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TEACHING YOUTH WILDLIFE DAMAGE MANAGEMENT PRINCIPLES COMPARING TECHNIQUES (HOW TO'S AND HELPFUL HINTS)

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Abstract: Youth need to receive research-based information about wildlife damage management principles and techniques so they can make wise decisions regarding issues. Educators also need to identify the best techniques for specific ages. We presented wildlife damage management topics on 70 separate occasions to over 4,500 youth in Nebraska's Panhandle from 1993 through 1996. Youth, ages 7 through 10 year old, comprised the majority of the audience. Presentations included a furbearer pelt display and illustration of fur preparation, wildlife population influences using interactive games and demonstrations, wildlife damage principles using lecture, video, small group discussion and demonstration, and historical changes in furtaking and habitat using drama. Drama and character portrayal were noticeably more effective for grades K through five. Demonstration and laboratory techniques were most effective for grades 6 through 9. Video and directed small group discussion were effective through high school, but high school youth favored demonstrations and displays over video, small group discussion and worksheets. Lecture and worksheet were used sparingly and only for high school youth.

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Key Words: socioeconomic studies, techniques, youth education, wildlife damage, furbearers

INTRODUCTION

Many techniques are available for teaching wildlife management and wildlife damage management principles to youth. Complex principles or relationships have historically been taught through lecture to secondary level students. But recently a variety of techniques have been used to teach the rudiments of such principles to elementary students.

For the purposes of this paper, we will categorize the techniques as hands-on, sensate or child-centered, and authority-centered activities. Hands-on activities include demonstrations involving students, show and tell items and interactive games. Environmental education curricula, such as Project Wild, Project Wild (Aquatic) and Project Learning Tree, have used such games as techniques. These can be word games, card games, building games and models. They can be games that use the student's body as well as his

mind.

Some environmental educators rely heavily upon sensate learning or awareness (Cornell 1979). Guided imagery or visualization, discovery learning and journaling are some techniques that rely upon the child more to discover some attribute of nature. These child-centered activities are not useful for instruction in management principles. Role-playing students is a technique used by curricula, like Lingelbach, 1986. It and debate may be useful to teach

about how one holds certain positions on environmental issues but it is limited in teaching principles.

Demonstrations, show and tell and drama can be used as authority-centered activities, too. The emphasis of this style is on the presenter as authority. Some texts that use these techniques are listed under Literature Cited at the end of this paper. A review of educational psychology and developmental psychology also provide information on how students think, act and respond at various ages.

From 1993 through 1996, the authors presented wildlife and wildlife damage management principles using different techniques to over 4,500 youth in Nebraska's Panhandle. Youth ages ranged from 5 through 18, but 7 through 10 years old comprised the majority. Class sizes averaged between 60 and 70 youth. Presentations included a furbearer pelt display and illustration of fur preparation and wildlife population influences using hands-on activities, wildlife damage principles using lecture, video, small group discussion and demonstration. Another presentation used drama to show historical changes in furtaking and habitat.

No evaluations of programs for elementary youth compared teaching techniques, but an evaluation of a shortcourse offered to high school youth showed that they prefer demonstrations over video or discussions. On a 1 to 4 scale, discussions and videos were rated 2.4 and 2.9, respectively while 3 different demonstrations were rated 3.1, 3.4, and 3.6.

Drama and Interactive Games

Drama is a particularly novel and effective technique. Beliefs and ideas develop at an early age. Imagery is very important to young students 8 years and younger. Even in adults, the greatest share of our information comes through our vision. Students are best able to visualize concepts when they see or perform drama. Drama is also captivating and fun.

The first author uses drama each year to teach third through fourth grade students about historical changes in wildlife populations. The author uses a fictional mountain man character.

When drama is performed by an adult

leader, students are better able to understand or accept the character's beliefs or perspectives. This is critical when the character's position differs from the students'. The mountain man character that is shown relates his ideas of the necessity of trapping and its relationship to other activities that affect wildlife.

We believe that you can best use drama for students, ages 6 to 10, with directed discussions or short question and answer segments. For soliloquies, you can give the teacher advanced notice of when you will take questions or be available for discussions. In drama, as in any technique, you should make the objectives known or raise essential points as early in the presentation as is possible.

Props do much to compensate for those who are less versed in dramaturgical techniques. Props should be self explanatory and hidden until they are needed during the presentation. This adds interests and avoids untimely questions or distractions.

Acting out or role playing with prepared scripts can sometimes be used for grades 5 and up. Their ability to reason at these ages allows them to act out positions they personally hold or to take on another's position. This technique allows young people to get a feel for how differing positions are held and supported. A scene involving a hunter/trapper, cooperative landowner and biologist might be used to exemplify cordial relationships necessary for managing wildlife populations.

In role playing, you should prepare learners in advance of the scene. Instruct students as to why their character has his

perspective of the issue. Give them the position and several basic assumptions that support it. You may want to assign another assumption that they could reason out on their own.

Length and format

Special attention should be given to time and format of youth presentations. Twenty to 30 minute sessions are sufficient for most topics at any age level. For longer sessions, we recommend that you change technique every 20 minutes for elementary students or 30 minutes for secondary students.

You can repeat 1 or 2 wildlife damage management principles from the previous day as a prelude to topics on the following day. This creates continuity. This technique is useful for empirical principles. For instance, you may want to present the wildlife population as the basic building block of wildlife management on day 1. On day 2 you can present a damage control technique that targets populations.

Teams of educators require coordination but are worth the effort. Teams are most successful if they present a topic jointly rather than successively. Use team members to reinforce ideas by repetition or by using slightly different techniques. For example, present relative significance of habitat and hunting pressures using an interactive game that enlists students in running, movement, or drama. Follow with a written or verbal contest like word finds or flash cards. These can be used with team or individual competition.

