to increase number of sites available for classes and field days

2. Volunteer firearms safety instructors

- C. Engage volunteer instructors in program planning and decision-making
- D. Determine more efficient and effective ways to identify instructor transgressions
- E. Reinstate annual instructor meeting to discuss program changes, updates, and obtain feedback
- F. Refocus the volunteer instructor training and include a final examination
- G. Provide a hands-on advanced or specialized optional training
- H. Establish new ways for instructors to communicate with each other, share resources, and easily find program updates as needed

3. Firearms safety students

- I. Redefine how potential students determine what type of firearms safety course to take
- J. Provide information to virtual field day students about hands-on opportunities
- K. Provide a way for online students to ask questions of instructors, such as an "instructor on call" via e-mail

4. Course materials

- L. Rewrite final exam with advice from an educational professional or by accessing HunterCourse.com exam questions
- M. Regularly update materials and resources

5. Potential staffing and resource needs

- N. Consider filling the currently vacant education specialist position
- O. Consider hiring a shared or contracted MN.IT staff member to support evolving technology needs of the firearms safety education program

Program Overview

Background

The Minnesota Firearms Safety Hunter Education program (FAS) was established in 1955 to address a growing number of hunting injuries and fatalities. Consequently, the program's outcomes are to prevent firearms and hunting accidents and to ensure the future of hunting and shooting sports through compliance with laws, regulations, and ethics. Currently, all individuals born after December 31st, 1979 are required to pass the FAS course in order to purchase a hunting license and hunt in Minnesota.

The FAS course is based on International Hunter Education Association (IHEA) standards. The IHEA is a global organization composed of hunter education administrators that develop standards for hunter education programs. In Minnesota, the FAS course has broadened its scope in recent years to meet and exceed IHEA standards by including topics such as hunter conduct and ethics, bowhunting, tree stand safety, muzzleloader safety, and more.

There are several different ways to become firearms safety certified in the State of Minnesota. Youth (ages 11-17) can enroll in a 12 hour (minimum) classroom course with field day experience, or take the online course with field day experience through HunterCourse.com. Adults (age 18 and older) can take the classroom course with field day, online course with field day, or complete an independent workbook with field day. The virtual field day is a new option for adults as of July, 2013.

Management & Operations

The program is overseen and managed by the DNR's Division of Enforcement, Education Section. The section has 13 staff members, including the hunter education program coordinator, four administrative staff, six regional training officers, the recreational vehicle coordinator, and the warehouse operations manager. The FAS program is one of the Education Section's many responsibilities. Approximately 20 percent of the Section's work time is dedicated to FAS, or three full-time equivalent (FTE) employees. However, there are currently three vacant FTE positions that are usually dedicated primarily to FAS and advanced hunter education programs.

Division of Enforcement field officers are also responsible for presenting at classes in their field station areas. Regional training officers (RTO) and conservation officers (CO) throughout the state dedicate time and resources to program operations that include assisting over 4,000 volunteer instructors. Instructors deliver over 6,000 online and classroom courses to approximately 25,000 students annually.

Firearms safety education is sponsored by the DNR, and is largely funded by firearms and archery manufacturers, U.S. Fish and Wildlife Service (USFWS), private conservation organizations, sportsmen's clubs, local businesses, IHEA, and students.

Evaluation Purpose and Scope

The agency requested an evaluation of the FAS program as it had not been thoroughly evaluated in the past five years. This evaluation was part of a DNR effort to advance continuous improvement of Department education and outreach efforts. Specifically, the agency was interested in knowledge retention differences between online and classroom students. In phase one of the evaluation, a review of scholarly literature (Appendix A) found no practical difference between online and classroom knowledge retention across a variety of subjects taught. As such, the project was re-scoped to focus on determining program strengths, areas of improvement, and identification of differences between online and classroom students. This decision was supported by the project team and agency leadership.

While the scope of the evaluation was broadened, some individual characteristics of the online and classroom courses required separation of the two course types for comparison. This allowed evaluators to compare knowledge retention in student surveys, even though it was no longer a primary study component. Important distinctions between the two course types are highlighted in evaluation results.

Evaluation Methods

Focused discussions

Focused discussions were conducted with volunteer firearms safety instructors in April and May of 2013. Five discussions of 6-12 participants were conducted with firearms safety instructors on three separate Thursday evenings for 90 minutes each. Three discussions were conducted at the Pizza Ranch in Elk River, MN to draw instructors from the Twin Cities and greater metropolitan area. The last two discussions were conducted at the Minnesota Interagency Fire Center in Grand Rapids, MN to obtain perspectives of instructors from rural parts of the state.

The Hunter Education Administrator provided project staff with the full roster of volunteer firearms safety instructors throughout the state. Active firearms safety instructors were recruited to participate based on their proximity to discussion locations to minimize travel distance and increase turnout rate.

Elk River

An invitation to participate in the Elk River discussions was sent to 488 instructors living in Anoka, Hennepin, Isanti, Sherburne, and Wright counties. The first two Elk River groups were recruited by email and the third by mail invitation. The mail invite was sent to 60 instructors from Anoka, Sherburne, and Wright counties only.

Grand Rapids

Grand Rapids participants were recruited from instructors living in Itasca county and proximate cities in Aitkin, Cass, Koochiching, and Saint Louis counties. The initial e-mail invitation to 36 instructors garnered only a few participants, so 97 mail invitations were sent to instructors in those areas. Project staff conducted 35 follow-up phone calls to recruit additional Grand Rapids participants. Grand Rapids groups were also organized in part by referral sampling in a few cases. A total of 133 people were contacted for the Grand Rapids discussions.

Participant Turnout

Overall, 44 people participated in five discussions. Given that 52 instructors responded to the invitation, the turnout rate was 84.6 percent. Each participant received dinner as an incentive to attend. In total, 621 people were contacted, indicating a recruitment rate of 7.1 percent.

Caveat

Because the adult virtual field day option launched after focused discussions occurred, comments from discussion participants about the online course only refer to the online course with in-person field day, not the virtual field day.

Mail questionnaire

Questionnaire development

Four different questionnaire versions were created specific to student age and course offering: adult classroom, adult online, youth classroom, and youth online (Appendix E). Adult classroom questionnaires were intended for adults who took a classroom course either with youth or adults. Youth questionnaires

were divided into a "parent" and "student" section, asking appropriate questions about the course to both parents and youth under 18. Three of four questionnaire sections posed identical questions for comparison, while a final section asked questions specific to the individual's course format. Classroom responses and comments about instructors refer to a single or group of instructors that taught all classroom sessions and field days. Online responses and comments about instructors refer to a single or group of instructors that taught the field day only. Questions were developed in collaboration with program staff and experts.

Sampling

Hunter Education program staff acquired a list of 20,954 firearms safety students enrolled in the course from June 2nd, 2012 to May 21st, 2013. Student records were obtained from the HunterCourse.com database and AS400 internal records. Researchers randomly sampled 500 respondents from all four course categories (adult online, adult classroom, youth online, and youth classroom).

Distribution

Questionnaire distribution followed a modified Dillman (2009) approach. The first questionnaire was sent with cover letter and stamped return envelope to 2,000 potential respondents on July 30th, 2013. A reminder postcard was sent on August 5th, 2013. Finally, a second questionnaire with reminder letter and stamped return envelope was sent on August 19th, 2013.

Virtual Field Day Online Questionnaire

In July of 2013, a new virtual field day option was instituted for adults 18 and older. Evaluation sponsors determined an additional online questionnaire of these students was necessary. Snap Survey (version 10) software was used to create a modified 20-question online questionnaire. Questions 1-4, 6-8, 10-11, 13, and 15-19 are the same as paper survey questions, but remaining questions are unique to the virtual field day questionnaire (Appendix E).

Approximately 1,200 students enrolled in the online course with virtual field day from July 15th, 2013 to October 7th, 2013. The DNR Hunter Education office previously surveyed part of this population. Therefore, 500 students were randomly sampled from a pool of 616 students who had not yet been surveyed. The online questionnaire was distributed to 500 potential respondents via e-mail on October 21st, 2013. Two reminder e-mails were sent on October 28th, 2013 and November 4th, 2013. The survey closed on November 11th, 2013.

Data Analysis

Focused Discussions

All five discussions were recorded with an mp3 audio device and detailed note taking. Although audio recordings were not fully transcribed, notes guided identification of common themes that occurred across groups. For direct quotes, audio recordings were referenced for accuracy. Frequency of particular words, phrases, or ideas discussed by participants identified discussion themes.

Questionnaires

Descriptive statistics were calculated in Snap Survey (version 10). Content analysis was used to analyze open-ended questionnaire responses. Content analysis consisted of tallying frequently mentioned words, phrases, or ideas to identify themes across comments (Appendix C).

Due to unavoidable database errors, a filtering question was included at the beginning of the questionnaire (Did you take the adult/youth classroom/online course?). In some cases, records inaccurately identified online students as classroom students. This might have occurred if online students attended a classroom field day. For the adult classroom sample, 64 respondents (6.2%) indicated they did not take the classroom course. This could mean that they actually took the adult online course and were recorded in the database as classroom students; or, that they used the independent workbook to complete the course and were also incorrectly recorded as classroom students. We could not confidently determine whether those 64 respondents took the adult online course or the independent workbook option. As such, those 64 respondents who answered "no" to the filtering question were removed for analysis. All other samples produced high accuracy rates (97.2-99.1%) and were analyzed as is (Table 1).

Table 1. Response rate by firearms safety survey received

Class Type	Response Rate	# Respondents	Revised Sample	Total Sample		
	Percent (%)					
Youth Online	59.2	290	290	490		
Youth Classroom	55.9	276	276	494		
Adult Classroom	48.7	236	172	485		
Adult Online	47.7	229	229	480		
Total	52.9	1031	967	1949		
Virtual Field Day	39.3	194	194	494		

Evaluation Results

Evaluation results reveal a variety of program strengths, opportunities for improvement, and differences between online and classroom respondents. In general, questionnaire responses yielded consistent levels of satisfaction among firearms safety student respondents. However, focused discussions offered more specific critique of program operations. Results are discussed in the sections below.

1. Strengths

Student satisfaction

All survey groups were satisfied on average with their firearms safety course experience overall (Figure 1). Adult classroom respondents were most satisfied with the course overall, followed by adult online and youth online, youth classroom, and then virtual field day. Field day satisfaction levels follow a similar pattern, but vary slightly among adult and youth online and youth classroom.

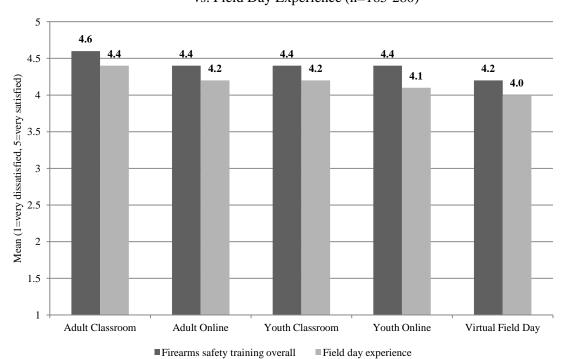


Figure 1. Mean Satisfaction with Firearms Safety Course Overall vs. Field Day Experience (n=165-280)

More specifically, students indicated average satisfaction with course cost and registration process (Table 2), where a majority of three groups (youth online as the exception) indicated they were very satisfied. Open-ended comments about course registration suggested the cost was reasonable, a good value, and the registration process was easy. However, several respondents viewed the process to be disorganized, or were confused about how to obtain their firearms safety certificate upon completion (Table C1).

Table 2. Respondent satisfaction with the course registration process (n=164-281)

	Mean*	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Don't know
				Percent	t (%)		
Adult Classroom	4.4	5.5	1.2	3.0	29.3	59.8	1.2
Adult Online	4.3	4.8	0.9	7.5	33.0	53.3	0.4
Youth Online	4.3	4.3	0.7	4.6	40.2	49.1	1.1
Youth Classroom	4.3	5.2	1.1	4.8	36.4	52.4	0.0

^{*}On a scale where 1=very dissatisfied and 5=very satisfied

Both online and classroom respondents were satisfied on average with the volunteer instructor fee (varies; up to \$7.50 according to Minn. Stat. § 97B.015) and self-certification fee (\$7.50) (Table B7). However, adult and youth online were less satisfied with the HunterCourse.com fee (\$24.95) than classroom respondents were with volunteer instructor and self-certification fees.

Online respondents also indicated average satisfaction with components of the online course such as the final exam, interactive activities, chapter quizzes, text, and narration (Table B18). However, approximately 40 percent of youth online respondents indicated they would like to see more interactive activities, videos, and pictures (Table B19).

Students comprehend course topics

Respondents were asked to what extent they agree or disagree that they understand a range of firearms safety course topics. Results show adult online and virtual field day respondents on average agreed they understood all of the topics (Table 3). Youth online and classroom respondents also agreed they understood firearms safety course topics; but were neutral on archery, muzzleloaders, and handguns (Table 3). This finding compares to responses from volunteer firearms safety instructors in focused discussions that suggest those topics are not always covered in the courses or field days (Appendix D).

Table 3. Mean level of agreement that respondents understand the below topics after completing the firearms safety course (n=163-280)

•	Adult	Adult Online	Youth	Youth Online	Virtual Field
	Classroom	Online	Classroom Mean*	Online	Day
Hunter responsibility	4.8	4.7	4.6	4.7	4.7
Hunter image, ethics, and responsibility	4.7	4.6	4.6	4.6	4.7
Transporting and carrying firearms	4.7	4.6	4.6	4.6	4.6
Safe and effective shot selection	4.6	4.6	4.4	4.5	4.6
Fundamentals of shooting	4.6	4.5	4.4	4.5	4.5
Personal preparedness for hunting	4.6	4.5	4.4	4.4	4.5
Firearms action types	4.5	4.4	4.3	4.3	4.5
Wildlife conservation and identification	4.5	4.4	4.2	4.3	4.3
Types of ammunition	4.3	4.3	4.0	4.3	4.4
Where to find hunting opportunities	4.2	4.1	4.1	4.1	4.1
Handguns	3.8	4.2	3.9	4.0	4.3
Muzzleloaders	3.7	4.1	3.9	3.9	4.2
Archery	3.6	4.0	3.8	3.9	4.1

^{*}On a scale where 1=strongly disagree and 5=strongly agree

Further, respondents frequently wrote that the course was informative and educational. For example, one respondent explained that "I was very impressed with the online course and feel like I really learned a lot." Similarly, a classroom respondent said "the teachers were very thorough and I learned a lot."

Instructors are dedicated

Focused discussions made clear many firearms safety instructors are dedicated and passionate about teaching the course (Appendix D). For example, one instructor noted, "we're not doing it for the money." Another instructor observed the "people that I teach with have real passion to get people into the club [of hunting]. Deep passion to get kids certified." Some instructors even fundraise or spend their own money to "cover a lot of this [course materials] by ourselves."

Student respondents confirm instructors' comments about dedication and passion. Table 4 shows that on average, all respondents agree that instructors were knowledgeable, helpful, prepared, friendly, professional, hands-on, on task, and fun.

Table 4. Mean extent respondents agree or disagree that instructors were: (n=219-281)

	Adult Classroom	Adult Online	Youth	Youth
			Classroom	Online
		Меа	n*	
Knowledgeable	4.8	4.6	4.6	4.5
Helpful	4.7	4.5	4.5	4.4
Prepared	4.6	4.4	4.5	4.4
Friendly	4.7	4.4	4.4	4.4
On task	4.6	4.4	4.5	4.4
Hands-on	4.6	4.4	4.4	4.3
Professional	4.6	4.4	4.3	4.3
Fun	4.6	4.2	4.2	4.1

^{*}On a scale where 1=strongly disagree and 5=strongly agree

It is necessary to mention that while respondents have average satisfaction with instructors, open-ended responses did reveal several concerning comments. For example, one person said their instructor "complained about not making money off the activity, number of attendees, and getting through the day as quickly as possible." Another respondent said their instructor was "arrogant and really phoning it in. Also, the DNR website said they could charge \$7.50, I was charged \$15.00." Similarly, another respondent reported "they didn't teach anything. We filled out the paperwork, took the test, and went home. I brought my online certification along with my worksheet and essays but they never asked for them "

However, the majority of respondents cited positive comments about their instructors, including "the instructors were very hands on and friendly," "they were awesome – I wish I could have spent more time learning with them," and "he/she was an excellent teacher. Very patient, explains things very well, and it's obvious he/she really cares about teaching adults and youth about firearms and hunting safety."

Administrative personnel are appreciated

During focused discussions, instructors consistently complimented hunter education administrative personnel on their efficiency, helpfulness, and friendliness. One instructor said I've "never been afraid to ask for anything. They were very nice. I got an extra patch to put on my vest." Another commented that "Ripley and CO's are the nicest people you could deal with. What they say they're gonna do, they can do – or better. I'm really impressed."

While specific questions about administrative personnel were not asked of firearms safety students, average satisfaction with the course registration process is in part due to the competence of administrative personnel (Figure 1).

2. Opportunities for improvement

Focused discussions with volunteer instructors highlighted several opportunities to improve the firearms safety program. However, the most prominent overarching discovery is the need to improve the DNR's approach to and clarity of communication primarily with instructors, but also with students. Many of the opportunities for improvement suggested relate to the need for improved communication overall.

DNR's approach to and clarity of communication

Instructors showed interest in more varied ways of communicating with the DNR to receive information about the course, understand expectations, and access resources. For example, one instructor said "Who is in my neighborhood? I could offer somebody a Saturday afternoon [to assist with field day]. Can we have an instructors-only forum?" This comment stemmed from a discussion about varying access to help and resources for classes and field days among instructors. More communication between local instructors through an online forum was suggested.

Another participant wondered, "Can they do a blog with updated information for instructors?" It was evident from the focused discussions that while most instructors receive e-mails from the DNR, some are not on the list or prefer to look up information as needed. As a result, participants discussed their interest in a secure forum or blog managed by the DNR to make clear course updates and connect with other instructors.

Students are affected by DNR-instructor miscommunications as well. Table 5 shows that the relatively new online self-certification process is not being communicated as effectively to classroom students. Whether this is because instructors are not receiving DNR updates, not reading them, or confused by the process is unclear. However, increased and clearer communications to instructors and students about this process is necessary to improve self-certification rates among classroom students in the future.

Table 5. Self-certification process

Whether respondents completed the self-certification process through the DNR website (n=162-281)									
	Adult Classroom	Adult Online	Youth Classroom	Youth Online					
	Percent (%)								
Yes	58.6	88.4	49.4	94.3					
No	35.8	4.5	45.7	2.1					
Don't know 5.6 7.1 4.8 3.6									
Perception of w	hether the instructions	were easy to follow	(n=115-271)						
Yes	86.1	97.6	78.4	96.7					
Don't know	10.4	2.4	15.9	2.2					
No	3.5	0.0	5.7	1.1					
Whether respon	Whether respondents printed the certificate (n=111-272)								
Yes	Yes 77.5 95.5 74.7 94.5								
No	12.6	3.5	12.9	3.3					
Don't know	9.9	1.0	12.4	2.2					

A related topic that consistently arose during focused discussions was skepticism about the online course. Many instructors seem concerned the online course does not provide sufficient opportunity for hands-on firearms practice. One instructor commented, "Online is the scariest thing the State of Minnesota ever did." Another instructor was troubled that "how do you know the kid is taking it? The kid got 7/15 of them wrong. [The next time] the mother sat behind him and told him the right answers." However, student respondents indicated the benefit of the online course is convenience (Table 13), and one

discussion participant noted they understood the "benefit of computer course is convenience. Most instructors like the hands-on classroom."

Scholarly literature (Appendix A) shows there is no difference for knowledge retention between online and classroom education. This fact is also evidenced by findings from this study (Table 3). While youth online students are required to participate in a hands-on field day, adults over 18 can now become certified entirely online. Survey results indicate that online students have the highest rates of past firearms experience, with virtual field day respondents reporting the highest overall past experience (86.5%, Table 6). In addition, 75.1 percent of virtual field day respondents reported they felt "very prepared" to hunt or target shoot after completing the course (Table B37). However, 11.5 percent of respondents felt the virtual field day was "too easy," while only 3.0 to 6.5 percent of other respondent groups perceived the course to be "too easy" (Table B21).

Table 6. Past firearms experiences among respondents

Respondents' experiences with firearms or hunting prior to taking the firearms safety course										
(n=164-284)	· · · · ·									
	Adult	Adult Online	Youth	Youth Online	Virtual Field					
	Classroom		Classroom		Day					
			Percent (%)							
Yes	63.4	80.7	77.3	79.9	86.5					
No	36.6	19.3	22.7	20.1	13.5					
Source of past fire	earms or hunting	experience (n=12	1-251)*							
	Adult	Adult Online	Youth	Youth Online	Virtual Field					
	Classroom		Classroom		Day					
			Percent (%)							
Family	86.8	81.9	94.6	96.5	80.6					
Friend	44.6	57.0	16.1	25.7	61.2					
Local gun	19.8	21.8	4.9	9.6	22.4					
club/range		21.0		7.0						
Boy Scouts or	15.7	8.8	4.9	8.3	6.1					
Girl Scouts										
Becoming an	~ 0		2.7	4.0	- -					
Outdoors	5.0	5.2	2.7	4.8	6.7					
Woman/Family										
Military	4.1	7.8	0.4	2.2	6.7					
Other	6.6	4.7	0.9	3.0	5.5					
4H	1.7	1.0	3.1	2.6	1.8					
Hunting summer camp	2.5	1.0	1.8	0.4	0.0					

^{*}More than one answer may be checked.

Of the 26 (13.5%) virtual field day respondents indicating they have no past firearms experience, responses indicated future firearms experience would largely come from family members (84.6%) and friends (57.7%) (Table 7). Four respondents whom indicated they would "teach themselves" or viewed the "virtual field day to be sufficient" also indicated they would get future experience from family, friends, or at a local gun club/range. Zero respondents selected the "teach myself" or "virtual field day was sufficient" options exclusively. Because this information only represents a sample of 26 respondents, data should not be used to make generalizations.

Table 7. VFD respondents' plan to obtain firearms or hunting experience given no past experience* (n=26)

	Percent (%)
Family	84.6
Friend	57.7
Local gun club/range	26.9
I'll teach myself	11.5
Virtual field day was sufficient	3.8
Private lessons	0.0
In-person field day	0.0
Other	0.0

^{*}More than one answer may be checked

Because the online course will continue in one form or another, transparent and clear communication around the rational for offering the online course is essential. DNR program staff may also find it helpful to engage instructors in an open and objective discussion about the online course and further opportunities for improvement.

Associated with transparent communication is the DNR's tone and approach to communicating with instructors and students. Focused discussion participants described a few unpleasant exchanges with DNR staff. One instructor was discouraged by such an exchange and felt "the DNR seems to forget that we are volunteers." Similarly, another said he/she "acts like a Minneapolis SWAT cop. The attitude is 'I'm a cop now. I can do things that I couldn't do before." This instructor appeared irritated by the way DNR employee interacted with them and desired a friendlier approach.

One instructor also referenced DNR's communication approach with children. Specifically, he/she said, the "ability to talk to kids [is a preferred characteristic]. One CO scared the kids. It's like he/she was barking at them. We had a parent complain." The need for a softer approach with both instructors and students is a point of consideration.

Consistency of course structure and content

While the differing formats for field days among instructors is not new information, focused discussions further revealed the inconsistency in how field days and courses operate. One instructor explained "they shoot twice as many rounds as the DNR requires. Kids get to see what all firearms look like. All get to shoot carbine and AR-15's if they want to." Another instructor said "they only shoot 20 rounds with a .22. We do a three mile walkabout. Have to practice different carries. We've done it for quite a few years." In contrast, more than one respondent explained "the instructor did nothing but hand out the test. There was no further instructor, demonstration or practice. Never even saw a firearm."

Possibly linked to the depth and type of exercises conducted in the field day is the student to instructor ratio. The student to instructor ratio is often inconsistent. Focused discussion participants explained how they operate their class. One said, "I limit my class to 35. I'll have 10 instructors show up at anytime." While that particular ratio is quite low, another participant noted "We tried to push 65 kids through on a field day [with two instructors]. We only had 20 percent pass."

Instructors are given some autonomy to adapt their courses to meet specific standards, but must comply with DNR curriculum and regulations. Survey results explicate the specific differences between classroom course components. While a majority of student respondents indicated their instructors used the Powerpoint presentation, 20 to 25 percent of all courses do not use this resource (Table 8). It is not

required, but focused discussions suggest that many instructors have never used the Powerpoint and will never use it; or, the material needs to be updated to be useful (Appendix D).

