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Introduction

What began as a meta search for 4-H curricula available on the Internet became a phenomenon that has served more than 18,000 Nebraskans in an amazing example of creating partnerships; blending resources; and celebrating 4-H, youth, and technology. Welcome to the Nebraska 4-H Cyber Fair.

When the Nebraska 4-H Office conducted an extensive review of Web-based curricula and CD-ROMs created by Cooperative Extension and 4-H nationwide, it became apparent that considerable material was available for delivery by computer. Although some of the material discovered was Nebraska-based, it was not necessarily known to Nebraskans involved in 4-H programming.

Nebraska youth in public schools benefit from the third best student/ multimedia computer ratio in the country (Nebraska Department of Education, 2001). In order for 4-H programming to appeal to this technologically adept generation, multimedia delivery must be added to volunteer training and provided as curricula resources. Obviously, the newly found 4-H material needed to be shared with 4-H youth, their volunteer leaders, and all Cooperative Extension personnel involved with Nebraska 4-H.

There was a natural fit between the need to inform 4-H'ers about the materials available for the computer and the opportunity to create a new "image" for 4-H at the Nebraska State Fair. Nebraska 4-H sought a way to infuse a new image into its presence at the Nebraska State Fair, and the use of technology at the State Fair as an interactive, educational tool presented an opportunity to do so. The Nebraska State Fair staff was extremely receptive to the idea of dedicating a building to Nebraska 4-H for technology with the understanding that it would be open 12 hours a day for the entire 11 days of the State Fair.

The Cyber Fair Committee

A collaborative committee was formed to explore the opportunity of having a technology presence at the State Fair in August 2001. The assembled team of seven was carefully recruited. The chair of the committee was the 4-H curriculum design specialist. Team members recruited included a county Extension educator, an Extension specialist, a youth representing the 4-H Technology Team, a graduate assistant, the 4-H state office computer program manager, the 4-H curriculum associate, and a Children Youth and Families At Risk (CYFAR) project coordinator. Members of the committee also represented the Nebraska 4-H Curriculum Committee, State Fair superintendents, and State Fair management team members. This article documents the tremendous odyssey of this team's journey.

The team of Extension faculty and staff met in May to determine the feasibility of creating, marketing, and conducting a major event in just 3 months. All members agreed a "Cyber Fair" would be the best strategy to accomplish the two goals of creating awareness of Nebraska programming designed for computer delivery and adding a new twist to the 4-H State Fair presence. This dedicated group became known as the "Cyber Fair Committee." Each member was involved in one or more of the following subcommittees: Outreach, Volunteers, Ambiance, Content, Technology, Marketing, and Recruitment.

The Concept Paper

The committee created a concept paper that included the vision and goals of the 4-H Cyber Fair and how it could progress over a 5-year period. The vision of the 4-H Cyber Fair is to "allow Nebraska 4-H and Cooperative Extension to use and demonstrate cutting-edge technology, enhance Nebraska's economic development opportunities (particularly for rural areas) and provide the entrepreneurial and technical skills to youth that will encourage them to stay and thrive in Nebraska."

The goal for year one was "to provide a spirited, fun, energetic, and youthful 4-H event at the 2001 Nebraska State Fair." In keeping with this goal, 4-H Cyber Fair 2001 was designed to promote Nebraska 4-H and the use of technology, feature Nebraska produced computer/Web-based material, and recruit new 4-H'ers and 4-H Technology Team members. A secondary goal was to recreate the 4-H Cyber Fair throughout the state.

Partnerships

One of the great successes of the 4-H Cyber Fair was the formation of partnerships between Nebraska 4-H and many businesses and organizations. In addition to the group of state and county-based Nebraska Cooperative Extension employees who made up the initial planning and implementation team, many partners were brought into the process. Gateway Country provided 30 computers to be used during the entire two-week program. Alltel, a local telephone company, provided complimentary digital subscriber line (DSL) Internet connections, and Computer Cable Connection, Inc., provided the computer cabling.

