DOE/ER/76005--T1

WOMEN IN ENGINEERING PROGRAM ADVOCATES NETWORK (WEPAN):

EVALUATION OF THE FOURTH ANNUAL CONFERENCE

June 5-7, 1994

WASHINGTON, D.C.

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President, WEPAN

University of Washington
August 1994

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WOMEN IN ENGINEERING PROGRAM ADVOCATES NETWORK (WEPAN):

EVALUATION OF THE FOURTH ANNUAL CONFERENCE

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CONFERENCE OVERVIEW

In an effort to provide greater access for women to engineering careers, women in engineering program directors at Purdue University, Stevens Institute of Technology and the University of Washington joined together in 1990 to initiate WEPAN, a national network of individuals interested in the recruitment, admission, retention, and graduation of women engineering students. This is the fourth year of operation. Success of this effort has been reflected in numerous ways: increased membership in the organization; increased number of women in engineering programs; increased number of women graduating in engineering; and grants from the National Science Foundation, the Alfred P. Sloan Foundation, and the AT&T Foundation to establish WEPAN Regional Centers at Purdue University, Stevens Institute of Technology and the University of Washington.

The Fourth Annual Women in Engineering Conference, entitled *Effecting the Climate: New Challenges, New Directions*, was held in Washington, D.C. on June 5-7, 1994 at the Washington Marriott. All previous conferences were extremely successful with over two hundred individuals from academe, industry, and government participating at each. Building on the successes of the previous conferences, the fourth conference offered a new variety of speakers and topics.

The 1994 WEPAN Conference highlighted the establishment of the three Regional Centers for Women in Engineering, which are located at the University of Washington, Purdue University and Stevens Institute of Technology. The primary goals of this year's conference were to:

1. Conduct technical and programmatic seminars for institutions desiring to initiate, replicate, or expand women in engineering programs;

2. Provide assistance in fundraising and grant writing;
3. Profile women in engineering programs of excellence;
4. Sponsor inspiring, knowledgeable and motivational keynote speakers; and,
5. Offer a series of workshops focused on topics such as: establishing partnerships with industry, current research findings, retention strategies, issues affecting special populations, and early intervention techniques.

CORPORATE SPONSORS

The conference contributors were as follows:

Alcoa Foundation
AT&T Foundation
Corning Incorporated
Dow Chemical, U.S.A.
E.I. DuPont de Nemours & Company
Hallmark Cards
Hewlett Packard Company
IBM Corporation
Microsoft Corporation
Mobil Corporation
National Science Foundation
NASA Headquarters
Purdue University
Stevens Institute of Technology
University of Washington
U.S. Department of Energy
Westinghouse Foundation

PLENARY AND WORKSHOP TOPICS AND SPEAKERS

Three plenary sessions were held. Ms. Sherita T. Ceasar, Director, Quality and Service, Motorola Paging Products, Inc. presented her address, *Changing the Corporate Environment: Women Making a Difference*, on Sunday evening. The second plenary session, *National Issues and Challenges Facing Women: Current Legislation*, was keynoted by Congresswoman Patricia Schroeder, U.S. Representative, Colorado, on Monday morning. The final session, presented by Dr. Susan Bailey, Director, Center for Research on Women, Wellesley College, was entitled, *Girls and Science: Are They Still Shortchanged?*.

Fifty speakers, including workshop leaders and presenters, delivered eighteen workshops. The subject of the workshops were:

Responding to Sexual Harassment at Your Institution
Engineering and Architecture for Girls: A Hands-On Workshop
Grantsmanship: Developing Successful Proposals
Reflections from Female Deans
Women in Engineering Programs for High School Students
Globalism-Multiculturalism-Pluralism: Implications for Working and Studying Here and There
The Academic Culture: Views from Female Faculty
Joint Initiatives: Community Colleges and Four-Year Institutions
Perspectives on Women in the Engineering Workforce
Recruitment and Retention at the Graduate Level
Intervention Programs at the Elementary and Middle School Level
Education/Industry Partnerships
Recent Findings from the Field
Funding Mechanisms for Systemic Change
Assessing Students' Needs: Reflecting on the Climate
Engineering Courses: Developments to Enhance the Retention of Women
Women in Engineering: Progress in the 20th Century and Projections for the 21st Century
Evaluation of Intervention Strategies: Do They Work?

WEPAN OFFICERS AND BOARD OF DIRECTORS

The following is a list of the newly elected WEPAN Officers and Board of Directors.

WEPAN OFFICERS

Suzanne G. Brainard, Ph.D., President
University of Washington

Jane Z. Daniels, Ph.D., Past President
Purdue University

Susan S. Metz, Vice President
Stevens Institute of Technology

Karan Watson, Ph.D., Secretary
Texas A&M University

Betty Vetter, Treasurer
Commission of Professionals in
Science & Technology

WEPAN BOARD OF DIRECTORS

Marilyn Berman, Ph.D.
University of Maryland

Rae Ann U. Hallstrom
American Institute of Chemical Engineers

Kathleen W. Buechel
Alcoa Foundation

Miriam Maslanik, Ph.D.
University of Colorado - Boulder

Carmen B. Cannon, Ph.D.
Howard University

Judith McDonald
Ohio State University

Sherita T. Ceasar
Motorola Corporation

Suzanne R. Nagel, Ph.D.
AT&T Bell Laboratories

Patricia D. Daniels, Ph.D.
Seattle University

Lewis E. Shumaker
DuPont Company

Cinda Davis, Ph.D.
University of Michigan

John Vergelli
IBM Corporation

Karen Frair, Ph.D.
University of Alabama

Susan Wood, Ph.D.
Westinghouse Electronic Systems

The ad hoc Board members head the Action Groups. They are as follows:

Mary Anderson, Ph.D.
Arizona State University

Marilee Jones
Massachusetts Institute of Technology

Emily M. Wadsworth, Ph.D.
Purdue University

The following section presents the results of an evaluation, which was conducted to obtain feedback on the effectiveness of the conference.

