WEAVING THE FABRIC

of professional development in the 21st century through technology

"If you think about a network as a woven cloth that contains strands of many types of thread, yarn and string, you can start to see what I mean by texture."

— *Anklam, 2007, p. 72*

By Patricia Chesbro and Nancy Boxler

N etworked learning supported by 21-century technology is reweaving the fabric of how educators acquire and create new knowledge. At the Alaska Educational Innovations Network (AEIN), we believe this has the potential to change how a profession looks at professional development. No longer will exchange of ideas be limited by time, distance, and local community. We have learned that using technology to support networks around a shared purpose enhances professional development and provides fertile ground for professional learning communities. Carefully selected technological tools, in conjunction with skilled human facilitation, allow for diverse voices to emerge in a climate of trust and respect. Educators have access to the expertise that lies within a larger group. More importantly, the group's combined wisdom creates new knowledge that both strengthens the individual and enriches the learning community. Networks allow complex, diverse, and effective systems of professional learning to emerge.

The goal of our U.S. Department of Education Teacher Quality Enhancement Partnership grant was to create a network of professional development and distributed leadership with educators across the geographically dispersed distances of Alaska, many not reachable by road. As Alaska makes up almost 20% of the total landmass of the United States, we knew that it would be necessary to connect people through technology. However, we did not know the advantages that technology would offer to ongoing, job-embedded, rich professional learning. Our contexts have forced us to look differently at networked learning and our charge to promote the ongoing conversation, reflection, and inquiry that lead to examination and change of practice.
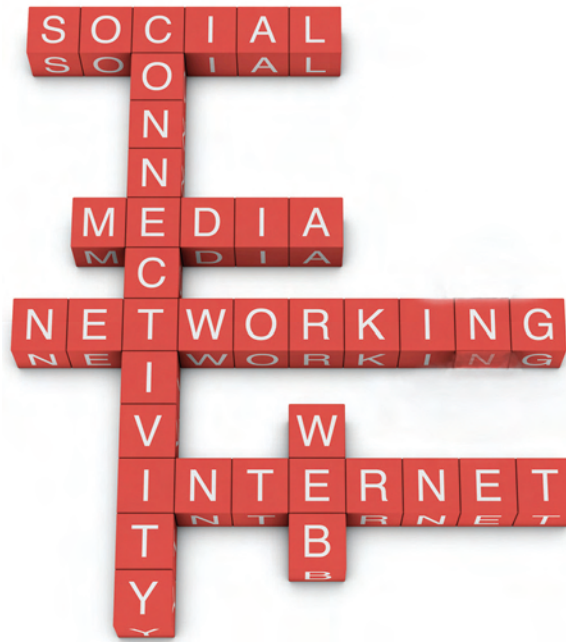
A COMBINATION OF TOOLS

Where exactly does technology fit? Throughout the partnership, we have used many technology tools. We send newsletters and updates electronically and post them on the AEIN web site (www.uaa.alaska. edu/aein/). School improvement plans, grounded in logic models, are housed on Google sites, a strategy that allows for internal sharing and revision at schools and provides external support from invited critical friends. The University of Alaska Anchorage Colleges of Education and of Arts and Sciences now offer quality coursework by distance, a shift supported through AEIN. Technology has definitely helped to span the great distances between partners.

However, one of our most productive uses of technology is to form, support, and sustain communities of practice (Wenger, 2006), otherwise known as mininetworks. These informal, participant-guided groups are organized around themes such as leadership or content such as science literacy and language acquisition. All educators in our nine-district service area are welcome to

engage. Participation is voluntary, ebbing and flowing with network members' schedules. Generally, interest and attendance build over time.

For example, the language acquisition mininetwork sprang from the relationship between two schools with Alaska Native language immersion programs. Last year, the group grew to 10 educators from six schools, including a kindergarten teacher who believes he teaches

A mininetwork has interactions that can look like this.