Table 8. Presence of the below technologies in classroom respondent's firearms safety course (n=153-261)

	A	Adult Classroom			Youth Classroom		
	Yes	Yes No Do		Yes	No	Don't know	
		Percent (%)		Percent (%)			
Other videos	89.5	89.5 5.9 4.6		86.4	5.8	7.8	
The Last Shot video	84.2	84.2 6.3 9.5		79.3	4.2	16.5	
Powerpoint presentation	70.5	25.0	4.5	68.8	20.0	11.2	

Students were also asked what field day exercises they practiced themselves, watched an instructor demonstrate, or neither. Tables B24-B27 show most respondents practiced .22 rifle shooting, field walk with firearm carry positions, muzzle control, and zones of fire. However, because not all respondents are practicing .22 rifle shooting (a minimum requirement), inconsistency in field days is apparent. Findings underline that youth online respondents practiced field day exercises more than all other groups and adult online respondents practiced field day exercises the least (Tables B24-B27). Consequently, several adult online respondents commented about a lot of "standing around" and "killing time" at their field days (Table C16).

Many respondents didn't remember how long their course took to complete. Classroom respondents estimated course duration at 12 to 20 hours, while online respondents estimated 4 to 12 hours (Tables 9-10). Predictably, the virtual field day appeared to take slightly longer than normal online courses due to the added chapter (Table 10).

Table 9. Hours classroom respondents indicated their course took, excluding the field day (n=159-261)

201)					
	Less than 11	12-15	16-20	More than 20	Don't know
			Percent (%)		
Adult Classroom	8.8	29.6	29.6	17.6	14.5
Youth Classroom	9.6	25.7	25.3	8.0	31.4

Table 10. Length of online courses

Hours online respondents indicated their course took, excluding the field day? (n=224-278)						
	0-3	4-8	9-12	13 or more	Don't know	
		Percent (%)				
Adult Online	5.4	30.4	33.0	15.6	15.6	
Youth Online	2.9	24.8	29.9	20.1	22.3	
Hours online respondents indicated their course took, including virtual field day? (n=193)						
Virtual Field Day	0.0	23.3	44.0	20.2	12.4	

Student final exam questions

One major topic that arose during the focused discussions was the 50-question final exam given to classroom students and all students at in-person field days. Several problems with question wording were the main concern among participants. One participant said, "the test needs to be rewritten. Kids don't

understand the word 'entrails.' And the conservation/preservation." Focused discussions did reveal that some instructors will abbreviate course topics such as wildlife management, wildlife identification, and hunting regulations (Appendix D). It seems the exam's vocabulary may still be confusing for students whether the topics were adequately covered or not.

Additionally, another participant explained that "double negatives on the test are confusing. They've taken out double negatives in testing overall [e.g. schools]." Several participants noted that "certain questions, we just give it to them because the wording is so tricky." Recommendations discuss the possibility of revising or rewriting the final exam.

Instructor certification process

Focused discussion participants generally perceived the instructor training and certification process to be too easy, with too many assumptions about prior firearms experience (Appendix D). Currently, there is no testing procedure in place to become a certified firearms safety instructor. One participant suggested a test may help improve the training, "should there be a testing procedure in place for instructors? If it started with a test, it would've been fine."

Another instructor commented that "the training is a weakness. I took the training, but I had no idea how to run the class." A different instructor had similar feelings that the training was "very disappointing. Two and a half hours, not four hours, like they said. Never touched a gun. It was like "here's your manual, now go find a group."

Further, some participants were confused about how to find other instructor teams for additional mentorship or training after becoming certified. For example, one instructor said the DNR should "organize by city/location, help pair people together" after completing the course. Communication is an important factor here, as one instructor said "it would be helpful to share practices across instructors. There's isolation across instructor regions."

While these criticisms were common, a few participants did offer very positive feedback about their instructor training experience. One participant thought, "It's a good process. They have every aid to teach you how to be a FAS instructor."

3. Differences between online and classroom respondents

While comprehension of course topics and course satisfaction are essentially the same between online and classroom students, online and classroom respondents did have some differences in terms of firearms experience, motivations for taking the course, logistics, and demographic representation.

Firearms & hunting experience

As previously mentioned, virtual field day respondents have the highest rates of past experience with firearms or hunting (86.5%) compared to other groups (Table 6). The group with the least prior firearms or hunting experience is adult classroom respondents (63.4%, Table 6). While it may appear that respondents selected their course based on their level of firearms experience, it may be helpful for the DNR to explicitly note the importance of hands-on practice for inexperienced students.

Another expression of this difference is experience hunting in an elevated stand. Table 11 below shows online respondents were more likely to have past experience hunting in an elevated stand than classroom respondents.

Table 11. Whether or not respondents have previously hunted in an elevated stand (n=136-249)

		Adult Classroom	Adult Online	Youth Classroom	Youth Online
	No	66.9	48.0	55.8	46.6
,	Yes	33.1	52.0	44.2	53.4

Further, intent to hunt in the next year differs between online and classroom respondents. Specifically, results indicate adult classroom respondents are less intent on hunting this year (65.9%), while online and virtual field day groups are the most intent of all on hunting this year (85.6-89.3%).

Table 12. Respondent intention to participate in hunting or target shooting this year (n=163-285)

_	Hunting			Target shooting		
	Yes	No	Don't	Yes	No	Don't
	168		know			know
	Percent (%)			Percent (%)		
Virtual Field Day	89.3	4.1	6.2	79.8	6.7	13.5
Adult Online	88.1	4.8	7.0	74.9	12.6	12.6
Youth Online	85.6	6.7	7.7	73.6	7.9	18.4
Youth Classroom	81.7	5.9	12.5	67.9	11.6	20.5
Adult Classroom	65.9	20.1	14.0	72.4	14.1	13.5

Motivations for taking the firearms safety course

As might be expected, online and classroom respondents have different reasons for choosing their preferred course option. When asked why they chose a particular course option, a large majority of online students reported due to convenience (Table 13). Convenience was still a factor for classroom respondents, but "learn more from this option" seemed to be a primary motivator for classroom respondents. A majority of virtual field day respondents also indicated they already had firearms experience, but needed certification to hunt (51.3%). However, this item cannot be compared to other groups because it was not an option listed on paper questionnaires.

Table 13. Reason for respondent's choice of either classroom or online course* (n=165-282)

	Adult	Adult	Youth	Youth	Virtual
	Classroom	Online	Classroom	Online	Field Day
			Percent (%)		
Most convenient	37.0	96.4	33.1	78.4	92.2
Learn more from this option	47.9	6.7	57.2	8.5	6.2
Other options were not available	4.2	11.6	2.2	24.8	8.8
Already had firearms experience,				_	51.3
but needed certification to hunt	-	1	_	ı	31.3
Other	18.8	8.4	7.1	9.6	2.6
Unaware of other options	10.3	0.9	21.6	4.6	0.0
Seemed easier	6.1	3.6	3.7	5.3	5.7

^{*}More than one answer may be checked.

Motivations for taking the course differed among online and classroom respondents as well. Table 14 below shows that while all groups largely took the course to hunt big game, small game, and waterfowl, virtual field day respondents were much more likely than others to take the course to "spend more time with friends/family who hunt" and "to understand more about firearms."

Table 14. Reason respondents took the firearms safety course* (n=163-280)

	Adult	Adult	Youth	Youth	Virtual
	Classroom	Online	Classroom	Online	Field day
	Percent (%)				
To hunt big game	41.7	65.6	73.0	69.3	69.1
To spend more time with friends/family who hunt	50.3	61.2	55.6	57.9	68.6
To understand more about firearms	66.3	44.5	61.9	51.8	40.7
To hunt small game	40.5	48.0	56.3	60.0	58.2
To hunt waterfowl	25.2	33.9	30.7	40.7	44.8
Other**	20.2	11.5	8.1	6.4	2.1
Because my friends took the course	5.5	3.1	7.4	10.4	4.6
To join my school's trap shooting/clay target team	0.6	0.9	6.7	15.7	0.0
To hunt out of state	-	-	-	-	16.5

^{*}More than one answer may be checked

Logistics

There are relatively few logistical differences of importance, but one main issue that arose during this study was the difference in self-certification follow-through between online and classroom students. As mentioned earlier in Table 5, about 90 percent of online respondents completed the self-certification process through the DNR website while less than half of classroom respondents completed it. Further, three-fourths of online respondents printed their certificate, while only about 12 percent of classroom respondents did so (Table 5). As previously mentioned, this difference is likely due to miscommunication between the DNR and volunteer instructors and subsequently misinformation given to students by volunteer instructors.

There is also a slight difference between online and classroom students regarding fees paid directly to volunteer instructors. The caveat here is that a large proportion of respondents don't remember exactly how much they paid directly to their firearms safety instructor (Table 15). Volunteer instructors should only be collecting \$7.50 from students; with the exception of camps or organized programs, where the cost may be integrated into the total fee. However, adult online respondents seem to have higher rates (12.0%) of instructors charging over \$7.50. Therefore, it is essential to continue communication about appropriate fees and the self-certification process.

Table 15. Dollars respondents paid directly to their volunteer instructor (n=164-276)

				(
	Adult Classroom	Adult Online	Youth Classroom	Youth Online
		Perce	ent (%)	
Don't know	27.4	51.1	42.7	52.5
\$7.50	45.1	28.4	33.8	32.6
Less than \$7.50	19.5	8.4	17.7	10.1
More than \$7.50*	7.9	12.0	5.8	4.7

^{*} Respondents who selected more than \$7.50 most often responded that they paid \$15.00, then \$10.00.

^{**}Other: Includes to learn with or help teach children about firearms and hunting, to be safe with firearms while hunting, to hunt out of state/country, and because certification is a legal requirement to hunt.

Demographic differences

Over 94 percent of all respondents were Caucasian/White and not of Hispanic/Latino/Spanish ethnicity. However, there were some differences in age and gender among groups. The majority of adult classroom respondents were female (54.5%), while all other groups had a male majority (Table B41). More notably, Table 16 shows adult online and virtual field day respondents were quite a bit younger than the adult classroom respondents. There was not a major difference in age between youth classroom and youth online.

Table 16. Age of respondents (n=164-290)

	Median Age (years)
Adult Classroom	40
Adult Online	28
Virtual Field Day	26
Youth Online	13
Youth Classroom	12

Recommendations

The following are a series of recommendations that may benefit the DNR's Firearms Safety Hunter Education Program. Recommendations are based on the survey, focused discussion findings, and observations. While many of these recommendations are easily implemented, additional funding and staff may facilitate more effective and efficient implementation of the below suggestions.

Section 1. Overall

Overall recommendations are broad themes that emerged from observations during evaluation and discussions with program staff and volunteer firearms safety instructors. Recommendation A in particular should be kept in mind when reviewing the following suggestions.

A. Define official scope of DNR's responsibilities regarding intended program outcomes and meaning of "certification"

- There is some confusion between DNR program staff, leadership, and instructors about intended program outcomes and responsibilities. Currently, the stated program outcomes are to "prevent firearms and hunting accidents" and "ensure the future of hunting and shooting sports through compliance with laws, regulations, and ethics." However, the course's deliverable outcome is firearms safety certification.
- Department leadership, in collaboration with program staff and instructors, should work to:
 - o more specifically define the DNR's role in reaching stated outcomes,
 - o determine what "certification" means to all program stakeholders (staff, instructors, students), and
 - o clearly communicate these definitions and roles to the public and stakeholders in the future.

B. Collaborate with cities and counties to increase number of sites available for classes and field days

- Several instructors voiced concerns that they are experiencing difficulties securing sites for classroom courses and field days; particularly in the Metro area. Even though some mentioned they received help from the DNR to resolve these issues, more needs to be done. It is vital that the DNR provide sufficient space for the program to be run effectively.
- Communication with city or county officials to discuss and resolve any issues regarding this situation would likely go a long way to increase access to training sites.
- This effort may need to be led by the Commissioner's office or other higher Departmental authority.

Section 2. Volunteer Firearms Safety Instructors

Volunteer firearms safety instructor recommendations are founded largely on focused discussion comments and responses from the student surveys. Efforts toward improving instructor involvement, communication, and training should be considered.

C. Engage volunteer instructors in program planning and decision-making

- Because instructors are the face of the firearms safety program, deliver the program itself, and are
 directly affected by program changes, it is necessary to increase their engagement in decisionmaking and planning processes.
- Allowing instructors an opportunity to voice their concerns about any program changes will
 improve instructor morale and facilitate easier communication between the DNR and instructors;
 and further, firearms safety students.
- Increased instructor engagement may be in the form of a formal advisory committee that meets regularly, frequent informal regional gatherings facilitated by the DNR, or another format determined by program staff. Involvement of the Minnesota Volunteer Safety Instructors Association (MVSIA) more frequently in program discussions would be beneficial.

D. Determine more efficient and effective ways to identify instructor transgressions

- Evaluation results suggest there is inconsistency in course and field day operations. This
 inconsistency allows instructors to be creative and try new things. However, in some instances,
 inconsistency has led to noncompliance with DNR regulations. Noncompliant instructors must be
 identified for decertification or warnings.
- We recognize that RTOs and COs are stretched thin and may not have the capacity to monitor classes, field days, or distribute instructor evaluations to students regularly. Nevertheless, we encourage program staff to start a discussion about how to more efficiently identify noncompliant instructors.

E. Reinstate annual instructor meeting to discuss program changes, updates, and obtain feedback

- While program staff have organized annual instructor banquets in the past, it would be helpful to reinstate a version of this meeting that includes discussion of program changes or updates, skills workshops related to best practices for teaching, and opportunities for instructors to provide input through discussions or feedback sheets.
- Focused discussion participants frequently mentioned they appreciated the opportunity to get together, socialize, and learn about other approaches to teaching firearms safety. These sorts of activities build rapport, trust, and will help improve and facilitate communication between instructors and the DNR.

F. Refocus the volunteer instructor training and include a final examination

• Many focused discussion participants were concerned the instructor training was insufficient. As a result, it may be helpful to refocus the volunteer instructor training on how to teach, handling of

firearms, and review of course content. While administrative requirements are key, it would be helpful to spend more time on approaches to teaching course content, specifically:

- o Allow time to conduct a mock field day (for all class types)
- o Discuss and demonstrate helpful teaching approaches for course content (classroom courses)
- o Consider creation of a final exam prior to certification that includes a written portion and a demonstration/hands-on portion
- Consistent mention of how to connect with existing instructors and instructor teams is imperative
 to eliminate any confusion about next steps upon certification for those people who may not
 already know other instructors.
- Because RTOs have limited time already to conduct volunteer instructor training, this suggestion is not meant to increase the amount of time spent on training but to slightly alter the training approach.

G. Provide a hands-on advanced or specialized optional training

- Focused discussion participants were not in favor of mandatory retraining, but were interested in
 a more advanced course beyond the general refresher course currently being offered by the DNR.
 One particular individual commented that they'd like to see how a CO runs the range. These
 courses could be held in conjunction with an annual meeting.
- In addition, many participants were not aware of current refresher courses, so again the opportunity to improve communication of existing efforts is relevant here.

H. Establish new ways for instructors to communicate with each other, share resources, and easily find program updates as needed

- Create a secure online instructor's forum that offers:
 - o storage for electronic documents,
 - o an area to post course updates,
 - o an online directory of instructors and Conservation Officers by location (permission to share instructor contact information required),
 - o a "bulletin board" where instructors can request or respond to resource or assistance needs. Other states with secure instructor logins or intranet sites include: Arizona, Alaska, Delaware, Kansas, Missouri, North Dakota, Vermont, Virginia, and Wisconsin.
- Consider discontinuing distribution of the paper newsletter, but still distribute an e-newsletter.
 - Focused discussions revealed instructors largely prefer e-mail communication, although some still prefer phone or in-person with their CO. However, it seems that discontinuing distribution of the paper newsletter to cut costs and time is practical.
 - o Program staff should continue distributing the e-newsletter via GovDelivery or e-mail.
 - o For instructors that prefer a mail newsletter, offer to send them a hard copy upon request for two to three years before requiring another opt-in. New instructors could opt-in via the Volunteer Agreement Form.
- Consider organizing quarterly informal instructor "meet-ups," either initiated by local DNR Conservation Officers or a willing volunteer instructor.

o Participants of focused discussions commented that they enjoyed the chance to get together and share best practices with other instructors in a more casual setting.

Section 3. Firearms Safety Students

Student recommendations largely relate to appropriate choice of course option, increasing accessibility to instructors for online students, and communicating all hands-on options. Due to concerns from volunteer instructors about the online courses, DNR program staff should work to understand and resolve any possible shortcomings of the adult online course with virtual field day given the option's controversial nature thus far.

I. Redefine how potential students determine what type of firearms safety course to take

- Because a major concern among focused discussion participants was the online course's lack of
 firearms handling practice, it would be helpful to provide students with recommendations for
 choosing the best course option for their experience level while considering outside support such
 as friends or family.
- For example, if a prospective student is looking on the DNR website to see what types of courses are available, perhaps a quiz or short description of each course and its ideal student would provide a filter for inexperienced students who may benefit more from a particular course style.
- Specifically, the classroom course may better serve students with little firearms experience who
 don't have access to a firearms or hunting mentor that will assist them upon completion of the
 course; or, for students who desire more hands-on learning. The online class may be a better fit
 for someone with a tight schedule, desire to learn independently, who also has had previous
 firearms experience, and is connected to a hunting or firearms mentor that will support their
 future learning.

J. Provide information to virtual field day students about hands-on opportunities

- Survey results show many virtual field day students have previous firearms or hunting experience, but it is still imperative to make resources known to any students that are interested in gaining more hands-on experience.
- One option is to set-up a list of resources on the website including options such as: in-person field days, local gun clubs, or private lessons. Similarly, program staff could request that HunterCourse.com post a similar list of resources at the end of the virtual field day portion so students would see hands-on options automatically.

K. Provide a way for online students to ask questions of instructors, such as an "instructor on call" via e-mail

Comments from student surveys (Appendix C) and online education literature (Appendix A) suggested it would be helpful if during the online course students had a way to ask questions. While instructors are already volunteering a significant amount of time, an actual "on call" instructor is unrealistic. However, creation of an "instructor on call" e-mail account available to online students for questions would enhance the online course's interactivity and improve learning.

- Another possible communication feature is a "Frequently asked questions" (FAQ) page on the DNR website and/or HunterCourse.com for students to access as a first-step to minimize management of an on-call instructor e-mail account.
- Further, literature (Appendix A) explains the importance of peer communication in addition to student-instructor communication. If possible, creation of an online forum or instant messaging feature on HunterCourse.com that allows students to communicate with each other while learning would be beneficial.

Section 4. Course Materials

While minor, several issues with course materials arose and can be fixed with relative ease. Program staff are likely able to resolve Recommendations L and M without significant time or resource dedication.

L. Rewrite final exam with advice from an educational professional or by accessing HunterCourse.com exam questions

- Instructors explained that questions with scientific vocabulary such as carrying capacity (#31), huntable surplus (#42), conservation vs. preservation (#30), and entrails (#40) are often incorrectly answered or confusing.
- Questions posed with the word "not" may be counterproductive for firearms safety education, including questions 7, 10, 20, 28-29, and 33.
- One focused discussion participant kept record of exam scores since fall 2011. After calculating percent incorrect for each exam question over time, evaluators determined that over 20 percent of students incorrectly answered questions 8, 10-11, 28, 33-34, 40, and 46.

M. Regularly update materials and resources

- Discontinue use of videos or materials that show hunters in red instead of blaze orange.
- Update instructor Powerpoint to reflect presentation best practices and correct inaccurate page number references. Encourage instructors to send ideas for improving the Powerpoint to program staff.
- Ensure all instructors are sent updated hunting regulations annually.

Section 5. Potential Staffing & Resource Needs

As previously mentioned, successful implementation of these recommendations will inevitably require additional resources. Two staffing needs arose as critical missing roles during this evaluation.

N. Consider filling the currently vacant education specialist position

• Although resources may be constrained to fill vacancies, it is apparent from this study and needed recommendations above (e.g. revising final exam, writing volunteer instructor exam, online education consultation) that filling the education specialist position would be beneficial to the program staff, volunteer instructors, and students. Given that the course's goal is to educate

students, it seems critical that an educational professional be on staff to lend expertise in such areas.

O. Consider hiring a shared or contracted MN.IT staff member to support evolving technology needs of the firearms safety education program

• Again, although resources may be constrained to dedicate MN.IT staff time to the firearms safety program, many of the above recommendations require advanced technological expertise to accomplish. A contract to complete initial modifications and additions to the program's website and GovDelivery support may suffice. Comparatively, proposal to dedicate MN.IT staff time to supporting the firearms safety program's needs is another ideal alternative.

Appendix A: Literature Review

The effectiveness of online education in comparison to classroom education is an issue that has been widely analyzed and debated since the invention of the internet. Online education has expanded and evolved dramatically, and is now offered as an option in high schools, universities, businesses, and even recreational safety programs. Since 2000, states have begun to offer recreational safety courses online for snowmobilers, ATV riders, boaters, and hunters, among others. The Minnesota Department of Natural Resources (DNR) offers the opportunity for youth to take part and adults to take the entire firearms safety course online. Because the online option for hunter education presents a new learning format for a traditional sport, it is essential to learn if online and classroom students gain an equal understanding of course content.

It is natural to have reservations about virtual instruction of a hands-on activity. However, this literature review sheds light on the viability and practicality of online education in the schools, safety education programs, and finally, hunter education programs. Past research in these areas informs technology's place in hunter education now and in the future. However, this review is not intended to justify online education as a replacement for classroom or hands-on instruction, but to identify best practices for each approach and their comparable outcomes for knowledge retention.

General online and classroom education

There has long been a discussion about the role of distance and online learning in schools and other educational settings. While this discussion may seem new and unresolved to the general public, researchers have been comparing online and classroom instruction for decades. The large majority of researchers in this field has found online and classroom methods are equally effective for knowledge retention (Aragon, Johnson, & Shaik, 2002; Mentzer, Cryan, & Teclehaimanot, 2007; Russell, 2010). Russell (2010) explains that "students who opt for distance delivery are not immediately put into a compromised position simply because they are not receiving their education in a face-to-face format." Unexpectedly, a couple of studies found that online learning could be a better option in some situations. For example, one analysis determined that "students in online conditions performed modestly better, on average, than those learning the same material through traditional face-to-face instruction" (Means, Toyama, Murphy, Bakia, & Jones, 2010, p.xiv). While that conclusion was not consistent across the board, it is difficult to argue the claim "that online training is as effective and more efficient an instructional method than classroom training" (Schmeeckle, 2003, p.205).

Nevertheless, the way technology is used for online learning is critical. Bernard, Abrami, Lou, Borokhovski, Wade, Wozney, and others (2004) explain that, "practitioners of either distance education or classroom instruction should ensure quality course design and collaborative learning" (p.411). Comparatively, it is the "instructional methods rather than delivery media that determines learning outcomes" (Sitzmann, Kraiger, Stewart, & Wisher, 2006, p.642). However, future research is still needed to determine the most preferable and effective instructional methods to "best utilize technology attributes" for desired student outcomes (Russell, 2010).

The method of presenting course materials is one of many factors influencing a student's performance. Learning time, materials, opportunities for collaboration, and intrinsic motivation are often as or more important than how the class is delivered (Schmeeckle, 2003; Mentzer, Cryan, & Teclehaimanot, 2007; Means et. al, 2010). A crucial aspect of learning is student motivation, which can be a challenge for online learners. Schmeeckle (2003) found "the classroom group reported higher motivation and positive feelings concerning their instruction than did the online group" (p.205). Lower motivation could be one reason "student final grades were lower in the web-based course due to incomplete assignments"

(Mentzer, Cryan, & Teclehaimanot, 2007, p.233). Ensuring students are completing required materials and are provided with an incentive to learn is important for online and distance education.

Research shows the need for curriculum and course design that is catered to the specific learning mode, whether it is online or classroom. Learning styles are a necessary component to consider in educational design. Specifically, while Aragon, Johnson, & Shaik (2002) explain that learning style preferences shouldn't affect student performance, it is imperative "to note that online environments will focus on learning by watching, listening, and thinking; while face-to-face formats should focus on learning by doing" (p.242). Regardless of learning style, communication opportunities must exist in any educational setting. According to Bernard et al. (2004), "sufficient opportunities for both student/instructor and student/student communication are important," in particular, for problem-based learning.