CONFERENCE EVALUATION

An overall evaluation was conducted to assess the effectiveness of the conference. A variety of different components were evaluated, including: the quality of plenary sessions, workshops, conference registration, accommodations and reception. An evaluation questionnaire was included in the folder of materials that each registered participant received.

The questionnaire included both structured and unstructured questions: twenty-eight structured and five open-ended questions. For the structured questions, respondents were given a range of seven points from poor to excellent to select. The five open-ended questions attempted to gather names of speakers and topics for the next year's conference. The evaluation also provided an opportunity for participants to submit comments regarding the quality and effectiveness of the conference.

Over 185 individuals from academia and industry participated in this conference. A total of 205 registered at the Conference. Of those, 49 (24%) responded to the evaluation questionnaire. The participants represented 40 states, the District of Columbia, and two countries; and 55% were from the East Region, 31% from the Central Region, and 14% from the West Region. Further, 73% came from colleges or universities, 18% from industry, 4% from professional organizations, 4% from government, and 1% from the press.

SUMMARY OF EVALUATION RESULTS

The following section will highlight some of the results of the evaluation.

TABLE I: Quality Ratings of Plenary Sessions Topics

Plenary Session Topic	%Poor	%Below Average		%Average	%Above Average		%Excellent	# Resp.
<i>Changing the Corporate Environment: Women Making a Difference</i>	0	2	0	7	15	37	39	41
<i>National Issues and Challenges Facing Women: Current Legislation</i>	0	0	0	0	0	18	82	45
<i>Girls and Science: Are They Still Shortchanged?</i>	0	0	0	6	19	31	44	36

One hundred percent of the conference participants felt the *National Issues and Challenges Facing Women: Current Legislation* plenary session was above average or excellent. The ratings of the other two sessions were also rated very high.

TABLE II: Quality Ratings of Workshops

Workshops	%Poor	%Below Average	%Average	%Above Average	% Excellent	# Resp.		
Topics	0	0	0	2	27	42	29	45
Speaker(s)	0	0	5	7	24	41	24	42
Length	2	0	5	17	15	44	17	41
Relevance	2	0	2	12	12	42	30	43
Applicability	2	2	5	2	19	41	29	42
Level	3	0	3	3	20	38	35	40
Materials	0	0	10	17	29	22	22	41

The majority of the ratings for the all aspects of the workshops were above average to excellent. Several of the participants (17%) felt the sessions should be longer and many (17%) commented on the need for more handout materials.

TABLE III: Quality Ratings of Conference Registration

Conference Registration	%Poor	%Below Average	%Average	%Above Average	%Excellent	# Resp.		
Organization	0	0	0	2	38	60	48	
Ease	0	0	0	4	2	33	60	48
Time of Day	0	0	0	2	4	48	46	48
Pre-conference Materials	0	6	2	2	19	32	38	47
Conference Materials	0	0	0	2	12	41	45	49

Nearly all respondents (98%) felt the conference registration process was above average to excellent. With few exceptions the pre-conference and conference materials were also rated above average to excellent.

TABLE IV: Quality Ratings of Conference Site

Conference Site	%Poor	%Below Average	%Average	%Above Average	%Excellent	# Resp.		
Site	0	0	6	14	16	39	25	49

Although 80% of the attendees felt the site of the conference was above average to excellent, 14% expressed a desire to have the conference located in another city besides Washington, DC. Consideration is being given to this for the 1996 Conference.

TABLE V: Quality Ratings of Sunday Night Reception

Reception	%Poor	%Below Average	%Average	%Above Average	%Excellent	# Resp.		
Reception	0	0	5	3	18	45	29	38

As can be seen, the majority of attendees felt the quality of the Sunday night reception was above average to excellent. Approximately 150 people attended the reception.

The following table present the results of the participants' perceptions of the top speakers.

TOP THREE SPEAKERS

Congresswoman Patricia Schroeder, *National Issues and Challenges Facing Women: Current Legislation*

Ms. Sherita T. Ceasar, *Changing the Corporate Environment: Women Making a Difference*

Dr. Susan Bailey McGee Bailey, *Girls and Science: Are They Still Shortchanged*

AREAS FOR CONFERENCE IMPROVEMENT AND SUGGESTED WORKSHOP TOPICS

The questionnaire also provided an opportunity for the participants to make comments. A summary of the most frequently made suggestions for improving next year's conference follow.

1. GENERAL SUGGESTIONS

Change the location of the annual conference (both city and hotel).

Provide more formal transportation arrangements to and from planned events.

Encourage more men to participate.

Explore other evening entertainment opportunities.

