Last January, in the midst of one of New England’s stormiest winters, a dozen of us banded together on a journey to an unknown destination with NCIPnet as our vehicle. Patricia Corley knew NCIP and special education well; I knew action research and educational reform and change well. We were well provisioned with the FirstClass system and a strong inclination to share and a quest to learn more about promoting effective keyboarding among our students.

Our first task was to organize the project online: how could we collaborate on studying keyboarding so that 12 persons, each with a different question, could share their work and deepen their understanding in an electronic medium? I am sure many of you recall the bumpy starts and stops for the facilitators as we tried to figure out how to maneuver this complex job online. We tried to make clear instructions about what is by its very nature ambiguous. We tried to reassure when people were understandably anxious about embracing this new method of inquiry. We tried to provision for nurturing the person as well as the professional educator in each of us.

Eventually we organized individual desktop folders with the action research components, an action research break section for personal sharing, and the general, all-meeting discussion on the core issues for our work. Making these distinctions proved helpful, although it meant there were a lot of places for each of us to check into. We managed. Each of us identified a question, each of us set about studying it, and each of us engaged in collaborative sharing about our studies, practices, and understandings about keyboarding as a skill. We were also caring of each other as people—as I put my garden to bed this weekend, I thought of the many sharings in the break section on planting gardens in the springtime!
Informally, through our conversations, we collaboratively redefined keyboarding and who is responsible for teaching students to do it. At the start-up, many of us thought there might be one right time and one right way to assist students in taking on the skill. As we progressed, it became clear that the subject was not so simple. This skill did not get learned all at once; many students came to school at age five with some ways of moving around a keyboard already in place. Keyboarding did not belong to one educational discipline and had no national group responsible for dealing with it from the theory and standards point of view in national meetings and conferences. We learned that keyboarding needs to be grounded in an educational purpose related to some content. We learned that all educators need to do some coaching in the continuum of this as a developing skill. We also learned that there may be times in a student’s education when it makes sense to offer specific skill building in keyboarding. As we reflected on our practices, our current students benefited. All of our future students will benefit as well because of what we tried, studied, and learned together.

Some of us shared our work more broadly than simply among ourselves: Grace and her colleagues in Hamilton-Wenham instituted a district-wide keyboarding program at the third grade level based on the pilot study they conducted last spring. Dolores shared her action research at a regional AERA conference, and Nan, Donna, Bev, and Anne shared their’s at the Madison, Wisconsin, Action Research Network Conference. Elspeth Sladden presented her work at the conference on Closing the Gap.

Most importantly, new questions and next steps are being taken by each of us based on last year’s work. We started bravely to a new destination, and we all stayed the course and took new actions based on our studies. We owe a big thanks to each of us who collaborated and to the NCIP staff, Education Development Center, Inc., and the Department of Education, our funders, for facilitating this way of working. We arrived in better condition than when we left, and the fall this year was warm and lovely!
Grappling with Structured Instruction
Anne Corrigan
Keyboarding Coordinator, Madison Public School-WI

Anne reports that her participation in the online Action Research Forum was a positive experience for her but that she might derive more benefit from conducting this kind of research with colleagues in a face-to-face format. Nevertheless, Anne appreciated the opportunity to converse with colleagues from around the country who came at the keyboarding problem from different angles. For example, she appreciated Alan Littlefield’s perspective on the motor demands of keyboarding, a perspective in which she might not have been exposed if she collaborated solely with classroom-based teachers.

As the specialist in charge of developing keyboarding programs within the Madison, Wisconsin School District, Anne was vitally interested in determining how to approach keyboarding instruction at the elementary level. Anne studied whether it was more beneficial to use a software program that teaches keyboarding (in this case, Ultrakeys) or to teach more directed lessons with a keyboarding book and Alphasmart portable keyboards. Anne’s research led her to conclude that the latter approach is a more beneficial way to initiate keyboarding instruction and that programs such as Ultrakeys can reinforce the skills acquired with more structured instruction. Anne is still grappling with ways to make structured instruction more accessible within her large district.