Dishonesty in online courses

One of the perceived concerns about online education is the prevalence of dishonesty, or cheating, in online classroom settings. Kennedy et al. (2000) supports the perception that a "majority of students and faculty think it is easier to cheat in a distance learning class, suggesting that as the number of distance learning classes increase, so will academic dishonesty." However, more recent and reliable literature explains that cheating is different in online versus traditional education, but no more or less prevalent. Addressing dishonesty based on course type is essential.

To illustrate, one study explains that while there is the "perception that cheating will be more abundant [online] than...in a traditional classroom setting... [there is] evidence that academic dishonesty in a single online class is no more pervasive than in traditional classrooms" (Grijalva, Kerkvliet, & Nowell, 2006). Spaulding (2009) echoed this finding, and explains that "there may be unnecessary alarm concerning the prevalence of academic dishonesty in online courses as opposed to face-to-face courses" (p.196). However, it is important to expect online students to use "every resource available to them all the time" and adapt to that reality (Christie, 2003, p.57).

Both classroom and online courses must apply methods to discourage dishonesty; and these methods differ by course type. Christie (2003) offers several useful strategies to discourage dishonesty specifically in the online classroom. While classroom courses often experience "panic" or spontaneous cheating rather than "planned" cheating, online courses do not cause the same degree of panic cheating (Grijalva, Kerkvliet, & Nowell, 2006, pp.3-4). As a result, design of an online course should at minimum include well written exam questions, consider the use of honor statements, use time limits for exams, and offer multiple versions of the exam (Christie, 2003, p. 57). Therefore, while additional measures can always be taken to minimize prevalence of dishonesty, the most recent research indicates students are no more likely to cheat in an online than traditional classroom setting (Heberling, 2002; Christie, 2003; Grijalva, Kerkvliet, & Nowell, 2006; Spaulding, 2009).

Blended is best

Although online learning is documented as a comparable educational alternative to classroom learning, researchers agree that the best learning opportunity is to combine the two methods, often called a "blended" approach. Means et al. (2010) state that "instruction combining online and face-to-face elements had a larger advantage relative to purely" one or the other. The advantage of blended learning conditions is not so much a result of media, but rather content, teaching style, and learning time" (p.xv). Similarly, Russell (2010) explains how student outcomes are dependent on more than just offering a course in a "new medium."

Dissenting opinions

While literature supports the claim that online instruction is comparable to classroom instruction for knowledge retention and dishonesty rates, it is critical to note that some dissenting research exists. The main criticisms of online learning aren't related to effectiveness, but propose that online education might not be an appropriate choice for all students. For example, Huang (2002) suggests that online learning is more practical for adults, but may not work as well for children. Means et al. (2010) does not directly support this assertion, but explains that very few studies have been done comparing effectiveness of online versus classroom education for K-12 students. More research is needed to understand the effects of online education for youth.

Safety education

A possible concern remains about the comparative effectiveness of online versus classroom instruction for more hands-on topics, such as safety education. However, research in this particular area also found that there was no practical difference between the two modes of education. For instance, Deatz and Trippe (2012) tested boating education students directly after their course and several months later to compare knowledge retention. They discovered that the average mean score several months later was 71 percent for online students and 73 percent for classroom students (Deatz & Trippe, 2012, p.9). While the "difference in retention between groups was found to be statistically significant, the practical significance appears minor and both groups retained much of the training content" (Deatz & Trippe, 2012, p.9). Similarly, Scott & Chapman (2004) compared home study and classroom driver's education courses and found "no compelling evidence that home study courses are less effective than classroom courses for teaching driver education" (p.30). However, given the nature of safety education, there are several caveats of online education to be discussed.

Additional hands-on instruction and user-friendliness are necessary concepts to include in an online safety education course. One reason for extra hands-on instruction is simply public perception, as there is "more [public] support for hands-on ORV safety education than a classroom oriented approach with optional hands-on" (Nelson & McCoy, 2005, p. 92). Secondly, there is the assumption that online courses are in fact user-friendly. Moore et al. (2010) indicate that "the online [boater education] course must be easy to navigate and the information logically organized in appropriate chapters" (p.34). The same study explains that "to maximize learning for all course providers, critical objectives and content should be identified and aligned with the media to support knowledge transfer" (Moore et al., 2010, p.34). Essentially, this means that course designers should understand what concepts call for videos, text, animation, and other online presentation approaches. Therefore, online safety education provides many benefits given the opportunity for adequate hands-on training in addition to consistency of course content and presentation.

Smart implementation of online safety education ensures certain benefits. One example is the ability of internet to reach a broader audience. Nelson, Lynch, and Planner (2003) propose that "making use of the internet to reach a broader audience with marine safety information appears to be a positive with little downside...the familiar use of computers, CDs, and DVDs by officers teaching marine safety can enhance their status and the value of their message in the eyes of teens" (p.391). Online options may have the potential to increase youth engagement with safety education and expand the area for which courses are offered. A related notion is the possibility that home study courses may also have the additional benefit of increasing parental involvement in their teen's learning process, which has been shown to be an important factor in the effectiveness of graduated licensing laws in general" (Scott & Chapman, 2004, pp.6-7). In addition, familial or parental involvement as a result of home study or online safety education inherently adds the hands-on factor to the experience.

While it is crucial to compare challenges and benefits of online versus classroom safety education, the overall effectiveness of safety education in general remains uncertain. An ATV safety program effectiveness study revealed that "the safety intervention [a school safety presentation] was effective at increasing ATV safety knowledge, but demonstrated limited effect on safe riding practices" (Novak et al., 2012). Specifically, "while adolescents reported an increase in helmet use and safety gear, the changes were not statistically significant (11.8% vs. 21.2%), although use of safety gear may be practically significant" (Novak et al., 2012). These results indicate some increase in helmet use following a safety presentation, but it may be difficult to generalize the effectiveness of a safety intervention without statistically significant results. Evidently, more research on effective teaching methods for safety education is warranted.

Hunter education

The effectiveness of safety education is of particular importance to hunting and shooting sports, where the ignorance of safety practices could mean the difference between life and death. While there is some debate about the extent to which knowledge retention leads to safe practices, high knowledge retention should be a continuous goal of hunter education. Similar to research in schools and safety education, there should be no significant difference in knowledge retention between online and classroom instructional methods for hunter education (Russell, 2010). A study comparing home study and classroom hunter education courses "revealed no statistically significant difference" between the course offerings (Hilaire, Benson, & Burnham, 1998, p.56). In addition, there are many advantages of home study hunter education to consider.

Home study and online options for hunter education offer a variety of benefits that may be appealing to students and instructors alike. For example, "self-paced learning, reduced travel, training for more than one learner at once, greater depth of learning, flexible time schedules, the opportunity for more hands-on time with firearms...and more consistent student learning" are all desirable characteristics of home study and online hunter education (Hilaire, Benson, & Burnham, 1998, p.64). However, these benefits are irrelevant if the student does not adequately learn the material.

Researchers propose several ways to facilitate effective learning of hunting and firearms safety outside the classroom. First, it is necessary to understand the different learning styles and preferences of youth and adults. Hilaire, Benson, & Burnham (1998) "recommend that younger students could benefit [from home study hunter education], but should have social support" (p.65). Fortunately, hunting can be a very social, family-oriented activity. A 1995 study by Responsive Management indicated "hunters come from hunting families, and hunting families produce hunters," suggesting that social support is part of hunting culture (Responsive Management/National Shooting Sports Foundation, 2008, p.39). While social support for younger students is critical, additional hands-on instruction is also a crucial component to ensure course effectiveness.

The large majority of hunter education programs throughout the United States offer online courses that require a hands-on field day component. The Alabama Department of Conservation conducted a peer review in 2009 that found it is very important to "encourage more hands-on exercises during the course" (p.4). Comparatively, a 2007 peer review of the Minnesota Firearms Safety Hunter Education Program explains "young people are visual learners and learning by doing is a very acceptable and encouraged way for students to grasp and retain the material" (p.10). The field day is necessary practice for hunting regardless of whether the content is taught online or in a classroom. The educational approaches mentioned above are just a few of the many ways hunter education programs can promote knowledge retention and course effectiveness across course offerings.

There have been relatively few recent studies done to compare the effectiveness of online and classroom instruction for hunter education. However, it is evident from the broader education literature and existence of online courses throughout the country, that the online hunter education course is a practical and equal alternative to the classroom for knowledge retention; especially for adults. The reality of hunting and shooting sports participation declines paired with an increasingly technology-oriented society necessitates the need to offer more easily accessible, but comparable options to the traditional version of hunter education. By understanding ways to enhance student learning in both the virtual and in-person setting, hunter education programs have the potential to improve course effectiveness and retention of safety knowledge as a result.

Appendix B: Supplementary Tables and Figures

Table B1. Revised sample sizes after removal of invalid adult classroom respondents

Class Type	# Respondents
Youth Online	290
Youth Classroom	276
Adult Online	229
Adult Classroom	172
Total	967

Table B2. How did the respondent hear about the firearms safety course? (n=165-281)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online
		Perce	ent (%)	
DNR website	36.4	53.1	34.2	40.2
Friend or family member	46.7	42.9	28.6	42.7
School	3.0	0.0	17.5	5.7
Other	4.2	3.1	7.1	5.3
Community organization	4.5	0.0	9.3	4.3
Flyer or other posting	5.5	0.9	7.8	1.8

Other (Table B2): Based on qualitative analysis, "other" responses indicated that respondents heard about the course from a volunteer instructor or other DNR personnel. A few people said they heard about it from a youth club or camp, a newspaper, or a gun club.

Table B3. Classroom respondents travel time to firearms safety course

Time respondents spent traveling to class, one-way (n=165-268)								
	Adult Classroom	Youth Classroom						
	Perc	ent (%)						
0-15 minutes	55.8	65.7						
16-30 minutes	29.1	26.5						
31-45 minutes	9.1	4.9						
46-60 minutes	3.6	0.7						
91 minutes or more	1.2	1.5						
61-90 minutes	0.6	0.4						
Don't know	0.6	0.4						
Perception that travel time	was too short, about righ	t, or too long (n=164-268)						
About right	90.9	91.4						
Too long	7.9	6.0						
Don't know	1.2	2.2						
Too short	0.0	0.4						

Table B4. Range of travel times to classroom courses reported to be "too long" (n=13-16)

	Adult Classroom	Youth Classroom			
	Percent (%)				
31-45 minutes	46.2	25.0			
16-30 minutes	30.8	56.3			
46-60 minutes	15.4	12.5			
61-90 minutes	7.7	6.3			
0-15 minutes	0.0	0.0			
91 minutes or more	0.0	0.0			

Table B5. Information about field day travel time

Tuble Be. Information about field day travel time										
Time respondents spent traveling to their field day, one-way (n=164-282)										
	Adult Classroom	Adult Online	Youth Classroom	Youth Online						
		Percent (%)								
0-15 minutes	36.6	26.1	46.6	28.0						
16-30 minutes	32.3	23.0	32.3	22.7						
31-45 minutes	21.3	24.3	12.0	17.7						
46-60 minutes	4.9	13.7	3.8	10.3						
61-90 minutes	3.0	8.0	1.1	11.7						
91 minutes or more	0.6	4.0	3.0	8.2						
Don't know	1.2	0.9	1.1	1.4						
Perception that tra	vel time too short,	about right, or	too long (n=163-28	30)						
About right	91.4	76.5	91.7	77.1						
Too long	6.1	19.9	4.5	20.4						
Don't know	2.5	3.1	3.4	2.1						
Too short	0.0	0.4	0.4	0.4						

Table B6. Range of travel times to field days reported to be "too long" (n=12-57)

	Adult Classroom	Youth Classroom	Adult Online	Youth Online				
		Percent (%)						
31-45 minutes	75.0	41.7	31.1	14.0				
46-60 minutes	8.3	16.7	26.7	24.6				
61-90 minutes	8.3	8.3	24.4	28.1				
91 minutes or more	0.0	16.7	13.3	29.8				
16-30 minutes	8.3	16.7	2.2	1.8				
0-15 minutes	0.0	0.0	0.0	1.8				

Table B7. Classroom respondents' satisfaction levels with course fees

Classroom resp	Classroom respondent satisfaction level with the volunteer instructor fee (n=162-248)										
	Mean*	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Don't know				
				Percent	t (%)						
Adult Classroom	4.3	4.9	0.0	8.0	27.2	52.5	7.4				
Youth Classroom	4.2	5.2	0.0	8.9	31.0	46.0	8.9				
Classroom resp	ondent sa	tisfaction level w	ith the online	self-certi	fication fee	e (\$7.50)? (n=1	27-201)				
Adult Classroom	4.3	3.9	0.0	10.2	31.5	45.7	8.7				
Youth Classroom	4.1	5.0	1.0	10.4	34.8	36.8	11.9				

^{*}Note: On a scale where 1=very dissatisfied and 5=very satisfied

Table B8. Online respondents' satisfaction levels with course fees

	Table Bo. Offine respondents satisfaction levels with course rees											
Online respon	Online respondent satisfaction level with the volunteer instructor fee (n=214-264)											
	Mean*	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Don't know					
				Percen	t (%)							
Youth Online	4.1	1.9	1.1	14.8	33.7	33.3	15.2					
Adult Online	4.0	1.4	1.9	17.8	42.1	27.6	9.3					
Online respon	ndent sat	isfaction level wit	h the online se	elf-certific	cation fee (\$7.50) (n=221-2	273)					
Youth Online	4.1	1.5	2.6	15.4	42.5	35.2	2.9					
Adult Online	4.0	1.4	3.6	15.4	48.0	29.0	2.7					
Online respon	ndent sat	isfaction level wit	h the Hunter(Course.co	m fee (\$24.	95) (n=226-275)					
Youth Online	3.9	2.2	6.5	16.7	44.0	28.4	2.2					
Adult Online	3.8	1.3	6.6	22.6	46.9	20.4	2.2					

^{*}Note: On a scale where 1=very dissatisfied and 5=very satisfied.

Table B9. Level of agreement that adult classroom respondents are confident they understand the

below topics after completing the firearms safety course: (n=163-164)

below topics after completing the meaning safety course. (n=105-104)							
	Adult Classroom						
	Mean	Strongly	Disagree	Neutral	Agree	Strongly	Don't
		disagree	_			agree	know
				Percent	(%)		
Hunter responsibility	4.8	0.6	0.0	1.2	19.6	78.5	0.0
Hunter image, ethics, and responsibility	4.7	0.6	0.0	1.2	20.7	76.8	0.6
Transporting and carrying firearms	4.7	0.6	0.0	0.6	28.7	70.1	0.0
Safe and effective shot selection	4.6	0.6	1.2	1.8	26.8	68.9	0.6
Fundamentals of shooting	4.6	0.6	0.0	1.2	30.5	67.1	0.6
Personal preparedness for hunting	4.6	0.6	0.0	4.3	29.3	65.2	0.6
Firearms action types	4.5	0.6	1.2	1.8	38.4	57.9	0.0
Wildlife conservation and identification	4.5	0.6	0.6	3.7	42.1	53.0	0.0
Types of ammunition	4.3	1.8	0.6	7.3	47.0	43.3	0.0
Where to find hunting opportunities	4.2	1.2	1.8	15.2	37.8	42.1	1.8
Handguns	3.8	3.1	6.1	22.1	45.4	21.5	1.8
Muzzleloaders	3.7	3.1	6.7	23.9	41.7	20.9	3.7
Archery	3.6	4.3	7.4	28.2	36.2	19.0	4.9

Table B10. Level of agreement that adult online respondents are confident they understand the below topics after completing the firearms safety course (n=225-226)

below topics after completing the invariant safety course (1-225-220)							
		Adult Online					
	Mean	Strongly	Disagree	Neutral	Agree	Strongly	Don't
		disagree				agree	know
				Percent	(%)		
Hunter responsibility	4.7	1.3	0.0	1.3	27.0	69.9	0.4
Hunter image, ethics, and responsibility	4.6	1.3	0.0	0.9	30.5	66.8	0.4
Safe and effective shot selection	4.6	1.3	0.0	3.1	32.4	63.1	0.0
Transporting and carrying firearms	4.6	1.3	0.0	2.7	34.1	61.9	0.0
Personal preparedness for hunting	4.5	1.3	0.0	3.1	34.5	61.1	0.0
Fundamentals of shooting	4.5	1.3	0.0	4.0	34.1	60.6	0.0
Wildlife conservation and identification	4.4	1.3	1.3	6.2	35.1	56.0	0.0
Firearms action types	4.4	1.3	0.0	6.6	40.7	51.3	0.0
Types of ammunition	4.3	1.8	0.4	6.6	46.5	44.7	0.0
Handguns	4.2	0.9	3.1	12.4	42.7	40.4	0.4
Muzzleloaders	4.1	1.8	1.8	17.3	42.0	36.7	0.4
Where to find hunting opportunities	4.1	2.2	3.1	16.0	41.8	36.4	0.4
Archery	4.0	2.2	2.7	22.1	37.2	34.5	1.3

Table B11. Level of agreement that youth classroom respondents are confident they understand the below topics after completing the firearms safety course (n=266-270)

below topics after comp			1) 1111111 (
		Youth Classroom					
	Mean	Strongly	Disagree	Neutral	Agree	Strongly	Don't
		disagree				agree	know
				Percent	(%)		
Transporting and carrying firearms	4.6	0.4	0.0	1.9	34.4	63.3	0.0
Hunter responsibility	4.6	0.4	0.0	1.5	34.2	63.2	0.7
Hunter image, ethics, and responsibility	4.6	0.4	0.0	3.3	36.4	59.5	0.4
Safe and effective shot selection	4.4	0.4	1.9	6.3	41.1	48.9	1.5
Fundamentals of shooting	4.4	0.4	0.7	6.7	43.3	48.1	0.7
Personal preparedness for hunting	4.4	0.4	1.1	4.9	46.6	46.3	0.7
Firearms action types	4.3	0.4	0.7	6.7	54.1	37.8	0.4
Wildlife conservation and identification	4.2	0.4	2.2	11.2	47.2	38.2	0.7
Where to find hunting opportunities	4.1	0.8	2.3	12.4	52.6	30.1	1.9
Types of ammunition	4.0	0.4	3.7	15.2	52.6	27.4	0.7
Handguns	3.9	1.5	5.3	21.4	40.6	27.1	4.1
Muzzleloaders	3.9	1.5	8.6	19.0	41.4	26.5	3.0
Archery	3.8	3.0	7.9	25.1	32.6	26.6	4.9

Table B12. Level of agreement that youth online respondents are confident they understand the below topics after completing the firearms safety course (n=279-280)

below topics after compl			15 0001150 (11				
		Youth Online					
	Mean	Strongly	Disagree	Neutral	Agree	Strongly	Don't
		disagree				agree	know
				Percent	(%)		
Hunter responsibility	4.7	0.7	0.0	1.8	28.2	69.3	0.0
Transporting and carrying firearms	4.6	0.7	0.0	2.1	30.4	66.8	0.0
Hunter image, ethics, and responsibility	4.6	0.7	0.0	2.9	35.1	60.9	0.4
Fundamentals of shooting	4.5	0.7	0.4	2.5	37.6	58.4	0.4
Safe and effective shot selection	4.5	0.7	0.4	3.9	38.6	56.1	0.4
Personal preparedness for hunting	4.4	0.7	0.0	7.1	41.1	50.4	0.7
Wildlife conservation and identification	4.3	0.7	0.4	9.0	45.2	44.8	0.0
Types of ammunition	4.3	0.7	0.7	9.6	46.8	41.8	0.4
Firearms action types	4.3	0.7	0.7	6.8	50.9	40.5	0.4
Where to find hunting opportunities	4.1	0.7	2.5	18.2	41.1	35.7	1.8
Handguns	4.0	1.4	2.2	19.7	43.4	31.2	2.2
Archery	3.9	3.6	1.4	25.4	35.8	31.9	1.8
Muzzleloaders	3.9	1.8	3.2	24.7	41.6	26.9	1.8

Table B13. Level of agreement that virtual field day respondents are confident they understand the

below topics after completing the firearms safety course (n=191-194)

below topics after completing	5 the mean		course (II—				
				Virtual F	ield Day		
	Mean	Strongly	Disagree	Neutral	Agree	Strongly	Don't
		disagree				agree	know
Hunter responsibility	4.7	3.1	0.0	1.0	18.0	76.3	1.5
Hunter image, ethics, and responsibility	4.7	3.1	0.0	0.5	20.6	73.7	2.1
Transporting and carrying firearms	4.6	3.6	0.0	1.6	21.8	72.5	0.5
Safe and effective shot selection	4.6	3.1	0.0	3.1	25.9	67.4	0.5
Fundamentals of shooting	4.5	3.1	0.5	2.6	31.4	62.4	0.0
Personal preparedness for hunting	4.5	3.1	0.5	2.1	34.5	58.8	1.0
Firearms action types	4.5	3.1	0.5	2.1	36.1	58.2	0.0
Types of ammunition	4.4	2.1	0.0	5.2	42.3	50.5	0.0
Wildlife conservation and identification	4.3	3.1	1.6	7.3	37.5	50.0	0.5
Handguns	4.3	2.6	1.0	8.9	42.9	44.5	0.0
Muzzleloaders	4.2	2.6	1.5	12.4	44.8	38.7	0.0
Where to find hunting opportunities	4.1	3.1	5.2	14.9	35.6	41.2	0.0
Archery	4.1	2.1	2.1	14.5	43.0	38.3	0.0

^{*}On a scale where 1=strongly disagree and 5=strongly agree

Table B14. Was the length of the online course with virtual field day too short, about right, or too long? (n=192)

101181 (11 12 1)	
About right	68.8
Too long	29.7
Too short	1.0
Don't know	0.5

Table B15. Number of classes classroom respondents attended, excluding the field day (n=162-264)

	0-3	4-7	8-11	12 or more	Don't know
			Ì	Percent (%)	
Youth Classroom	6.8	51.5	28.8	0.0	12.9
Adult Classroom	22.8	50.0	11.7	6.8	8.6

Table B16. DNR Conservation Office spoke at the respondent's course (n=164-265)

	Yes	No	Don't know
		Percent (%)	
Youth Classroom	85.3	8.3	6.4
Adult Classroom	79.9	14.6	5.5

Table B17. Mean satisfaction level among online respondents with the following online course characteristics? (n=222-277)

	Adult Online	Youth Online
	Me	an*
Final exam	4.3	4.3
Chapter quizzes	4.3	4.2
Interactive activities	4.2	4.2
Text	4.2	4.1
Narration	4.0	4.1

^{*}On a scale where 1=very dissatisfied and 5=very satisfied

Table B18. Level of satisfaction among online respondents with the following online course characteristics (n=224-276)

characteristics (H=224 270)						
			Adult Onl	ine		
	Very	Dissatisfied	Neutral	Satisfied	Very	Don't
	dissatisfied	Dissatisfica	1 (Oddidi	Butisfied	satisfied	know
			Percent (%)		
Final exam	0.4	0.4	6.2	51.1	41.8	0.0
Interactive activities	0.9	3.1	9.8	45.5	40.6	0.0
Chapter quizzes	0.4	0.4	5.8	55.6	37.8	0.0
Text	0.4	0.4	8.0	54.2	36.9	0.0
Narration	1.3	4.9	15.1	45.8	32.4	0.4
		7	outh On	line		
Final exam	0.4	0.4	11.6	45.3	42.4	0.0
Narration	0.4	1.4	12.7	45.7	39.1	0.7
Interactive activities	0.8	1.5	13.2	48.5	35.5	0.5
Chapter quizzes	1.1	0.7	13.1	50.5	34.2	0.4
Text	1.8	2.9	13.0	51.1	30.1	1.1

Table B19. Online respondents' preferences to see less, about the same, or more of the following online course characteristics (n=222-277)

		Adult O	nline	
	Less	About the same	More	Don't know
		Percen	t (%)	
Videos	2.7	72.2	22.9	2.2
Interactive activities	4.9	71.3	22.4	1.3
Pictures	0.4	77.7	20.5	1.3
Outside resources (e.g. hyperlinks)	6.3	69.4	17.1	7.2
Text	6.3	87.9	4.9	0.9
Narration	16.5	76.3	4.9	2.2
		Youth C)nline	
Videos	4.0	52.7	42.2	1.1
Interactive activities	2.5	55.2	41.2	1.1
Pictures	1.4	57.0	40.4	1.1
Outside resources (e.g. hyperlinks)	12.3	63.4	14.9	9.4
Narration	14.1	72.2	12.6	1.1
Text	15.9	77.9	5.1	1.1

Table B20. Number of people in classroom courses (n=165-266)

		/
	Adult Classroom	Youth Classroom
	Perce	ent (%)
21-30	30.3	30.5
11-20	22.4	30.5
41 or more	20.0	9.4
31-40	17.0	11.3
Don't know	4.2	12.8
0-10	6.1	5.6
Respondents' perception	ns about the number of people in the	heir classroom course (n=165-268)
About right	86.1	78.7
Too many	11.5	17.2
Don't know	2.4	3.7
Too few	0.0	0.4

Table B21. Respondents' perceptions about course difficulty level (n=165-279)

_	Too easy	About right	Too difficult	Don't know
		Per	cent (%)	
Adult Classroom	3.0	95.8	0.6	0.6
Adult Online	5.8	94.2	0.0	0.0
Youth Online	6.5	93.2	0.0	0.4
Youth Classroom	4.5	92.9	1.9	0.7
Virtual Field Day	11.5	84.3	1.0	3.1

Table B22. VFD respondents' perceptions about firearms safety course difficulty level (n=191-193)

	Per echeron	5 46 5 64 C 111 C 461 1115 5 6		10101 (11 1) 1 1)
	Too easy	About right	Too difficult	Don't know
		Per	rcent (%)	
Online Course	5.2	94.6	0.0	0.0
Virtual Field Day	11.5	84.3	1.0	3.1

Table B23. Respondent's overall satisfaction level with the firearms safety course (n=165-279)

Table D23. Nesp	Table D23. Respondent's overall satisfaction level with the file at his safety course (n=103-273)						
	Mean*	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Don't know
			Percent (%)			
Adult Classroom	4.6	1.2	0.0	2.4	26.7	69.7	0.0
Adult Online	4.4	0.0	0.9	5.3	44.0	49.8	0.0
Youth Online	4.4	0.4	0.7	5.4	45.2	47.7	0.7
Youth Classroom	4.4	0.0	1.1	4.9	48.5	45.5	0.0
Virtual Field Day	4.2	2.1	1.0	4.1	55.4	37.3	0.0

^{*}On a scale where 1=very dissatisfied and 5=very satisfied

Table B24. Participation in various field day exercises among adult classroom respondents

	Adult Classroom						
	Practiced myself	Watched a demonstration	Both*	Neither			
		Percent (%)					
.22 rifle shooting (n=165)	63.0	14.0	22.0	1.0			
Field walk with firearm carry positions (n=164)	63.0	15.0	19.0	3.0			
Muzzle control (n=162)	52.0	27.0	15.0	6.0			
Zones of fire (n=162)	42.0	43.0	12.0	3.0			
Shotgun shooting (n=162)	33.0	41.0	10.0	16.0			
Tree stand safety (n=164)	24.0	60.0	5.0	10.0			
Motor vehicle firearm transportation (n=163)	20.0	64.0	5.0	11.0			
Handgun shooting (n=161)	14.0	45.0	5.0	36.0			
Duck boat safety (n=162)	13.0	58.0	4.0	25.0			
Muzzleloader shooting (n=162)	12.0	48.0	4.0	36.0			
Hunting from a ground blind (n=161)	11.0	54.0	4.0	31.0			
Blood trailing (n=161)	11.0	43.0	1.0	45.0			
Archery (n=162)	11.0	41.0	4.0	44.0			
Other (n=17)							

^{*}This category was added after a large number of respondents inaccurately selected more than one response.