2. WORKSHOPS

Have fewer panel members per workshop to allow more time to interact with, visit, and question the members.

Request that all presenters bring handouts including a summary of major points and how to get additional information.

Schedule sessions so that similar sessions are not held at the same time.

Arrange "free-time" that does not coincide with sessions, to visit the resource room.

Offer a poster session.

In addition, several suggestions were made for workshops to be held at next year's conference, including:

Best Engineering Related Careers for Women After the Year 2000

Communication and Leadership Skills for Women

Conflict Management and Negotiation

Handling Sexual Harassment

Industry's Role in the Recruiting, Advancement, and Retention of Women in Engineering

Multi-cultural Issues in Science and Engineering Education

Personal and Social Needs of Generation X

Politicizing Women Engineers

Recent Research

Successful Model Programs

CONCLUSION

Coupled with the specific evaluation results summarized above, the overall success of the conference was also demonstrated by the tremendous interest expressed by the membership in the administration of WEPAN. Several individuals volunteered to become involved in planning regional meetings and assisting with the national conference planning for next year.

The WEPAN Board of Directors and the members look forward to continued success in their pursuit of increasing the participation of women in engineering nationally.

APPENDICES

A. Participant Comments

B. 1994 Conference Brochure

C. 1994 Conference Program

A. Participant Comments

"It was an absolutely exhilarating three days! To be in the company of such bright women is so wonderful!"

"Too many good panels were going on at the same time that I wanted to hear."

"There was insufficient time to visit and question panel members."

"Resource room hours coincide with sessions, this makes it difficult for one to try to attend sessions and the resource room."

"I loved the interactions, most of the talks, the good organization and mailings, and the wonderful people!"

"I urge the conference committee to consider changing location."

"Lose the cruise!"

"It would be nice to see more males in attendance, especially teachers and professors, to sensitize them to gender equality issues."

"The program itself was wonderful! It was my first. I'll be a diehard WEPAN member, now!"

1994 WEPAN Conference

Resource Room Summary of Tasks and Recommendations

Robby Henes, Director
Center for Women in Engineering
University of California, Davis

I. INTRODUCTION

As the organizer for the Resource Room (RR) for the 1994 National WEPAN Conference, I discovered a great deal of enthusiasm for the RR, but relatively little documented information about organizing it. Therefore, I am writing this report to help take the mystery out of the RR and provide future organizers with some simple ideas to pursue. During the 1994 WEPAN Conference, a survey was distributed to the people who visited the RR to gain insight about how they viewed it and potential future innovations. Some of the information from the RR Survey can be used by WEPAN Board Members and the Conference Chair to make plans for future conferences. All of the comments and ideas in this report are merely suggestions. Feel free to use those parts that make sense and discard the rest.

I have organized the paper into 2 sections. The first section is a list of some of the basic steps and preparatory tasks the next RR organizer needs to accomplish to organize the RR. They are relatively simple. The second section summarizes the results of the RR survey and provides a list of recommendations based on survey results and other ideas. Appendix A contains a sample reminder postcard, Appendix B is a list of addresses of organizations to be solicited for information for the RR, Appendix C is a sample Sales Sheet for institutions other than WEPAN that hope to sell their products in the RR, Appendix D is the Resource Room Survey, and Appendix E contains the results of the RR Survey.

II. PREPARING FOR AND RUNNING THE RESOURCE ROOM: THE BASICS

PRE CONFERENCE

1. Location

It was my experience that I had little to do with the location of the resource room. the conference organizers made the Hotel reservations and room assignments. I would however advocate to get the largest room possible. I believe that the resources are expanding each year and there is a great deal of potential for new creative uses of the RR. If the conference will be held at the Washington Marriott again next year, try to get the Logan room assigned to the RR.

2. Informational Post Card

When the conference announcement and registration form are mailed out, your name will be listed as the contact person for the RR. I did not get too many calls related to this job. Traditionally, a postcard has also been sent out following the conference brochure reminding people of the resource room and an address to send their literature to just prior to the conference. (A copy of the postcard is attached as Appendix A.) Traditionally the postcard has said that "Materials will be returned after the conference upon your request" however, WEPAN does not pay for this and it is very time consuming to box things back up. If they are high value, low

weight objects, i.e.. a video or computer disks, it is understandable that we would try to send the items back. I think that we should eliminate this comment on the postcard. Actually, I would recommend considering writing a complete flyer or a letter instead of a postcard, particularly if some of the other recommendations in this report are utilized. Information to be included in a flyer could include: a reminder to contributors to pick up the left over information and take it home with them, information on how to arrange to sell things in the RR, a notice to all conference participants regarding acceptable methods of payment for items purchased (i.e.: American Express, checks or cash ONLY).

3. Audio Visual Equipment

The conference chair made arrangements for all AV equipment needed. You just request the equipment you need. We only had one TV/VCR in 1994. There were twelve video's however; too many to allow adequate viewing time. Someone also brought computer disks for copying but we did not have any available computers. This is discussed further on page 6 under 'Computers'.

4. External Contributions

I believe that everyone on the WEPAN mailing list receives information regarding the conference. We did receive handouts and information from some Federal government organizations, a few engineering professional societies and some companies that I personally did not solicit. However, there are several excellent organizations that produce literature related to the interests of WEPAN members. I would suggest finding out who is included on the regular mailing list and supplement the regular mailing lists by contacting a few select organizations that would provide excellent literature to WEPAN members. (I have attached a short list of places I contacted in 1994 in Appendix B.) This list could be circulated among some WEPAN members for ideas on how to expand the list prior to the conference.

