New Directions in Teacher Education:

Emerging Strategies From the Teachers for a New Era Initiative

The Induction Program at the

University of Virginia

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Novice teacher attrition and migration have become areas of great concern in the field of education, and the reasons for these phenomena are numerous and varied. Induction programs and mentoring support are recommended as effective means for addressing these areas of concern. The induction model at the University of Virginia incorporates multiple approaches to providing support for all first and second year novices in the two local school divisions surrounding the University and for our own graduates as they enter their first classrooms, many at great distances from our campus.

LOCAL INDUCTION PROGRAM

Research Basis and Conceptual Overview

Smith and Ingersoll (2004) identified the value of a comprehensive support program for novice teachers consisting of a variety of components. Researchers examined data from the Schools and Staffing Survey from 1999-2000 and selected a nationally representative sample from among schools, administrators, and teachers. Examination of the data indicate that induction programs with the greatest success go beyond basic mentoring and provide a full system of support including three key factors: (1) close mentoring by a mentor from the same content area; (2) collaboration or networking supports such as seminars or common planning time; and (3) additional assistance to ease the transition into teaching such as reduced schedules and preparations or having a teaching assistant.

Results indicated that the number of novice teachers participating in mentoring or induction programs jumped from 51% in 1990 to 83% in 2000 although the details of the programs and support varied widely in relation to the three factors identified above. Overall the data revealed the additive effects of including each of the three factors in a full induction support program with the following results:

Percentage of	Number of factors	% Attrition	% Migration
novices participating	included in program		
3%	No induction	20%	21%
56%	Basic induction	18%	21%
	(mentoring only)		
26%	Basic induction +	12%	15%
	collaboration		
1%	Basic induction +	9%	9%
	collaboration +		
	additional assistance		

The need for a comprehensive induction program consisting of varied means of support is made increasingly important due to other changes in the field of education. The existence of high-stakes environments mandates the need for increased instructional expertise in teachers. Support for novice teachers must go beyond emotional guidance and involve highly-focused support designed to increase instructional effectiveness with an increasingly diverse student population (Ganser, 2002).

The current push for standards-based reform in schools has led to the need to ensure that teachers hold a deep understanding of their content as well as the pedagogical content knowledge needed to teach that content to students. In addition, pedagogical learner knowledge requires teachers to focus on individual student characteristics in relation to the content to be learned. This requires teachers to think more reflectively about their practice and identify the links between theory and practice, a process that requires structured guidance for all teachers, but especially for novice teachers (Wang and Odell, 2002).

As the student population is becoming more diverse, there is also increased variance in the types of novice teachers entering today's classrooms. There are greater numbers of career switchers and teachers with alternative licensure entering the profession, and these teachers may have different professional development needs from those with more traditional educational preparation (Ganser, 2002).

All of the factors identified above contribute to the need for increased training and support for new teacher mentors/advisors. Evertson & Smithey (2000) offer research that indicates that trained mentors are more effective in providing support to new teachers than those receiving no training. Their data reveal that trained advisors are better at guiding novices (as opposed to evaluating), actively listening and probing for deeper reflection on novices' needs, and providing specific feedback and plans for follow-up support. Wang and Odell (2002) state that in order to provide novice teachers with support that allows them to develop into reflective, independent practitioners, mentors must be skilled in transmitting knowledge, connecting theory and practice, and engaging in collaborative inquiry. Without ongoing support, mentors find it difficult to move to the higher levels of collaborative inquiry that are necessary for novices' growth as professionals.

Local Program in Action

We have incorporated aspects from these research findings into the development of our local induction program that serves first and second year teachers who teach in either of the two local school divisions – Charlottesville City and Albemarle County – that surround the University. This program consists of varied components in an effort to provide the type of comprehensive induction support advocated by Smith and Ingersoll (2004). These components can be organized into three areas of support: one-to-one mentoring, professional learning opportunities, and University collaboration.