Anne joined Beverly Mellskog, Donna Landsman, and Nan Youngerman in the presentation at the Madison Action Research Network Conference. She very much enjoyed getting to know these colleagues better and felt that the presentation was well received.

Anne pictured here with her dog Madoo
The Role of School-based Occupational Therapists in Supporting Keyboarding

Alan Littlefield
Maine Occupational Therapist Association

Alan Littlefield spoke with me about his experience with the Action Research Forum early in October. Alan reflected that although, as a community-based clinician, he sometimes felt like a fish out of water, he learned a great deal from fellow action researchers who were grappling with the keyboarding issue in school settings. He decided that he wanted to learn more about how school-based occupational therapists approach keyboarding, and so he developed a survey that he is planning to distribute through an AOL forum for school-based occupational therapists. Alan will share the results of the survey with us when it is completed.

Alan reflected that his experience with the forum has affected his practice in terms of the recommendations he makes about keyboarding in his clinical practice. He believes that he has more rational levels of expectations about how much keyboarding instruction can be reasonably undertaken within the school day and that in consultation with school systems, he is more focused on how they can intertwine this instruction with the curriculum in purposeful ways.

Recently I had the opportunity to reflect back on this project with Nan. She said the project was “pretty good for a first crack at doing this.” She benefited first by re-framing her understanding of keyboarding and its importance. Furthermore, the way of working collaboratively online inspired her. She hopes in future online action research, people will be saying “Hang on to your seats, folks, I am revising my question and plans based on what I am seeing and finding out.” This is the dynamic part of action research and maybe, she suggests, we were a little too self-conscious on this first attempt and therefore became protectively committed to keeping our questions static. Nan would also like NCIP to find a way to actually bring any future group together in one physical place at least once during a future project.

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Alan felt that something personal motivation was lost when NCIPnet moved off of FirstClass and onto the World Wide Web. However, he is eager to get back involved with NCIPnet on the Web and would like to continue keyboarding discussions there in a more open forum.

Keyboarding Shortcuts

Nan Youngerman
Teacher, Crestwood Elementary-WI

“I have really changed my understanding about keyboarding as a result of participating in the NCIP Action Research Forum this year. Keyboarding just wasn’t something that I had focused on previously.” is what Nan Youngerman reported to me in late spring. She and three other members of this keyboarding study group had just presented at the Madison, Wisconsin, Action Research Network Conference. This event was the high point for Nan’s participation in our work together. She communicated regularly with Anne and Donna, both local to her area, and reached out to Bev, in an adjacent state, about the conference. She and Donna also persuaded Bev to join them at NECC, which was another high point for all of them, as they were able to do some real face-to-face sharing and nurturing of each other’s professional study and personal lives.

Nan’s own research focused on keyboarding shortcuts and showing these to students using the computer for writing. She believed that familiarity with these shortcuts could be important for all students, and especially for students with special physical or learning needs. She had noticed that some of the “most skilled” students used control keys when they worked in Logo and with other software programs. However, they did not seem to use shortcuts regularly as part of word processing. Nan was determined to make these shortcuts more available to more students through direct teaching, creating posted “cheat sheets” and increasing awareness among other teachers.

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Nan actively explored leading an online action research event for her school district. She plans to take what she learned from participating in this project and apply it to leading a parallel effort for others; the project gave her the vision and a model.
More Eloquent Writers through Keyboarding
Donna Cutler Landsman
Teacher, Elm Lawn School-WI

“One of the largest tasks facing upper elementary school students is learning to become eloquent writers” is the way Donna Cutler Landsman started her report on her NCIP keyboarding study, “Does Use of the Computer Enhance Students’ Writing?” It was Donna’s hypothesis that the “computer offers many students a vehicle by which they can have success with writing.” Donna used her study to learn how to foster that success. By comparing surveys and writing samples from January to June, Donna concluded “all students improved their writing” in terms of complexity of structure, grammar usage, and their willingness to do creative writing and revise it on computers.