5. Prepare for RR staff coverage

Working with Cathy Deno and other conference organizers you will need to assure that there is enough staff available to have a minimum of two people in the RR during all open hours. In 1994 the RR was open Monday from 8:00 am - 6:00 pm and on Tuesday from 8:00 am to 4:00 pm. Four o'clock was too late on Tuesday, I would suggest changing the hours to two o'clock on Tuesday. This still equals approximately 32 -34 hours of coverage not including your time as the organizer or the set up and take down times. I would estimate it took 4 hours total time to set up and about 3 hours to take it down. Most of the scheduling arrangements were carried out by Cathy Deno utilizing student workers brought by different institutions. Backup coverage of a third person during periods when traffic is heavy (right before meals and after meals, at the beginning of the receptions, early morning etc.) is helpful. As the RR coordinator, I spent quite a bit of time in the RR relieving other staff, organizing new information and answering questions. All the people covering the RR need to understand that it is important to be there as scheduled because when a rush hits, it is impossible for one person to cover.

6. Supplies

It is to your advantage to have RR supplies and not rely on general WEPAN or hotel supplies. Whether you bring them from your institution or purchase them there and get reimbursed by WEPAN, you should have:

-CASH BOX	-Packing Tape (multiple rolls, 3-4)
-Scotch Tape	-Exacto or Scissors for opening boxes
-Push pins	-Magic Markers
-Extra pens	-Plain Paper for making signs, writing notes etc.
-*Optional Calculator (for more complex orders and balancing money)	

AT THE CONFERENCE

7. Setting up the RR

Setting up the RR took several hours on Sunday afternoon. People are instructed to send packages to the Hotel in your name. When you are ready to set up the room, the hotel staff will bring them to the appropriate room. For the 1994 conference, 20 packages were mailed to the hotel in advance. These formed the basis of the information to display however, many people brought things with them to drop off at the RR when it was convenient for them. Any good layout for the RR must be very flexible to accommodate the constant additions and changes to literature displays. I suggest labeling one copy of anything that may disappear quickly as a display copy so that everyone will get to see it.

8. WEPAN items for sale

WEPAN has many things for sale. All these things should go on a separate table where the cash box is kept. These WEPAN items should not get mixed in with other things because conference participants may not realize they are for sale and take them. Cathy Deno is very good about providing receipt books and summaries of all the WEPAN products.

9. Other items for sale

Several other people brought things to sell in the RR this past year. It caused quite a bit of confusion and potential disaster for handling the money. I have a couple of ideas for dealing with this and you might want to consult with Cathy Deno who also shared the angst of figuring out what occurred.

- A. Tell everyone who wants something sold that they will receive a check from WEPAN for the items that sold after the conference. This way Cathy can take home all the money and sort it out later. When the conference is ending, it is a hectic time and no one will be able to do final bookkeeping.
- B. Make up a form for people with a product for sale to fill out. It would give the name of the product, a brief description, the price (Tax if necessary), the address and phone number of the person. This could have potentially two uses. One would be a descriptor for the product so that when a receipt is made out using the product name, there is a document telling who is distributing the product. The second use would be to make multiple copies of the form with space at the bottom for the purchaser to write their name and address to be used as a receipt. In any case there has to be a clear paper trail for both those selling, and for Cathy when she accounts for all the money. (A sample of what this information sheet might look like is attached in Appendix C.)
- C. All things for sale should be kept in one place (on the WEPAN table probably) so that people do not get confused about what is free and what isn't.

10. Money

- A. I did not worry about having change on hand at the beginning of the conference. Most people paid with checks.
- B. Since we only accept American Express many people were caught off guard and did not have adequate ways to purchase items. This might be something to emphasize in pre-conference information!
- C. I locked up the cash box in the Hotel safe at night.
- D. All the funds should be taken to Purdue with Cathy Deno to be sorted out and distributed rather than handed out piecemeal as people are leaving the conference. It was too confusing.

11. Training RR Staff

It is a good idea to try and give every one a quick orientation to running the RR. Otherwise, very bright and creative people develop multiple ways of writing receipts and receiving money.

12. Audio Visual Needs

We had twelve videos for display in 1994. To accommodate such a large number we made a display board. On the board was written "Now Showing" and then there was a place to insert a sheet of paper with the name of a video written on it. We then made a title sheet for each video which could be inserted into the display board. Our board was rather crude since we improvised it on the scene. This might be addressed in advance to create something that looks more professional.

13. RR Survey

In 1994 I created a RR survey to get more feedback on the RR and how people used it. I doubt we need to do this every year, however it might be a good way to collect other data if necessary. (Appendix D contains a copy of the Survey)

14. Leftovers and Recycling

Make sure to make several announcements at the general meetings to urge people to pick up their leftovers. We threw away a phenomenal amount of literature because WEPAN does not pay shipping for returning items. The big agencies like NSF ect. find that reshelving literature is more expensive than just throwing it away. It is a huge waste.