One-to-One Mentoring

Our local mentoring program is based on the New Teacher Center (NTC) model, and many of our program components were created as a result of our training with their consultants. Our program consists of three tiers of teacher advisors or mentors. Tier one is comprised of full-time released teacher advisors. Initially the two local divisions hired three full-time advisors who worked with first year novice teachers at the secondary level in a one-to-one mentoring relationship. It was determined that secondary teachers would receive the benefit of the full-time

advisors because traditionally the secondary level was where the greatest number of novice teachers had been found in the two divisions. *Teachers for a New Era* funds paid the salaries for these three advisors and well as the salary of an Induction Coordinator who oversees their work, including training and support of the advisors' mentoring skills. In this second year of the program, the divisions have increased the number of full-time advisors to five. In both Charlottesville City and Albemarle County, two full-time advisors work with secondary novices in their second year of the program as well as with a group of new first year novices. In Albemarle County, a third full-time advisor has been hired to work with elementary novices in their first year.

Tier two advisors work in their advising roles on a part-time basis. Elementary novice teachers in Charlottesville work with building-based, part-time advisors who also serve as Instructional Coordinators/Assistant Principals (ICAPs) in their buildings. These ICAPs have continued to work with their now second-year novices and have picked up any new first year novices in their buildings this year. While this dual role – administrator and advisor - had the potential to become problematic, the ICAPs and novices have developed strong, trusting relationships that seem to have overcome any hesitancy on the part of participants. In the first year of the program a small pilot group of novices in Albemarle also worked with building-based, part-time advisors. This year, with additional funds from the *Teachers for a New Era* project, Albemarle County opted to hire a full-time released advisor to work with elementary first year novices and the second years from the three initial pilot schools.

Advisors in both tiers one and two meet weekly with their year one novices, providing a range of support services. Each novice completes a weekly Collaborative Assessment Log with his/her advisor. This log is derived from the NTC, yet modified to incorporate the Virginia Standards for Teaching so that all discussions of practice are centered on those standards (see Attachment A). This focus helps ensure that novices are guided in the development of their practice in addition to receiving needed emotional support as advocated by Ganser (2002) and

Wang and Odell (2002). Advisors respond to the needs of each novice teacher, and provide the types and degree of support needed at different points in the year. Advisors and novices team teach classes, co-observe lessons taught by master teachers, reflect on videotaped instructional episodes conducted by the novice, analyze student work together or in a small group of novices, plan lessons together, develop management plans, and prepare for parent conferences or special meetings together - just to name a few support options. This variety of support offerings allows advisors to meet the diverse needs of the novices which are inherent in their varied backgrounds and preparation for teaching. In all interactions, discussion focuses on the standards of teaching that are expected of teachers and on which teachers are evaluated by their administrators. Advisors have become instrumental in guiding novices through this evaluation process by helping them identify areas of strength and areas for focus and development and then assisting novices in setting professional goals and developing plans to reach those goals. Building administrators have expressed tremendous satisfaction with the guidance these novices are receiving in this process. Relationship-building with school-based administrators has been a large part of the advisors' responsibility, and the increase in positive response to the program in year two can be directly attributable to the work the advisors have done in this area.

Tier one and tier two advisors receive ongoing training and support on a regular basis in the development of their mentoring skills. This training and support provided by the Induction Coordinator at the University has changed over time as well. In year one, we conducted monthly half-day workshop sessions with all advisors at tiers one and two. These sessions consisted of two parts: peer-to-peer collaboration time and presentation/skill development time. Peer-to-peer collaboration was done whole-group, and advisors had an opportunity to share successes and new strategies they were testing out and get input and feedback on concerns related to the position. The skill development segments varied from session to session and included events such as presenting and having advisors practice using new observation systems, introducing new tools and strategies for analyzing student work in small groups, role-playing difficult mentoring

situations and practicing the language that can help diffuse such difficult situations, and holding brainstorming sessions regarding strategies for building networks of support for novices within their own buildings.

Training in year two, unfortunately, has been reduced for whole-group sessions with our meetings now taking place every other month due to the increased administrative demands placed on the tier two mentors. However, the same two parts of the sessions continue to work well for the advisors with some changes to improve things. We still conduct the peer-to-peer collaboration segment of the workshop, but we now organize this in small groups. We have modified the Collaborative Assessment Log, and use what we call a Collaborative Advisor Log to guide those discussions (see Attachment B). Tier one advisors take the lead in getting each small group going, and the small groups stay the same from session to session with different group members taking responsibility for completing the log during the session and distributing it via email to all members of the group. The hope is that this will build camaraderie among the small group members, who are charged with maintaining communication regarding next steps over the month that we do not come together.

