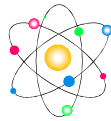


2000-2001 Expanding Your Horizons in Science and Mathematics Annual Report

“Maybe the classes could be a half-hour longer?”

Last year saw EYH™ continue to flourish as the premier volunteer-based math and science program in the United States. Active Expanding Your Horizons in Science and Mathematics Conference sites totaled 100 during the 2000-2001 conference year. We estimate total attendance of 28,000 young women during the conference year.



Who Are the Young Women?

What trends do we see in EYH attendance? What do we know about the young women who attend? In 2000-2001, the percentage of middle school students relative to high school students returned to a 4 to 1 ratio. We continued to see reports of significant numbers of 6th grade and some 5th grade girls, including one conference just for 5th and 6th grade girls. The percentage of high school young women increased this year, returning to its recent level of 20%. EYH remains overwhelmingly a program for middle school young women.

The average attendance at EYH conferences stayed steady this year at about 280 young women. Some sites reported size limits imposed by school districts. Sites also report choosing smaller conferences for a variety of reasons including better personal contact and better management. EYH conferences in 2000-2001 averaged attendance of 279 young women, compared to 282 the year before. Some conferences reported smaller than anticipated attendance, and others turned away girls. Strategies for successful recruiting of young women remain a constant point of emphasis for all of EYH conferences.

The Math/Science Network and many EYH conference organizing committees continued to work to ensure that conference attendance is a cross-section of the entire community. Outreach to non-European ethnic groups and economically depressed communities continues to be a major emphasis of our work.

The Network continues to work to develop materials and strategies that are inclusive, and to work with sites to provide resources and effective strategies for particular sites. Sites take many different approaches. Conferences engage in active outreach to professional groups, churches, sororities, and women's service organizations in communities with large non-European ethnic populations in order to recruit both role models and young women.

Some committees seek the help of young women of non-European ethnicity who attended EYH in previous years to publicize EYH at their schools. All reports indicate that personal contact is one of the keys to recruiting role models and young women from underrepresented groups.

Thirty-five percent of young women attending EYH identified themselves as members of non-European ethnic groups in 2000-2001. This percentage, an increase of 2% over last year, re-emphasizes the

progress we have all made in the last seven years to make EYH inclusive. We are thrilled by the efforts of everyone concerned to bring the EYH message to *all* young women in conference areas, to involve *all* parents and teachers, and to find a diverse set of women role models for EYH conferences. Our commitment to this outreach is ongoing, sustained by the firm belief in our mission to promote the continuing development in mathematics and science of *all* women and girls, in *all* communities.

The EYH Adult programs continued to bring a vibrant and varied group of activities to sites. Adult programs ranged from small ones on encouraging daughters in math and providing information about the educational barriers they may face, to larger ones encompassing workshops for parents and caregivers, others for teachers, and still others for counselors. Teacher activities in particular experienced a resurgence this year.

Costs for EYH Sites

The average cost of putting on an EYH increased again this year. Sites reported average conference expenses of \$6,721, a slight increase over the \$6,655 of the year before. But the costs were not so great across the board; 34% of conferences were hosted on a budget of \$2,500 or less, with many of those supporting attendance of 125 to 250 young women.

Many sites reported sponsorship by local private enterprises. Support from the business community ranged from local banks, power companies, and copy centers to global corporations such as Wells Fargo Bank, General Electric, and Clorox. Some sites also reported that grant funding supported their conference activities.

But funding for volunteer activities is often not stable. Many sites reported a need to rebuild portions of their funding structure each year. The almost complete elimination of gender equity funds by the federal government has effected EYH in states with small urban and industrial bases. But volunteers persist in finding money. And we did welcome new sites in three states for the second year in a row, funded by public and private funds.

The fee charged to students to attend continued to climb last year. However, scholarship availability remains strong. We have no reports of students unable to attend due to lack of funds. We continue to stress our responsibility to reach out to those who will most benefit, but who may be least able to afford the fee.