Table B25. Participation in various field day exercises among adult online respondents

		Adult Online		
	Practiced myself	Watched a demonstration	Both*	Neither
		Percent (%)		
.22 rifle shooting (n=219)	68.0	16.0	10.0	6.0
Field walk with firearm carry positions (n=217)	51.0	24.0	7.0	18.0
Muzzle control (n=214)	43.0	30.0	5.0	22.0
Zones of fire (n=214)	42.0	29.0	6.0	22.0
Shotgun shooting (n=214)	38.0	28.0	5.0	29.0
Motor vehicle firearm transportation (n=216)	29.0	40.0	4.0	27.0
Tree stand safety (n=215)	21.0	45.0	3.0	31.0
Handgun shooting (n=215)	21.0	36.0	4.0	39.0
Hunting from a ground blind (n=214)	20.0	33.0	3.0	45.0
Blood trailing (n=212)	17.0	32.0	1.0	50.0
Archery (n=215)	17.0	29.0	1.0	53.0
Muzzleloader shooting (n=213)	13.0	42.0	1.0	43.0
Duck boat safety (n=214)	12.0	41.0	2.0	45.0
Other (n=27)				

^{*}This category was added after a large number of respondents inaccurately selected more than one response.

Table B26. Participation in various field day exercises among youth classroom respondents

		Youth Classroom		
	Practiced	Watched a	Both*	Neither
	myself	demonstration	DOIII.	Neither
		Percent (%)		
.22 rifle shooting (n=263)	70.0	14.0	12.0	3.0
Field walk with firearm carry positions (n=266)	59.0	24.0	12.0	5.0
Muzzle control (n=261)	54.0	28.0	8.0	10.0
Zones of fire (n=263)	46.0	40.0	6.0	9.0
Shotgun shooting (n=261)	37.0	34.0	7.0	22.0
Tree stand safety (n=263)	25.0	54.0	8.0	13.0
Blood trailing (n=257)	19.0	30.0	2.0	50.0
Motor vehicle firearm transportation (n=260)	17.0	56.0	4.0	23.0
Handgun shooting (n=259)	17.0	37.0	3.0	43.0
Duck boat safety (n=259)	15.0	39.0	2.0	44.0
Hunting from a ground blind (n=259)	15.0	37.0	2.0	47.0
Archery (n=261)	15.0	34.0	4.0	47.0
Muzzleloader shooting (n=260)	12.0	45.0	2.0	41.0
Other (n=12)				

^{*}This category was added after a large number of respondents inaccurately selected more than one response.

Table B27. Participation in various field day exercises among youth online respondents

		Youth Online		
	Practiced myself	Watched a demonstration	Both*	Neither
	•	Percent (%)		
.22 rifle shooting (n=271)	79.0	10.0	6.0	6.0
Field walk with firearm carry positions (n=272)	78.0	14.0	5.0	3.0
Zones of fire (n=271)	65.0	24.0	5.0	7.0
Muzzle control (n=270)	56.0	24.0	5.0	15.0
Shotgun shooting (n=269)	53.0	22.0	6.0	19.0
Tree stand safety (n=270)	51.0	34.0	5.0	10.0
Blood trailing (n=268)	46.0	21.0	2.0	31.0
Hunting from a ground blind (n=266)	35.0	32.0	2.0	31.0
Duck boat safety (n=271)	32.0	35.0	3.0	30.0
Motor vehicle firearm transportation (n=269)	27.0	48.0	3.0	22.0
Archery (n=268)	25.0	25.0	1.0	49.0
Handgun shooting (n=270)	21.0	33.0	2.0	44.0
Muzzleloader shooting (n=271)	16.0	38.0	1.0	45.0
Other (n=13)				

^{*}This category was added after a large number of respondents inaccurately selected more than one response.

Other (**Tables B24-B27**): Based on qualitative analysis, "other" responses were mainly related to fence crossing.

Table B28. Field day duration and perceived length

Length of field day in hours (n=165-278)									
	Less than 2	3-4	5-	7	8 or mor	e D	on't know		
		Percent (%)							
Youth Classroom	22.3	53.6	10	.6	4.2		9.4		
Adult Classroom	21.8	52.7	21	.8	4.2		1.2		
Adult Online	38.6	39.5	14	.1	1.8		5.9		
Youth Online	16.9	28.4	33	33.8 12.6			8.3		
Respondents' perceptions	Respondents' perceptions about field day length (n=166-279)								
	Too short	About r	ight	Too	olong	Don	't know		
			Perce	nt (%)					
Adult Classroom	1.8	92.2	,	4	4.8		1.2		
Youth Classroom	7.5	84.6)	4	4.9		3.0		
Adult Online	6.8	81.3		(9.1		2.7		
Youth Online	4.3	77.4		1	6.1		2.2		

Table B29. Length of field day perceived to be "too long" (n=11-43)

		percer; ear to se too rong (12 12 10)					
	Adult Classroom	Adult Online	Youth Classroom	Youth Online			
		Perce	ent (%)				
3-4	54.5	35.0	76.9	18.6			
5-7	36.4	50.0	15.4	46.5			
8 or more	0.0	0.0	0.0	27.9			
Don't know	0.0	10.0	7.7	2.3			
Less than 2	9.1	5.0	0.0	4.7			

Table B30. Number of people at field day and perception about group size

Number of people at	Number of people attending field days (n=166-278)									
	(0-10	11-	-20	21-30	31-40		or ore	Don't know	
					Perce	nt (%)				
Youth Online		14.0	25	5.2	30.9	11.9	8	3.6	9.4	
Adult Classroom		11.4	23	5.5	27.1	16.9	10	6.9	4.2	
Youth Classroom		9.4	24.2		26.4	14.0	9	0.4	16.6	
Adult Online		36.2	24.0		14.0	9.0	12	2.2	4.5	
Respondents' percej	otioi	ıs about	t num	ber of	people at fi	eld days (n	=166-2	280)		
		Too i	few	Al	out right	Too mai	ıy	y Don't know		
					Per	cent (%)				
Adult Classroom		0.6	5		82.5	13.9			3.0	
Youth Classroom		0.0	3		82.3	12.1			4.9	
Adult Online		1.4	4		78.6	16.8		3.2		
Youth Online		1.4	1		78.6	12.5		7.5		
						•	•			

Table B31. Number of people at field day perceived to be "too many" (n=28-37)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online							
		Percent (%)									
41 or more	57.1	51.4	28.1	37.1							
31-40	28.6	21.6	31.3	37.1							
21-30	10.7	16.2	15.6	20.0							
Don't know	3.6	5.4	15.6	5.7							
11-20	0.0	5.4	9.4	0.0							
0-10	0.0	0.0	0.0	0.0							

Table B32. Respondents' satisfaction level with field day experience (n=166-280)

Tubic Dezi iteb	Jonatha	satisfaction level with field day experience (n=100 200)						
	Mean*	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Don't know	
				Percent	t (%)			
Adult Classroom	4.4	1.2	1.8	4.8	35.5	55.4	1.2	
Adult Online	4.2	3.2	4.6	9.6	36.1	45.2	1.4	
Youth Classroom	4.2	0.0	0.8	11.3	50.2	36.6	1.1	
Youth Online	4.1	1.1	3.6	11.8	47.1	35.7	0.7	
Virtual Field Day	4.0	2.6	3.6	13.4	46.4	31.4	2.6	

^{*}On a scale where 1=very dissatisfied and 5=very satisfied

Table B33. Extent adult classroom respondents agree or disagree that instructors were: (n=162-164)

107)									
				Adult Cla	assroom				
	Mean*	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know		
			Percent (%)						
Knowledgeable	4.8	0.6	0.0	0.6	20.9	77.9	0.0		
Helpful	4.7	0.6	0.6	1.8	25.0	72.0	0.0		
Friendly	4.7	0.6	1.8	3.7	20.1	73.8	0.0		
Prepared	4.6	0.6	0.6	2.4	26.8	69.5	0.0		
Hands-on	4.6	0.6	0.6	4.9	24.4	69.5	0.0		
Professional	4.6	0.6	1.8	3.1	25.8	68.7	0.0		
On task	4.6	0.6	1.9	4.3	24.1	68.5	0.6		
Fun	4.6	0.6	1.2	7.3	24.4	65.9	0.6		

^{*}On a scale where 1=strongly disagree and 5=strongly agree

Table B34. Extent adult online respondents agree or disagree that instructors were: (n=219-222)

				Adult (Online				
	Mean*	Strongly	Disagrag	Neutral	Agraa	Strongly	Don't		
	Mean	disagree	Disagree	Neutrai	Agree	agree	know		
			Percent (%)						
Knowledgeable	4.6	0.5	0.5	3.2	33.8	60.4	1.8		
Helpful	4.5	1.4	2.3	5.9	31.1	58.6	0.9		
Friendly	4.4	2.3	2.3	2.7	35.1	56.3	1.4		
Prepared	4.4	1.4	1.4	7.7	33.8	55.0	0.9		
Hands-on	4.4	2.7	2.7	7.2	31.5	55.0	0.9		
Professional	4.4	1.8	2.7	7.2	32.9	54.5	0.9		
On task	4.4	1.4	1.4	8.2	33.3	54.3	1.4		
Fun	4.2	2.7	1.8	14.0	32.0	48.2	1.4		

^{*}On a scale where 1=strongly disagree and 5=strongly agree

Table B35. Extent youth classroom respondents agree or disagree that instructors were: (n=272-274)

		Youth Classroom								
	Mean*	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know			
			Percent (%)							
Knowledgeable	4.6	1.8	0.7	2.6	30.7	63.9	0.4			
On task	4.5	1.8	0.0	3.6	33.9	60.2	0.4			
Helpful	4.5	1.8	1.1	2.9	36.5	57.3	0.4			
Prepared	4.5	1.8	0.0	3.6	37.6	56.9	0.0			
Friendly	4.4	2.6	0.7	7.0	30.4	59.3	0.0			
Hands-on	4.4	1.5	0.7	7.7	36.1	52.6	0.7			
Professional	4.3	2.2	1.5	10.9	33.2	51.1	1.1			
Fun	4.2	2.2	4.0	13.6	32.0	47.4	0.7			

^{*}On a scale where 1=strongly disagree and 5=strongly agree

Table B36. Extent youth online respondents agree or disagree that instructors were: (n=277-281)

				Youth (Online					
	Mean*	Strongly	Disagree	Neutral	Agraa	Strongly	Don't			
	Mean	disagree	Disagree	Neutrai	Agree	agree	know			
			Percent (%)							
Knowledgeable	4.5	0.7	1.4	5.0	38.4	55.2	0.4			
On task	4.4	1.1	0.7	5.8	37.5	53.8	1.1			
Helpful	4.4	0.7	0.4	7.5	37.7	52.7	1.1			
Friendly	4.4	1.1	1.4	8.9	37.4	50.9	0.4			
Prepared	4.4	0.7	0.7	6.8	43.4	47.7	0.7			
Hands-on	4.3	1.1	1.4	11.1	37.9	47.9	0.7			
Professional	4.3	1.1	1.4	9.6	39.1	47.7	1.1			
Fun	4.1	2.1	5.0	17.8	30.6	43.8	0.7			

^{*}On a scale where 1=strongly disagree and 5=strongly agree

Table B37. VFD respondents' perceived level of preparation to hunt or target shoot after taking the online course with virtual field day (n=189)

Mean*	3.7
	Percent (%)
Very prepared	75.1
Moderately prepared	22.2
Slightly prepared	2.6
Not at all prepared	0.0
Don't know	0.0

^{*}On a scale where 1=not at all prepared and 5=very prepared

Table B38. How respondents typically transport their firearm in a car/truck* (n=134-253)

	Adult	Adult	Youth	Youth
	Classroom	Online	Classroom	Online
		Perce	ent (%)	
Fully cased	84.3	84.4	83.8	83.4
Unloaded	77.6	76.4	79.1	82.2
I've never transported a firearm by motor vehicle	12.7	9.5	10.3	7.9
Broken down	6.7	7.0	9.4	4.0
Other	3.7	6.0	2.1	2.8
In a gun rack	2.2	1.0	2.6	0.8
Don't know	0.7	0.5	1.3	1.2
Loaded	0.7	2.5	0.0	0.0

^{*}More than one answer may be checked.

Other (Table B38): Based on qualitative analysis, "other" responses were negligible. However, a few respondents indicated they transported their firearms in the trunk or trailer of their motor vehicle.

Table B39. Where respondents typically load their firearm* (n=132-251)

table 357. Where respondents typically load then interim (n=132-231)						
	Adult	Adult	Youth	Youth		
	Classroom	Online	Classroom	Online		
		Perce	ent (%)			
When I'm in position and know the zones of fire	80.3	75.3	76.5	80.1		
In my hunting group before splitting up	6.1	16.2	13.0	15.1		
At my hunting camp	3.0	10.1	12.2	3.6		
I've never loaded a firearm	6.1	4.0	7.4	3.6		
Other	3.8	4.0	1.7	3.6		
Don't know	0.8	0.5	2.2	3.2		
Inside a car	0.0	0.0	0.4	0.4		

^{*}More than one answer may be checked

Other (Table B39): Based on qualitative analysis, "other" responses were negligible. A few respondents indicated they loaded their firearm at their hunting stand.

Table B40. How respondents store firearms in their households* (n=133-251)

•	Adult	Adult	Youth	Youth
	Classroom	Online	Classroom	Online
		Perce	ent (%)	
Unloaded and locked in a gun	66.2	61.9	71.2	67.7
locker	00.2	01.9	/1.2	07.7
Out of sight in a zippered gun case	23.3	30.5	25.4	28.3
My household doesn't store	13.5	7.6	6.8	5.2
firearms	13.3	7.0	0.8	5.2
Other	3.8	9.6	6.4	6.4
Stored with ammunition	2.3	4.1	4.7	3.2
Loaded and out of sight	1.5	5.6	0.8	1.6
Don't know	0.8	0.5	1.7	3.6

^{*}More than one answer may be checked.

Other (Table B40): Based on qualitative analysis, "other" responses included a combination of multiple choice answers that weren't offered such as unloaded, ammunition stored separately, locked, or with trigger and/or action lock.

Table B41. Gender (n=165-285)

	Male	Female
	Perc	ent (%)
Youth Online	69.1	30.9
Youth Classroom	64.7	35.3
Adult Online	58.3	41.7
Virtual Field Day	56.5	43.5
Adult Classroom	45.5	54.5

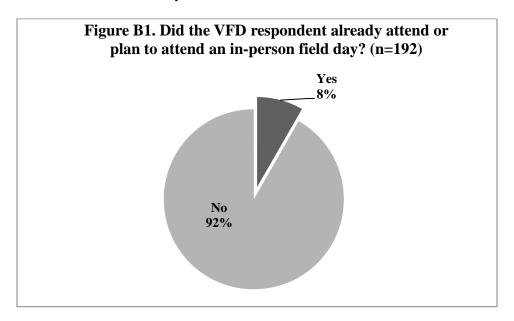
Table B42. Hispanic/Latino/Spanish ethnicity of respondents (n=162-275)

	Yes	No
	Perce	ent (%)
Adult Classroom	0.6	99.4
Adult Online	1.3	98.7
Youth Classroom	1.5	98.5
Youth Online	1.8	98.2
Virtual Field Day	2.1	97.9

Table B43. Race of respondents* (n=163-275)

10010 = 101 11000 01 105 point		-,			
	Adult	Adult	Youth	Youth	Virtual Field
	Classroom	Online	Classroom	Online	Day
			Percent (%)		
Caucasian/White	94.5	97.4	96.7	97.1	95.3
Asian	4.3	3.1	1.1	0.7	3.7
American Indian or Alaska Native	0.6	0.0	2.6	2.5	2.1
African American/Black	0.6	0.4	1.5	0.7	0.5
Pacific Islander	0.0	0.4	0.0	0.0	0.0

^{*}More than one answer may be checked.



Other (Figure B1): Respondents were asked to explain why they did or didn't intend to attend an inperson field day in addition to the virtual field day. The main explanations suggested respondents already had previous firearms training (and therefore didn't need to attend), they were confident that family and friends would teach them, or they didn't want to because it wasn't required.

Appendix C: Open-ended Responses Analysis

Methodology Overview

- Number of mentions indicates number of times a comment or phrase was mentioned throughout all open-ended responses. One respondent's comment might yield more than one mention.
- Categories were formed based on tallying of similar comments and words used by respondents.
- Acronyms: (AC=Adult Classroom, AO=Adult Online, YC=Youth Classroom, YO=Youth Online, VFD=Virtual Field Day)

Table C1. Comments about course cost and registration

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	TOTAL
		Num	ber of mentions		
Reasonable/ fair cost	19	19	6	6	50
Pleased overall	8	9	11	15	43
Easy	8	13	4	6	31
Should be less expensive or free	2	5	2	7	16
Disorganized/complicated	6	3	4	-	13
Good value	8	4	-	-	12
Confused or frustrated about obtaining certificate	5	-	6	-	11
Lack of availability	-	-	-	6	6
Would have paid more to support DNR	4	1	1	-	6
Disliked first-come, first-served approach	2	-	-	-	2

- "Form was easy to follow. Kept the info simple." (AC)
- "I felt the cost was fair. I would have paid more with no questions asked. Every dollar counts to help the programs that need supporting." (AC)
- "Very easy registration and affordable cost." (AO)
- "It's a pain having to finish the course and not get the certification without more work." (YC)
- "I never got my card in the mail." (YC)
- "The cost and registration was very reasonable and great for a busy family." (YO)
- "\$25 for online classes and the instructor gets \$7.50. That is why nobody in my city has hunter ed. I think if places like schools or Gander Mtn. could make a few bucks they might start giving classes! There are not enough options in my area. I think classroom training is much better!" (YO)

Table C2. Explanation for how VFD respondents plan to get experience in the future

Comment Category	Number of Mentions
I already have firearms experience* (n/a)	56
Friends or family will teach me	28
Apprentice Hunter Validation	21
Go target/trap shooting	13

^{*}Not necessarily hunting experience

Select responses:

- "I used Apprenticeship licenses the last two years and was taught by my boyfriend's family about hunting and guns and safety."
- "Wife grew up hunting with her family. I plan to learn from them, particularly my father-in-law."
- "Most of my family are avid hunters and are willing to continue educating me on the matter."
- "I grew up shooting targets."
- "Having the apprentice program is a great idea. It helped me figure out which type of hunting I wanted to do."
- "I am surrounded by people who love to hunt and influenced me to get my license and they are more than willing to help me."
- "Firearm experience with all types of firearms. Target shooting."