	Acquisition network As you consider our shared experiences this year, what has interrupted your thinking? What triggered a change in your thinking? What is a … Started by Nancy Boxler	1	May 21 Reply by Debra Ashler
	Book chapter I wanted to let you know that we have preliminary approval to do a chapter for a book on language issues. I have attached the proposal we … Started by Jim Powell	6	May 11 Reply by Georgianna Starr
	Examining our practice together Please respond to the following after reading the foreword of Ethnographic Eyes. The author talks about the importance of the lens we se … Started by Nancy Boxler	7	Apr 20 Reply by Flora Avuluis
	Cross-cultural observations Hi! As we continue to delve into our inquiry around place-based education and how it relates to language acquisition, I would like to pro … Started by Nancy Boxler	4	Apr 8 Reply by Jamie Stacks
	Show and tell Hi, folks! I hope you are all having a great Friday. At our last forum, Chuck Zimmer shared a project with a blog he is doing with his kin … Started by Nancy Boxler	1	Feb 18 Reply by Charles Zimmer
	Bilingual Multi-Cultural Education/ Equity Conference — January 28-30 Are you interested in joining our mininetwork at the BMEEC Conference January 28-30? This event is an approved AEIN mininetwork activit … Started by Nancy Boxler	10	Jan 28 Reply by Nancy Boxler

Re-created from a screen capture provided by the authors.

language to all students and a middle school Spanish teacher who was looking for a community. This year, more than 20 educators attend. Participants include pre-K-12 teachers, teacher candidates, university faculty from the Colleges of Education and Arts and Sciences, and even an Alaska Native filmmaker who has been documenting language preservation. Interest is often generated by excitement of members who invite others to attend.

Occasionally, groups meet in person. More often, groups meet virtually every two to three weeks through

a conferencing program called Elluminate Live! Between synchronous sessions, members use a social networking site called Ning.com to share their thoughts and reflections and keep the learning going. All three modes have value for weaving the network.

Technology tools provide an effective environment for ongoing, job-embedded professional learning. Educators do not have to carve out significant amounts of time to stay connected with and energized by collegial conversations. Further, we have learned that technology can be a great equalizer. First impressions emerge from the voices and thoughtful comments of participants rather than visual clues. Youthful educators can engage with classroom veterans as peers, for example.

We have learned it takes two people to effectively facilitate each Elluminate session. One facilitator takes care of the inevitable logistical challenges encountered with variable technological access issues in Alaska and accommodates the orientation needs of new members. While one facilitator is engaged with supporting technological issues, the other facilitator is encouraging input from all those who logged on. Participants can offer comments by audio and through text messaging boxes. Conversations often begin with facilitators encouraging educators to tell their stories or highlight something that works. An advantage of Elluminate is that only one person can speak at a time, providing ample opportunity for speakers to complete their thoughts without interruption.

The text box provides another avenue for input. The skilled facilitator threads these perspectives into the dialogue. Text boxes also provide a format for taking notes during the session. In addition, sessions can be recorded so that those who could not attend can keep up with the conversations from their offices or homes at more convenient times. The recordings and saved text messages also provide a way for facilitators and project evaluators to analyze the session's effectiveness, plan for improvements in follow-up sessions, and identify emerging themes.

We have also learned that periodic in-person meetings enhance the quality of our dialogue. In Alaska, however, those opportunities are limited by distance and cost.

We piggyback on scheduled events such as state conferences as opportunities to get mininetworks together to share a meal, consider next steps, and get to know each other. One mininetwork member noted that she feels energized by the in-person meetings.

There are certainly specific uses for connecting in person. For example, some individuals have been motivated to visit each other's classrooms or schools as learn-

ers and critical friends as well as collaborate on projects spanning multiple districts.

Ning.com, a free, easy-to-use web service, provides space for further reflection for each mininetwork as well as a forum for other interested participants to join. The graphic on p. 50 illustrates an example of the interactions of one mininetwork. This asynchronous tool is especially helpful for deepening the dialogue or extending the learning. The synchronous meetings are limited by time, but the Ning offers ongoing access. Those who are reluctant to speak at the virtual meetings can add their comments without the pressure of spontaneity. Further, because of the extended time for thought, educators can consider how the learning applies to their contexts and relay these thoughts back to the group. Often the questions raised at the virtual meetings are explored in the Ning. For example, the leadership mininetwork uploaded school improvement plans and logic models on the Ning and posed questions for colleagues.