Donna appreciates that the NCIP Action Research Forum is a new idea and knows that it takes practice to get a new way of working smoothed out. She liked the conversation online, citing especially the heated dialogue about gender differences that enabled her to rethink some of her own ideas. She enjoyed speaking with Alan Littlefield (the resident occupational therapist) and got ideas for software and hardware—Smartkeys and the Alphasmart Keyboard stand out. She helped to plan and give the roundtable presentation for the Madison, Wisconsin Action Research Network Conference with four of the action researchers in this keyboarding study. And she became more aware of assistive technology and used her time attending the National Educational Computing Conference (NECC) to learn more about this between real-time meetings with her Madison colleague, Nan Youngerman, and her new colleague from this study, Beverly Mellskog.

Donna has participated in school-based action research groups previously, and she missed the nurture of real people in this online version. She enjoyed the early part of the project when we were dialoguing regularly and looking forward to presenting this way of doing action research online as a conference presentation. Later, when she experienced some technology problems and was unable to get online at all over the last few months, Donna feels that this way of working in a virtual community is more challenging and perhaps not as satisfying as the real-time connection with other colleagues, such as school-based study teams. She would like to use it in conjunction with face-to-face groups, extending the connections and resources.

Making the "How-To" Explicit to Teachers
Elspeth Sladden
Learning Specialist-NY

Elspeth reflected that she was enlivened and thoroughly engaged by her online involvement with the Action Research Forum until personal tragedies coincided with technical glitches that made it impossible for her to get back onto FirstClass. (She speculated that perhaps the technical glitches were destined so that she could turn her attention more fully to these personal matters.) Despite the interruption, Elspeth felt that her involvement with the group had a profound effect on how she viewed her approach to keyboarding instruction and materials. She was glad that Molly encouraged her to focus her research on her keyboarding manual, and she is currently rewriting it to reflect what she has learned about the importance of making things very focused and explicit for teachers. Many teachers, she feels, want to know why they are doing something and exactly how they should do it.

In October, Elspeth presented her work at Closing the Gap in Minneapolis and had an enormous turnout for her presentation. She said that people are thirsting for this information. She is currently considering writing an article for Closing the Gap’s publication and will share this with the group when she is finished. She would appreciate ongoing feedback on her evolving manual from any members in the group who are interested.
District-wide Keyboarding Instruction for Third Grade
Hamilton-Wenham District- MA
GraceMeo,ElementaryComputerCoordinator
PamLarchez,ThirdGradeTeacher
JenniferMichaud,FourthGradeTeacher

When I met last summer with Grace Meo, Pam Larchez and Jennifer Michaud from Hamilton-Wenham, Massachusetts, they shared their exciting progress with me. Grace, as technology coordinator, and Pam, as a third-grade teacher, have shared a long interest in keyboarding and found that the action research forum provided an incentive for them to further reflect on and extend the excellent work they have already been doing on keyboarding in their district. As a new teacher, Jennifer was interested in learning more about the informal and incidental aspects of keyboarding instruction in her fourth-grade classroom.

Keyboarding issues have come to the fore at Hamilton-Wenham. Last year, under Grace’s direction, Pam and the applied technology teacher from the high school team taught an experimental class in keyboarding to third graders over a four-week period. Grace and Pam reflected that the children took this very seriously and felt honored to be working with a “high school teacher” and learning an “adult skill.” During this time, Grace and her colleague experimented with new techniques, including ideas and materials developed by Elspeth Sladden. They also worked hard to integrate this instruction into the curriculum, thereby using meaningful vocabulary and passages about things they were studying in the classroom. The students each created a book of their keyboarding work. Everyone involved felt this experiment was very successful.

In her fourth-grade class this fall, Jennifer will be informally observing the differences in keyboarding skills between the students who were involved in this experimental program and those who were not.