Our principles of habitat presentation used several interactive games, then used a take-home or in-class word find. To address the affect of hunting or trapping on wildlife habitat components, we first identified habitat components. Each student won the component card by correctly identifying it and giving one or two examples. The student was then placed within a "habitat" along with the other components and a game animal or animals. A hunter or a factor influencing habitat was then introduced and the game begins as a chase. Habitat components can be in any arrangement (linearly, sparse or dense) to illustrate concepts.

We used another interactive activity to reinforce the idea of the insignificance of hunting/trapping upon habitat by comparing it

with other factors. A habitat was drawn on a flip chart. Students placed pictures of objects (houses, businesses, airports, cars, hunters) within the habitat. Group discussion followed as to how each affected a habitat component. The relationship of hunting to habitat and animal populations was also reinforced through this activity.

Take-home activities are probably not effective unless a reward system is used. We used a crossword puzzle as a take-home activity. We then coordinated with the teacher to send us completed worksheets in return for a prize such as a wildlife poster, book or pamphlet. Prizes do not necessarily have to have intrinsic worth but can be used to honor recipients. Prizes can serve double duty by illustrating a wildlife principle, too.

You may want to return to the classroom to award prizes and to briefly present the concept or issue again. This is also a good time to pick up evaluations left after the presentation. Alternatively, it is a good time to guide a short evaluation.

Personal contact during follow up evaluations serve two additional functions. They help students remember concepts taught and they continue to build the relationship between you, the learners and teacher. Pre-tests are best administered before the event by the adult leader.

Some types of evaluations allow the use of only 1 test instrument. These typically ask the student to recall their knowledge, skills and attitudes prior to the event and compare

those to those after the event. The authors feel that you, rather than the teacher or group leader, should administer this type of instrument. It assists in recall and improves results.

Audiences in classroom presentations are usually captive but don't expect a carte blanche approval of the positions you are promoting. Also, don't expect a major change in student values or positions given a single or even, several appearances. Remember that the primary relationship with the learner is with the day-to-day instructor and that changing a concept is as much about relationships as it is about simply hearing the argument.

If you present on successive days, you will certainly help build upon previous relations with the instructor and students. Three 30-minute sessions are better than 1 90-minute session.

Trust is one of the critical components of getting your opinion heard in a classroom. The teacher will have their own perspective on the issue or topic that you present. Develop a written document explaining your topic and your reason for presenting it. Identify your position on the issue, but be succinct. Do not give unwanted or unsubstantiated reasons when trying to support your position.

Scheduling and Preplanning

It is always difficult to fit youth programs into an already over-booked calendar. You can either block times of days or dates or both. If you don't have intimate knowledge of school calendars and daily schedules, get them. You may have to schedule events one year in advance for some school calendars.

In Nebraska, Educational Service Units (ESU's) are great avenues for coordinating your program with other related programs. They may even have funding available for your expenses. You may want to state that you are screening applicants in your first-contact letter with the school.

Ask of administrators how they prefer to have you contact their school or teachers. Be sure the announcements and other pre-event materials for your program are getting to the most appropriate person in the best way.

Use the telephone or visit the teacher before the event. Written correspondence or electronic mail is not a substitute. We prefer to

contact the group leader or teacher and not administrative personnel.

Long before the presentation, ask the educator to alert you to possible concerns by students, administrators or parents. This will allow you to address potential issues as well as place you in better regard by the group leader.

Discussions with the teacher or a visit to the classroom is always helpful. You will learn much about the abilities and interests of the students and about the teacher's instructional style and discipline. You can then tailor your activities accordingly.

Ask the teacher what background students have with the topics or issues being presented. Ask about the timeliness of your topic with classroom topics.

It is best to plan for the teacher to participate in your classroom activities. Inform them in advance of their role. Be specific in your expectations.

If you do not have a specific role for the teacher, they will abstain or simply act as a disciplinarian, at best. At worst, you may find yourself alone with a classroom of unruly youth and a substitute teacher! Always ask if the teacher will be present during your topic and what role they plan to take.

Fitting techniques to you and your audience

Not all third graders are at the same conceptual level. Nor are all third grade classes equal. Teachers and cultural conditions are both strong influences.

In preparing topics that are controversial, role play with another coworker or family member. Formulate possible questions that may be asked. Determine the level of discussion among students that you will use or permit. Select techniques that fit your mode of teaching. If you are only comfortable with an authority-centered style, do not use activities that move the children around at centers or involve long periods of students handling demonstration items.

Making your presentation

On the day of the presentation, be punctual. Allow yourself plenty of time to find the people and places to help you present. Be courteous and organized. Ask questions of the teachers, administrators, and secretaries to get a feel for what you need to accomplish. Take an active interest in the teachers current activities. Be thinking of ways that relate your topic to their activities. The more you can relate what you are teaching to what the teacher has been recently teaching, the better your concepts can be understood.

As you set up your presentation, listen carefully to what is being said in the classroom among teachers and students. Try to remember those comments and introduce them into a related part of your presentation.

SUMMARY

Environmental education in the classroom provides opportunities as well as challenges. The fundamentals of most wildlife management and wildlife damage management

principles can be taught to elementary students by hands-on, authority-centered activities such as interactive games and demonstrations. Although many management concepts are inherently more complex and encompassing than what can be illustrated through demonstration and interactive games, the rudiments of the principles can be shown. Having such elements of the principle will lead the elementary student on toward a greater understanding at a later time.

We believe that wildlife damage management professionals and others in natural resource management need to commit as much time to building relationships with learners and teachers as in designing curricula and activities. We feel that the minutes spent getting to know your audiences and letting them know you will be as rewarding as the hours spent presenting your programs.

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