Lively discussions followed on both the Ning and the next Elluminate session. Through this strategy, learning becomes more transparent. Unlike synchronous meetings that are closed by the boundaries of time and space, the social network is open and inviting to all.

We have learned that the three modes of communication work together to help educators create networks of professional support. Together, they provide a space for thoughtful, nonthreatening examination of practice. There is a sense of trust and a realization that educators have shared goals and shared challenges. The networked learning environment provides space to seek answers to our inquiries.

DEVELOPING FACILITATORS

Initially, all mininetwork facilitators came from the College of Education. Three of us worked full time with the grant, others instructed teacher candidates. We formed our own community of practice to think together about the knowledge, skills, and dispositions we needed to create the conditions for successful mininetworks. We read a book together and considered how it fit our work. We discussed our successes and challenges, sometimes offering examples of strategies that had or had not worked. We discussed ways to evaluate the effectiveness of these mininetworks.

However, this year, former participants from the mininetworks from outside the college have taken leadership roles. We still meet for support, yet facilitation is emerging from our pre-K-12 colleagues. Many are determined that these communities will endure beyond grant funding. Three facilitators no longer work at
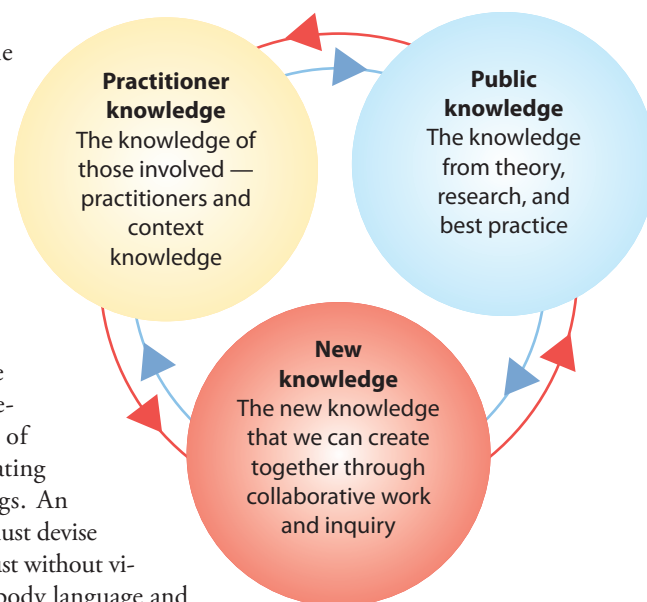
schools within the network, but feel strongly that communities of practice provide space for powerful professional learning.

We have learned that facilitation of online communities requires expansion of the skills of facilitating in-person meetings. An online facilitator must devise ways to develop trust without visual clues such as body language and eye contact. Where a smile or nod might be encouragement in an in-person meeting, online facilitators must use structures that create a positive environment and speak in ways that encourage engagement. Calling for input from individuals and soliciting specific comments is necessary.

However, balance is essential. Each facilitator must take care to not talk too much. Adequate wait time is more difficult to gauge in virtual environments, especially those that include culturally diverse participants, and specific strategies are necessary to promote a collective dialogue. People will not sign on or engage in virtual meetings if there is nothing in it for them or if they do not feel they belong. It is a facilitator's responsibility to create the conditions for the learning environment in which people believe that their voices are heard and their wisdom valued.

Part of a facilitator's role is to guide the group into finding its purpose. The mininetworks did not truly prosper until participants took control of the agenda and negotiated priority topics across the membership. In the leadership mininetwork, participants decided they wanted to learn how to construct effective surveys to gather information for their projects. The math mininetworkers attempted an action research project around teaching fractions. The language acquisition network is grappling with deepening its practice in place-based education.

