
ANN Board Strategic Planning Meeting

Oct 15-16, 2004

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This report summarizes the discussions at a meeting held in October, 2004 between the board members of the Adult Numeracy Network and representatives from the Office of Vocational and Adult Education in the US Department of Education held in 2004. The ANN Board thanks OVAE for funding the meeting and for continuing the dialogue begun there. Readers can find more information about ANN at its website, www.literacynet.org/ann

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Part I: Meeting with Representatives of OVAE

On Friday morning, Oct 15, eighteen board members of the Adult Numeracy Network (ANN) met with Cheryl Keenan, Director of the Division of Adult Education and Literacy (DAEL) in the Office of Vocational and Adult Education (OVAE), Ronna Spacone, Education Specialist at DAEL, and Steve Wilson, mathematician at Johns Hopkins University. The meeting was supported by OVAE to begin discussions on how OVAE could organize an adult mathematics initiative similar to ED's K-12 initiative in math and science. The Secretary of Education's Mathematics and Science Initiative was launched in February 2003 to look at three areas in K-12 mathematics: public awareness, teacher quality, and research. (For more information, see the website at <http://www.ed.gov/rschstat/research/progs/mathscience/index.html>)

Mary Jane Schmitt presented a summary of what ANN has accomplished in its ten years of existence and what its future might include. Her comments were focused around the recommendations made at the organizational meeting of the network in 1994, acknowledging steps already taken and highlighting goals that remain. She mentioned the over-riding goal of influencing practice in adult mathematics instruction through these strategies: influencing standards development within states, developing quality curricula, improving and increasing professional development opportunities, aligning assessment frameworks, and supporting meaningful research that gives insight into learning and studies the impact of instructional strategies.

Cheryl Keenan explained that this is an opportune time for cooperation between ANN and OVAE.

Dr. Susan Sclafani, Assistant Secretary for OVAE, also spearheads the Math and Science Initiative for the Secretary of Education. In those two roles, she focuses on both mathematics and adult education. Specifically, as the 2004 National Programs Spending Plan is developed, OVAE is looking for opportunities to strengthen math instruction for adults. Ms Keenan, acknowledging what ANN has accomplished in the field of adult numeracy, came to the meeting seeking advice as to how the goals of an adult mathematics initiative might articulate with the K-12 Mathematics and Science initiative. The group agreed that the three components identified in the initiative (engaging the public, developing a research base, and training and retaining teachers) are indeed pertinent and coincide well with the goals of ANN. Despite this agreement, there was some concern over how adult education could benefit by the K-12 work without losing its unique features and priorities.

Engaging the Public

The K-12 initiative includes a focus on engaging the public and there was strong agreement that the field of adult numeracy needs to work seriously on marketing itself, not only to the public, but also within the field of adult education itself. A short, clear definition of numeracy is essential in any campaign to increase public awareness. For the field of adult education, which to date has focused on language and literacy, the importance of numeracy in terms of the adults' goals and purposes should be emphasized. In addition, a catchy "one liner" could create strong interest with the public at large.

Research

The major concern was building a body of research to inform practice. While research has been done on children learning mathematics and other research exists on adults learning to read, there is very little, if any, research on adult numeracy. The need is for research that builds toward impact, e.g., with respect to emerging good practices, to look at what *might* work in anticipation of finding what works.

It was agreed that an action step was needed here; a research agenda concerning adults learning mathematics must be created. It should address topics of cognition (everyday as well as academic), adult development, and the connection between adult literacy and numeracy. It was suggested that the research agenda build on K-12 research efforts as well as international research efforts. OVAE will need to engage partners to develop a research agenda, including leading universities, the existing body of researchers in K-12 and adult education, and ED’s research arm, the Institute for Educational Sciences.

Other considerations with respect to research supported by OVAE arose. Which level of student should be targeted? There was wide agreement that the majority of adult education students are at the pre-GED level (NRS levels 2-4) and that this level would be the place to focus on building a good foundation. Should a particular mathematics content area be emphasized? Because the content strands (number and operation sense, geometry and measurement, algebra, and data analysis) are so interconnected and difficult to define separately, the opinion was that fundamental mathematics instruction should include elements of each. However, it was noted that the United Kingdom built their reform agenda around the strand of measurement, and that the issue of “what is

important” should be carefully considered before proceeding forward.

Teacher Quality

The third area of attention in the K-12 math and science summit was teacher quality. This is especially critical for ANN since it is estimated that 95% of the teachers who teach mathematics in adult education are not certified or prepared to do so. This fact underscores the need for a content-deepening focus in staff development so that teachers develop greater understanding of fundamental mathematics rather than mere “how-to” activities.

Since adult education relies on in-service programs of professional development, Cheryl Keenan suggested that ANN representatives who are currently offering training services connect with state adult education offices. State offices often fund professional development activities for teachers through their professional development systems. This may provide an opportunity for ANN to offer more comprehensive professional development opportunities with follow-up, such as intensive math institutes, rather than using the current one-shot workshop format.

It is clear that building capacity within the states to carry ANN’s mission forward is necessary for the long term. Establishing a cohort of ANN professional development experts that works with state members to develop a sustainable effort across each state could do this. Both ANN and the representatives of OVAE viewed developing an organizing structure around this idea as a priority.