15. Exhibits Promotion Plus

Exhibits Promotion Plus (EPP) is a firm that solicits books from publishers that will appeal to WEPAN members. They come and set up a display requiring at least three tables. This past year they also brought gemstones for sale in a silent auction. For the most part you will not have to worry much about EPP. However, they do take up a considerable amount of space. This past year they shared the same room as the RR. I feel that EPP should be located just outside of the official resource room to allow us more space and to give them a distinct identity as a part of the RR but also providing them with a more visible location. I really was not overly delighted to loose table space to gems.

16. Miscellaneous

I did not have to make any arrangements for tables, tablecloths, chairs etc. These things were already pre-arranged. The hotel staff was excellent about providing more tables, setting the thermostat etc.

III. IDEAS AND RECOMMENDATIONS

Results from the RR Survey provided the following information and recommendations. 42 surveys were completed. On a scale of 1 (low) to 5 (high) respondents rated the resources they could get at 4.05. They had many comments on why they were useful including some of the following major themes.

- They got many new ideas, as well as new supporting citations and statistics to document their own findings and research.
- They gain a better idea of what similar programs are doing, how to implement ideas and benchmark their own programs.

- They receive new information for libraries and potential speakers for upcoming programs.
- Some commented on finding future career possibilities.
- Several noticed that they got good ideas for layouts of brochures and effective publications based on what others have done.

One question on the survey addressed specific types of the resources and their usefulness. Again on a scale of 1 to 5 respondents noted that brochures, papers and videos were the most useful types of information. 75% of the respondents rated brochures in the very useful categories, 92% rated papers very useful and 72% rated videos as being very useful.

The following are a summary of recommendations based on the request to *"Describe your ideas for enhancing the resource room."*

- Poster sessions were supported by six of the responders. This could be a great deal of extra work but it might also provide a further way to disseminate more information. If WEPAN is growing in prominence each year, there will be more people trying to get opportunities to present papers. Having a poster session would extend the opportunities for dissemination and provide a semi structured method for exchanging ideas.
- Several suggestions have been made about organization. "More Signs would be useful. Leave a notice for the materials from a school or organization with their name." "Categories or information topics such as recruitment, retention, professional development, industry efforts etc." [As the RR organizer this year, I considered this suggestion seriously however, there is not a good way of determining the different types of material. It also would mean splitting the literature from a specific institution into several different areas which I think disperses the effect of seeing and understanding the range of programs of a specific institution.] This past year I organized everything in two categories. 1) Academic Institutions 2) Everyone else; Federal agencies, Industry and Non-profit organizations.
- Several people noted a need for larger facilities. They also wanted seating areas available in the resource room to talk and to sit and watch the videos.
- Many people desired some way to talk to the people who had contributed resource room material. Scheduling specific times to meet in the resource room has been suggested but I think this level of organization would be difficult and would not produce significant results.
- Having computers on hand has been discussed before. Some people supported this idea for the exchange of documents and if there is on-line connection people could ftp documents to their own institution.
- Several people desired copies of the plenary talks and other speakers papers available during the conference.
- A job opportunities bulletin was desired.
- Some people felt that the gem auction was inappropriate.

The complete survey results are contained in Appendix E.

FINAL RECOMMENDATIONS

Having a little experience now in organizing a resource room, here are a few last thoughts and recommendations.

1. Signs

I think a nice large sign should be created for the front door of the RR. The sign was small and insignificant this year. It would help attract more people to the RR early in the conference. Designing a sign for the "Video on Display" prior to the conference would also make it more professional and require less effort during the set up stage of the RR.

2. Space and Dialog

Having as much space as possible within the RR, with some room to sit down and talk is highly desirable. I think that encouraging people to be in the RR to discuss their information and programs would be difficult to organize and not as productive as other forms of exchange.

3. Poster Session

The poster session idea sounds great but should not be considered as a function of the resource room. It would require a great deal of separate organization and planning. I do think it would be a way to expand the range of topics covered by the conference and would give more people a chance to present in some way. We also might be able to schedule a few more training type sessions rather than panel sessions if some of the programs were presented as posters.

4. Adequate Equipment for AV

We should seriously consider getting two TV/VCR machines. There are so many different and good video's to be viewed that one machine is not enough.

5. Computers

We should consider how widespread the usefulness of having a computer available in the RR would be. There are many good data bases, forms and other information sources that could be shared. This idea though, has the potential of being expensive and cumbersome. To do it well, we would have to rent both a Mac and IBM type computer. Determining which software needs to be available on each computer would be difficult. Plenty of advance notice to conference participants would allow them to bring information on disk. This could be announced in the pre-conference flyer (see page 1, Informational Post Card.) We could sell blank disks. This idea would require a great deal of advanced thought and planning and still represents many difficulties.

WEPAN

Women in Engineering Conference

June 5 - 7, 1994

RESOURCE ROOM REMINDER

Send your program materials and brochures, fund-raising information, posters and videotapes to share with conference participants. Please mail your materials to the hotel to arrive no later than two days before the conference. Address the package to:

*Washington Marriott
1221 22nd St. NW
Washington, DC 20037
Attn: Robby Henes
WEPAN Conference June 5-7, 1994*

Materials will be returned after the conference upon your request.