One very positive trend remains that almost 35% of responding sites reported no fee or a fee of \$5 or less. Some sites offset costs for the young women by charging adults a higher fee than they charge the young women. Conversely, one site only charges the adults if they don't volunteer to help serve lunch or help with materials distribution. Most sites sought out sponsors to fund scholarships for girls who needed assistance. Some sites have established ongoing scholarship funds.

I Really Enjoyed Cutting Up the Pig's Heart

Each year, EYH sheds light on the value of giving young women the opportunity to spend a day doing something math related with women who spend their work lives doing something math related.

EYH demonstrates that there is no substitute for real hands-on activity, with women who work in real, accessible careers that use math and science. No “virtual” activity can adequately replace the opportunity to do something hands-on with and to talk to a real person who uses math every day to do real work. The way that hands-on workshops ignites the young women makes all the hard work worth it for conference organizers: “The enthusiasm of the girls was incredible.” What’s so great about EYH? “My favorite class was ‘Electric Devices’ because I liked the hands-on activities instead of just reading or listening about it.” USING things is important.

The hands-on workshops are always the high points of the conference: In New Mexico, the young women enthused about the creating, doing, playing, and other actions that make hands-on so compelling. Around the country, young women ate mealworms, created web pages, found physics to be fun and interesting, looked into the ears of dogs and cats, built robots, and made towers out of straws. “I liked all the experiments that we did.”

What were the negatives? The young women always identify problems. Too much listening or sitting is always on the list. “Get some interesting talkers.” And there is the subject of food. The bad food, the wrong food, or not enough food is always on the list (“Better, different, more food.”). There are the problems of not getting a first-choice workshop, or being separated from a friend. However, this is somewhat made up for by interesting and a feeling of belonging. “This was the best (Hire her again)!”

But the young women did want more. The girls wanted more hands-on experiences, more experiments, more interaction, more women to interact with, more careers represented, longer classes, more chemistry, more science fair, and EYH™ more often. Oh, and music at lunch would be nice.

When asked what they liked about the EYH Conference, the responses of the young women articulate the positive effects of EYH. One young woman wrote at the end of the day that, “It was a cool workshop and I learned a lot of new things on the aurora borealis.” Another in California said, “It got me interested in microbiology. We got to meet professionals and do experiments.” A young woman in Arizona enthused, “In the workshop I learned that I could like computers.”

Impact and Effect of EYH

Can a one-day event have a strong impact on young women? Every year we gather more evidence that EYH is clearly effective in increasing the participation of young women in math and science. After the conference at San Bruno, California, 45% of EYH participants planned to take more math and 48% more science. In San Jose, California, 79% of the girls rated the conference as excellent in getting students to consider different kinds of careers.

Clearly, EYH helps girls make informed choices about their futures. At the San Jose EYH, 79% of the young women said it was excellent in providing them specific information about careers using math and science, and 71% rated it better than average in helping them to plan high school or college classes. In Los Angeles, 68% learned about new careers.

The impact of the conference on their future plans was plain. Wrote one young woman, "I want to thank the organizers of this conference for helping us think about our future." Another saw her future: "This university is the best. I want to come here." For another girl, the importance of the hands-on workshops not only was the fun, but also "the activity made us see how math and your decisions shape your future. If you drop out of high school, your future isn't as bright as if you went on to college."

Real Role Models Are Crucial

The presence of women role models was crucial in making connections. For one young woman the high point was, "This was exciting and Dr. Grace made it real fun." Another young woman was truly pleased: "I liked it a lot. I want to become a criminalist. She was great." And the presenters knowledge? "They really know what they are saying about their careers." Underlying the declarations that "I liked the ph factor in the kitchen the best," that "the liquid nitrogen ice cream was extremely cool," and the immense popularity of the Asphalt Cookies, was the enthusiasm and preparation of the presenters. Science *is* women's work.

Learning Can Be Fun!

And the young women loved that they had fun learning. "I loved this program and wish to come next year." One young woman enthused that she learned a lot of math. Another liked a workshop because "we made our own root beer. SOOO cool!" For another it was learning things about chemistry that she didn't know. In fact, many young women are looking forward to coming back again: "Thank you very much. Please invite us again."

