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Regional Consortiums: the Northwest Experience

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Abstract: In the Pacific Northwest, the Northwest Academic Computing Consortium (NWACC) and NorthWest Higher Education Academic Technologies (NWHEAT) have served valuable, but different roles and have worked with different constituents. NWACC serves a large and diverse audience of colleges and universities, and works with a formal structure, bylaws, dues, and steering committees. NWHEAT arose to serve a small group of colleges and operates informally. This session will explore how to start a consortium and the advantages and disadvantages of each model, focusing on benefits to individual members, degree of formality and structure, methods of communication, and accomplishments to date. The session will also cover efforts to tie the two groups together while maintaining their separate mission, and future plans for collaboration between the groups.
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NWACC

1. 1. How did it get started? What was the environment?

The Northwest Academic Computing Consortium was born in the mid-1980s when a group of Northwest universities, along with the Boeing Company, saw both a need and an opportunity for high performance computing. Because the Northwest had long been starved for powerful research computing resources, the group pursued a National Science Foundation (NSF) initiative to place a shared supercomputer in the Northwest.

While the effort did not result in the creation of a supercomputer center, it did crystallize a broader set of shared technology goals among the members of the group. They agreed to continue to pursue opportunities that would strengthen their ties and improve the educational and economic health of the region.

The group incorporated in 1989 as a not-for-profit in Oregon under the name of the Northwest Academic Computing Consortium (NWACC). The organization spanned six states with institutions as members in Alaska, Oregon, Washington, Idaho, Montana and North Dakota. With support from the Western Interstate Cooperative for Higher Education (WICHE), NWACC pursued its goal of connecting the region to the Internet. After much effort, and thanks to the leadership provided by Boeing Computer Services (BCS) and the University of Washington, the National Science Foundation approved and funded an NWACC proposal to establish a regional network. BCS built the original network and operated it for more than a year, until operation was phased over to the University of Washington as a subcontractor to NWACC. The regional network gradually came to be known as NorthWestNet.

As the network evolved, NorthWestNet became heavily involved in training and educating its constituency in the use of information technology, including the development of one of the first published Internet guides in the country.
The NWACC/NorthWestNet style of operation and network management was used by NSF as a model for regional networks everywhere. Companies like Boeing called on NWACC to give seminars and consult on the future activities of the Internet. NWACC offered the least expensive network access in the region, and its activity became a significant educational and economic resource for the entire Northwest.

1.2 What projects did it tackle?

NWACC/NorthWestNet served as the hub for connections to NSFNET in the Northwest, and as the network use grew it added members from industry, health sciences, and secondary schools. One of the objectives was to aid the smaller institutions in connecting, and in addition to consulting and training every effort was made to keep the cost of connection low even to sites far away from population centers (not too many in the sparsely settled West!)

In addition to its annual meetings, NWACC provided user services and other technical sessions in addition to the development of the Network Handbook. Dr. Eric Hood, who served as NorthWestNet Executive Director, was active in representing the needs of the members in the national planning for the Internet through his testimony at Congressional Hearings and his role as Chairman of FARNET (the national association of network service providers.)

1.3 How did it organize?

The organization changed significantly following its incorporation in 1989, and its full time staff began to develop. It had a Board of Directors, an annual membership meeting, and an Executive Committee involved in the planning and development.

1.4 What caused it to change?

In 1996 the overwhelming success of NorthWestNet and the changed Internet environment -- NSF changed the network architecture and eliminated its support for regional networks -- required NWACC to separate out NorthWestNet into an independent, for-profit, company. NorthWestNet, Inc., which continued to provide Internet connectivity services, was sold in March to VERIO Inc.

1.5 What didn’t change?

With a solid track record of successes during the past six years, the members of NWACC decided that it was time to re-emphasize the original and broader goals of NWACC as a resource for its members and, more generally, for the region. Traditional work forces need retraining, and companies and universities need to
insure that their information infrastructures keep pace with research and educational needs. The emergence of the Next Generation Internet (NGI) and Internet2 project provides an important opportunity for NWACC to aid its members in both informing them and influencing the planning to meet their needs.

1.6 What is next?

NWACC is focusing on several types of activities:

A. Planning
NWACC works to ensure representation of the members’ requirements in the national efforts toward the next evolutionary (or revolutionary) steps in the Internet. While the primary focus is toward higher education, members include schools, hospitals, and industry as well and another focus is economic development. As one step, NWACC has joined the Internet 2 Project as an Affiliate member and is working with other affiliates on issues of diffusion of the lessons to be learned to a broad set of institutions.

B. Facilitating and educating
NWACC is sponsoring seminars and training that are open to its members, with a special focus on providing opportunities for the smaller institutions. NWACC is also planning for a regional CAUSE/CNI/NWACC conference in June of 1998 to be hosted by Reed College in Portland, Oregon.

C. Aggregating
NWACC is providing opportunities for its higher education members to gain discounts by aggregating the institutions and entering into agreements with manufacturers. A good example is the support from Claris through Wareforce which is offering this through Web access.

4. Grants
NWACC will be using some of its resources to establish appropriate grant programs that will address Northwest needs.