The success of this experiment has spurred Grace and Pam on to bigger and better things this year. They are doing a formal pilot study of a nine-week program of daily keyboarding instruction across the third grade, district-wide. They are including pre- and post test measures of various aspects of keyboarding and writing and so will have some hard data on the outcomes of this instruction. Jennifer hopes to study these children more formally, the following year, as they enter her fourth-grade classroom. We will be eager to hear how this effort goes.

Grace, Pam, and Jennifer all expressed that being involved in the action research project expanded their view of keyboarding. They felt that the conversations were relevant to their interests and helped inform their practice. They all indicated feeling somewhat overwhelmed by the sheer amount of reading required to keep up.

We look forward to hearing about the third-grade pilot study as it progresses and to seeing the eventual book these pioneering practitioners write about the exciting work in their district.

Dolores with her grandson, Colby
Informal Instruction for Fourth Graders
Beverly Mellskog
Computer Coordinator, Galena Public Schools- IL

In October, Patricia had the pleasure of speaking with Beverly Mellskog about her experience with the keyboarding forum. Beverly said that her involvement in action research expanded her perspective of just how complex keyboarding can be. Keyboarding includes all the ways we input information into a computer and the various ways students learn these skills, starting from their first interactions with computers. When Beverly first became involved in the Action Research Forum, she did not know whether or not keyboarding should be taught at the elementary level. Her interactions with her fellow action researchers has convinced her that it is important to teach keyboarding according to a developmental process with age-appropriate activities that build on one another. She is now working with the district technology coordinator to develop a policy for beginning keyboarding instruction in the early grades.

Beverly appreciated learning from the knowledge and insight of other participants. In particular, she became sensitized to the important role that muscle development and posture play in successful keyboarding. She utilized some of the procedures and materials Elspeth Sladden developed and found them helpful.
Conclusions on the Online Process

Judy Zorfass and Patricia Corley
Education Development Center, Inc.

This Action Research Forum was simultaneously taking place on multiple levels. While participants were carrying out their action research on keyboarding, we at NCIP were carrying out action research on action research. Our guiding question was, “What does it take to plan and implement an effective online Action Research Forum?” We designed the forum to have co-facilitators (Molly and Patricia); to include 14 carefully selected participants; to last from January 1996-Fall 1996; to follow a process that involved posing questions, making a plan, sharing data, reflecting on what we learned, documenting what we learned, and making it public.

As action researchers, we too, collected data. Our strategies included: reading and responding to the online postings and hard copy papers, meeting with as many of you as possible, and consulting via the telephone.

Our overall finding is that no matter which side of the computer you sit on (as facilitator or participant), it’s hard work to do action research. It takes clarity of purpose, a workable plan, (lots of) time to implement the plan, and ongoing support from colleagues.

When we do another online Action Research Forum, we would consider the following changes: lengthen the time, have a face-to-face meeting to launch the project, have smaller circles (maybe three participants to a facilitator), set clearer expectations for goals and the process, provide participants with more focused support and technical assistance, and collaboratively decide on what the products should be.

Finally, as Molly has said, “We started bravely to a new destination and we all stayed the course and took new actions based on our studies.” Thank you for helping us learn about building supportive online communities. We hope we can continue working and learning together.

Perhaps the highlight of this project for Bev was getting together with the Madison keyboarding contingent—Anne Corrigan, Donna Landsman, and Nan Youngerman—to do a presentation about this project at an Action Research Network Conference in Madison. She reflected that it was unique to meet your co-presenters face-to-face for the first time when walking into a roomful of people waiting for your presentation. Bev felt that the presentation was well received. She also had lunch with Nan and Donna at the National Educational Computing Conference (NECC) in Minneapolis, where they enjoyed more time discussing their respective studies.

As a practitioner in a rural setting, Bev feels that these professional connections are important to her, as is the ongoing involvement with NCIPnet.

In her action research, Bev studied how her informal keyboarding instruction influenced her group of fourth-grade resource room students. Bev has drafted a report of her study that she has tried valiantly to transfer online, but to no avail. She will be faxing this to Molly and Patricia for feedback, and is willing to share the finished product when it is revised.

Judy with her first grandchild, Hannah