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Farm and Forest Fair Educates Fifth Graders about Natural Resource Issues

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Abstract: The Farm and Forest Fair educational program was developed to provide an objective view of the importance and impact of natural resource industries and promote an understanding of the issues regarding natural resource use. The targeted audience is fifth grade youth, teachers, and parents. Participants rotate through 10 stations in 9-minute intervals. Stations are staffed by agriculture- or forest-based industry personnel who demonstrate their area of natural resource involvement utilizing visual aids and hands-on learning techniques. Teachers, presenters, and youth are evaluated each year. Student pre- and post-test results indicate knowledge level increases of 21%.

Introduction and Need

The Clearwater River Basin area of north-central Idaho is famous for its mountains, prairies, and river valleys. A business base of forest products, agriculture, and tourism is a reflection of the natural resources in the area. Residents of the region typify a growing diversity of cultural and geographical backgrounds. Many people, especially youth, do not have a good understanding of natural resource-based industries and their importance and impact.

Natural resource education is a vital component of a well rounded education. Young people need to learn how food and fiber is produced in harmony with nature. The knowledge gained provides them a solid background to become adults and participate in decisions regarding natural resource uses. It is important for youth to make the connection between food and fiber production and their health and quality of life.

University of Idaho Extension Educators developed the Clearwater Area Farm and Forest Fair (FFF) to provide youth with a basic understanding of the impacts and significance of natural resource-based industries on their community and lives. Extension educators plan and implement the FFF, identify presenters, help presenters prepare presentations, and handle organizational details.

The FFF targets fifth-grade students in the five counties of north-central Idaho, an area similar in size to the combined states of Massachusetts, Delaware, and Rhode Island. The FFF was developed for students, parents, and stakeholders who share concerns about natural resources.

Educational Approach

Research indicates that the level of mastery is dependent on the cognitive ability of individual youth (Kress, 2004). Extension educators select age appropriate study materials and develop activities that enhance participants' FFF learning experience. Presenters are provided with developmentally appropriate methods utilizing practical procedures to provide a supportive learning environment.

We also endeavor to transfer knowledge on natural resources to parents and teachers by providing take-home resource materials to each student. This effective Extension method for dissemination of educational information traces its roots back to corn and canning clubs of the early 1900's (Wessel & Wessel, 1982).

The FFF consists of 10 educational stations staffed by natural resource industry professionals and cooperators. Four sessions are held over a 2-day period. Students are divided into groups and assigned to a station where they participate in a 10-minute educational program. Tour guides move the groups to each station and help answer questions.

All presenters use hands-on activities as part of their teaching methods, reflecting our 4-H preference for the "learning by doing" model (Richardson, 1994). Activities include planting seeds and seedlings, tree and weed identification, a working mini-sawmill, natural resource games, a petting zoo, specimen examination, erosion simulation, and the GrainMax Theater. Students are given a "souvenir" (e.g., pencils, tree seedlings) and resource literature at each station to take home as a reminder of their learning experience.

The FFF provides an opportunity for Extension educators to collaborate and partner with natural resource specialists from groups such as the Idaho Grain Producers, Idaho Pork Growers, Idaho/Lewis County Cattlemen's Association, the Nezperce Prairie Grass Growers, PNW Aerial Applicators, Natural Resources Conservation Service, Clearwater County Soil and Water Conservation District, UI Master Gardeners, US Forest Service, Nez Perce Tribe, Bureau of Land Management, Idaho Department of Lands, Potlatch Forest Industries, and Hutchins Sawmill. These partnering agencies and groups are actively engaged in natural resource industries and are committed to natural resource education. This successful collaboration promotes the achievement of program goals and program sustainability (Strieter & Blalock, 2006).

Accomplishments and Impacts

More than 4,000 students from 15 schools and over 1,000 adults and teachers have attended the FFF since its inception in 1997. Home-schooled youth and their parents also attend. Annual attendance averages over 400 students.

With over 4,000 youth receiving education by attending the FFF, the potential impact to the community is far reaching. One goal of the program is to have students take home the information learned at the fair, using handouts and other educational materials provided to the students, and share it with their parents and other

family members. Given an average household size in Idaho of 2.69 persons (U.S. Census Bureau, 2000), over 13,500 people have had the opportunity to learn from the topics and lessons taught at the FFF. The general public also gains an understanding of natural resource uses showcased by the FFF through extensive media and press coverage.

Presenters at the FFF have the opportunity to tell a natural resource industry story to area youth. The unique collaboration between Extension educators and natural resource-based industry partners is vital to the overall program success. This collaboration effort brings together partners who rarely have the opportunity to work with youth or the general public.

Evaluations are mailed to teachers and presenters 2 weeks after the FFF. Using a Likert scale of 1 to 4, (4 = very good), all categories evaluated have received a 3.63 or better. Survey respondents have commented positively on the quality and educational value of the program. One hundred percent of teachers who completed and returned the survey have indicated that the program was educational and valuable. Teachers appreciate that the FFF is held the week before spring break each year, giving them the opportunity to get their students out of the classroom into a hands-on learning environment.

An evaluation instrument was designed to test for knowledge about the main concepts presented at the FFF. Teachers administer a 20-question test to the students before the FFF and repeat it 2 weeks after the event. Post-test results showed a knowledge increase of 21% after.

Conclusion

The FFF highlights the value of educating people about the importance of natural resources. Ultimately, the best indication of the success of this program is a populace in the Clearwater Basin area that demonstrates increased understanding of the costs and benefits of natural resource use. Such understanding should lead to a deeper sense of appreciation for management practices that sustain natural resources for generations to come.

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