These themes emerged after several meetings. Facilitators are charged with being patient and listening carefully as themes emerge. This means facilitators must give up control and trust the process as purpose is refined collectively. Throughout, the questions change and new knowledge emerges. This becomes a challeng-

Practitioner knowledge
The knowledge of those involved — practitioners and context knowledge

Public knowledge
The knowledge from theory, research, and best practice

New knowledge
The new knowledge that we can create together through collaborative work and inquiry

Each facilitator must weave a coherent whole across three fields of knowledge — practitioner, public, and new knowledge.

Jackson & Temperley, 2007, p. 48.

ing yet powerful role, as facilitators must remain learners and colleagues and guard against seeing themselves as teachers or experts.

TAP THE GROUP'S WISDOM

"If you were to examine a fabric, you might notice how tight or loose the weave is, or how fragile. How many types of thread are used? How thick are they?" (Anklam, 2007, p. 72).Our mininetworks are ultimately focused on tapping the warp and woof of wisdom from within the group, connecting learning to research and theory, and learning on behalf of one another. An exciting byproduct is creating a collective space to challenge our thinking and examine our professional practice. We find the work of Jackson and Temperley (2007) as illustrated in the graphic on p. 51 helpful in conceptualizing how each facilitator must weave a coherent whole across three fields of knowledge – practitioner, public, and new knowledge.

This interdependency is the key to developing collegial support. Often, educators' natural tendency is to give advice or fix problems for others. Our mininetworks are made up of educators from both university and school settings. Rather than getting captured in a silo mentality, the network format and structure honors all knowledge. The university professor certainly holds some key knowledge, but so do practitioners. Colleagues support each other's learning to complement their own.

Key to this knowledge-sharing is using probing questions. Rather than critiquing, we are learning to help colleagues discern their own questions and honor their own wisdom. We have adopted a strategy that encourages us to ask open questions to assist in this process. Questions are not framed as advice or suggestions, they do not overidentify with the questioner's perspective, and they do not pass the buck to someone else to solve. The pace

Participants in the school leaders' forum reflect on their use of probing questions.

Show   All

adkins_elizabeth: I feel that I worry too much about what the person will take personally.

Clare Robyt Tuluksak: Having others ask questions helps clarify our own thinking. But T.A. and I found it difficult to come up with good questions.

Moderator (Pat Chesbro AEIN): Nancy, I'm giving this back to you. Will you do the ending/logic model moment stuff?

Talia Akiachak: I find myself second-guessing my questions quite often — especially after this! But I put myself in Howard's shoes and I would want to hear what others have to say, so I ask them anyway.

rick rolhman: I really like the idea of developing a nonthreatening questioning style. Even though most do not question with malice, it seems much more efficient to elicit answers and not prompt defenses.

Mikolas SITKA: I posted my comments to Howard's Logic Model, but now I see that they were not necessarily of "probing thinking" type.

Moderator (Nancy Boxler): I have to hold myself back from offering suggestions too soon before I know the whole story.

adkins_elizabeth: I felt like I had to force a question which makes it less authentic.

Joe - Batchley _ Sitka: I don't think we have to know all the details to offer good probing questions.

Re-created from a screen capture provided by the authors.

is respectful, honest, and culturally responsive (Palmer, 1998). One member noticed that this practice also reflects a way of communicating wisdom in her Cup'ik culture. This protocol creates conditions in which judgments are suspended. However, suspending judgment is difficult and requires the collegial group's support. The ongoing nature of our synchronous and asynchronous technology-enhanced formats allows us to practice our probing skills as we examine our assumptions and alter our practice. Participants of the school leaders' forum reflect on their use of probing questions in the graphic at left.