NWHEAT

2.1. How did it get started? What was the environment?

NWHEAT came into being in 1991 when a newly appointed Director of Academic Computing at Willamette University wrote letters to 90+ "small"
institutions of higher learning in Oregon and Washington and invited them to a meeting to discuss the creation of a peer group for academic computing. 30+ institutions attended the meeting in November. It was a very timely meeting since several institutions in the Pacific Northwest had just appointed a person to head academic computing. There was an instant bonding among the attendees and thus the group was formed.

The group’s ambition was very simple. It was to serve as a support group. Many of the newly appointed heads of academic computing arrived to the Northwest from larger institutions where the mission and culture were quite different from those of smaller and/or liberal arts institutions. With limited staff size, many had to wear multiple hats, sometimes having to make decisions or implement services that were not in their primary area of expertise. NWHEAT was an excellent place to exchange information and ideas and also to enjoy the sense of community among professional peers.

Currently 18 institutions participate in NWHEAT activities.

2.2. What projects did it tackle?

Some of the projects to date include the following:

- Spring and Fall mini-conferences, hosted by different member institutions in Oregon and Washington.
- Summer camp: a hands on training for front-line staff. Hosted in 1996 by Pacific University with sponsorship from Apple with 85+ attendees.
- 1997 summer seminar on Help Desk to discuss the possibility of creating a virtual help desk among the member institutions.
- Listserv for general membership, board, and special interest groups at listproc@NWHEAT.org.
- Web page (www.NWHEAT.org) for dissemination and sharing of information.
- Participation in Web Doc project to share documentation among member institutions.

2.3. How did it organize?

NWHEAT began as an informal group where any member institution could initiate a discussion or schedule a function depending on its need or interest. Other member institutions chose to participate or not participate depending on their own interest or needs. However, because of similarities in mission, culture, and needs of the member institutions, most activities have been of interest to everyone thus far.
NWHEAT charges no dues. Institutions that host events cover costs to the extent they feel comfortable (for example, some serve lunch, others do not), with each participating institution assuming its own travel cost.

2.4. Did it change over time?

Initially, decisions for activities were made right on the listserv or through personal phone calls. However, as the number of subscribers to the listserv grew, this method became impractical.

A year ago, the NWHEAT Board of Directors was created, composed of a representative from each member institution. A separate listserv was created for the board, and the board meets twice a year to schedule activities for the year. The board member from whichever institution that volunteered to host the next semi-annual meeting becomes the de facto head of NWHEAT for that duration.

As the technology infrastructure at member institutions matured and got established, proposed activities, too, became more mature--requiring participation by outside experts to conduct training or expenditures beyond what a no-dues organization can support. NWHEAT is carefully separating projects and activities it can continue to support and those that would be more appropriate for a formal organization, such as NWACC. The group has learned to leverage similar needs of member institutions to collectively approach funding agencies and commercial interests.

2.5. What didn't change?

The informal and peer group nature of the organization has not changed. The group focuses on activities and is able to plan and deliver activities very quickly. The same attitude has now come to include submitting joint proposals for collaborative projects among member institutions.

2.6. What is next?

Our proposed projects under consideration include the following:

- Workshops on such topics as data warehousing, routing, security, curriculum development, and network statistics.
- Expansion of Web Doc project to include more institutions.
- Creation of Virtual Help Desk.
- Submission of a proposal for collaborative project for faculty development among member institutions.
- Cooperative/collaborative disaster recovery plan.
• Job description/salary survey among member institutions.

NWHEAT will continue to act on behalf of member institutions to present a strong, unified presence and interest to outside groups.

Comparisons

3.1 How did they get started? What was the environment?

Both organizations arose to tackle well-defined, present needs on the part of their members. NWACC filled an immediately perceived need for supercomputing and high-speed networking. While the major NorthWest universities were NWACC’s founding members, NWACC grew to serve a diverse body of colleges, universities, government agencies and businesses. NWHEAT filled an immediate need for information sharing on the part of academic computing directors at small colleges and universities, and the membership has remained fairly homogeneous.

Though filling an immediate need was a common point, the difference in the needs laid the groundwork for different organizational structures. The magnitude of the task for NWACC was such that a formal organization and formal decision-making structure were in order. NWHEAT’s task called for an informal information-sharing forum.

Each organization has been attuned to its environment and origins. Keeping in mind the initial impetus for an organization, the well-defined needs that exist, and the scope and size of the projects will allow a beginning organization to choose the best form of organization and governance. Large scale projects may fail under informal organizational structure, whereas small scale, spontaneous activity may not be possible under an overly formal organization.

3.2 What projects did they tackle?

Though addressing many common needs, each organization tackles projects of differing nature and scale. Both organizations have filled needs in the realm of user education. NWACC has sponsored conferences, training sessions, workshops, and published an Internet guide at a time when comprehensive documentation was needed yet in sparse supply. NWHEAT has sponsored mini-conferences, workshops, and shared documentation. NWACC has provided network connections and services, which NWHEAT has used through its listservs and web to foster communications. NWACC has participated in informing national organizations and Congress about Northwest network needs, and NWHEAT has actively shared information among member institutions.
Just as any organization must have a clear sense of its mission, what it will and won’t do, so each consortium must be clear in what it will tackle. Consortia
that begin by clearly demarking their areas of interest, and continue to examine their focus to meet the needs of their members have a good chance of survival. The focus may be on specific goals or it may be on forming a community of interest that allow members to work better together. Concrete projects provide that focus.