Table C3. Type of fall restraint device respondents typically use (other)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online			
		Number of Mentions					
Permanent	2	2	13	22			
enclosed stand	2	3	13	22			
Guard rail around	1	1		1			
platform	1			1			
Lap bar	-	1	1	-			
Vest style	1	-	-	-			
Tri pod blind	-	-	-	1			

Table C4. Reason for respondent's choice of either classroom or online course (other)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	Virtual Field Day	TOTAL
			Number of me	entions		
Wanted to take the course with my child or grandchild	30	-	-	-	1	31
Scheduling issues	ı	13	ı	7	-	20
It's my only option	ı	2	ı	7	-	9
To study at my own pace	ı	4	ı	1	-	4
Avoid taking course with children	-	3	-	-	-	3
Know an instructor	-	-	3	-	-	3
School requirement	-	1	-	3	-	3
Part of trap team requirements	-	-	2	-	-	2
Desired hands-on training	-	-	2	-	-	2
To learn about safe hunting	-	-	-	-	2	2
Required to attend a DNR event	-	-	-	-	1	1

Select responses:

- "To start hunting with my son, who also took the course." (VFD)
- "Wanted to take the class with my daughter." (AC)
- "Had limited time frame and needed it done." (AO)
- "I wanted to study at my own pace" (AO)
- "Mom and cousin are some of class instructors." (YC)
- "Classroom schedule was always full." (YO)
- "No class at the time needed." (YO)
- "Faster than a course." (YO)

Table C5. Reason respondents took the firearms safety course (other)

Table Co. Reason respondent	Adult Classroom	Adult Online	Youth Classroom	Youth Online	Virtual Field Day	TOTAL
			Number of M	entions		
To learn with or help teach children about firearms/hunting	23	2	1	1	1	26
To be safe with firearms/while hunting	5	1	6	2	2	16
To hunt out of state/country	4	11	-	-	-	15
Required by law to hunt	4	1	5	4	-	14
Encouraged by parents	-	-	4	5	-	9
School-related (class or team)	2	1	2	2	-	7
Precursor to conceal & carry	2	1	-	-	-	3

- "Introduce my son to safe firearm handling." (AC)
- "Told myself if we were going to have guns in the house I needed to take it." (AC)

- "New requirement to purchase a hunting license in Canada." (AO)
- "To hunt in Colorado." (AO)
- "To maybe hunt in the future. To shoot at ranges so I can be more safe around firearms." (YC)
- "My parents said I had to." (YC)
- "Dad wanted me to." (YO)
- "I wanted to ensure that I am a safe and responsible hunter." (VFD)

Table C6. Dollars respondents paid directly to their volunteer instructor (other than \$7.50)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	TOTAL
	Number of comments				
\$0.00	5	8	22	18	53
\$15.00	2	9	4	2	17
\$10.00	-	5	5	1	11
\$7.00	2	1	4	1	8
\$5.00	-	2	5	ı	7
\$20.00	-	3	1	2	6
\$25.00	1	1	2	1	5
\$6.00	-	ı	-	1	1
\$8.00	1	ı	-	ı	1
\$21.00	-	ı	-	1	1
\$23.50	-	ı	1	ı	1
\$24.00	-	-	-	1	1
\$30.00	-	1	-	-	1
\$100.00*	-	-	1	-	1

^{*}MN Deer Hunters Assn. fee

Table C7. How did the respondent hear about the firearms safety course (other)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	TOTAL			
		Number of mentions						
Instructor or DNR personnel	1	3	3	6	13			
Youth organization, club, or camp	-	-	5	2	7			
Newspaper	3	-	3	1	7			
Gun Club	2	-	2	2	6			

Table C8. Participation in various field day exercises (other)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online				
		Number of Mentions						
Fence crossing	2	1	4	-				
Survival/first-aid	-	-	2	2				
Loading/unloading a firearm	ı	ı	1	2				
Safe hunting	1	-	-	2				
Clay pigeon/trap shooting	1	1	-	ı				
Ask permission	1	ı	-	ı				
Trapping small game	-	-	-	1				
Ammunition identification	-	1	-	-				
Animal identification	-	1	-	-				

Table C9. Past firearms experiences among respondents (other)

	Y =					
	Adult	Adult	Youth	Youth	Virtual Field	
	Classroom	Online	Classroom	Online	Day	
		N	umber of Mention	ıs		
Previous hunter education	2	2				
class	2	2	•	1	-	
Law enforcement	-	-	-	-	3	
Summer camp (not just for	1			1	1	
hunting)	1	-	•	1	1	
Apprentice Hunter		2				
Validation	1	2	•	1	-	
Taught myself	-	1	-	-	2	
Clay/trap shooting	1	3	-	1	-	
Conceal & carry permit	1	-	-	-	1	
School	1	-	-	-	-	

Table C10. How respondents typically transport their firearm in a car/truck (other)

•	Adult Classroom	Adult Online	Youth Classroom	Youth Online				
		Number of Mentions						
In trunk/trailer	1	6	1	1				
Handgun loaded	2	3	-	-				
Safety on	-	1	1	1				
Unloaded & fully cased	2	1	-	-				
Locked	1	1	-	ı				
Action open	1	1	-	ı				
When it's legal	-	2	-	ı				
Bow & arrow in case	1	-	-	ı				
4-wheeler	-	-	1	-				
Uncased	-	-	-	1				

Table C11. Where respondents typically load their firearm (other)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online			
	Number of Mentions						
At my stand	-	4	2	3			
Don't hunt	2	-	-	-			
Someone else does it for me	-	1	-	2			
Gun range	1	-	-	-			
In the blind	-	1	-	-			
At target practice when I'm ready to shoot	1	-	-	-			
Only at the safety class	1	-	-	-			
Before hunting position	-	2	-	1			
Depends on what firearm I'm using	-	1	-	-			
Outside of the car	-	-	1	-			
When I see game	-	-	-	1			

Table C12. How respondents store firearms in their households (other)

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	TOTAL
		Nu	mber of Mentions*		
Unloaded	6	11	8	9	34
Ammo separate	2	6	2	3	13
Locked	3	4	1	1	9
With trigger or action lock	3	3	1	2	9
Safe room	1	4	1	2	8
Out of sight	2	1	2	1	6
On gun rack	-	-	1	3	4
Carry weapon loaded	-	3	-	-	3
Zippered case	-	-	2	1	3
On the wall	-	-	-	1	1

^{*}Note: Many comments included combinations of the above storage options

- "Action open, safety on." (AC)
- "In trunk." (AC)
- "In the truck bed strapped down." (AO)
- "On safety." (YC)
- "Ammunition separate." (YO)
- "Unloaded and on a gun rack." (YO)

Table C13. Most important thing respondents learned in the firearms safety course

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	TOTAL		
		Number of mentions					
Safe firearms handling/use	53	37	58	48	196		
General safety/everything	27	35	56	61	179		
Safe shot selection/shooting	9	28	36	33	106		
Transport/carry of firearms	9	13	24	31	77		
Muzzle control	4	8	36	26	74		
Hunter image, ethics, & responsibility	10	13	12	17	52		
Treat every firearm as if it were loaded	3	6	22	13	44		
Action types & ammunition	6	20	3	6	35		
Hunting rules & regulations	4	10	4	3	21		
Safety can fail/how to use safety	-	-	5	6	11		
Wildlife conservation	3	3	-	1	7		
10 commandments of firearms safety	-	-	6		6		

- "Determining a safe shot." (AC)
- "Safe handling of a gun and hunting out in the field. Became more confident out in the field and handling a gun." (AC)
- "Probably deciding ahead of time what my shooting zone would be, and sticking to it, even if game is right outside the zone." (AC)
- "Safe handling, shot selection." (AO)
- "Know your target and beyond!! Your responsibility for the bullet after the target." (AO)
- "Never keep a firearm loaded because you never know if it could go off." (YC)
- "Keeping control of the muzzle, because you only have one chance." (YC)
- "How to carry your firearm. If you don't know how to carry your firearm properly you can point at something or someone and accidentally shoot them." (YO)
- "How to safely handle a firearm so nothing bad happens." (YO)

Table C14. Least important thing respondents learned in the firearms safety course

	Table C14. Least important thing respondents learned in the irrearms sarcty course						
	Adult	Adult	Youth	Youth	TOTAL		
	Classroom	Online	Classroom	Online	TOTAL		
		Nun	iber of mention	ıs			
Nothing (it was all important)	17	44	82	75	218		
Muzzleloaders, flintlocks (older action	4	26	4	22	56		
types)	4	20	4	22	30		
Archery	1	13	14	23	51		
Handguns	1	3	4	7	15		
Different types of guns & their parts	-	4	6	5	15		
How different actions work	-	4	5	2	11		
Wilderness survival skills	2	1	4	2	9		
Information about game I don't hunt	1	4	4	-	9		
Instructors' personal stories	2	-	5		7		
Field dressing game	3	-	3	1	7		
Where to hunt	1	1	2	2	6		
Hunting information (only interested in	1	1	1	1	4		
firearms)	1	1	1	1	4		
Shooting positions	-	-	4	1	5		
Wildlife conservation	-	3	1	-	4		
History	-	1	1	1	3		
Vital regions	-	-	3	-	3		
Asking landowner permission	-	2	-	-	2		
Hunter image	-	2	-	-	2		
Licensing	-	1	-	-	1		
Trapping	_	-	1	-	1		

- "Everything we learned had importance." (AC)
- "Muzzleloaders too much time spent on this. Good to know about them, but the vast majority of people will never hunt this way." (AC)
- "Everything was important and relevant." (AO)
- "Archery, because I don't hunt with archery." (AO)
- "Nothing. Everything was important to know to be a safe hunter." (YC)
- "Muzzleloader, not going to use it." (YO)

Table C15. Comments about the firearms safety training overall

Tuble C15. Comments about t	Adult	Adult	Youth	Youth	TOTAL				
	Classroom	Online	Classroom	Online	TOTAL				
		Number of mentions							
Satisfied with	27	29	26	12	94				
course/experience	21	29	20	12	24				
Informative/learned a lot	10	15	24	13	62				
Praise for instructor(s)	22	1	16	3	42				
Fun	3	1	10	10	24				
Course took too long	1	12	3	7	22				
Convenient	1	9	-	9	19				
Online course well designed	-	10	-	5	15				
Enjoyed hands-on experience	2	2	4	2	10				
Logistical issues	2	1	1	4	8				
Online course too easy	-	3	-	2	5				
Wanted to learn more	3	-	-	1	4				
Complained about instructor	2	1	-	-	3				
Too much text online	-	-	-	2	2				
Too many people	1	-	-	-	1				
Confused about getting certificate	-	1	-	-	1				

- "It was a good experience and gave me a new respect for hunting. I was absolutely anti-hunting before this class." (AC)
- "Good experience. Instructors very knowledgeable and took course teaching serious." (AC)
- "I was very impressed with the online course, and feel like I really learned a lot. The tests made me pay attention, though they were really easy and based too directly on exactly what was in the text." (AO)
- "It was very helpful and convenient." (AO)
- "It was really fun." (YC)
- "Taking safety course is a great experience and our instructor was great. Hope more classes will be available in the future." (YC)
- "Was nice to do at home." (YO)
- "There was a certain amount of time that had to go by before you were allowed to navigate to the next page. I just felt that it was just a bit unnecessary." (YO)

Table C16. Comments about field day experience

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	TOTAL
		Num	ber of Mentions		
Good/fun/educational experience	22	24	35	28	109
Good/helpful instructors	11	27	4	11	53
Appreciated opportunity to practice/hands-on	8	4	16	10	38
Wanted more practice	3	11	11	7	32
Too many people/a lot of standing around	3	12	1	7	23
Dissatisfied/pointless	-	11	1	8	20
Well organized	7	7	1	-	15
Inconvenient/unclear (location, time, instructor availability)	-	11	-	3	14
Too long	1	1	3	3	8
Weather complaints	5	-	2	1	8
Great resources used	1	-	-	_	1

- "It was good to put things learned in the classroom into action. Hands on experience is the best and the instructors did a good job of covering everything" (AC)
- "We could have spent a little more time shooting different types of firearms." (AO)
- "The instructor did nothing but hand out the test. There was no further instruction, demonstration, or practice. Never even saw a firearm." (AO)
- "Field day was a two part deal that took two days which meant two trips (1.5 hours long for me) or a hotel stay." (AO)
- "I didn't feel like it was adequate...even though I liked how short it was." (AO)
- "It was fun but things could have been moving faster." (YC)
- "More time on handling, loading, and identifying different firearms." (YC)
- "Very realistic. Felt like I was hunting." (YC)
- "We were always busy on field day that made it fun not boring. I learned a lot. Thank you." (YO)
- "Not clear how long it would be up front did not know to pack a lunch not clear on activities, etc. at start." (YO)

Table C17. Comments about firearms safety instructors

	Adult Classroom	Adult Online	Youth Classroom	Youth Online	TOTAL
		Num	ber of mentions	S	•
Pleased overall (nice, knowledgeable, funny, wonderful, great, helpful, etc.)	50	40	40	39	169
Committed/caring/passionate	9	3	4	2	18
Approachable	4	6	4	1	15
Prepared/professional	4	3	5	3	15
Bad attitude/rude	2	5	3	2	12
Engaging	5	-	4	1	10
Good teaching style	3	3	3	-	9
Didn't do his/her job	-	5	-	1	6
Off task	5	-	-	-	5
Boring	2	-	1	1	4
Wasted time	-	2	-	1	3
Recommended	2	-	-	1	3
Inconsistent	2	-	-	-	2

- "These two gentlemen were great! My wife and I enjoyed the class and a big part was due to the way it was taught." (AC)
- "Our three instructors were very knowledgeable, funny, and non-condescending to all of us in the class as women. That's a big plus for me and probably half of the class because hunting and guns are a foreign language to some women." (AC)
- "Great instructor and would recommend to anyone." (AO)
- "A bit rude when mistake was made on bullet identification but fair overall." (AO)
- "Complained about not making money off the activity, number of attendees, and getting through the day as quickly as possible." (AO)
- "Absolutely amazing instructors." (YC)
- "They felt strongly about the course and they wanted to help us pass the test." (YC)
- "They seemed prepared and were very safe." (YO)
- "She was awesome I wish I could have spent more time learning with her." (YO)

Table C18. Other suggestions for improving the firearms safety course

Table C10. Other suggestions for impro	Adult	Adult	Youth	Youth	TOTAL
	Classroom	Online	Classroom	Online	IOIAL
	Number of Mentions				
Good course	22	20	10	8	60
More hands-on time	1	2	6	11	20
Wanted to know more about certain					
topics (e.g. handguns, archery, wildlife	1	1	7	10	19
ID)					
Dissatisfied with instructors	3	7	3	-	13
More adults-only & women-only options	4	5	-	-	9
Too many people at field day/class	2	2	4	1	9
Good instructors	6	1	-	-	7
Improve field day	-	6	1	-	7
Administrative problems/confusion	2	2	1	1	6
Had to travel too far to class/field day	2	2	-	1	5
Offer classes more often	2	2	-	1	5
Update & match course materials	1	2	2	-	5
Everyone should take it	-	4	-	-	4
Too easy	1	2	1	-	4
Offer more specific courses based on	- 3	2			3
interest/experience		-	-	S	
Offer "test out" option for experienced		2			2
hunters/AHV	_	2	-	_	2
Continue to offer online & hands-on	-	2	-	-	2
options					
More info on regulations	1	-	-	-	1
Website was helpful	1	-	-	-	1
Needed tech help for self-certification	1	-	-	-	1

- "More hands on time with the firearms and direct oversight with volunteers. Get the kids to be comfortable handling a firearm in a safe way." (AC)
- "Find an instructor that entertains the younger kids in the class instead of intimidates them. All the other helpers were really helpful, more so than the main one." (AC)
- "Keep it up!" (AO)
- "Overall it was a good course and experience. My two sons and I learned a lot and enjoyed it."
- "Online portion was good but field day was a joke. Maybe consider another avenue for people who did 2 years of apprentice program. Perhaps no field day requirement if you've hunted 2 years. Apprentice program is where I learned everything." (AO)
- "I would have liked to learn a lot more about archery and muzzleloaders." (YC)
- "Smaller class size would have been better." (YC)
- "Have less people in field days so the students can have more hands on training and more advice from the instructors." (YO)
- "In my opinion if there were more hands on activities it would be better." (YO)
- "Keep it the way it is. It was a great experience." (YO)

Table C19. Explanation of VFD respondents' intentions to attend in-person field day or not

Comment Category	Number of Mentions	
Have previous firearms experience*	34	
Confident that friends/family will teach me instead	19	
Unnecessary/wasn't required	15	
Don't have time to go	13	
Already attended/ would like to attend in-person course	9	
Had trouble finding an available in-person field day nearby	8	
Didn't want to attend with children	2	
Only needed the course to hunt out of state	1	
Feel confident enough with knowledge provided	1	

^{*}Just needed certificate to hunt

- "My dad and boyfriend helped me learn how to hold, load, and shoot my gun for the first time."
- "I hunt with guys who have been hunting for years, longer than I've been alive. Hunting with them seemed to be an equal option to an in-person field day."
- "I have been target shooting for years and this was more of a technicality to get a hunting permit."
- "Have plenty of experience doing the apprentice hunting with experienced hunters."
- "I have a very busy schedule and a strong understanding of the material and actions needed."
- "Finding time with a new baby is really hard."
- "I don't have the free time to do the field day but wish I could just to ask questions."

Appendix D: Instructor Focused Discussions Report

Research Objectives: Focused Discussions

Focus discussions with volunteer firearms safety instructors were conducted in order to better understand how instructors teach the firearms safety course, their interest in learning and development, and their experiences with Department of Natural Resources (DNR) staff.

Specifically, focus discussions were used to gain insight about:

1. Course format and operations

- Course strengths and areas for improvement
- Course topics emphasized or abbreviated
- Classroom course schedules
- Field day approaches
- Youth online course option

2. Instructor development

- Instructor strengths and areas for improvement
- Process of becoming a certified instructor
- Retraining and recertification

3. DNR support

- Interactions with DNR personnel
- DNR-provided resources
- Communication

Methodology

Focus discussions were conducted with volunteer firearms safety instructors in April and May of 2013. Five discussions of 6-12 participants were conducted with firearms safety instructors on three separate Thursday evenings for 90 minutes each. Three discussions were conducted at the Pizza Ranch in Elk River, MN to draw instructors from the Twin Cities and greater metropolitan area. The last two focused discussions were conducted at the Minnesota Interagency Fire Center in Grand Rapids, MN to obtain the perspectives of instructors from rural areas of the state.

The Hunter Education Administrator provided project staff with the full roster of volunteer firearms safety instructors throughout the state. Active firearms safety instructors were recruited to participate based on their proximity to discussion locations. Participants were recruited this way to minimize travel distance and increase turnout rate.

Elk River

An invitation to participate in Elk River discussions was sent to 488 instructors living in Anoka, Hennepin, Isanti, Sherburne, and Wright counties. The first two Elk River discussions were recruited by e-mail and the third by mail invitation. The mail invite was sent to 60 instructors from Anoka, Sherburne, and Wright counties only.

Grand Rapids

Grand Rapids participants were recruited from instructors living in Itasca county and proximate cities in Aitkin, Cass, Koochiching, and Saint Louis counties. The initial e-mail invite to 36 instructors garnered only a few participants, so 97 mail invitations were sent to instructors in those areas. Project staff conducted 35 follow-up phone calls to recruit additional Grand Rapids participants. Grand Rapids discussions were also organized in part by referral sampling in a few cases. A total of 133 people were contacted for the Grand Rapids discussions.

Participant Turnout

Overall, 44 people participated in five discussions. Given that 52 instructors were confirmed, the turnout rate was 84.6 percent. Each participant was offered dinner as an incentive to attend. In total, 621 people were contacted, indicating a recruitment rate of 7.1 percent.

About Focused Discussions

Please note that we use the label "focused discussions" instead of "focus groups" because researchers adapted some of the more rigorous academic guidelines to meet the needs of the program. This qualitative research technique convenes a group of 5-12 people to discuss a set of previously determined questions. The discussion is moderated by an unbiased facilitator to allow participants to fully express their positive and negative opinions. Focus groups are generally designed to provide in-depth perspectives on issues.

Focus group design and script development was informed by Krueger and Casey (2009). Further, focus group results are not generalized to a larger population as they are qualitative in nature. However, experience shows that conducting at least three or four focus groups per "category of individual" (e.g. firearms safety instructor) should offer a sufficient range of feedback from participants to adequately identify common themes (Krueger & Casey, 2009, p.21).

Key Findings

1. Communications & support

- Instructors would like more knowledge and resource sharing with other instructors and the DNR.
 - Because some instructors have access to more resources than others, the idea of sharing
 of equipment and supplies among instructors was enthusiastically supported. The
 instructors would like some kind of mechanism, through the DNR, in which they can be
 made aware of and share resources.
 - Across the board, instructors were grateful to have the opportunity to get together to share best practices, socialize, and meet in-person. Many desired an organized way to get together on a regular basis, facilitated by the DNR.
 - o Instructors would like more resources for communicating with staff and other instructors online such as: downloadable files, an instructor's forum (with log-in) to increase access to one another, a calendar with dates where they can join a class or request help from another instructor, and a blog to learn new FAS course techniques.
- Instructors consistently praised Camp Ripley administrative staff. Instructors were also appreciative and proud of their RTOs and COs, but sometimes cited complaints about lack of availability or interpersonal/educational skills, particularly around kids.
- ➤ Negative feedback arose from discussion of communication around April's firearms incident in Stillwater. Instructors were insulted, confused, or felt underappreciated because of the response. Many thought the mandate infringed on their ability to properly demonstrate firearms handling. However, some instructors did agree with the additional safety measures.

2. Course delivery

- > There is significant disparity among available resources for instructors. This, along with instructor preference, accounts for the wide variation in course delivery. Some instructors own their own land or are members of gun clubs, while others can't find open time at a local range for months. Several Metro area instructors are experiencing challenges with securing consistent sites to conduct their courses because of city or school rules and personnel.
- > Student to instructor ratios are inconsistent. Examples include: 100-150 students per 7 instructors, 16 students per 2 instructors, 5-10 students per 1 instructor, and 76 students per two instructors.
- > Inclusion or exclusion of particular field day activities depends on the individual instructor. This variation is due to instructor preference as well as availability of resources and sites to conduct the field day.
- > Safety is always the topic emphasized during classes, according to participants. Sometimes other topics will be glossed over to allow sufficient time to cover safety and firearms handling, specifically: wildlife management, identification, and regulations, among others dependent on instructor preference.

- Instructors believe the online course does not provide adequate firearms handling practice.
 - This is especially important for youth as it is believed that they require more practice with firearms handling than adults.
 - Another important component instructors believe is lost through the online course is the opportunity to get to know a student and gauge and gain a sense of whether they would be a good hunter.

3. Course materials & resources

- Instructors generally thought some test questions were confusing or irrelevant. "Problem" areas include: double negatives, wildlife identification, conservation questions, and transporting firearms in motor vehicles.
- Instructors appreciated course materials, specifically the book (Student Manual and Reference Guide). However, there were several issues with corresponding instructor and student materials. Specifically, the instructor and student book page numbers and PowerPoint slides do not always correspond.
- > Several instructors do not receive all necessary materials for the course. Many instructors do not receive updated hunting regulations each year and a few reported they don't receive e-mails.
- An important, but uncommon issue was the lack of safe state-provided firearms. Two participants said they received unsafe firearms from Conservation Officers, but did not use them.

4. Instructor training and certification

- The process of becoming a certified instructor was thought to be too easy, with too many assumptions about prior firearms knowledge and handling experience.
- There is confusion and a lack of guidance about how to find an instructor team or a mentor upon certification.
- Instructors were not supportive of mandatory retraining or recertification. However, they were interested in refresher courses if new topics were presented, especially in a hands-on format, by topic area, or experience level.
- Instructors felt their personal strengths included passion, experience, personal investment (financial & otherwise), and unique expertise.
- Instructors felt their personal weaknesses included staying focused, preparation and organization, accepting and adapting to course changes, and covering all topics equally.

Specific Findings

Course Format & Operations

Course Strengths

1. Hands-on instruction and opportunity to handle firearms

There was a wide variety in responses about strengths of the firearms safety course. The most frequently cited strength of the course was the hands-on nature of instruction and opportunity for students to handle firearms. Participants were straightforward and matter-of-fact about the benefit of hands-on training, as is evident in the quotes below.

2. Course materials, in particular the "Student Manual and Reference Guide"

Many of the course materials were referred to as strengths of the course. Most frequently the "book" was complimented for its format and content.

"Book is excellent. [I've received] comments from adults and kids about the book. Hit it out of the park. Book emphasizes important points. Easy to read and follow."

"I like the actions and the diagrams [in the book]. Illustrations make the kids think."

"Book is laid out simple enough to use as a reference material."

Other materials including the CD, PowerPoint, and handkerchiefs were also referenced as strengths of the course.

"I like the way the CD is laid out."

"The kerchiefs are a nice addition to the class. A nice gift."

3. Commitment of volunteer instructors

To be expected, participants cited the dedication and commitment of volunteer instructors as one of the major strengths of the course. They were clearly very passionate and put in a lot of time and effort to make the class successful.

4. Curriculum stresses safety and ethics

Participants were pleased with the curriculum's focus on safety and ethics. Many instructors emphasized that "firearms safety" comes first above all other topics, indicating class time spent on safety enhanced the course.

"Stresses safety and ethics of hunting."

"We stress safety throughout the course."

5. Camp Ripley administrative staff were highly praised across all groups

Participants consistently complimented administrative staff at Camp Ripley for their help, support, and dedication.

"Ripley and CO's are the nicest people you could deal with. What they say they're gonna do, they can do – or better. I'm really impressed."

6. Involvement of Conservation Officers

The presence of Conservation Officers in the course and their support outside of the classroom was frequently mentioned as an asset. Instructors remarked that students appreciated a new face in the classroom. Several instructors have experienced challenges finding a classroom or field day location and commented that their CO was instrumental in solving those problems.

"Nice to have a new voice [CO] there. Kids like it."

"It's not uncommon for a deputy to come by to talk. It's a real plus [to have COs in the classroom]."

While the strengths above were most commonly mentioned by participants, other course strengths were: personal connection with the students, high demand for the program, course adaptability, online certification process, and inclusion of hunting dilemmas (survival and wildlife topics) in the curriculum.

Course Areas for Improvement

1. Test questions

Participants frequently mentioned that test questions are confusing to students and should be rewritten. Particular problems referred to by instructors include double negative questions, the test's vocabulary level, and certain topics apparently not presented consistently within course material. Specific confusing questions and words brought up include:

- Transporting a firearm via motor vehicle
- Huntable surplus
- Conservation/preservation
- Entrails
- Carrying capacity

One instructor frustrated with the test questions brought in a table of exam scores from several past classes. This individual's observations echoed comments from other instructors in the focused discussions below.

"Fix #8 on test that's bogus. [It's] not very well reviewed in book [regarding who to transport a firearm in a motor vehicle]."

"Double negatives on the test are confusing. They've taken out double negatives in testing overall [for example: in schools]."

[&]quot;Very good moral support. Good crew up there."

"Certain questions, we just give it to them because the wording is so tricky."

"The test needs to be rewritten. Kids don't understand the word 'entrails.' And the conservation/preservation. Clean it up. They get stuck on carrying capacity. You gotta remember your audience."