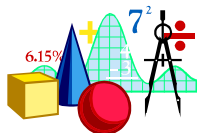
For twenty-seven years, thousands upon thousands of conference volunteers, role models, career panelists, and the small staff of the Math/Science Network have helped to bring the message of the value of math and science education, and the fun of the careers that go with them, to the more than 550,000 young women who have attended Expanding Your Horizons in Science and Mathematics™ Conferences. And each year young women discover EYH™ and take away from it happy discoveries. For organizers, the extremely hard work of putting on a conference is rewarded.

"I liked that they take time to explain."

"I liked it because I had fun doing experiments. Also because it taught me a lot of things."

"It was excellent. I am sorry you only get to do it once."

One-on-one we can change the world.



2000-2001 EYH Annual Report Evaluation Summary Data*

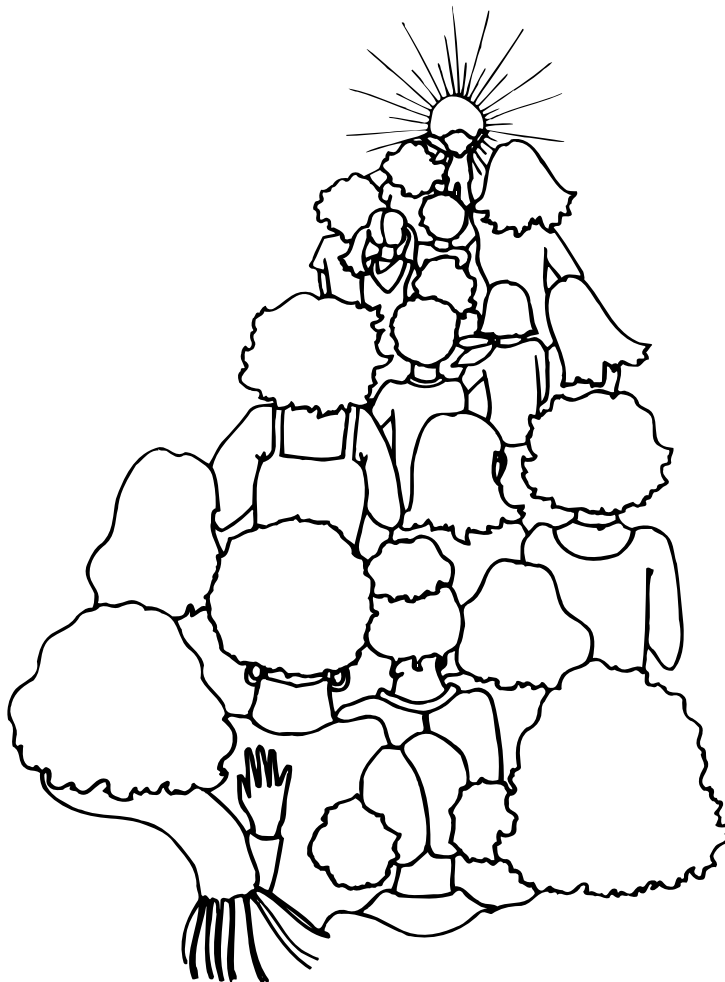
Subject	Count-Estimate	Percentage	Average
Active Conferences	100		
Middle School Girls	22,445	80%	224
High School Girls	5,555	20%	56
Minority Students	9,800	35%	98
Total Students	28,000	100%	279
Adults Attending	5,900	24% minority	59
Role Models	5,500	16% minority	55
Committee Members	2,256	n/a	23*

Conference Cost average: \$6,721
range: \$400 to \$26,100

Conference Fee average: \$9
range: free to \$18

Projected figures based on **44%** evaluation response (44 of 100 sites holding conferences). Percentages may not add up to 100%.

* One site has almost 400 volunteers! Without that site, the average number of committee members is 19 volunteers. Just over 6% of the committee members are paid for working on EYH.



The Math/Science Network
Is
Expanding Your Horizons