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WEPAN Conference June 5-7, 1994*

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APPENDIX B

ADDRESSES OF ORGANIZATIONS WITH RELEVANT INFORMATION

WOMEN'S EDUCATIONAL EQUITY ACT

Gaea Honeycutt
WEEA Publishing Center
Education Development Center
55 Chapel Street
Newton, MA 02158-1060

800-225-3088
WEEAPUB@EDC.ORG

AMERICAN ASSOCIATION FOR UNIVERSITY WOMEN

AAUW
Susan Reubin
1111 Sixteenth Street N.W.
Washington DC 20036

202-785-7727

JOURNAL OF WOMEN AND MINORITIES IN SCIENCE AND ENGINEERING

Kathy Wager - Editorial Assistant
Women's Research Institute
Virginia Polytechnic Institute and State University
10 Sandy Hall
Blacksburg, VA 24061-0338

703-231-6296

CENTER FOR RESEARCH ON WOMEN

Wellesley College
Center for Research on Women
106 Central Street
Wellesley, MA 02181-8259

617-283-2525

CENTER FOR WOMEN'S POLICY STUDIES

2000 P Street, N.W.
Suite 508
Washington, DC 20036

PART ONE

1995 WEPAN National Conference

INSTITUTIONAL SALES INFORMATION

I understand that the staff of the WEPAN Resources Room will take care of the sales of my product. I will receive the money from sales approximately 2 weeks following the conference from WEPAN Headquarters at Purdue University. I also understand that the staff of WEPAN and the Resource room will do everything possible to monitor my product and carefully record each sale and collect the money, however if there is an error I will not hold them responsible for the errors.

Name _____ Date: _____

Institution _____

PART TWO

1995 WEPAN National Conference

INSTITUTIONAL SALES INFORMATION

Sold by:

Name: _____

Phone: _____

Institution: _____

FAX: _____

Address: _____

E-MAIL: _____

Name of Product: _____

Type of Product: _____ Cost: _____

Sold to:

Name: _____

Phone: _____

Institution: _____

FAX: _____

Address: _____

E-MAIL: _____

1994 WEPAN National Conference

Resource Room Survey

This is a short and simple survey to find out how we can make the resource room better for you. Thanks for your insight and ideas. ENJOY THE CONFERENCE!

Name _____

(optional)

Position: _____ Director of WIE Program

_____ Staff of WIE Program

_____ Admissions

_____ Engineering Faculty

_____ Industry Representative

_____ Agency Representative

_____ Journalist

_____ Other (specify) _____

1. How useful are the resources you get from the Resource Room in your work?
	Little Use				Very Useful
	1	2	3	4	5

How are they useful?

2. How useful are each of the following types of resources:

	Little Use			Very Useful	
a) brochures	1	2	3	4	5
b) posters	1	2	3	4	5
c) books	1	2	3	4	5
d) papers	1	2	3	4	5
e) videos	1	2	3	4	5
f) other _____	1	2	3	4	5

Please describe what is most useful about the resource(s) you rated highest.

3. Here are some ideas that have already been suggested for enhancing the resource room.

•Have computers available for information that is on disk and on-line.

•Use a bigger room and have some seating available to facilitate discussion.

•Add a poster session to allow people to explain their projects.

•Lay out the information in the resource room by topic and use signs to direct people to areas.

Can you think of a better format or new ideas that will make the resource room even more useful to you? Feel free to use the ideas mentioned above. (Keep in mind that there is limited time and resources on everyone's part!)

Please describe your ideas for enhancing the resource room.

1994 WEPAN National Conference

Resource Room Survey

This is a short and simple survey to find out how we can make the resource room better for you. Thanks for your insight and ideas. ENJOY THE CONFERENCE!

Name _____

(optional)

Position: 13 Director of WIE Program

0 Staff of WIE Program

0 Admissions

6 Engineering Faculty

6 Industry Representative

0 Agency Representative

1 Journalist

16 Other (specify) _____

		Little Use			Very Useful
1.	How useful are the resources you get from the Resource Room in your work?	1	2	3	4 5
		0	0	9	18 11

How are they useful?

- 1) New publications; brochure ideas.
- 2) Lots of ideas provided by handouts.
- 3) Lend supporting citations and add statistics to research.
- 4) This is the first time I have picked up materials. I have not reviewed them yet, but I believe they will be very useful.
- 5) Ideas for what others are doing with their programs: videos, books, periodicals to use in my program.
- 8) Bench marking; best practices, inspiration, research and documentation.
- 9) Resource info.; model ideas.
- 11) Information regarding different programs in engineering are important to me. I'm trying to decide how best to implement such programs and which programs to implement.
- 13) Gives different ideas on beginning a new program component or changing an existing one.
- 14) The opportunity to get ideas from others on brochures, annual reports, etc. is ideal.
- 15) Books for library; contacts for speakers series.
- 16) Get ideas for hands-on projects for H.S. Days, Girl Scout Days; also, show videos during H.S. visits; get ideas for layouts of a brochure or annual report.
- 17) Provide information. Stimulate thinking/ideas.
- 18) Identifying ongoing programs, surveys, etc. Commensurate with my corporate research goals, and maintaining a reservoir of information to share.
- 19) Want to use what I purchased to help our women's program develop an outreach activity.
- 20) We have no formal program. It's useful to see what the "pros" are doing!
- 21) Applicable to job and future possible career ideas.
- 23) Recruiting sources. Assistance in setting up summer intern program.
- 25) Ideas for producing effective publications; programing improvements; contacts.
- 26) Starting program for women in engineering.
- 27) No experience at this juncture - other than the video, "She's an Engineer", which has been very effective.
- 29) Materials available to take or to buy are great. Titles super! Good job!
- 31) I do res. on women in engineering. I was able to get quite a bit of project information and procedures from past WEPAN conferences.
- 32) Ideas for programs and PR literature.
- 33) Ideas, plan to use WEPAN book with summer programs, preview videos we might purchase and use.