2. Course materials don't match, need updating

Another common issue that arose during the discussions was the inconsistency of course materials. Specifically, participants explained that the Powerpoint and homework doesn't match, or that the instructor and student handbook page numbers don't align. In general, instructors were frustrated by this issue.

"[I have] frustration with the materials, they don't always mesh."

"Instructor and student materials don't match."

"Page numbers in book don't match Powerpoint."

In addition, updating of the CD and videos was mentioned. Specifically, the video portraying hunters in red directly conflicts with the current requirement of wearing blaze orange.

"Films are outdated."

"Disc needs a few updates."

One participant sent additional comments following the focus group to offer constructive criticism about the PowerPoint's effectiveness, suggesting the following comment:

"I think it would also be useful to provide a text file on the PPT CD, "How to use a Power Point". I've watched instructors stand there and simply read the slides to the students. Well, the students can read the slide five times faster than you can read it to them, so they're bored by the time you are half-finished."

3. Concern about online course due to lack of opportunity for hands-on training

While many of the instructors cited "hands-on" as a strength, they also explained that there needs to be even more hands-on training for students. These comments were often related to concern over youth taking the online course, or just the online course in general. More specifically, certain hands-on approaches were criticized such as the irrelevance of field carries.

"New technology [is a weakness]. Kids don't have a lot of time with hands-on. A lot of kids aren't able to read that well. It's more of a problem now with the new technology."

More detail about instructors' concern over youth and the online course is available on page 70.

4. Some instructors have difficulty reserving field day sites, especially in metro area

Several participants expressed significant concern about their inability to secure field day sites, and even classroom sites in some instances. They explained it has become harder to find good locations given the more recent gun control debate. Parks and schools are increasingly not allowing firearms safety courses to

use their facilities in the metro area. Instructors desire DNR support to facilitate these interactions. While this problem as mostly cited in the metro area, it was also mentioned in Grand Rapids.

"Itasca is losing their range. Losing by next March because of mining expansion. I don't see how they're going to have a new range in nine months."

"I'll be damned if I can get a cooperative police chief in [metro area city]. We lost people each time we had to move locations. I got turned down from another [metro area city] yesterday. Our CO helped me get the insurance paperwork, but it's not worth it if the police chiefs won't cooperate."

"Traditional courses are not allowed to use online field ranges like Carlos Avery." [Expressing frustration]

"We've been run out of town. Used to be that every police chief allowed it. We need the DNR to take action in the seven county metro area to allow more local ranges and parks to allow FAS classes and field days."

"[I] never got a response from our CO about finding places to shoot."

"Our group is not equipped to do a full outdoor field day. We do not have access to a police range. We do not have access to land or an area to be outdoors with guns."

While this issue seems to be a problem, there were other firearms safety instructors able to use schools, their own private land, or private gun clubs and ranges without much of a problem.

"Schools in [two specific metro cities] are supportive of the classes. They treat us like kings!"

5. Availability of Conservation Officers

Participants expressed some frustration about communicating with Conservation Officers, particularly in regards to availability for class presentations. However, it was clear that instructors understood many Conservation Officers are "stretched thin" by financial and personnel resource constraints.

"We don't get a call back from our CO."

"We have to work harder to fill the CO day slot."

However, lack of CO availability is not necessarily experienced by all instructors, according to the below comment.

"Never had a CO not show up for our class."

Course Topics Emphasized

Other than the obvious importance of focusing on firearms safety, instructors struggled with how to prioritize topics given insufficient time. Individuals had differing opinions about what should be second and third most important, etc.

1. Safety

Participants overwhelmingly said they emphasize firearms safety. This is not surprising, given the course purpose. However, the emphasis on firearms over other safety measures such as survival was clear. Examples cited include: three basic rules of firearms safety and encouraging students to always say "got it" when passing a firearm to another person. Instructors were adamant about the need to always emphasize safety with firearms in the course above other topics.

"Safety end of it. I say, 'If I don't feel you can go out and hunt alongside me, I won't pass you."

2. Handling of firearms

While safety is clearly emphasized by instructors, many were more specific about concentrating on the handling of firearms by students. It was clear throughout all discussions that instructors thought practice with firearms handling was crucial to safe hunting. A few people said that they try to emphasize everything; while others indicated ethics and understanding hunter culture and perception are also high priorities.

"We do the single file walk unloaded. I walk them through the fence and the duck boat."

"They put in a lot of time carrying the guns when our CO set it [online field day] up."

Course Topics Abbreviated

Participants were very interested in discussing course topics that are abbreviated. Most commonly mentioned were topics related to wildlife management and identification; however, instructors vary widely on what topics they choose to shorten.

1. Wildlife management, identification, and regulations

Many participants said they did not always cover wildlife management and identification, because they thought it was more of a "nice to know" rather than "need to know" topic. Given time constraints, this topic was perceived by instructors to be less important.

"[I] ditch wildlife management and ID, compass, and blood trailing parts."

"If you don't know the difference between a badger and a wood duck, you shouldn't be hunting anyway."

"We're not woodsmanship or hunting instructors, we're firearms instructors."

[&]quot;Focus only on safety."

[&]quot;Our whole thing is the three basic rules of FAS."

[&]quot;Firearms safety, tree stand safety, hypothermia is what I focus on."

[&]quot;Firearms safety should be firearms safety only. The other stuff should come after."

[&]quot;Most important part is to put the firearm in their hands."

[&]quot;We have even expanded it to handle guns during the speaker."

"Bag limits. Head and wing. They can look that up on their own. They don't need me to tell them what legal field dressing is."

Follow-up comments from one instructor provided evidence that students in his/her class are missing exam questions related to wildlife identification, regulations, and management. Specifically, questions 28, 30, 31, and 40 were consistently missed by this instructor's students across several classes. When referring to the final exam, these questions cover topics that instructors indicated they abbreviate during their classroom course.

2. Other abbreviated topics

Many other topics were mentioned, but are not as consistent. Specifically, the below topics were put forth during discussions as areas that are sometimes abbreviated in order to focus more on firearms safety or handling.

- Compass instruction
- First-aid
- Handguns
- Trapping
- Stages of the hunter

However, there was some debate among instructors about how to abbreviate the topic, in addition to which topics are useful or not. This was especially true for first-aid and compass portions.

"I don't do stages of the hunter. I do Pittman-Robertson, but 11 year olds don't care."

"The handgun portion. I have another instructor do it. You've got so much on your plate already, it's hard to find time with handguns. Don't have time for dog training. The trapping. Read that stuff on your own."

"I've lost them at the compass part. Half of these kids don't know what a compass is."

"Kids are interested in the compass, but I tell them to go online to learn more."

"First-aid is great, but what are they gonna get from three slides? Go to Red Cross training."

"First-aid touches on first-aid, and that's all you need to do. To expand would be foolish. I tell them to take a class."

Classroom Course Schedules

1. Variation among course schedules

Classroom course schedules are quite variable in terms of number of classes and duration. Field days schedules are slightly more consistent, with most instructors teaching one four to eight hour field day.

"My class goes Thursday, Friday, Saturday. We found kids tested better in three day sessions. It's fresher in their minds."

"We teach two nights, three weeks, and field day on following Saturday."

"Ours is two and one-half hours for five weeks."

"Mine is four hours, four hours, eight hours."

"Ours is six hours, six hours, six hours."

"We're range limited in [city]. I have to call at the end of March to schedule for October."

Field Day Approaches

The high variability among instruction styles was determined early on in the focused discussions. This was particularly evident when participants described how they conduct their field days. There is significant inconsistency with field day schedule and structure.

1. Prevalence of scenario-based field days, demonstrations

Instructors seem to focus heavily on handling of firearms during the field day and making sure students get adequate opportunity to understand how firearms work and what it's like to hunt.

"It's not in the range day lesson [shotgun instruction]. We can take the kids outside, and we go into shotguns quite a bit. Our class kicks butt. We get them into shotgun shooting."

"They only shoot 20 rounds with a .22. We do a three mile walkabout. Have to practice different carries. We've done it for quite a few years."

"I add to mine, I have Midwest Archery come in. My company comes in. We're pulling birds for them."

"Duck boats, actions, walk through. We do it in groups of five or six. It's easy for my group because of the club that I belong to."

"Each of the kids brings a gun from home. We check them in individually. They need to understand what kind of gun they'll be using."

"We own all our own guns and ammo. They shoot twice as many rounds as the DNR requires. Kids get to see what all firearms look like. All get to shoot carbine and AR-15's if they want to. Some kids get to shoot 100 rounds a piece. Grass area for pheasant simulation. Option for people to stay and shoot with handguns with five stations: .22, revolver, 25, 9mm. We raise money for this. I wish we could simulate getting in and out of the duck watercraft."

2. Student to instructor ratios are inconsistent

Instructor to student ratios are not consistent. Some groups limit the number of students they allow in their classes, while others accommodate as many as possible.

"I limit my class to 35. I'll have 10 instructors show up at anytime."

"We shoot four or five rounds. We have 15 .22's, so we run 15 shooting lanes. Two to four instructors are managing."

"We try to have at least three to four adults helping out on field day. We're fortunate enough to have a lot of help."

"We tried to push 65 kids through on a field day [with two instructors]. We only had 20 percent pass."

Youth Online Course Option

Overall, focused discussion participants were not in favor of offering the online course option to youth ages 11-17. However, many of the opponents to the online course did only have experience with the classroom course. There were several instructors that supported the online course for adults.

1. Dislike of online course for youth, more accepting for adults

There was an overwhelming response from participants that the online course did not adequately offer students hands-on firearms experience. However, several said they would be more accepting of the online course if it was only offered to adults. It was evident that some instructors were not aware of the online field day.

"Take online course before they come to regular course. You need that hands-on experience too. Those kids have done that stuff ahead of time. You could spend more time with hands-on stuff. The more of the stuff you can do at the front end, the better."

"My compromise is over 18 can take online and do the full 50 question test."

"How do you know the kid is taking it [online course]? The kid got 7/15 of them wrong. [The next time] the mother sat behind him and told him the right answers."

"Online is the scariest thing the State of Minnesota ever did."

"Plenty obvious that those metro kids have never touched a firearm before class. You're allowing these kids to take the class with no supervision, no training. That's the last thing you know of them."

2. Understanding about time constraints of youth

While many instructors don't approve of the online course, they seem to understand that the online course is more convenient for students with busy schedules.

"I took some training in the new system [online]. There's been talk of doing it [teaching the online course], but there's a bit of resistance. I can see the benefit of it schedule-wise."

"Benefit of computer course is convenience. Most instructors like the hands-on classroom."

During one discussion in particular, participants suggested that the online course would be a great resource, but only in addition to the classroom course. They like the graphics and the way the material was presented and thought it would be useful for students to complete prior to their classroom course to allow more time for hands-on training.

"Take the online course before they come to the regular course. You need that hands-on experience too. Those kids have done that stuff ahead of time. You could spend more time with hands-on stuff. The more of that stuff you can do on the front end, the better."

Instructor Development Section

Instructor Strengths

Instructors were readily able to discuss their personal strength, and several prominent perceived strengths included experience, passion, personal investment, and expertise.

1. Experience

Many of the participants have taught the firearms safety course for years and viewed this experience as a major personal strength.

"Experience. If you lose them, sometimes it's tough to get them back. Having a lot of experience is key."

"I've been doing it for so long, I'm comfortable with the material."

2. Passion for teaching

Instructors across discussions explained that their strength was because of their passion and enthusiasm for teaching, hunting, and for the kids. They bring enthusiasm to the course as the instructor.

"Our instructors really like kids. I think you have to like kids. I wanted to be a school teacher, but a little scuffle called Vietnam got in the way. I'm still getting my teaching in."

"Not doing it for the money."

"I have a soft spot for the kids."

"People that I teach with have real passion to get people into the club. Deep passion to get kids certified."

3. Significant personal investment

It was clear that instructors go the extra mile to fundraise, acquire extra materials for the courses, and spend a lot of time preparing for and conducting courses. That personal time and resource investment was discussed in the groups as strengths of the firearms safety program.

"We cover a lot of this [materials] by ourselves."

"Instructors cover many things themselves [their own money]."

4. Specific expertise

Instructors bring a wide variety of expertise and professional backgrounds to the courses, which they perceived to be strengths in their instruction.

"Educator and naturalist classroom management and teaching are right up my alley."

"Heavily involved with scouting. I have strength in survival stuff. I show them survival stuff they need to know."

"I was 20 years in the military. I know a lot about weapons and guns."

"One of our instructors is a wildlife biologist. That comes in handy."

Instructor Areas for Improvement

Participants struggled with this question, as it required them to self-reflect on what they could personally do better as instructors. However, several participants were willing to think about how they could improve their own classes.

1. Spend more time on preparation and organization

Because of schedule and resource constraints, many instructors expressed that they could do a better job of delegating tasks to allow more time for preparation and organization.

"Rushing and busyness. Time. I need to spend more time prepping."

"Just so busy and losing instructors."

"Be better organized."

2. Adapt to and welcome change

Several instructors said it's easy to become comfortable with teaching one way, and are reluctant to try new things. As a result, many thought improving the diversity of the instructor pool would help deter complacency and fear of change.

"Trying to keep up as an older instructor. You really get complacent as you're engrained with what you've always done."

"Stuck in a rut. Getting real comfortable in the way you've been doing this. More outreach for younger and female instructors. More diversity in instructor pool."

"We're really short on women. We need more female instructors, rather than 60 year old guys."

"We need to get some younger people doing this. There's no interest."

"There cannot be a group without female instructors."

3. Stay focused

Many instructors described themselves or other instructors as people who like to talk a lot, but sometimes get distracted. They suggested it might help the students if instructors kept focused on the curriculum and didn't get too sidetracked.

"Talk less"

"Limit the war stories. They get off on a tangent. You're not learning a lot about FAS and so forth. Unfortunately, they'd really get off on a tangent. We need to limit that."

4. Make sure all topics are equally covered

One issue that arose related to topics emphasized or abbreviated was that instructors sometimes teach their own values. If they're a deer hunter, they might focus on deer hunting more than waterfowl hunting or another topic. A suggestion was that instructors should attempt to equally cover all topics.

"Some teachers don't cover everything. Teaching is biased by what we care about, try to push one thing too much."

"I have to make sure that I cover that [turkey hunting]. Some instructors really try to push one thing, but they should focus on everything."

Process of Becoming a Certified Instructor

First, there were some regional differences between Elk River and Grand Rapids participants concerning the process of becoming an instructor. Grand Rapids participants were generally more comfortable with the training process and had very few complaints compared to Elk River participants. However, the two locations did share a concern about the lack of screening for firearms experience prior to certification.

1. Too easy

Overall, instructors though the initial training process was too easy, and didn't allow enough time to effectively cover all the materials or how to teach the course.

"Really easy. Too easy. You show up, fill out paperwork, and you're good."

"Should there be a testing procedure in place for instructors? If it started with a test, it would've been fine."

"Training is a weakness. I took the training, but I had no clue how to run the class."

"I was rather glad to get the 4H and NRA aspect of it before taking the DNR training. DNR training wasn't enough."

"Very disappointing. Two and half hours, not four hours, like they said. Never touched a gun. It was like 'here's your manual, now go find a group.'"

2. Too many assumptions about prior knowledge, experience

Because there is no mechanism for understanding if potential instructors have prior firearms experience or sufficient knowledge, many instructors thought this assumption was inadequate.

"There's no requirement for having firearms handling as an instructor."

"It used to be they would teach you how to teach."

"Implicit assumption that you know how to use a firearm – not everybody does."

"I feel like I didn't have enough hands-on training, but I do like the convenience of the course."

3. Insufficient communication options

One prominent theme that arose during the discussions was the desire for an instructor network or more communication options to help instructors connect with each other and the DNR. Many participants said they didn't know how to find an instructor group when they started.

"At the end, they just said: find someone who's done it and hook up with them."

"Organize by city/location, help pair people together."

"It would be helpful to share practices across instructors. There's isolation across instructor regions."

4. Positive feedback

There were also positive comments about the instructor training that should be mentioned.

"It's a good process. They have every aid to teach you how to be a FAS instructor."

"Our RTO does an excellent job around here."

"[At first] I was horrified at having to teach kids how to shoot a gun. My training was really great."

Retraining and Recertification

There were mixed feelings among the participants about the necessity and importance of retraining. While some viewed it as growth-producing, others thought it was unnecessary. Overall, instructors did not like the idea of mandatory retraining or recertification.

"Never too old to learn, there's always new stuff."

"I don't think it's necessary if you guys [DNR] are sending out updates."

"More advanced refresher. Two separate types of classes. Break down into different skill sets. What area do you need a refresher in?"

"It needs to be a robust training. I'd like to see how the CO runs the range."

"I don't want to be re-taught everything I already know."

"Careful about mandatory refreshers. Given the first training doesn't teach you anything."

1. Incentives for retraining or recertification

Another question discussed was if there were any specific incentives that would encourage instructors to take a refresher class or recertify. In most cases, instructors reiterated that as dedicated volunteers, they were not seeking any incentives because they were "self-motivated to continue learning." However, several interesting options were mentioned, including simply food, networking opportunities with other instructors and DNR personnel, or materials for their classes such as laser shots.

DNR Support Section

Interactions with DNR Personnel

There were more comments about positive interactions than negative interactions overall. In general, instructors mentioned their interactions with administrative staff, Regional Training Officers, and Conservation Officers. Most negative comments about DNR interactions arose from discussion of the recent Stillwater incident and the DNR's response. Those comments are addressed in Section X.

1. Administrative Staff

Participants described their interactions with admin staff as very positive, referring to their efficiency and friendliness of service.

2. Regional Training Officers

The majority of participants indicated very positive relationships with their RTOs, citing friendliness and dedication as reasons for positive interactions. One participant remarked that their RTO spent a lot of time helping them find a good range and classroom location, indicating commitment to instructors. However, another participant described their RTO as unapproachable, but this was a small minority.

[&]quot;We care about it, that's our incentive."

[&]quot;The incentive is the opportunity to have a group of instructors to get together and share ideas."

[&]quot;More exposure to people in the Department."

[&]quot;Spring banquet. They basically stopped it. The legion would host, do cooking. Speech on turkeys. Retired COs would come in. You learn from this."

[&]quot;Admin staff are wonderful."

[&]quot;Excellent! I get materials two days after I request them."

[&]quot;They take me off the website immediately [once class is full]."

[&]quot;Never been afraid to ask for anything. They were very nice. I got an extra patch to put on my vest."

[&]quot;[Jokingly referencing a 'negative' interaction] at the last dinner, my RTO didn't buy me a beer!"

[&]quot;Acts like a Minneapolis SWAT cop. The attitude is 'I'm a cop now. I can do things that I couldn't do before."

3. Conservation Officers

Instructors cited many very positive interactions with their Conservation Officers. However, several issues did arise due to schedule constraints or lack of ability to teach and work with kids.

"Our COs are the best in the state."

"COs are stretched too thin. They can't come always on the agreed upon night."

"COs do a great job. No qualms with what they do. What they don't know, they try to find out for you."

"Death by PowerPoint [referencing CO class presentation]."

"Ability to talk to kids [is a preferred CO characteristic]. One CO scared the kids. It's like he was barking at them. We had a parent complain."

In particular, many negative comments were in reference to communication issues that arose from a recent firearms incident in April 2013.

State-provided Resources

While many participants were satisfied with the state-supplied resources they receive, several expressed interest in more sharing of resources among instructors. Issues arose regarding quality of state-supplied resources, availability of resources, and specifically, distribution of hunting regulations.

In contrast, several instructors talked about their fundraising efforts and donations, explaining that they're able to find sufficient and quality resources without DNR assistance.

1. Interest in sharing resources

Across all discussions, there was an interest in sharing resources among instructors. While much of the resource sharing conversations were surrounding specific materials, instructors also indicated interest in lending a hand to teams that were short instructors for field days, etc. To their knowledge, there is not a mechanism for them to contact each other.

"In our experience, sharing [of resources] doesn't happen."

"I'd like to see pooling of resources. I don't have enough instructors. I don't have any way to get more instructors."

"Not aware of website resources. But an internal instructor website would be nice. With a login and everything."

"Could we have a wish list for instructors, managed by the DNR?"

A related issue is that some instructors have plenty of one resource, but not enough of the other. One participant expressed concern that there was no formal method for communicating with DNR staff about what materials they do and don't need each year.

"There is no way to say 'don't send me that,' I have enough tests and coloring books. I wish there was some way to tell Ripley staff that I have enough of this or that."

2. Instructors are not receiving updated hunting regulations from DNR

One frequently mentioned issue was that many instructors are not receiving updated hunting regulations from the DNR. While certainly many instructors receive regulations with the home study packets, several instructors have had to work with the sporting goods stores or gas stations to make sure they'll receive the newest version each year.

"Can I order the laws?"

"We get them [the laws] from sporting goods."

"I was surprised that the regulations aren't distributed."

3. Concern that state firearms are not safe

This concern was only prominent in one focus group, but it is an important issue. Instructors that borrow state firearms to conduct classes and field days explained that they weren't sure those firearms were safe.

"A lot of the guns [state firearms] were not properly taken care of."

"One gun I got from a CO didn't even fire. If they were my own guns, I would've gotten rid of them."

4. Interest in resources provided by DNR

Participants expressed a desire for the DNR to provide them with more of or to begin distributing the below resources to instructors.

- Orange guns without firing pins
- More ammunition
- Certification patches for students
- Instructor documents available for electronic download (via website)
- Updated hunting regulation booklets
- FAS instructor hat, shirt, or more patches
- Educational posters (e.g. dissected shotgun shell)
- Laser education

5. Resources provided by instructors

It quickly became clear during the discussions that many instructors invest personal funds to enhance their firearms safety course. The list below includes items mentioned that were bought with personal funds or donated by non-DNR entities.

- Food and beverages
- Blaze orange hats
- Shotgun shells
- Personal firearms
- Tree stands

- Extra ammunition
- Compasses
- Updated hunting regulations

One topic that arose from this question was the fee structure for instructors. There were differing opinions among individuals about whether or not the additional \$7.50 was sufficient to cover course costs. A few were adamant that it wasn't enough, while more thought the fee was plenty.

"We charge the [full] \$7.50 extra. We give them an orange hat and a pop. We don't pocket a penny."

"I know instructors that lost certification for taking more than \$7.50. I know some clubs charge \$40-\$50."

"You're gonna have to work pretty hard to spend the \$7.50 per kid extra."

"We don't charge extra fees. We don't make kids pay for it if they can't afford it."

One team of instructors is very creative with raising funds for their course. This was a unique story, but not the only successful fundraising example mentioned during the groups.

"We formed our own incorporation. I work charitable gambling. We run raffles. Average between \$4,000 and \$5,000 per year. Raffle for guns at the bar, proceeds go to gun safety...we have a lot of fun doing that. All the money we raise goes back to the kids. [Our local] bank also sponsors us."

Communication

While clearly communication between the DNR and instructors impact all aspects of the firearms safety program, instructors indicated their preferred communication modes. One noteworthy finding from the groups was that instructors strongly desire a facilitated effort to network amongst themselves to share best practices and resources, but also for social reasons.

1. Dated contact information

Several instructors were not receiving e-mails, newsletters, or other materials. In addition, during the discussion recruitment process, one contact was deceased, several mailing addresses and phone numbers were not up-to-date, and several more had undeliverable e-mail addresses.

2. Interest in new communication methods

Instructors proposed many ideas that would help improve communications between the DNR and instructors.

"I would like to see more e-mail access. Who is in my neighborhood? I could offer somebody a Saturday afternoon [assist with field day]. Can we have an instructors-only forum?"

"A little advanced notice about the updates/changes would be nice."

"Can they do a blog with updated information for instructors?"

"New instructors should be get all existing instructor e-mails."

3. Instructors want to be treated with more respect

In addition to tangible ways of improving communication, several instructors suggested the approach (or tone) coming from the DNR can be too authoritative, rather than gracious. As volunteers, they said it can be off-putting.

"You'll get more with me with honey, and busting my chops [for doing something different] isn't common sense."

"The DNR seems to forget that we are volunteers."

4. Phone and e-mail are both necessary ways to contact instructors

Most instructors receive and prefer to receive information from the DNR via e-mail. However, there are still instructors who either do not have internet access at home, or prefer to communicate by phone. It is important to make sure program changes are communicated by multiple modes. Some instructors said they often get information directly from their RTO or CO. Participants generally thought a paper copy of the newsletter was unnecessary.

"Getting e-mails for 10 years. Adequate for me."