A partner in delivering the programs was ConNEcting Nebraska, a team of Nebraska Cooperative Extension faculty who are responsible for developing and marketing information technology programs across Nebraska. Forty-six volunteers, including members of the Nebraska Rural Development Commission, also supported the 4-H Cyber Fair throughout its 11-day run. Youth volunteers were selected to help with the 4- H Cyber Fair based upon completed electronic applications, which were subsequently reviewed by the committee. Seventy percent of the 4-H Cyber Fair expenses were in-kind donations.

Marketing and Ambiance

Emphasis was placed on creating a high-energy, youth-driven event. The 4-H Cyber Fair logo was designed by the 4-H Technology Team representative on the 4-H Cyber Fair Committee.

Figure 1.
Cyber Fair Logo

The red, orange, and yellow flame logo imprinted with "4-H Cyber Fair" was featured prominently on correspondence, forms, flyers, posters, brochures, and the 4-H Cyber Fair Web site. The logo was an apt visual representation of the 4-H Cyber Fair motto, "The future just got HOTTER."

To ensure awareness by Cooperative Extension staff across the state, flyers and posters were available for county fairs, and Extension staff received weekly updates through "4-H Alerts," the statewide weekly newsletter. In addition, 4-H Cyber Fair was debuted to Cooperative Extension educators and assistants who were at the State Fair for entry day.

Multiple news releases featuring the 4-H Cyber Fair were provided statewide to newspapers and radio stations by both the Nebraska State Fair marketing staff and Nebraska Cooperative Extension. Youth from grades 4 - 6 whose schools had signed up for State Fair tours were invited, as were the high school bands marching at the State Fair. Invitations were also sent to members of the Nebraska Legislature and university administrators.

Figure 2.
Cyber Fair Ambience

4-H Cyber Fair logos were also featured prominently on banners, posters, balloons, and displays. The color scheme of the 4-H Cyber Fair was derived from the logo, as well. Wind socks, chairs, tables, and all decorations featured the red, orange, yellow, and black 4-H Cyber Fair colors. T-shirts were available for volunteers with the 4-H Cyber Fair Logo and tied in with the first year's theme: "My Future Just Got HOTTER because I volunteered at 4-H Cyber Fair." A concerted effort was made to consistently place the 4-H clover and university logo in all marketing pieces and within the building to make the visual link of technology, 4-H, and the University of Nebraska.

Figure 3.
Cyber Fair Volunteers

Volunteers walked around the fair, wearing the t-shirts and carrying 4-H Cyber Fair balloons to encourage people to visit the event. Nebraska football games were shown on screens, and a digital photography show was ongoing. A stereo system provided youth-selected music throughout the State Fair.

Format and Program Highlights

The 4-H Cyber Fair was located in a 2,100-square-foot, air-conditioned building in a high traffic area of the State Fairgrounds. The building was open from 9:00 a.m. to 9:00 p.m. for the full 11-day schedule of the State Fair. The 30 Gateway Profile III and laptops with broadband DSL connections were set up for participants to get hands-on experience with the featured technology.

The planning team identified and featured 12 Web-based educational programs and another 12 CD-ROMs designed to enhance 4-H programs. Several of the featured programs were developed through Nebraska Cooperative Extension and its partners: *4-H Cyber Camp*; *Nutrition, Fitness and YOUth; Wonder Wise,* a career exploration in science series; and *Splash*, an environmental program. Programs developed elsewhere were also showcased. Topics ranged from citizenship to virtually exploring farms.

While self-guided experimentation with pre-loaded featured programs was a primary focus of the 4-H Cyber Fair experience, other delivery methods were also used. ConNecting team members, additional Nebraska Extension faculty, and the Nebraska 4-H Youth Technology Team delivered technology-related workshops throughout the 4-H Cyber Fair. Presenters projected computer programs onto a screen for a specific audience, not interrupting the computer users throughout the building. Many times, presenters worked individually with workshop participants after their formal presentations. Some workshops featured Nebraska authors providing additional information about their programs to youth and adults. In addition, workshops were also provided on the following topics:

- Digital photography,
- Developing Web pages,
- Finding veterans on the Web,
- Searching the Web,
- Using free email,
- Career education in the sciences,
- How to use Internet chat,
- Introducing environmental education, and
- Exploring virtual 4-H clubs.