The mentoring skill development segments are still being conducted, but we have tried to include tier one advisors in the presentation of tools, strategies, and processes as well. Many of these advisors have developed new approaches that are working really well, and we have tried to build in the sharing of those approaches to our meetings so that their expertise can be shared with the part-time advisors. For example, Albemarle County advisors shared some work they had done with developing an observation tool that many of the tier two advisors are finding very useful. Charlottesville advisors shared work they have been doing with guided reflection on videotaped instructional segments, and many tier two advisors are asking for their guidance in beginning to use the tools and processes associated with this work.

In addition to these whole group sessions, the advisors also receive more individualized support. The Induction Coordinator meets at least twice each semester with each tier two advisor

in his/her school building to check in on how things are going and to provide support in mentoring skill development. The support provided is individualized to the advisor and can range from observing novice teachers (for those advisors who have classroom responsibilities and cannot visit classrooms easily or often) to going over observation notes together and co-planning the post-observation conference (typically when an advisor has used a new tool) to connecting the advisor with a resource/contact for support materials.

Tier one – the full-time released - advisors also receive additional support and meet with the Induction Coordinator monthly for mentor skill development as well as program development aspects of their job. It was determined that the tier one advisors are in the best position to help develop the program in ways that will be sustainable in the two divisions with guidance from both the Induction Coordinator and the district administration. These meetings have been occurring for both years of the program but have changed slightly in their focus over time. In the first year of the program the focus of these sessions was more on foundational mentoring skills such as building relationships, establishing trust, encouraging reflection in others, and having difficult conversations about practice. The other key aspect of the first year meetings for the full-time advisors was becoming familiar with a new role in schools. Now that those elements are under the advisors' control, we still focus on mentor skill development to some degree, but we spend a much greater percentage of our time on leadership development in relation to program development. The full-release advisors have taken on a variety of leadership roles in their districts from creating exit surveys or developing new teacher evaluation processes and documents to creating manuals for building-based mentors/buddies and leading the New Teacher Academies in August. Advisors have also been instrumental in the design and documentation of the program that is being developed under the Teachers for a New Era project at UVa. If the program is to be sustainable long after the grant funding has ended, we must involve these tier one advisors in its creation.

Unfortunately, as more focus in these meetings is taken up by program development aspects, the mentor skill aspect has diminished; the balance of these two components is challenging. We have attempted to make connections with another university an hour away that is working with local school divisions in a pilot of the New Teacher Center model, but the needs of the two groups are vastly different. While our advisors enjoyed the opportunity to talk with others who serve in their same role, they are experiencing very different developmental needs. While we will likely continue to form an informal relationship with these advisors, the consistent support does not seem likely between the two groups. We are also currently in the process of exploring online options for advisor development through which we can provide our advisors with access to highly qualified, experienced mentors via technology for consistent, timely support.

Tier three of our program consists of school-based buddies who can be found in every school building and whose role is to provide logistical, context-specific support for all teachers new to the building including both veteran and novice teachers. These buddies do not receive the University-based advisor training and are not expected to provide the same degree or type of support to the teachers in their buildings. In the first year of our program, we did not consider the roles of these buddies as carefully as we should have, and many of them felt resentful at being left out of the program. This led to some tension between tiers one and three as roles were not defined clearly enough and partnership opportunities were not offered up front. Over the course of the last year and a half, the advisors have worked hard to reestablish a feeling of collaboration with the building-based buddies and have shared all relevant documents and training they receive with them even if just to keep them in the loop. It is very important to have a strong building-based buddy for the teachers' questions that require "just in time" support, and the collaboration between advisors and buddies for the benefit of the novice teacher is critical.