"I like e-mail. I might not remember everything over the phone."

"I don't think they need to spend money on the [paper] newsletter."

Some instructors even thought that a Firearms Safety Instructor Facebook group would be a good way to recruit younger volunteers. However, there was some concern about privacy.

"Facebook might be a good way to recruit more 20- and 30- somethings."

Stillwater Incident Response

While not planned in the focus group script, an incident referring to the accidental discharge of a firearm during a firearms safety class occurring in Stillwater on April 11th, 2013 was consistently brought up and discussed in conjunction with other support, communication, and safety topics. Comments were mainly in reference to the incident response letter sent out by DNR staff. Below are a few of the sentiments instructors shared during the discussions.

1. Many instructors were offended or confused by the response letter

In general, instructors were upset or insulted by the letter sent responding to a firearms incident in April, 2013. Many instructors felt they were not appreciated for successfully conducting their own firearms safety courses, and that their contributions as volunteers and attention to safety were underappreciated with regards to the letter.

"The system we've had has worked for 60 some years. It's not the first accident."

"I had a guy who wanted to quit. This letter was an overreaction. Total overreaction. I thought there was a fatality at first or something."

"I didn't think the letter was real clear. It seemed pretty restrictive to me."

"To be told 'what is going to be done' is frustrating."

"We're the safest sport out there, we gotta be doing something right."

"[The letter] basically said you guys don't know what you're doing. I took it as an insult."

2. Concern that effectively teaching firearms handling given new mandate will not be possible

Many instructors were unsure about how to demonstrate firearms handling with chamber lock and weed whip restrictions.

"How can I demonstrate with a trigger lock on the gun?"

"They're telling me I can't do one of the three things the course is supposed to teach."

"I have no problem with giving a kid a gun with a dead round. You have him check it."

"We're doing a disservice to people by using a trigger lock for firearms that aren't designed to have a trigger lock."

"Kids need to get more involved with gun handling. We have two instructors check to make sure kids' guns are unloaded. If kids have the opportunity to check and see if the gun is loaded, they will respect the firearm more. I would like the kids to have to handle the action more. I don't want them to take for granted checking the gun."

3. Agreement about no live ammunition in the classroom

While there was concern about ability to handle guns properly, instructors did agree that no live ammunition in the classroom was a good policy. Several instructors do want to use safety checking mechanisms in some, but not all situations.

"We never bring live ammunition into the classroom. We are going to adjust things we didn't do in the past to have full safety."

"The chamber flags are good. I started using them years ago. Relatively inexpensive. No reason why everybody can't do that."

"No live ammo in the classroom. Period."

Additional Comments

A couple of other issues arose during the discussions that provide feedback for the firearms safety program, including how to address special needs and instructor networking.

1. Concern and uncertainty about how to deal with special needs

Throughout the discussions, the question of how to accommodate children with special needs was present. While there is a checkbox for "special needs" on the course registration form, instructors were uncertain about how to help those students who need more assistance, other than reading the test to them.

"Special needs. Parents don't want to say anything about it."

"[We could ask] does your son or daughter have educational testing needs? Parents are more likely to respond to than if we said 'special needs.'"

"People don't think things are special needs. We need to be able to focus on firearms safety. Huge discrepancy [in awareness of special needs] between parents."

"Is Asperger's or ADD an element for consideration here? How do we deal with this as instructors?"

"We've had some kids with ADD and Asperger's come in. Sign-up form doesn't make clear those disabilities. One of the mothers had a fit because she couldn't stand next to her daughter with a behavior disorder."

2. Instructors valued the opportunity to connect

Instructors really enjoyed the opportunity to sit down and talk with other instructors. Whether it was to compare best practices or to sympathize with challenges, the participants said they really appreciated the chance to get together and expressed interest in connecting more often socially or for resource sharing purposes.

"Great to hear what others have to say."

"Thanks for getting this group together."

"We don't get instructor input. We need to get together to improve programs. We won't do it on our own, but DNR organized gathering would work."

"Instructor happy hours?"

Appendix E. Questionnaires

Firearms Safety Hunter Education Survey ADULT CLASSROOM

Q1	Did you take the adult classroom firearms safety course?	(Check one)
	Yes Go to Q2	No Go to Q27
Q2	Why did you choose the classroom course option? (Chec	k all that apply)
	It was the most convenient	I didn't know there were other options
	It seemed easier	Other options were not available (e.g. Online field days were full)
	I thought I would learn more from this option	¬
		Other (please describe):
02	How did you been about the electron fire and enfety as	uma antiana (Chask ana)
Q3	How did you learn about the classroom firearms safety co	
	DNR website Friend or family me	mber Community organization Other (please describe):
	Flyer or other posting School	Other (please describe).
Q4	How satisfied or dissatisfied were you with the course reg	
	Very Dissatisfied Dissatisfied Neutral	Satisfied Very Don't know
Q5	How much time did you spend traveling to your class, one	e-way? (Check one)
	0-15 minutes 31-45 minutes	61 to 90 minutes Don't know
	16-30 minutes 46-60 minutes	91 minutes or more
Q6	Was your travel time too sho <u>rt,</u> about right, or too long? (Check one)
	Too shortAbout right	Too long Don't know
Q7	How much time did you spend traveling to your field day,	one-way? (Check one)
	0-15 minutes31-45 minutes	61 to 90 minutes Don't know
	16-30 minutes 46-60 minutes	91 minutes or more
Q8	Was the time you spent traveling to your field day too sho	i i i i
	Too shortAbout right	Too longDon't know
Q9	How much did you pay directly to your volunteer instructor	or2 (Cheek one)
Q3		
	Less than \$7.50 (How much? \$)	More than \$7.50 (How much? \$)
	∐\$7.50	Don't know
010	Did you complete the firearms safety self-certification pro	cess through the DND website? (Check one)
QIO	Go to Q11 Go to Q12 D	on't Go to 012
	res into ki	now SS IS 412
011	Please answer the following questions regarding the onling	ne self-certification process (Check one per row)
QIII	Yes	No Don't know
	Were the instructions easy to follow?	
	Did you print the certificate?	

	Very		rse costs: ((Very	
Volunteer instructor fee (varies) Online self-certification (\$7.50)	Dissatisfied	Dissatisfied	Neutral	Satisfied	Satisfied	Don't kno
Online self-certification (\$7.50)		ш		ш	ш	ш
Use the space below to write other	comments al	bout your fire	arms safety	course cos	t and registr	ation.
We'd like to know why you to	ok firearm	s safety an	d some de	tails abou	ıt your cou	ırse.
Why did you take the firearms safet	y course? (C					
To hunt big game			-		nds/family who	hunt
To hunt small game			Because my fri			
To hunt waterfowl			To understand		earms	
To join my school's trap shooting/clay	target team		Other (please o	describe):		
How much do you agree or disagree	e with the fol	lowing state	nent: After t	taking the fir	earms safet	y course
I'm confident I understand: (Check of	one per row) Strongly	-		-	Strongly	
	Disagree	Disagree	Neutral	Agree	Agree	Don't kn
Firearms action types	\sqcup		\vdash	닏		닏
Types of ammunition	\sqcup		\vdash	닏	닏	닏
Transporting and carrying firearms	\sqcup	\Box	\vdash	\vdash	\sqcup	닏
Fundamentals of shooting	\vdash		닏	닏		닏
	1 1	1 1	1 1	1 1	1 1	1 1
Safe and effective shot selection	\vdash	\vdash	\vdash	\vdash	\vdash	⊢
Safe and effective shot selection Hunter responsibility	Ħ	Ħ	Ħ		Ħ	Ħ
Hunter responsibility						
Hunter responsibility Hunter image, ethics, and responsibility						
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting						
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting Wildlife conservation and identification						
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting Wildlife conservation and identification Where to find hunting opportunities						
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting Wildlife conservation and identification Where to find hunting opportunities Archery						
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting Wildlife conservation and identification Where to find hunting opportunities Archery Muzzleloaders Handguns	U U U U U U U U U U U U U U U U U U U	in your firear	ms safety or	Ourse? Why	,	
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting Wildlife conservation and identification Where to find hunting opportunities Archery Muzzleloaders	you learned	in your firear	ms safety co	ourse? Why	?	
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting Wildlife conservation and identification Where to find hunting opportunities Archery Muzzleloaders Handguns	you learned	in your firear	ms safety co	ourse? Why	?	
Hunter responsibility Hunter image, ethics, and responsibility Personal preparedness for hunting Wildlife conservation and identification Where to find hunting opportunities Archery Muzzleloaders Handguns	you learned	in your firear	ms safety co	ourse? Why	?	

Q17	What was the least important thing you learned in your firearms safety course? Why?
040	Have many hours did your algorison course take evaluding your field day? (Check one)
QTO	How many hours did your classroom course take, excluding your field day? (Check one) Less than 11 12-15 16-20 More than 20 Don't know
Q19	How many classes did you attend, excluding your field day? (Check one)
-	0-3
Q20	Did a DNR Conservation Officer speak to your class? (Check one)
	☐ Yes ☐ No ☐ Don't know
Q21	Did your instructor use the below technologies in your firearms safety course? (Check one per row)
	Yes No Don't know Powerpoint presentation
	The Last Shot video
	Other videos
Q22	How many people were in your class? (Check one)
	0-10
Q23	Were the number of people in your class too few, about right, or too many? (Check one)
	Too few About right Too many Don't know
224	We the decree of the case shout sight or too difficult? (Check and)
QZ4	Was the classroom course too easy, about right, or too difficult? (Check one) Too easy
Q25	How satisfied or dissatisfied were you with your firearms safety training overall? (Check one)
	Very Dissatisfied Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied Don't know
226	Use the second state with other comments should your firearms defeat training averall
QZ6	Use the space below to write other comments about your firearms safety training overall.

Please tell us about your field day experience.

Q27	For each of the following exercises, p practiced the exercise yourself, or did			f the exercise,
	.22 rifle shooting			
	Motor vehicle firearm transportation			
	Field walk with firearm carry positions			
	Tree stand safety		Ц	
	Duck boat safety			
	Shotgun shooting			
	Muzzleloader shooting		닏	\vdash
	Muzzle control		닏	\vdash
	Handgun shooting	\sqcup	\sqcup	\sqcup
	Hunting from a ground blind	\sqcup	\sqcup	\sqcup
	Zones of fire	\sqcup	\vdash	\vdash
	Archery	\vdash	H	\vdash
	Blood trailing	\vdash	\vdash	\vdash
	Other (please describe):			
Q28	How many hours was your field day? Less than 2 3-4	(Check one)	8 or more	Dont know
Q29	Was the length of your field day too si		ng? (Check one) long	Don't know
Q30	About how many people attended you	ır field day? (Check one)		
	0-10 11-20	21-30 31-40	41 or mor	re Don't know
Q31	Were the number of people at your fie ☐ Too few ☐ About		t, or too many? (Check	cone)
Q32	How satisfied or dissatisfied were you Very Dissatisfied Dissatisfied	u with your field day exper	Verv	Don't know
Q33	Use the space below to write other co	mments about your field o	day experience.	

Please tell us about your firearms safety instructor.

Q34	How much do you agree or disagree row)	with the follo	wing staten	nent: <i>Instruc</i> i	tor(s) was(w	vere): (Checl	k one per
	Towy	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
	Prepared						
	Professional						
	Hands-on						
	Friendly						
	Knowledgeable						
	Helpful						
	Fun						
	On task						
Q35	Please add any other comments you	have about v	our firearm	s safety instr	uctor.		
		•					
	Please to	ell us abou	t your hur	nting habits	5.		
036	Do you plan to participate in the follo	wing activitie	es this vear	Check one	ner row)		
430			Don't know	. (Circox one	perion,		
	Hunting	_	Ц				
	Target shooting		Ш				
Q37	Prior to taking the firearms safety cor	urse. did vou	have any fi	rearms or hu	nting exper	ience? (Che	ck one)
40.	Ves Go to Q38	_	o Q44		g enpen		,
Q38	Where did that firearms or hunting ex	kperience coi	me from? (C	heck all that	apply)		
	Family		L	Boy Scouts or G	irl Scouts		
	Friend		L	Becoming an Ou	tdoors Woma	n/Family	
	Military		4	Н			
	Local gun club/target range		Ш	Other (please de	scribe):		
	Hunting summer camp						
Q39	Have you ever hunted from an elevate	ed stand? (C	heck one)				
400	Yes Go to Q40 No	Go to Q41	,				
Q40	If yes, what type of fall restraint device	ce do you use	e? (Check o	ne)			
	Full-body harness	Waist stra	ıp		Other (p	olease describ	e):
	Chest strap	None					

Q41	41 How do you typically transport your firearm in a car/truck? (Check all that apply)					
	Broken down	Loaded				
	Unloaded	I've never transported a firearm by motor vehicle				
	Fully cased	Don't know				
	In a gun rack	Other (please describe):				
042	Where do you typically load your firearm? (Check all t	that apply)				
Q4Z	Where do you typically load your firearm? (Check all t					
	At my hunting camp	☐ I've never loaded a firearm				
	When I'm in position and know the zones of fire	Don't know				
	In my hunting group before splitting up	Other (please describe):				
	Inside a car					
Q43	Where does your household store firearms? (Check a	II that apply)				
	Unloaded and locked in a gun locker	My household doesn't store firearms				
	Out of sight in a zippered gun case	Don't know				
	Stored with ammunition	Other (please describe):				
	Loaded and out of sight					
	Please tell us ab	out yourself.				
Q44	What is your gender? (Check one)	Female				
Q45	Do you consider yourself Hispanic/Latino/Spanish? (0	Check one) Yes No				
Q46	Which of the following best describes your race? (Ch	eck all that apply)				
	African American/BlackAsian	Pacific Islander				
	American Indian or Alaska Native Caucasian/Wh	nite				
Q47	How old are you?					
Q48	What is the zip code of your permanent home?					
Q49	Use the space below to write other suggestions you h	nave for improving the firearms safety course.				
	Thank you for completing this survey!					
Survey	# (This survey is only used to keep track of who has com	injeted the survey and who has not. We will send replacement surveys to				

Survey #: _____ (This survey is only used to keep track of who has completed the survey and who has not. We will send replacement surveys to those who don't respond in 3 weeks. Your answers are confidential and will not be associated with your name.)

Firearms Safety Hunter Education Survey ADULT ONLINE

Q1	Yes Go to Q2 No Go to Q2	
Q2	Why did you choose the online course option? (Check It was the most convenient It seemed easier I thought I would learn more from this option	k all that apply) I didn't know there were other options The classroom courses were full Other (please describe):
Q3	How did you learn about the online firearms safety co DNR website Friend or family Flyer or other posting School	·
Q4	How satisfied or dissatisfied were you with the course Very Dissatisfied Dissatisfied Neutral	e registration process? (Check one) Satisfied Don't know
Q5	How much time did you spend traveling to your field of the control	day, one-way? (Check one) 61 to 90 minutes 91 minutes or more
Q6	Was the time you spent traveling to your field day too	short, about right, or too long? (Check one) Too long Don't know
Q7	How much did you pay directly to your volunteer instruction Less than \$7.50 (How much? \$) \$7.50	ructor? (Check one)
Q8	Did you complete the firearms safety self-certification Yes Go to Q9 One Go to Q10	process through the DNR website? (Check one)
Q9	Please answer the following questions regarding the	online self-certification process. (Check one per row)
	Were the instructions easy to follow?	
	Did you print the certificate?	
Q10		ing course costs: (Check one per row) Very satisfied Neutral Satisfied Satisfied Don't know
	Volunteer instructor fee (varies) Online self-certification fee (\$7.50)	+ + + + +
	HunterCourse.com fee (\$24.95)	

Why did you take the firearms safety To hunt big game To hunt small game To hunt waterfowl To join my school's trap shooting/clay to		To spend more Because my fri To understand	time with friendends took the omore about fine explain):	course earms	
How much do you agree or disagree I'm confident I understand: (Check of I'm confident I understand: Gheck of I'm confid	Disagree Disagree	Neutral Neutral	Agree	Strongly Agree	Don't kn
What was the most important thing What was the least important thing					

Q16	How many hours did your	online course ta 4-8	nke, excludin	g your field		eck one) more	Don't	know
Q17	How satisfied or dissatisfierow)	•	h the followi	ng online c	course char	acteristics?	(Check on	e per
		Dissa		tisfied N	leutral .	Satisfied	Satisfied	Don't know
	Interactive activities	Ĺ	_	╛				
	Narration	L	_	╛	\sqcup			
	Text	Ĺ	╛	╛	\sqcup	\sqcup	\sqcup	Ш
	Chapter quizzes							
	Final exam							
Q18	Would you prefer to see le	ss, about the sa	me, or more	of the follo		e course ch		s? n't know
	Interactive activities		\vdash]	\vdash		닏
	Narration]	\sqcup		\sqcup
	Text				ļ	\sqcup		\sqcup
	Videos]	\sqcup		\sqsubseteq
	Pictures]	Ц		\sqsubseteq
	Outside resources (e.g. hyperlin	ks)						
Q19	Was the online course too	easy, about right	ht, or too diff		eck one)		Don't know	
Q20	How satisfied or dissatisfied Very Dissatisfied Dissa	· · ·	h your firear eutral	ms safety t		rall? (Check Very Satisfied	<u> </u>	n't know
Q21	Use the space below to wr	ite other comme	ents about th	ne online fir	rearms safe	ty training.		

Please tell us about your field day experience.

Q22	For each of the following exercises, p practiced the exercise yourself, or did			of the exercise,
	.22 rifle shooting			
	Motor vehicle firearm transportation			\Box
	Field walk with firearm carry positions	Ħ	Ī	Ī
	Tree stand safety	Ħ	Ħ	Ī
	Duck boat safety	Ħ	Ħ	Ħ
	Shotgun shooting	Ħ	Ħ	Ħ
	-	Ħ	Ħ	Ħ
	Muzzleloader shooting	H	H	H
	Muzzle control	H	H	H
	Handgun shooting	H	H	H
	Hunting from a ground blind	H	H	H
	Zones of fire	H	H	H
	Archery	H	H	H
	Blood trailing	H	H	H
	Other (please describe):			
Q23	How many hours was your field day? Less than 2 3-4	(Check one)	8 or more	Don't know
Q24	Was the length of your field day too s ☐ Too short ☐ About		ong? (Check one) oo long	Don't know
Q25	About how many people attended you	ır field day? (Check one)		
	0-10 11-20	21-30 31-4	40 41 or mo	ore Don't know
Q26	Were the number of people at your fie		ht, or too many? (Chec o many	k one) Don't know
Q27	How satisfied or dissatisfied were you Very Dissatisfied Dissatisfied		erience? (Check one) Very Satisfied	Don't know
Q28	Use the space below to write other co	mments about your field	day experience.	
		,		

Please tell us about your firearms safety instructor.

229	How much do you agree or disagree row)	with the foll	lowing stater	ment: Instru	ctor(s) was(were): (Chec	k one per
	1047	Strongly	Dianama	Neutral	4	Strongly	Don't know
	Prepared	Disagree	Disagree	Neutrai	Agree	Agree	Don t know
	Professional	Ħ	H	H	H	H	H
		H	H	H	H	H	H
	Hands-on	H	H	H	H	H	H
	Friendly	H	H	H	H	H	H
	Knowledgeable	H	H	H	H	H	H
	Helpful	H	H	H	H	H	H
	Fun	H	H	H	H	H	H
	On task						
230	Please add any other comments you	have about	vour firearm	s safety inst	ructor.		
200	lease and any one; comments you	nave about	your mounn	o outcry mor	ructor.		
	Please t	all us abo	ut your hu	nting habit			
	Flease t	en us abo	ut your mu	nung nabi	.5.		
231	Do you plan to participate in the follo	wing activit	ies this year	? (Check on	e per row)		
	Yes	No	Don't kno	OW			
	Hunting	님	님				
	Target shooting	Ш	Ш				
733	Prior to taking the firearms safety hu	inter educati	ion course d	lid vou bava	any firearm	e or hunting	
43Z	experience? (Check one)	inter educati	ion course, u	na you nave	any meann	s or municing	
	Yes Go to Q33 No	Go to Q39					
233	Where did that firearms or hunting ex	xperience co	ome from? (0	Check all tha	t apply)		
	Family		<u></u>	Boy Scouts or	Girl Scouts		
	Friend		<u></u> ,	Becoming an C	utdoors Wom	an/Family	
	Military		<u></u> 4	4H			
	Local gun club/target range			Other (please o	lescribe):		
	Hunting summer camp						
234	Have you ever hunted from an elevat		Check one)				
	Yes Go to Q35	Go to Q36					
	M			(Ob b)			
135	If yes, what type of fall restraint device			(Check one)		please describ	e):
	Full-body harness	Waist sti	rap				
	Chest strap	None					

Q36	How do you typically transport your firearm in a car/true	ck? (Check all that apply)
	Broken down	Loaded
	Unloaded	I've never transported a firearm by motor vehicle
	Fully cased	Don't know
	In a gun rack	Other (please describe):
Q37	Where do you typically load your firearm? (Check all that	at apply)
	At my hunting camp	Don't know
	When I'm in position and know the zones of fire	l've never loaded a firearm
	In my hunting group before splitting up	Don't know
	Inside a car	Other (please describe):
Q38	Where does your household store firearms? (Check all	that apply)
	Unloaded and locked in a gun locker	My household doesn't store firearms
	Out of sight in a zippered gun case	Don't know
	Stored with ammunition	Other (please describe):
	Loaded and out of sight	
	Places fell on all or	
	Please tell us abou	ut yourseit.
Q39	What is your gender? (Check one)	Female
Q40	Do you consider yourself Hispanic/Latino/Spanish? (Ch	eck one) Yes No
Q41	Which of the following best describes your race? (Chec	k all that apply)
۷	African American/Black Asian	Pacific Islander
	American Indian or Alaska Native Caucasian/White	
Q42	How old are you?	
042	What is the six and of comment have 2	
Q43	What is the zip code of your permanent home?	
Q44	Use the space below to write other suggestions you have	ve for improving the firearms safety course.
	Thank you for complet	ing this survey!
_		
Survey those	r#:(This survey is only used to keep track of who has comple who don't respond in 3 weeks. Your answers are confidential and will not be	ted the survey and who has not. We will send replacement surveys to associated with your name.)

| Page

Firearms Safety Hunter Education Survey YOUTH CLASSROOM

Parents, please fill out this section.

Parents, thank you for your involvement in your child's firearms safety course. Please only complete this section, and ask your child to complete the student section below.