"Weavers also often act as the pulse takers in networks during their growth, but must cede this role to a member when the network is on its own" (Anklam, 2007, p. 72). Facilitators mine the group to find the expertise needed to pursue the themes. Members end up playing myriad roles as all learn together. Facilitators must resist the temptation to become the teacher and remain a learner in the most humble and equitable sense. Through this practice, new co-facilitators emerge and the network becomes sustainable, no longer relying on one person to lead.
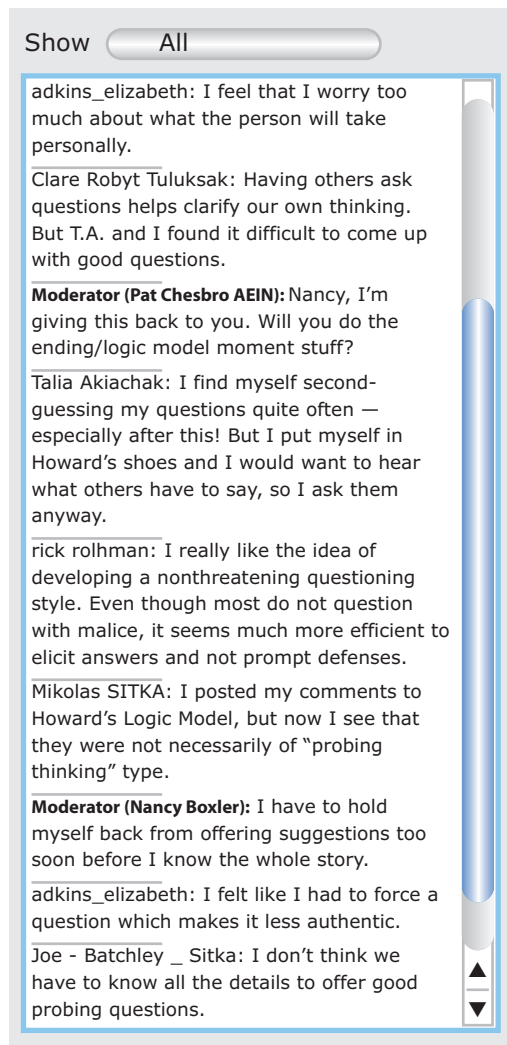
BEYOND BOUNDARIES AND ROLES

The knowledge from these networked communities touch many, including grant faculty. We at the university learned that assuming the role of teacher, trainer, or presenter did not facilitate development of an egalitarian network. We changed our practice, flattened the tacit hierarchy of expertise between university and school, and worked to develop collegial leadership. We moved from directors to directed, from facilitators to learners, from participants to evaluators. More importantly, school leaders emerged.

Many teachers explained that this was the first time they had thought of themselves as leaders. One participant noted, "Because I am not normally one to take center stage at a staff meeting, the idea of conducting teacher inservice days … was enough for me to want to quit. But, because I truly believe in our logic model, I didn't." Leadership perspectives changed. Another participant said, "In the course of the year, I came to see myself more as a teacher leader. … I no longer see a teacher leader as a 'boss' with the plan and answers … but as an encouraging, inquisitive, team member who wants to work with others to make the school the best place for people to learn and grow."

Participants gained new perspectives on data. "Our staff learned to develop fluid and ongoing measurements to assess our progress and provide direction for future investigation and development. The … experience has

helped us to learn how to work as a … professional learning community," said one participant. Other skills developed as well. "The process of probing questions guided me to be more evaluative, less judgmental, and work as a team … to create open, honest dialogue about what goes on in our school," noted a learner.

Our technology-enhanced formats are inexpensive and allow for spontaneous interaction as well as extended communication. Yet the formats are of limited valued without the ongoing support of skilled facilitators. We are creating a "fabric that is built to last, can withstand losses, and adjusts its governing mechanisms to maintain equilibrium among the sum of its ties" (Anklam, 2007, p. 72).

Alaska is blessed with great diversity among educators. Some are native to Alaska and others come from all corners of the lower 48. We practice in cities, towns, and villages from the Pribilof Islands to Anchorage. We teach in small K-12 schools, urban middle schools, and university campuses.

However, we have become convinced that the goal of ongoing, job-embedded professional learning among educators in any context requires similar formats, structures, and strategies. Creating the conditions for meaningful interaction requires flexibility and intentional facilitation.

The three modes of interaction we use in our network allow for personal connection as well as deep professional conversations with colleagues around Alaska.

These tools expand the reach of our voices beyond that capacity of more traditional modes of professional learning. Technology not only brings the Alaska Educational Innovations Network together, it levels the traditional hierarchy and is key to building our learning communities, sharing wisdom, and nourishing learning.

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