Professional Learning Opportunities

The collaborative networks of support advocated by Smith and Ingersoll (2004) form the second component of our local induction program. While the one-to-one mentoring began full-force in our first year, we introduced the professional learning opportunities in stages. In year one, advisors received training through the University's Induction Coordinator in how to work with small groups of novices to guide them through processes of analysis of student work or reflection on instructional practice, and these small group sessions provided context-specific, collaborative professional learning opportunities that were mutually beneficial for the teachers engaged in the process.

While these experiences were provided to small groups and facilitated by advisors, all novices in the program came together for four required, half-day workshops over the course of the year. The workshops consisted of three segments: peer-to-peer interactions for sharing the positive and problem-solving, opportunities for novice presentation of successes, and skill development. We based the structure of the workshops on research indicating novices often indicate lack of satisfaction with their positions due to lack of leadership development opportunities or chances to showcase their work (addressed in workshop segments one and two) and research on novice teachers' typical frustrations experienced in year one (addressed in workshop segment three). We determined a topic for each session from this body of knowledge about novice concerns and from an analysis of the Collaborative Logs that advisors had been turning in all year, and then we provided a secondary and an elementary-focused break-out session on the topic of the meeting. The novices' response to the required workshops was quite varied, with many of the novices indicating a positive reaction to the format and information presented and others expressing concern at being pulled from their students for professional development that was not context-specific enough or relevant to their teaching situation. Informal survey feedback in the spring of 2005 indicated that the aspect of the workshops that was universally appreciated by the novices was the opportunity to problem-solve and discuss

often. Feedback also indicated that the teacher presentations were a good idea but that teachers needed more guidance in preparing them so that they would be better received. The overwhelming message from the new teachers was that the skill-building segment of the workshop needed to be even further differentiated beyond the elementary/secondary split.

In the spring of 2005, we hosted a lunch for teams of people to come together to discuss the novice curriculum, the corresponding advisor development curriculum, and the connections that Arts and Sciences and Education Department faculty might make with this work. Many ideas were generated, and the result of this larger meeting was that we developed a curriculum development team consisting of members from both school divisions, the Curry School of Education, and Arts and Sciences at the University. The team spent the summer revising the current required novice workshops as well as expanding on the idea of bringing small groups together for analysis and reflection-based discussions of practice.

The four required workshops were maintained in year two, but the focus and format shifted to address the concerns expressed by the novices in the spring survey (see Attachment C). Each session began with small group collaboration time during which the novices had the opportunity to discuss documents from their classrooms that they selected with the help of their advisors prior to the workshop. These documents in some way related to the topic of the skill-building segment of the workshop. This collaboration time was followed by a skill development segment presented by central office administrators, advisors, or University faculty in which novices learned new ways of looking at the information they brought with them and had an opportunity to work with the new learning and take something away with them that they could directly apply in their classroom or to the situation under consideration. One example was a session held in workshop two in which the novices gathered documentation and developed a plan of action for an upcoming parent-teacher conference that they anticipated being difficult. The session was presented by a University faculty member from psychology who specializes in family

dynamics and families in crisis. Many novices signed up for this session, but those who felt they had excellent conference preparation provided by their school administration or tier three buddy could sign up for a different session. The third workshop featured three presenters from different Arts and Sciences departments who shared their content knowledge through modeling an instructional model (see Attachment D). Prior to the workshop, novices, with advisor help, examined their lesson plans to determine the instructional models they were using most often and reasons for those choices. They then selected a session to attend that featured a model with which they were less familiar or comfortable. The faculty presented content but discussion was held throughout on the pedagogy being used. Full-time advisors facilitated each session and helped novices make connections and begin planning some new lessons using the new model. This workshop was very successful and yielded the most positive evaluations yet. Novices examined their practice, interacted with faculty to learn new approaches to presenting curriculum, and walked away with a plan for (and some initial work on) incorporating the model into their classrooms.