Q1	Did your child take the youth classroom firearms safety course? (Check one) Yes Go to Q2 No Go to Q27
Q2	Why did you choose the classroom course option? (Check all that apply) It was the most convenient. It seemed easier. I thought my child would learn more from this option. I thought my child would learn more from this option. Check all that apply) I didn't know there were other options. Other options were not available (e.g. Online field days were full) Other (please describe):
Q3	How did you learn about the classroom firearms safety course option? (Check one) DNR website
Q4	How satisfied or dissatisfied were you with the course registration process? (Check one) Very
Q5	How much time did you spend traveling to your child's class, one-way? (Check one) 0-15 minutes 31-45 minutes 61 to 90 minutes Don't know 16-30 minutes 91 minutes or more
Q6	Was your travel time too short, about right, or too long? (Check one) Too short Don't know
Q7	How much time did you spend traveling to your child's field day, one-way? (Check one) 0-15 minutes
Q8	Was the time you spent traveling to your child's field day too short, about right, or too long? (Check one) Too short Too long Don't know
Q9	How much did you pay directly to the volunteer instructor? (Check one) Less than \$7.50 (How much? \$) \$7.50 Don't know
Q10	Did your child complete the firearms safety self-certification process through the DNR website? (Check one) No Go to Q12 Don't Go to Q12 Rnow

Q11 Please answer the following questions regarding the online self-certification process. (Che Yes No							e per row) tknow		
	Were the instructions easy to follow?		i	Γ̈́	Ĭ				
	Did you print the certificate?	Ē	Ŧ .	Ē	₹	Ħ			
	Did you print the certificate:	_	_		_		_		
Q12	12 How satisfied or dissatisfied were you with the following course costs: (Check one per row) Very Very Dissatisfied Dissatisfied Neutral Satisfied Satisfied Don't k								
	Volunteer instructor fee (varies)	Diodelloned	Dissatisfied		Satisfied				
		H	H	H	H	H	Ħ		
	Online self-certification fee (\$7.50)								
Q13 Use the space below to write other comments about your firearms safety course cost and registra						ation.			
			_						
Th	ank you for completing the paren	t's section o	of this surve	ev Please	ask vour ch	nild to come	olete the		
	remaining qu					ina to comp	31010 1110		
	Student	ts, please	fill out t	his section	on.				
	First, we'd like to know why you	ı took firear	ms safety a	and some o	letails abou	ıt your cou	rse.		
Q14	Why did you take the firearms safety	/ course? (Cl	heck all that	apply)					
	To hunt big game	To spend more time with friends/family who hunt							
	To hunt small game	Because my friends took the course							
	To hunt waterfowl	To understand more about firearms							
	To join my school's trap shooting/clay target team Other (please describe):								
					- L' 41 - F				
Q15	How much do you agree or disagree I'm confident I understand: (Check of		lowing state	ment: Atter t	aking the fir	earms satety	y course,		
	,	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know		
	Firearms action types	Disagree	Disagree		Agree	Agree	Don't know		
	Types of ammunition	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ		
		Ħ	Ħ	Ħ	Ħ	Ħ	Ħ		
	Transporting and carrying firearms Fundamentals of shooting	H	Ħ	H	H	Ħ	H		
	· ·	H	H	H	H	H	H		
	Safe and effective shot selection	H	H	H	H	H	H		
	Hunter responsibility	H	H	H	H	H	H		
	Hunter image, ethics, and responsibility	H	H	H	H	H	H		
	Personal preparedness for hunting	H	\vdash	H	\vdash	\vdash	\vdash		
	Wildlife conservation and identification	님	님	님	님	\vdash	님		
	Where to find hunting opportunities	님	님	님	님	님	님		
	Archery	닏		닏	닏	닏	닏		
	Muzzieloaders	Ц			\sqcup		\sqcup		
	Handguns								

Q16	What was the most important thing you learned in your firearms safety course? Why?					
Q17	What was the least important thing you learned in your firearms safety course? Why?					
Q18	How many hours did your classroom course take, excluding your field day? (Check one) Less than 11					
Q19	How many classes did you attend, excluding your field day? (Check one) 0-3 8 or more Don't know					
Q20	Did a DNR Conservation Officer speak to your class? (Check one) Yes Don't know					
Q21	Did your instructor use the below technologies in your firearms safety course? (Check one per row) Yes No Don't know The Last Shot video Other videos					
Q22	How many people were in your class? (Check one) 0-10					
Q23	Were the number of people in your class too few, about right, or too many? (Check one) Too few					
Q24	Was the classroom course too easy, about right, or too difficult? (Check one) Too easy About right Too difficult Don't know					
Q25	How satisfied or dissatisfied were you with your firearms safety training overall? (Check one) Very					
Q26	Use the space below to write other comments about your firearms safety training overall.					

Please tell us about your field day experience.

Q27 For each of the following exercises, please indicate if you watched a demonstration of the exerci practiced the exercise yourself, or did neither. (Check one per row) Watched a demonstration Practiced myself Neith					
	.22 rifle shooting				
	Motor vehicle firearm transportation				
	Field walk with firearm carry positions				
	Tree stand safety				
	Duck boat safety				
	Shotgun shooting	Ц			
	Muzzleloader shooting	Ц			
	Muzzle control				
	Handgun shooting				
	Hunting from a ground blind	Ц			
	Zones of fire			\sqcup	
	Archery	Ц			
	Blood trailing			\sqcup	
	Other (please describe):				
Q28	How many hours was your field day? (Check one)	8 or more Don't	know	
Q29	Was the length of your field day too sh Too long Too short		long? (Check one) Don't know		
Q30	About how many people attended you) -40	Don't know	
Q31	Were the number of people at your fiel Too few About right		ght, or too many? (Check o	one)	
Q32	How satisfied or dissatisfied were you Very Dissatisfied Dissatisfied		erience? (Check one) Very Satisfied Satisfied	Don't know	
Q33	Use the space below to write other co	mments about your fiel	d day experience.		

Please tell us about your firearms safety instructor.

Q34	How much do you agree or disagree with the following statement: Instructor(s) was(were): (Check one per row)							
O35	Prepared Professional Hands-on Friendly Knowledgeable Helpful Fun On task Please add any other comments	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know	
Q33	Please and any other comments	you mave	about your	incarins se	nety msut	ictor.		
	Please tell us about your hunting habits.							
Q36	Do you plan to participate in the Yes Hunting Target shooting	following No		nis year? (C ?know	heck one	per row)		
Q37	Prior to taking the firearms safet	y course, Go to C	_	e any firea	rms or hur	iting experi	ence? (Chec	k one)
Q38	Where did that firearms or huntin Family Friend Military Local gun club/target range Hunting summer camp	ng experie	nce come f	Boy Sco Becomin	uts or Girl S	couts ors Woman/Fa	amily	
Q39	Have you ever hunted from an el	evated sta lo Go to	-	(one)				
Q40	If yes, what type of fall restraint of Full-body harness Chest strap		ist strap	y use? (Ch	eck one)	Other (pleas	e describe):	

Q41	How do you typically transport your firearm in a car/true	ck? (Check all that apply)
	Broken down	Loaded
	Unloaded	I've never transported a firearm by motor vehicle
	Fully cased	Don't know
	In a gun rack	Other (please describe):
042	When de you to itself, lead your forces 2 (Charle II the	4
Ų4Z	Where do you typically load your firearm? (Check all the	
	At my hunting camp	☐ I've never loaded a firearm
	When I'm in position and know the zones of fire	Don't know
	☐ In my hunting group before splitting up	Other (please describe):
	Inside a car	
Q43	Where does your household store firearms? (Check all	that apply)
	Unloaded and locked in a gun locker	My household doesn't store firearms
	Out of sight in a zippered gun case	Don't know
	Stored with ammunition	Other (please describe):
	Loaded and out of sight	
	Places fell on about	
	Please tell us abou	ut yourself.
Q44	What is your gender? (Check one)	Female
Q45	Do you consider yourself Hispanic/Latino/Spanish? (Ch	eck one) Yes No
Q46	Which of the following best describes your race? (Chec African American/Black American Indian or Alaska Native Caucasian/White	Pacific Islander
Q47	How old are you?	
Q48	What is the zip code of your permanent home?	
Q49	Use the space below to write other suggestions you have	ve for improving the firearms safety course.
	Thank you for complet	ing this survey!
_		

Survey #: _____(This survey is only used to keep track of who has completed the survey and who has not. We will send replacement surveys to those who don't respond in 3 weeks. Your answers are confidential and will not be associated with your name.)

Firearms Safety Hunter Education Survey YOUTH ONLINE

Parents, please fill out this section.

Parents, thank you for your involvement in your child's firearms safety course. Please only complete this section, and ask your child to complete the student section below.

Q1	Did your child take the youth online firearms safety co	
	Yes Go to Q2	No Go to Q22
Q2	Why did you choose the online course option? (Check	all that apply)
	It was the most convenient	I didn't know there were other options
	It seemed easier	The classroom courses were full
	I thought my child would learn more from this option	Other (please describe):
Q3	How did you learn about the online firearms safety cou	rse option? (Check one)
	DNR website Friend or family	member Community organization
	Flyer or other posting School	Other (please describe):
Q4	How satisfied or dissatisfied were you with the course	registration process 2 (Check one)
Q4		T '
	Very Dissatisfied Dissatisfied Neutral	Satisfied Very Satisfied Don't know
Q5	How much time did you spend traveling to your child's	field day, one-way? (Check one)
	0-15 minutes 31-45 minutes	61 to 90 minutes Don't know
	16-30 minutes46-60 minutes	91 minutes or more
Q6	Was the time you spent traveling to your child's field do	ay too short, about right, or too long? (Check one)
	Too short About right	Too long Don't know
Q7	How much did you pay directly to the volunteer instruc	tor2 (Check one)
Q!	Less than \$7.50 (How much? \$)	More than \$7.50 (How much? \$)
	\$7.50 (How much? \$)	Don't know
Q8	Did your child complete the firearms safety self-certific	ation process through the DNR website? (Check
	one) Go to Q9 Go to Q10	Don't Go to Q10
	∐Yes	L know
Q9	Please answer the following questions regarding the o	nline self-certification process. (Check one per row)
	Were the instructions easy to follow?	
	Did you print the certificate?	
	-	_

Q10	How satisfied or dissatisfied were y		ollowing cou	irse costs: ((neck one p	er row)	
	Volunteer instructor fee (varies) Online self-certification fee (\$7.50) HunterCourse.com fee (\$24.95)	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Don't know
Q11	Use the space below to write other	comments al	out the firea	rms safety o	ourse cost	and registrat	ion.
Th	ank you for completing the paren remaining q					hild to comp	olete the
	Studen	ts, please	fill out t	his section	on.		
	First, we'd like to know why you	u took firear	ms safety a	and some o	letails abo	ut your cour	se.
Q12	Why did you take the firearms safety	y course? (C	heck all that	apply)			
	To hunt big game		<u></u> ;	To spend more	time with frie	nds/family who i	hunt
	To hunt small game			Because my fri	ends took the	course	
	To hunt waterfowl			To understand	more about fir	rearms	
	To join my school's trap shooting/clay	target team		Other (please o	lescribe):		
Q13	How much do you agree or disagree I'm confident I understand: (Check of	one per row) Strongly				Strongly	/ course,
	Firearms action types	Disagree	Disagree	Neutral	Agree	Agree	Don't know
		Ħ	H	H	H	H	H
	Types of ammunition	Ħ	H	H	H	H	H
	Transporting and carrying firearms Fundamentals of shooting	H	H	H	H	H	H
	Safe and effective shot selection	H	H	H	H	H	H
	Hunter responsibility	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ
	Hunter image, ethics, and responsibility	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ
	Personal preparedness for hunting	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ
	Wildlife conservation and identification	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ
	Where to find hunting opportunities	Ħ	Ħ	П	Ħ	Ħ	П
	Archery	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ
	Muzzleloaders	Ħ					
	Handouns	П	\Box	П	\Box	\Box	\Box

Q14	What was the most important the	ning you learne	d in your fir	earms safety	course? Why	?	
Q15	What was the least important th	ing you learne	d in your fire	earms safety (course? Why?	?	
Q16	How many hours did your onlin	e course take, [our field day?			
		L	9-12		13 or more	L_Do	n't know
Q17	How satisfied or dissatisfied we	ere you with the	e following o	online course	characteristic	s? (Check o	one per
	row)	Very				Verv	
			Dissatisfied	Neutral	Satisfied	Very Satisfied	Don't know
	Interactive activities	H	\vdash	\vdash	\vdash	\vdash	\vdash
	Narration	\vdash	\vdash	\vdash	\vdash	\vdash	\vdash
	Text	H	\vdash	H	H	\vdash	H
	Chapter quizzes	H	\vdash	H	H	\vdash	H
	Final exam	Ш			Ш	Ш	
Q18	Would you prefer to see less, al	bout the same,	or more of t	he following	online course	characteris	tics?
	(Check one per row)	Les	5	About the same	More		Don't know
	Interactive activities		j				
	Narration]				
	Text]				
	Videos]				
	Pictures]				
	Outside resources (e.g. hyperlinks)]				
Q19	Was the online course too easy	ĺ	r too difficul		9)	П -	
	Too easy	About right	L	Too difficult		Don't kno	w
Q20	How satisfied or dissatisfied we	ere you with yo	ur online fir	earms safety	training overa	II? (Check o	ne)
	Very Dissatisfied Dissatisfied			Satisfied	Very Satis	· —	n't know
	Diodalones						
Q21	Use the space below to write of	her comments	about the o	nline firearms	safety trainir	ıg.	

Please tell us about your field day experience.

Q22	For each of the following exercises, practiced the exercise yourself, or d			of the exercise,
	.22 rifle shooting			
	Motor vehicle firearm transportation			
	Field walk with firearm carry positions			
	Tree stand safety			
	Duck boat safety			
	Shotgun shooting			
	Muzzleloader shooting			
	Muzzle control			
	Handgun shooting			
	Hunting from a ground blind			
	Zones of fire			
	Archery			
	Blood trailing			
	Other (please describe):			
Q23	How many hours was your field day	? (Check one)	8 or more	Don't know
Q24	Was the length of your field day too ☐ Too short ☐ About	short, about right, or to	o long? (Check one) _{Too long}	Don't know
Q25	About how many people attended y		ne) 31-40 41 or r	nore Don't know
Q26	Were the number of people at your to	field day too few, about out right	right, or too many? (Che 700 many	Don't know
Q27	How satisfied or dissatisfied were y Very Dissatisfied Dissatisfied		kperience? (Check one) Satisfied Very Satisfie	ed Don't know
Q28	Use the space below to write other	comments about your fi	eld day experience.	
		-		

Please tell us about your firearms safety instructor.

Q29	How much do you agree or disagree with the following statement: Instructor(s) was(were): (Check one per row)							
	Prepared	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know	
	Professional	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	
	Hands-on	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	
	Friendly	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	
	Knowledgeable	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	
	Helpful	П	\Box	П	\Box	П	\Box	
	Fun							
	On task							
Q30	Please add any other comments yo	u have about	your firearm	s safety inst	ructor.			
	Please	tell us abo	ut your nu	nting nabi	is.			
Q31	Do you plan to participate in the fol	lowing activi	ties this year	? (Check on	e per row)			
	Yes	No	Don't know					
	Hunting	H	H					
	Target shooting	Ш	Ш					
Q32	Prior to taking the firearms safety of Yes Go to Q33	ourse, did yo Go to Q39	u have any f	irearms or h	unting expe	rience? (Che	eck one)	
Q33	If yes, where did that firearms or hu	ınting experie	ence come fr	om? (Check	all that app	lv)		
	Family			Scouts or Girl		3,		
	Friend			oming an Outd		amily		
	Military		4H					
	Local gun club/target range		Othe	er (please desc	ribe):			
	Hunting summer camp							
024	University of from an almost	-4-4-42/	Charlana)					
Ų34	Have you ever hunted from an elevi	Go to Q36	check one)					
Q35	If yes, what type of fall restraint dev	/ice do you ty	pically use?	(Check one)				
	Full-body harness	Waist st	rap		Other	(please describ	e):	
	Chest strap	None						

Q36	How do you typically transport your firearm in a car/true	ck? (Check all that apply)
	Broken down	Loaded
	Unloaded	I've never transported a firearm by motor vehicle
	Fully cased	Don't know
	In a gun rack	Other (please describe):
Q37	Where do you typically load your firearm? (Check all the	at apply)
	At my hunting camp	I've never loaded a firearm
	When I'm in position and know the zones of fire	Don't know
	In my hunting group before splitting up	Other (please describe):
	Inside a car	
Q38	Where does your household store firearms? (Check all	that apply)
	Unloaded and locked in a gun locker	My household doesn't store firearms
	Out of sight in a zippered gun case	Don't know
	Stored with ammunition	Other (please describe):
	Loaded and out of sight	
	Please tell us abo	ut yourself.
Q39	What is your gender? (Check one)	Female
Q40	Do you consider yourself Hispanic/Latino/Spanish? (Ch	neck one)
Q41	Which of the following best describes your race? (Chec African American/Black American Indian or Alaska Native Caucasian/White	Pacific Islander
Q42	How old are you?	
Q43	What is the zip code of your permanent home?	
Q44	Use the space below to write other suggestions you ha	ve for improving the firearms safety course.
	Thank you for complet	ing this survey!
_		

Survey #: _____ (This survey is only used to keep track of who has completed the survey and who has not. We will send replacement surveys to those who don't respond in 3 weeks. Your answers are confidential and will not be associated with your name.)



Firearms Safety Hunter Education Survey

_			
Ш	To hunt big game		To spend more time with friends/family who hunt
	To hunt small game		
	To hunt waterfowl		Because my friends took the course
	To hunt out of state		To understand more about firearms
	To join my school's trap shooting/clay target team		Other
If "otl	her," please specify.		
1			
Why	/ did you choose to take th	e onli	line course with virtual field day? (Check all that apply)
Why	did you choose to take th	e onli	line course with virtual field day? (Check all that apply)
	It seemed easier		
	It seemed easier I thought I would learn more fro	om this	s option
	It seemed easier I thought I would learn more fro	om this	s option s
	It seemed easier I thought I would learn more fro I didn't know there were other of	om this options ence, b	s option s but needed certification to hunt
	It seemed easier I thought I would learn more fro I didn't know there were other of	om this options ence, b	s option s
	It seemed easier I thought I would learn more fro I didn't know there were other of	om this options ence, b	s option s but needed certification to hunt
	It seemed easier I thought I would learn more fro I didn't know there were other of I already have firearms experie Other options were not available	om this options ence, b	s option s but needed certification to hunt

3	How much do you agree or disagree with the following statement: After taking the firearms safety course
٠.	I'm confident I understand: (Check one per row)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know
Firearms action types	C	0	0	0	0	0
Types of ammunition	0	0	0	0	C	0
Transporting and carrying firearms	C	O	O	C	O	С
Fundamentals of shooting	C	0	0	0	0	0
Safe and effective shot selection	C	0	0	C	C	0
Hunter responsibility	0	0	0	C	C	0
Hunter image, ethics, and responsibility	C	0	0	C	O	О
Personal preparedness for hunting	0	0	C	C	C	C
Wildlife conservation and identification	0	0	0	O	C	0
Where to find hunting opportunities	C	0	C	O	0	0
Archery	0	0	0	C	C	0
Muzzleloaders	C	0	0	C	C	0
Handguns	0	0	C	C	C	0

4.	was the offilie course (ch	apiers 1-15) ioi	b easy, about	rigint, or too	difficult: (Cil	eck one)	
	C Too easy C A	bout right	C Too difficul	t O 1	Don't know		
5.	Was the virtual field day (o	hapter 16) too	easy, about ri	ight, or too	difficult? (Che	ck one)	
	C Too easy C A	bout right	C Too difficul	t O 1	Don't know		
6.	How many hours did your	online course t	take overall, i	ncluding the	e virtual field d	ay? (Check on	e)
	C 0-3 C 4-8	C 9-1	2 C	13 or more	C Don't know		
7.	Was the length of the cour				long? (Check	one)	
8.	How satisfied or dissatisfi	ed were you wi	th the followi	ng experien	ces: (Check o	ne per row)	
		Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied	Don't know
	Online course (chapters 1-15)	0	C	0	0	C	O
	Virtual field day (chapter 16)	C	0	C	0	C	0
	Firearms safety training overall	0	0	0	0	0	0

9.	Do you pla	n to parti	icipate in	the follow	ving activities this year? (Check one per row)	
		Yes	No	Don't know		
	Hunting	O	C	0		
	Target shooting	О	0	О		
10.	Do you pla	0,	Vo	tend an in-	person field day in addition to your virtual field day? (Check one)	
	r rease expra	iii your an	ower.			
						_
11.	Prior to tak			safety hunt	ter education course, did you have any firearms or hunting	
	C Yes	-				
12.	If no, how	do you pl	lan to ob	tain additio	onal firearms experience? (Check all that apply)	
	Family			☐ l'II te	each myself	
	Friend			☐ In-p	person field day	
	Local g	jun club/rar	nge		ual field day was ficient	
	Private	lessons		Othe		
	Please expla	ain your ans	swer.	041		

13.	if yes, where did that nunting or firearms experience come from? (Check all that apply)					
		Family		Boy Scouts or Girl Scouts		
		Friend		Becoming an Outdoors		
		Military		Woman/Family 4H		
		Local gun club/range		Other		
		Hunting summer camp		out:		
	If "ot	her," please specify.				
	Шон	v propored do you feel to	band	le firearme for hunting or target cheeting after taking the online course		
14.		How prepared do you feel to handle firearms for hunting or target shooting after taking the online course with virtual field day? (Check one)				
	O		ightly epare	Moderately C Very prepared C Don't know		

15.	What is your gender? (Check one)				
	C Male C Female				
16.	Do you consider yourself Hispanic/Latino/Spanish? (Check one)				
	C Yes C No				
17.	Which of the following best describes your race? (Check all that apply)				
	African Pacific Islander Caucasian/White American/Black American Indian or Asian Alaska Native				
18.	How old are you?				
19.	What is the zip code of your permanent home?				
20.	Use the space below to write other comments you have about the online course and/or virtual field day.				

Thank you for completing this survey!

Appendix F. Focused Discussion Script

OPENING (5 minutes)

Moderator's Instruction

Hello. My name is Andrea Date and I work in the DNR Planning, Research and Policy section in the Operations Services Division. Also, I would like to introduce Arielle Courtney. Arielle is a student worker who has been working on this study. She will be taking notes to include in a final report.

Overview of the Topic

We have been asked by the DNR to explore how we can enhance the firearms safety course to increase customer satisfaction and improve course offerings. You were invited here because you are volunteer firearms safety instructors. We want to better understand your experiences and opinions about the FAS course in general and your role as an instructor.

Ground Rules

To allow our conversation to flow more freely, I'd like to go over some ground rules:

- 1. Please turn your cell phones on silent. If you need to take a call, please quietly step outside and rejoin us when you're ready.
- 2. Only one person speaks at a time.
- 3. Please avoid side conversations.
- 4. Everyone doesn't have to answer every question, but I'd like to hear from each of you as the discussion progresses.
- 5. This is a confidential discussion, in that, I will not report your names or who said what during the study. Names of participants will not be included in the final report about the meeting. If at any time you decide you would like to end your participation, you are welcome to leave this discussion and/or have your comments removed from the report.
- 6. There are no "wrong answers," just different opinions.
- 7. This discussion will last about 1 ½ hours. During that time, feel free to help yourself to some food and refreshments or take a restroom break.

Introduction of participants (5 minutes)

Let's begin. Let's find out a little more about one another. Please tell me your name, where you're from, and your favorite place to hunt (or be outdoors).

Course format and operations (40 minutes)

We aren't going in order anymore, so feel free to jump in whenever you want to comment or add something.

1. Please use one piece of paper to write down 2 strengths and 2 areas for improvement of the firearms safety course. [Allow 2-3 minutes for thought and then invite participants to share their ideas.]

Prompt: Do you think FAS graduates adopt safe hunting practices upon certification? What influences this outcome?

Prompt: How would you describe your experience with students during the field day?

Prompt: Did you observe any unexpected surprises or challenges?

2. If you have limited time, what course topics do you emphasize or abbreviate? Does this vary by course method (i.e. classroom vs. online field day)?

Prompt: What aspects of the course are you most comfortable teaching?

Prompt: What aspects of the course are you least comfortable teaching?

- 3. What is unique about the way you conduct your course and field day?
- 4. Have you been able to keep up-to-date with FAS course changes over time?
- 5. The online firearms safety course has been available to adults for a few years but has recently been provided as an option for students 11-17 as well. How many of you have viewed the entire online course? [Ask for only those people to answer the following questions.]
 - a. What do you think are the benefits of offering the online course to this age group?
 - b. What are some potential areas of concern for this age group from taking the online course?

Instructor Development (20 minutes)

Now let's discuss some topics related to instructor development and learning.

1. Using your other sheet of paper, please write down 2 strengths and 2 areas for improvement for instructors. [Allow 2-3 minutes for thought and then invite participants to share their ideas.]

2. How did you feel about the process of becoming a certified FAS instructor?

Prompt: Are the requirements adequate?

3. Does the DNR provide the types of training you need?

Prompt: What types of training should be offered?

4. How do you feel about retraining requirements or refresher courses for FAS instructors?

Prompt: How often do you think retraining is necessary, if at all?

Prompt: Are you aware of the recertification classes offered by the DNR?

Prompt: Have you, or are you planning to take a recertification class?

Prompt: Are there any specific incentives that would influence you to retrain?

Prompt: What type of training would you prefer? (E.g. classroom, online, DVD courses, etc.)

DNR Support (15 minutes)

Now let's discuss your involvement and interaction with DNR staff.

5. Think about your interactions with the DNR related to the FAS course during your time as a volunteer instructor. What has been your overall experience working with DNR staff? (e.g. RTO, CO, other Camp Ripley staff)

Prompt: Do you have an example of a positive experience you've had with DNR staff?

Prompt: Do you have an example of a negative experience you've had with DNR staff?

6. Does the DNR provide sufficient resources for you to teach the course?

Prompt: What resources do you need to teach the course?

7. In general, how do you prefer to communicate with DNR staff?

Prompt: For example: the hunter education newsletter, phone, DNR staff, DNR website, e-mail

Closing (5 minutes)

Does anyone have any questions for us or is there anything that we missed that you wanted to talk about? (Allow for a few minutes for responses, if any).

Well, our time is up. Thanks for coming today and sharing your thoughts on the Firearms Safety Course. Your feedback will be used to help us look for ways to continuously improve the Firearms Safety Course.

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