This article describes lessons learned from an online, professional development opportunity for teachers to learn and improve their practice by conducting action research projects in their classrooms or schools (Noffke & Somekh, 2009). We also share what we learned about meeting the needs of adult learners (Merriam, 1993) and how to create viable online learning communities for teachers (Palloff & Pratt, 2005).

Introduction
This article describes the Teacher Action Research Academy project, or TARA Online, which used an online course management system hosted by the University of North Carolina at Greensboro to support teacher action research projects (Hubbard & Power, 1999). In the United States, becoming a National Board Certified Teacher (NBCT) means earning the right to be called an “accomplished” teacher based on the National Board for Professional Teaching Standards (NBPTS) certification process (http://www.nbpts.org/). This highly-regarded status, earned through a year-long portfolio development and assessment process, is valid for 10 years and must then be renewed. All the participants in this project were NBCTs considering the renewal of their NBPTS certification. However, for those NBCTs teaching in small, rural school districts, or in schools where there are not many other like-minded teachers, or teaching too far from a college or university where they might take classes, we wondered: How can teachers connect with other teachers, learn to do action research, and actually carry out and share action research projects online at no cost – except for time and effort? What would make this completely voluntary, professional development project valuable to the participants?

First, we developed TARA Online to provide NBCTs with self-paced instruction about how to conduct action research in classrooms or schools (Noffke & Somekh, 2009), and then recruited accomplished teachers from several rural counties in North Carolina who wanted to participate. The goal was for TARA Online to offer a scaffolded and mentored community of fellow NBCTs with
whom they could share ideas for action research projects, post questions and plans for their action research projects, and share final results. During the first year of TARA online, two university faculty members mentored a dozen NBCTs through the action research process, but in the second year we sought out an experienced NBCT who participated in TARA Online during the first year to serve as an online mentor to new participants. During both years we gathered data with the participants’ permission that included all their online postings, including discussions with fellow participants and several opportunities for guided reflection, and results from their final project presentations. What follows is a description of how we used TARA Online to meet the needs of accomplished teachers for meaningful professional development and discussion of ways teachers can learn to improve their practice by conducting action research projects.

One Teacher’s Experience with TARA Online – Angela’s Story

As a teacher of academically and intellectually gifted students in my school district, I was enticed to try TARA Online because I wanted to participate in meaningful professional development. I wanted to interact with other NBCTs who were excited about trying innovative projects in their classrooms. I also wanted to develop an action research project around the notion of developing critical thinking with my students. By participating in TARA Online and discussing my ideas with colleagues, I narrowed my focus to studying the effects of implementing the game of chess with students in my gifted classroom. After gaining district and parent permission, and through the advice of my online peers, I administered a primary critical thinking test, implemented a playing log with reflections, taught the children how to keep track of the number of moves needed to win the games, and pre and post tested related terminology. My students learned the strategies of the game of chess, practiced chess strategies, mapped out their strategies, and then taught chess strategies to others. From my perspective, my action research project was a huge success because my students’ scores on a measure of critical thinking improved from the beginning to the end of my project. My students also slowed down and thought through their actions, an aspect of learning to think critically that I hoped would carry over in real-life applications.

At the end of the first year, my TARA Online colleagues and I shared our projects. I learned from their action research projects how technology can enhance mathematics instruction, how the use of audio books can influence reading, the benefits of kids teaching other kids about science concepts, and strategies to increase the self-worth of poverty stricken students. All of the action research projects were meaningful and worthwhile to the teachers conducting research in their classrooms – and to their students.

The next step for me was to offer TARA Online to another cohort of NBCTs who were also planning to renew their National Board certifications and looking for personally meaningful professional development opportunities. This time, I was to be the facilitator for the TARA Online discussions. Now, from a teacher’s point of view, I thought this was going to be a breeze! However, what I learned from facilitating and mentoring other teachers online was that mentoring across distances can have its challenges. First, not everyone had experience working in an online environment. As one participant stated, “The concern that I have about working in this online project is manipulating the [courseware]
technology, as it has taken me a few weeks just to get started.” Becoming familiar with the use of a different technology was a goal many participants sought and all accomplished. Second, facilitating ideas coming from teachers from across the state seemed to flow best when multiple participants were regularly adding input to the discussion board. Several heads together produced the greatest results. One NBCT, Bethany, stated, “communicating with teachers across the state in an educational forum has been outstanding. Outside perspectives, varied backgrounds, and thoughtful insights from different areas of education have provided a rich learning environment.”

At the conclusion of the second year of TARA Online, action research projects included journaling in an early childhood methods class, analyzing the effects of using Brain Gym activities with ESL students, emphasizing eco-friendly practices at home and school with middle school students, and using electronic journals in a science classroom. Kathryn stated, “teaching is really an individual and personal experience, and teachers must be willing to go outside a comfortable box to grow.” These teachers stepped outside of their comfort zone and blossomed!