Topics were designed to fit with the daily events at the Fair. For example on Veterans' Day, finding veterans on the Web was featured, and on Older Nebraskan's Day the focus was on searching the Web and using free email. Featured technology also included the projection of Nebraska football games, digital photography, and a robotics display.

Spontaneous learning experiences happened throughout the duration of the 4-H Cyber Fair. Many senior citizens had their first experience on a computer. With individual guidance from a 4-H Cyber Fair volunteer, they found their children's and grandchildren's Web sites, searched for friend's addresses, learned how to explore the Web, and had fun trying out educational games and activities meant for a younger audience. These experiences helped them become familiar with the benefits of technology. They also understood that technology is something that anyone can learn to use. Many youth became familiar with fun, new ideas being offered through 4-H. Youth were often observed showing older members of their families about technology.

School tours have always been a part of the Nebraska State Fair. A special attempt was made to inform teachers about this new opportunity. Approximately 1,100 elementary students from 30 different schools across the state participated in the 4-H Cyber Fair. During this time, volunteer staff were available to guide students through featured learning experiences on the computer.

A major highlight and climax to our 4-H Cyber Fair was a presentation on the last day by Nebraska Congressman Tom Osborne. He spoke about the importance of information technology for the future of rural Nebraska and of its youth. His appearance brought in a full house and a great deal of publicity.

Impact

Approximately 17,000 youth and adults participated in the 2001 4-H Cyber Fair. A log-in survey (n=1,200) at the State Fair 4-H Cyber Fair indicated the following about participants:

- 8% had never touched a computer;
- 24% did not have Internet access;
- 63% were between the ages of 5 and 19 years of age;
- 21% were between 30 and 49; and
- 28 states were represented.

These figures indicate that 4-H Cyber Fair goal of promoting Nebraska 4-H computer-based programming had been reached. Data also showed that nearly one quarter of 4-H Cyber Fair attendees were in need of an introduction to technology.

Through observations at the State Fair 4-H Cyber Fair, the following observations were noted.

- Many older adults needed to be coached and coaxed to use the computers; youth were eager to access computers.
- Parents and young people participated together at the 4-H Cyber Fair. The two largest age groups responding were 9 - 12 and 30 - 49.
- Several adults reported that they did have Internet access at home, but did not know how to use it. After attending the 4-H Cyber Fair, they felt they were able to effectively use the technology in their own home.
- One respondent wrote, "I really enjoyed the program. I never played on a computer before, and my grandson loved it."
- A businessman, unaware of wireless Internet capabilities demonstrated at the 4-H Cyber Fair, said he would be using it with his business.
- Veterans learned how to use the Internet to locate fellow veterans.
- Numerous people who regularly used the Internet were amazed at the difference high-speed connectivity made in the online experience.

In addition, there was a surprisingly strong response by youth volunteers. One individual joined 4-H so that he could be a 4-H Cyber Fair volunteer. Two youth volunteers became members of the Nebraska 4-H Technology Team.

Observations showed a high level of interest and interaction among youth attending the Cyber Fair and the Nebraska 4-H Technology Team. Applications were accepted on site.

County 4-H Cyber Fairs

A secondary goal of the 4-H Cyber Fair team was to provide similar technology-based activities in other parts of the state. A request for proposal process was developed by the committee, with 13 counties responding. Five counties were selected, each having a different model for conducting a county 4-H Cyber Fair. Gateway Country donated 20 computers for 3 months. These computers were shipped to each of the five selected counties for a 1-, 2-, or 3-day event. Results from the County 4-H Cyber Fairs include:

- Introduced the Nebraska 4-H Program to potential members and families;
- Introduced computer skills training to youth and adults;
- Created interest in 4-H programs among under-served audiences (Native Americans and Hispanics);
- Introduced Cooperative Extension to over 1,000 community members and young people;
- Provided hands-on workshops ranging from Web-page design to computerized record books;
- Featured programs and Web sites for exploration and learning;
- Brought visitors into County Extension offices for technology training;
- Provided an electronic introduction of 4-H opportunities to 4-H families; and
- Provided documentation that Internet access was not consistent across all venues (one county fair reached a local population in which 99% did not own a computer).