Another format, action or practitioner research, which has proven to be an effective staff

ANN will focus on three components: engaging the public, developing a research base, and training teachers

development tool, was also discussed as a method to improve mathematics instruction in adult education. With demonstration grants, ANN could encourage teachers to examine promising practices, build from their findings, and share their results at forums like the ANN Annual Meeting, thus giving them broad dissemination to interested teachers from around the country.

First steps

To initiate the development of the K-12 mathematics initiative and a research agenda, the Rand Report and other commissioned papers reviewed the state of the field and areas of research to frame the issues. Would a similar approach be

advisable and effective in this case? In the adult numeracy field, papers would need to look at the state of the field of numeracy, both nationally and internationally, and describe issues around mathematics instruction that are specific to adult education. They would need to consider the audience and describe the context for the diverse group that would gather at an adult mathematics summit. Such papers could be generated from a number of sources of expertise and experience, such as Kathy Safford's review of dissertations, work done for developmental mathematics, and Mary Jane Schmitt and Dave Tout's paper for the National Center for the Study of Adult Learning and Literacy (NCSALL) Review.

Part II: Strategic Planning

During the afternoon of Oct. 15 and all day on Oct. 16, the ANN board members considered options that would position the organization to be able to respond to the plans that had been presented by OVAE and set priorities for action in the next five years. Proposals from individual members were presented to the group and were discussed with respect to the goals. Finally, subgroups were formed to create action plans around three goals:

- strengthen the organization,
- influence the practice of numeracy instruction, and
- create a research agenda.

Strengthen the Organization of ANN

Several key areas addressed in the action plan are important to revitalizing the structure of ANN. To establish more efficient electronic internal communication for board members, a board account was opened on NiceNet and is functioning well. To improve external communication, the public website for ANN will be redesigned to our specifications by Literacy Works and the Numeracy

listserv will continue to serve a world-wide audience. To disseminate news of the activities of ANN and to share instructional strategies, the newsletter, *The Math Practitioner*, will be fed by a more dependable pipeline and will be distributed electronically to members.

Membership benefits will be examined in an attempt to increase and retain membership over the years. The regional representatives will work to identify representatives for each of the states that they represent to establish active two-way communication channels. To increase public awareness of adult numeracy, a concise definition and a catchy one-liner will be created to be used in presentations.

Improve Practice: (Professional Development)

The mission of ANN, to improve mathematics instruction to adults, was addressed by a series of action items. To provide a guideline for all professional development activities that ANN sponsors, a set of principles and criteria describing the philosophy of the organization must be

established. Using the guidelines, recommendations can be made for using appropriate materials that already exist. The least demanding action step is to continue to work with web-site groups, such as LINCS, to publicize access routes to appropriate materials that are available on-line. However, more directed action is necessary to see significant improvement in practice. For example, ANN could facilitate study-circles within various states using programs such as the Annenberg Learning Math Series. Funds would be needed to train facilitators and pay them to work with programs and possibly to develop guides to adapt the material to adult education.

A second plan is to create original professional development workshops that are specifically designed around the ANN Framework strands that could be the substance of ANN-sanctioned “Train the Trainer” sessions. Funds would be needed for the workshop developers and for the initial sessions where trainers from participating states would gather. Subsequently, those trainers would present the workshops to groups in their states or regions and continue to follow up with the groups of trained teachers. Ongoing discussions, face-to-face and electronic, about the successes and difficulties teachers encountered when implementing the recommended changes in their classrooms would continue for at least a year.

Create a Research Agenda

As discussed during the first day’s meeting with OVAE, the steps in this facet of the overall strategic plan have critical importance for the future. A standing committee of board members was organized to continue the focus on research in the years ahead. The first step is to create a bibliography by compiling and collecting existing adult education mathematics research to describe the present state of adult numeracy. The bibliography will be posted on the ANN website and sent to board members. The next step is to work with ED to develop a national research

agenda for numeracy that is informed by the findings of ANN.

ANN will support another form of research, action research, done by practitioners in their classrooms. An article describing action research will be published in the newsletter to attract interest. A mechanism will be established in which teachers submit proposals for action research, the proposals are judged, and the selected research projects are funded and mentored by an expert from ANN. On a broader scale, ANN hopes to establish a practitioner/research partnership with researchers in K-12 mathematics or adult education mathematics.

Specific areas for research were identified as promising. Data on student learning with respect to the Equipped for the Future (EFF) Performance Continuum for the ‘Use Math to Solve Problems and Communicate’ standard could be collected and analyzed with a goal of improving adult mathematics instruction. Research on the connection between reading and numeracy could be done in collaboration with organizations like the National Association for Developmental Education (NADE) or with programs like EFF which recommend integrating instruction in basic subject matter domains.

Summary

During the productive two-day meeting, strides were made in planning strategies for cooperation between OVAE and ANN that will serve the goals of both organizations in terms of public awareness, teacher quality, and research. The meeting is seen as just the beginning of a period where numeracy gains a higher profile in adult education programs, research findings offer guidance with respect to needs and best practices, and teachers get the assistance that they need to offer meaningful instruction in the classroom. To that end, a standing committee from ANN will be established to continue the discussion with OVAE on how adult numeracy instruction can be improved.