- 35) Pick up videos for recruitment
- 36) Gives me ideas and data for my program.
- 38) New ideas, resources.
- 40) Will use to help start WEPAN program at UNLV.
- 41) It's just hard to find this stuff. It's great to be able to take things and to have order forms for things, with phone numbers and contacts.
- 42) Resources in one place - no hunting. Don't have to call each speaker for information.

2. How useful are each of the following types of resources:

		Little Use			Very Useful	
a)	brochures	1	2(1)	3(9)	4(17)	5(13)
b)	posters	1(5)	2(11)	3(10)	4(4)	5(3)
c)	books	1(2)	2(6)	3(11)	4(13)	5(6)
d)	papers	1	2(1)	3(4)	4(20)	5(11)
e)	videos	1(2)	2(3)	3(5)	4(16)	5(10)
f)	other _____	1	2(1)	3	4(1)	5(2)

Please describe what is most useful about the resource(s) you rated highest.

- 1) Models, ideas, other programs, contacts.
- 2) I can use them all.
- 3) Bibliographies, statistics.
- 4) They are helpful in generating ideas for use at our college, and they are informative regarding the nature of other institutional programs.
- 8) We are in the midst of designing new programs and materials. Resources designed by others give me ideas and inspire creativity.
- 10) Information about programs out there.
- 15) Information on journals.
- 16) Getting practical ideas (not general statistics) on programs that work.
- 17) Quick, painless way to learn about programs.
- 18) Material I can share in my efforts to support and encourage in women and minority affairs in engineering and science.
- 19) They (papers and videos) are very useful when formatted as "how to...." documents.
- 21) Sources for references for other related topics/matters.
- 24) Viewing tapes.
- 25) Able to incorporate/share/use other's ideas.
- 26) Motivation with videos. Ideas for program.
- 28) Display of books.
- 29) Books - as a source of new ideas and knowledge about gender issues and politics.
- 30) Videos for use in high-schools - WOMEN SHAPING TECH'.
- 31) Interested to see the overviewing of prof. avail.
- 33) Again - Ideas on how to shape our program and what is successful.
- 37) Help me learn more about other programs which could either make good story ideas or help us plan our programs.
- 38) Can be used to give to students (brochures on careers, posters), papers keep you informed.
- 40) Can read papers for detailed examples. Videos capture dynamics of the profession.
- 42) Keeps me up on research.

3. Here are some ideas that have already been suggested for enhancing the resource room.

- Have computers available for information that is on disk and on-line.
- Use a bigger room and have some seating available to facilitate discussion.
- Add a poster session to allow people to explain their projects.

•Lay out the information in the resource room by topic and use signs to direct people to areas.
 Can you think of a better format or new ideas that will make the resource room even more useful to you? Feel free to use the ideas mentioned above. (Keep in mind that there is limited time and resources on everyone's part!)

Please describe your ideas for enhancing the resource room.

- 1) Consider poster sessions around the area - set up a day and a time. Accept presentations and poster sessions.
- 2) Great idea! (poster sessions). This could even be part of conference session - maybe during the reception.
- 3) Great for graduate students! (poster sessions).
- 4) A bigger room would be helpful. More signage would be useful. Perhaps each participant leaving materials could have a location with their school's name or organization name - perhaps categories like corporations, books, schools, etc. Business cards for individuals were left this year. I rather liked that. It appeared that display copies often were taken by people, perhaps this needs to be considered somehow. Perhaps students from the host city could participate in coordinating the resource room. I liked being able to view the videos. I encourage more materials be brought.
- 5) Job opportunities bulletin board - administrative and faculty. Focus on women in science and engineering issues. Don't think we need to have "gem auction" in resource room. Well organized and well staffed this year. Thanks for setting it up! Posters would be great!
- 8) I think it's great the way it is.
- 9) Lay out the information by topic. e.g.: recruitment, retention, prof. development, industry efforts. Thanks!
- 10) Having an overall list of books in resource room would be helpful for later ordering. Accept other charge cards besides American Express.
- 11) These are all great ideas!! How about an evaluation section. Which programs are cost and time effective?
- 14) An open resource room during the conference is good, but possibly an hour set aside for people to stand with the material they are displaying and talk to others would be a good addition.
- 16) Bigger room - hard to see everything - spread it out more. Keep open all the time, so if a particular set of tables are not of interest (e.g. Congresswomen Schroeder), you can use that time to really look at the resources. Disk transfer sounds great!
- 17) Larger space = critical.
- 19) Why were there gemstones for sale? I didn't understand the connection.
- 21) Seem to be many non-applicable (but interesting) bits of literature.
- 22) I would like to see more books on different learning styles dealing with multi-culturalism challenges in the classroom, etc.
- 28) Add a poster session.
- 29) I bought 4 books and now I have to carry them home. My suitcase is going to feel it!
- 33) I like the TV/VCR availability. A better layout with information on topics, prices, etc., readily visible. Computer availability would be nice, but really only necessary if more is available on disk (though this might be a chicken-and-egg situation....).
- 35) Good job, Robby!
- 36) Papers on speakers should be in there. Need more goodies from companies to add allure. Pretty basic now.
- 37) I would just like greater access on-site to meeting papers, particularly plenary talks.
- 40) Bigger room and seated possibilities. Consider exhibitors - text books, etc.
- 41) (have computers available for information that is on disk and on-line) plus a way for us to ftp information directly to our system.
- 42) Chairs to view videos. Good job, very good organization.