Perhaps the most notable results were at a Native American Reservation and a community where Hispanics comprise over 80% of the population. Both Cooperative Extension Educators, new to the geographic area, indicated the county Cyber Fair allowed them immediate access and acceptance into these communities, where both are now fully engaged and offering additional technology classes as well as more traditional Extension programs.

Implications

4-H Cyber Fair was a very successful method of informing over 18,000 people about Nebraska's technology based 4-H programming. At the same time, through the 4-H Cyber Fair, 4-H showed a new "face" at the 2001 Nebraska State Fair. Unexpected results of the 4-H Cyber Fair included a

surprisingly large number of adults who experienced information technology for the first time. Youth were observed to be at ease with technology, and many were eager to share their knowledge with others.

These observations should lead to programming focusing on youth training adults about the use of technology. Before such programming is developed, it would be wise to find out if technologically adept youth have the leadership skills to train older adults in the use of technology. Also, the question should be asked if older adults would accept youth as "experts."

An evaluation of the 2001 4-H Cyber Fair as well as the 2002 traveling 4-H Cyber Fairs, by the 4-H Cyber Fair Committee showed that all offered excellent learning experiences to youth and adults, alike. Future 4-H Cyber Fairs should remain focused on cutting-edge technology. The formula for success in the original 4-H Cyber Fair, "to provide a spirited, fun, energetic, and youthful 4-H event" should be a part of all future 4-H Cyber Fairs.

Because adults attended the 4-H Cyber Fair in large numbers, programming should be added to serve an adult market, as well. To appeal to diverse markets, including Hispanic, materials should be offered in Spanish. A program should be developed for a Cyber Mobile that would present Cyber Fair programming across the state with consistent, high-speed access by way of satellite.

Conclusions and Recommendations

The 4-H Cyber Fair proved to be a very successful delivery method for celebrating youth and technology. It succeeded in meeting all of its goals by creating partnerships and blending resources. Four conclusions become apparent.

The 4-H Cyber Fair can be a highly successful recruitment tool for introducing 4-H and Cooperative Extension to new audiences. High acceptance by the Hispanic community demonstrated that additional emphasis should be placed on developing Spanish curricula and 4-H recruiting information. In addition, a concerted effort should be given to recruiting Hispanic audiences at the next State Fair.

The 4-H Cyber Fair can provide the opportunity to showcase computer-based, free resources. The 4-H community is highly enthusiastic and receptive to the new resources, which should be posted on-line and be available in an ongoing capacity.

The 4-H Cyber Fair can provide wonderful leadership and inter-generational program opportunities. While youth are technologically astute, many of their older family members appear hesitant to approach computers. Youth

mentoring adults could be an exciting concept around which to develop leadership skills for youth and to enhance inter-generational programming opportunities.

There is a tremendous need to provide high-speed Internet access to rural communities. The original idea of a Cyber Fair Mobile touring rural areas to meet this need was encouraged by those from rural communities who attended the 4-H Cyber Fair at the State Fair.

These conclusions represent tremendous programming opportunities for future growth and exploration for Nebraska. Our experience indicates that all or part of the above could be successfully implemented at the local, county, or state levels throughout the country.

For more information about the 2001 Nebraska 4-H Cyber Fair, visit our Web site at http://expo.unl.edu/cyberfair/. Click on "2001 Cyber Fair."

Reference

Nebraska Department of Education. (2001). Education Week: Technology Counts 2001. *Eyes on Nebraska* On-line. Available at: http://www.nde.state.ne.us/eyesonNebraska/

This article is online at *http://www.joe.org/joe/2004june/a1.shtml*.