Kris also posted about her experiences with learning about, doing, and sharing action research using TARA Online: “I learned that it is a very “workable” research method. It takes what I think a lot of teachers do naturally and makes it more structured. It helps you really fully analyze whether or not a new approach is effective. I think it [action research as a professional development experience] is great because it is immediately applicable in your class and meets your own needs.”

Why Learn, Do, and Share Teacher Action Research Online?
One of the original goals for TARA Online was to provide professional development opportunities that would encourage NBCTs to remain in their teaching positions and not leave the classroom. Over the years, many NBCTs have been selected for other positions in their school districts and leave their classrooms. We did not want to see this trend continue and tried to find ways to provide professional development to accomplished teachers beyond the more traditional “sit and get” experience. Engaging in teacher action research where teachers could pose their own questions and develop their own action research projects was one possible solution. Here is what we learned after two years with TARA Online.

What we learned about the needs of adult learners
We learned that teachers, as adult learners, needed support and guidance when trying something new. Despite being accomplished teachers, all our participants were not comfortable with the electronic courseware and they needed clear directions for how to access and post information to the online discussion forums (Palkoff & Pratt, 2005). They also needed deadlines for each step in the action research process and guidelines about exactly what and how to post online. Examples were the best solution to the “what to post” concerns, and access to a phone number of a real person to talk with at the beginning of each year was necessary until a level of comfort was achieved. As Kris said, “I thought the resources and learning activities, especially the samples, were very helpful!” Even though we demonstrated TARA Online to several large groups of NBCTs at information sessions about the National Board renewal process, the time lag between those meetings and beginning TARA Online necessitated personal support in the form of an online mentor. Angela also sent several individual and group email messages throughout the year she served as a mentor for TARA Online as a way to offer the personal connection desired by adult learners (Merriam, 1993). As Bethany stated, “TARA is a wonderful experience and working online has been exciting (and boosted my confidence). I had a little trouble navigating the site at first, but Angela (the facilitator) has been super to help me understand. Communicating with teachers across the state in an educational forum has been outstanding.”

What we learned about creating online learning communities
We learned that the more people involved in TARA Online, the better we were able to create a viable learning community. A minimum of five teachers in a group was needed in order to generate enough dialogue back and forth on the discussion board to motivate these busy teachers to respond to each
other. Nothing was more frustrating and disappointing to participants than going online only to find that no one had responded to their recent posting. Having a mentor like Angela was critical, but a real learning community did not develop until other teachers in the group began discussing their project ideas, posting their research questions, asking if they had planned for enough data to be collected, and seeking feedback on their plans for their action research projects. As Bethany stated, “The strength of TARA in regard to online support is that it is an ongoing communication tool. Rather than waiting for a weekly meeting to gather feedback and insight from colleagues, by posting our thoughts, others could respond immediately. I especially like the varying topics and discipline areas represented in our TARA group. Having my project viewed by a variety of perspectives offered unexpected insights.”

What we learned about high-quality professional development
We learned that you can provide high-quality professional development online, but we also learned that you have to do much more than just offer information (Treacy, Kleiman, & Peterson, 2002). You have to offer and even require interaction and active engagement from the participants. We learned that in order for TARA Online to be worthwhile as a professional learning opportunity we had to connect and engage the participants with each other, assist with answering any questions or concerns they had (such as about why and how they needed to get parent permission for their projects), and we had to keep them coming back to TARA Online so they would not feel alone or isolated as they conducted their action research projects in their classrooms and schools across the state.

What we learned about getting the most from online professional development
We learned that online professional development is doable and costs very little, that it is a great way to connect like-minded teachers around the state in a learning community, and that learning and doing teacher action research is a valuable form of professional development. Once the online curriculum is developed, it can be used over and over again with each new group, and the cost of adding another organization to an online course management system is so negligible that a college or university can easily donate that service. Mini-grants to support teachers conducting action research are useful but not always essential, so the main cost is for someone to serve as the mentor and facilitator for others who want this learning experience, preferably a teacher who has already has some experience conducting action research. As another participant stated, “I totally embrace the action research of TARA. I feel that it has impacted my teaching more than other in service in a long time!”

Conclusion
Finally, we learned that participation in TARA Online was a good fit to the core principles of the National Board for Professional Teaching Standards (2008). These include teachers’ commitment to students and their learning, knowing their subject and how to teach it to their students, taking responsibility for managing and monitoring their students’ learning, thinking systematically about their practice and learning from experience, and participating in learning communities. So, while the participants in TARA Online were already experienced, accomplished teachers, we believe that projects like TARA Online can benefit teachers anywhere there is access to the technology, fellow teachers to work with, and supportive leadership. In this technological age, learning forums such as TARA Online seem to offer accomplished teachers the atmosphere to link with like minds and enhance their professional lives and their classrooms!

References