WEPAN

Item	Member Cost	Non-Member Cost
CATALOG OF RESOURCE MATERIALS		
◆ 3.5 inch disk (available in the following formats)		
Circle one: MS DOS Mac MS Word ASCII/Text	\$ 5.00	\$25.00
◆ Hard Copy	\$50.00	\$75.00
◆ Summary of Catalog (available free of charge)	No Charge	No Charge
WEPAN CONFERENCE PROCEEDINGS		
◆ 1991, 1992, 1993, 1994 National Conferences	\$20.00 ea.	\$35.00 ea.
1994 WEPAN DATA BOOK OF WOMEN IN ENGINEERING PROGRAMS	Members are sent 1 free copy Additional Copies - \$20.00	\$35.00
◆ Mailing Labels of Institutions in Data Book	.05/label+ \$20.00 computer charge	.05/label+ \$40.00 computer charge
CAREER ENCOUNTERS: WOMEN IN ENGINEERING	\$25.00	\$40.00
◆ Fifteen Minute Video		
WHAT DO ENGINEERS DO?	\$25.00	\$40.00
Book of Labs for Pre-College Student		
WEPAN WORKING PAPERS SERIES		
◆ Final Report - 1991 National Survey of Women in Engineering Programs	\$ 5.00	\$10.00
◆ National Evaluation of Existing Women in Engineering Programs	\$ 5.00	\$10.00
◆ College Classroom Climate Resources	\$ 5.00	\$10.00
WEPANNEWS	No Charge	No Charge
Newsletter Published Three Times Annually		
MEMBERSHIP DIRECTORY	No Charge	\$20.00
◆ Mailing Labels of Membership	.05/label+ \$20.00 computer charge	.05/label+ \$40.00 computer charge
CPST DISCOUNT		
WEPAN members may order publications from the Commission on Professionals in Science and Technology at the discounted CPST member price by calling 202-223-6995.		

WOMEN IN ENGINEERING PROGRAM ADVOCATES NETWORK

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MAKE CHECKS PAYABLE TO: WEPAN, INC.

Federal I.D. # 52-1729532

WEPAN

WEPAN was founded in 1990 in order to increase the number of women who pursue careers in engineering, by encouraging colleges and universities to initiate or expand Women in Engineering Programs at the pre-college, undergraduate, and graduate levels. Nearly \$2,000,000 has been raised from federal, foundation and corporate sponsors in support of WEPAN initiatives.

- ◆ WEPAN now exists as a non-profit, tax exempt corporation with a membership of more than 500 members including 258 corporate or institutional members.
- ◆ WEPAN established three Regional Centers responsible for evaluating existing programs, providing technical assistance and conducting training seminars for institutions desiring to initiate, replicate or significantly expand Women in Engineering Programs. These Centers, directed by the co-founders of WEPAN, are located at Purdue University, Stevens Institute of Technology, and the University of Washington.
- ◆ A *National Evaluation of Existing Women in Engineering Programs* has been conducted and analyzed and will be continued as an ongoing effort of WEPAN. One of the products of the evaluation will be a brochure identifying and describing Women in Engineering Programs of Excellence.
- ◆ WEPAN Regional Training Seminars, initiated in 1992, will continue annually to assist institutions to develop or expand their programs focused on recruitment and retention of women in engineering.
- ◆ The WEPAN National Women in Engineering Conference is held annually in Washington, D.C. Representatives from academia, industry and government participate and plan ways to work together to develop unique programs which will increase the pool of women engineers. Proceedings from WEPAN National Conferences have been published annually and distributed internationally.

WEPAN has developed a comprehensive set of publications.

- ◆ *The Catalog of Resource Materials* is an extensive data base of activities, publications, funding sources, and organizations related to women in engineering. It is updated on a continuing basis.
- ◆ *What Do Engineers Do?* is a book of demonstrations, laboratories and research projects designed to introduce students in grades 7-12 to engineering.
- ◆ *Career Encounters: Women in Engineering* video has reached millions of students, parents and educators through major national cable television networks.
- ◆ WEPANNEWS, the organization's newsletter, has a distribution list of over 3000 and highlights current activities, research findings, prevalent issues, and news from the field.
- ◆ *The WEPAN Data Book of Women in Engineering Programs* is useful to inform teachers and counselors about programs throughout the country designed to promote mathematics, science and engineering among girls in grades K-12. Institutions offering retention programs for undergraduate and graduate students are also identified.
- ◆ *A Working Paper Series*, refereed by professional researchers addresses significant research findings and analyses of relevant issues.

WOMEN IN ENGINEERING PROGRAM ADVOCATES NETWORK

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