3.3 How did they organize?

The organizational structure of the consortiums presents the clearest contrasts. NWACC’s organizational structure began formally in order to address large-scale projects. NWACC maintains formal Bylaws and Articles of Incorporation that govern its actions and decisions. This formal structure utilizes a Board of Directors, and an elected Executive Committee and Executive Director. Monies have also allowed the organization to work with nationally recognized full-time staff. Membership requires connectivity, entrance fees, and annual dues.

NWHEAT began with an informal, consensus-driven approach. Increasing organizational size and an increased cope of projects have resulted in a mission statement, focused list of activities, and a loosely-organized Board of Directors. However, the informal, consensus approach still operates.

Governance involves power relations. Formal organizations allow these power relations to be made explicit up front, so that its members can better understand how to work with the consortium to meet their individual needs or to suggest changes to the governance structure. This arrangement is vital in large projects or where large monies are involved. Informal organizations can allow more rapid movement on small, experimental or pilot projects.

3.4 How have they changed?

Both organizations have changed or are contemplating changes in their mission, organizational structure, and activities to respond to changing environments. NWACC spun off NorthWestNet and has begun to focus more on projects of common concern related to user education, while maintaining interest in regional connectivity. Some changes in the organizational structure have been contemplated, to reduce the size of the Board of Directors and to explore the role of the Membership.

NWHEAT has increased its degree of organization and formality to address more specific needs on the part of its members. Increasing membership has
required more planning of the get-togethers, which now entail opening sessions, break-out sessions and joint activities.

The two organizations are converging or overlapping on three fronts. First, their missions are converging as each organization focuses more on cooperative efforts on the part of its members and on user-education resources. Second, the organizations are converging in governance. NWACC is considering trimming its board, while NWHEAT has created one. Third, the organizations have begun talking about joint projects and recognizing the ties between them based on a large number of members common to both consortiums.

3.5 What is next?

NWACC has embarked on a new phase of national involvement in the Internet, and is working on a variety of user-education activities such as sponsoring the regional conference with CAUSE, pursuing aggregate pricing, and looking into grant opportunities. These efforts address a range of common needs on the part of colleges and universities in the Northwest. In addition, NWACC continues to recognize its role in contributing to the economic and social development of the region.

NWHEAT continues to maintain an interest in workshops and mini-conferences, but is now pursuing more collaborative projects, such as web documentation and a virtual help desk. Most importantly, it has provided a forum for small colleges to meet and spin off other papers, grant proposals, and projects in a collaborative manner.

NWACC and NWHEAT now recognize the importance of working together as their interests have converged. NWACC recognizes NWHEAT as representing a large segment of their membership, as well as the needs of other small colleges and universities in the region. NWHEAT recognizes the vital role NWACC has played in developing and continuing to develop the resources and services that all colleges and universities in the region can draw on. This paper represents the first joint project the two organizations have worked on, and we hope it lays out a number of the issues that must be considered in future cooperation. Future plans include cooperation on workshops and conferences.

4. Summary and Checklist

NWACC and NWHEAT are entwined and working together. From the NWACC view, NWHEAT may be just one of a number of informal organizations that it would like to foster if they aid its members in their goal of collaboration and development. From the NWHEAT view, NWACC offers resources to help them accomplish even more for their homogenous membership
and also to compliment the NWACC goals. It is a good start at a partnership and collaboration!

**Checklist for forming or joining a consortium**

I. Why form or join a consortium? What's in it for the college or you?

- Is an existing consortium already in place that could do this work?
- What needs does the consortium address, i.e. what benefits will individual institutions or members receive?
- Why is a consortium required? What project, service, or resource issue requires this scale?
- Who will be involved? Will individuals or schools be members? Will deans or computing staff be the key decision-makers?

II. What projects will the organization tackle?

- Improved vendor relationships?
  - volume discounts?
  - user group issues?
  - training, documentation?
- Sharing information?
  - conferences, mini-conferences, workshops?
  - mailing list or newsgroup?
  - informal brainstorming on common problems or interests?
- Sharing resources?
  - virtual help desk?
  - network services?
  - staff?
  - training, documentation?
- Special projects?
  - collaboratory?
  - instructional improvement?
  - lobbying?

III. What are different models of organization for a consortium?
Which models work best to meet the needs of the members?

- When is formality in order, and when is it not? How is consortium organized? Bylaws, Articles, Committees, Officers,...
- How do decisions get made? Who makes them? At what times? How do you ensure equal support and equal say on the part of member institutions? Or should you?
• What is the mission and/or plan of the organization? How are these developed?
• How is membership determined?

IV. What role will money play?

• How much $ does organization have?
• What are the dues?
• Where does the money go?