In addition to revising the structure for the four required meetings, the curriculum development team created a menu of optional professional development opportunities for teachers (see Attachment E). The idea behind this was to take the concept of working with novices in small, school-based groups and expand it to the larger group. The first and second year novices have first choice in signing up for sessions, but we determined that it might be beneficial to include experienced teachers as well for a range of perspectives and that the small number of veteran teachers likely to be in a workshop would not be overwhelming for a novice. The team created a menu of options that was based on novice needs found in the research but also through a careful examination of the Collaborative Logs completed during the year. A variety of formats was offered from two hour workshops to book discussion groups to full day workshops. Offerings were presented by a range of presenters including central office administration, University faculty, full-time advisors, and outside speakers. Participants who took part in the

various professional development options indicated on exit surveys that the offerings were very beneficial in that they presented opportunities to wrestle with problems of practice that were taken directly from their practice and that they gained much information to help them make improvements in their practice immediately. Unfortunately – or perhaps fortunately – what made these sessions so effective for teachers was the small attendance at each one. Typically approximately ten novice teachers would participate in any given session. While this made for a small, comfortable group in which to discuss concerns, we were not reaching the numbers of novice teachers we hoped to support. We have continued to offer the sessions that were planned at the beginning of the year and have recently added some additional novice-driven small group sessions that involve University faculty working more directly with novice teachers and which will be described in the next section. The reality of novice teachers' first year of teaching is that they are so overwhelmed that they do not see a way to fit anything else in the realm of professional development into an already packed schedule. We will continue to work with district administration in an effort to address the third component of Smith and Ingersoll's (2004) research – reduced loads and additional assistance to ease the transition into teaching. Perhaps by addressing this, we can free novices to attend some of these beneficial professional development experiences.

University Collaboration

The first year of our program involved little faculty involvement in the induction work taking place in the schools. The University-based Induction Coordinator provided training for the tier one and tier two advisors and oversaw the work of the program through an induction steering committee which included three representatives from the Curry School and three from Arts and Sciences. But other than this, there was no faculty involvement with our novice teachers. The aim was to determine what needs the novice teachers had that could not be addressed sufficiently by school or district-based personnel or for which University faculty might provide additional, complementary support and at the same time to determine what incentives would make a

University faculty member, who is already overwhelmed with his/her responsibilities on grounds, want to contribute to the development of k-12 teachers.

In the spring of 2005 at a luncheon referred to earlier, we hosted faculty from the departments corresponding to the five main content areas in public schools: math, English, social studies, science, and foreign language. We had a surprisingly large turnout with many enthusiastic participants, and a large number of ideas for potential interactions between University and k-12 faculty emerged. Many of those have been incorporated into our work this year. The first outcome of this lunch meeting was the creation of a database of faculty around the University who were interested in collaborating in schools. We have drawn on this list numerous times since its creation last spring for resources, meetings with teachers, and presentation/workshop requests. Six of the ten sessions presented at our required novice meetings this year have been presented by University faculty, and, as mentioned earlier, the most successful ones have been those involving the faculty. Eleven of the optional professional development offerings were presented by faculty who helped teachers make stronger connections with content. While these interactions are important and well-received by the teachers, they do not represent a sustainable model for interaction between faculty and novice teachers.

Beginning this spring, we have undertaken a new approach to linking faculty with teachers and creating a collaborative environment that makes future interactions more likely. The tier one advisors have really begun to see themselves as "brokers" in that a significant part of their work involves making these links with faculty for novice teachers. So, in an attempt to provide support for context-specific needs and create networks of support that extend beyond the advisor relationship, we have begun looking at the novices' weekly Collaborative Assessment Logs for trends and patterns of need, proposing small group investigations around those needs, and linking teachers with faculty who can help meet those needs.

The most fully developed example of this occurred with several ecology teachers in one of the districts. The issues or concerns that seemed to come up consistently centered around the

fact that these three ecology novices wanted to provide an experience in their ecology classrooms that went beyond what was typically happening in the ecology classrooms of veteran teachers they were observing. These teachers were saying that they wanted a more inquiry-oriented approach involving project-based learning and wanted some support in that area. We hosted a meeting between these three teachers, an experienced ecology teacher, the district science coordinator, a professor from the University's Environmental Sciences department, and a science methods professor from the Curry School. Prior to the meeting, we had the teachers complete a Faculty/Novice Collaboration Log (see Attachment F), a modification of the Collaborative Log used between advisors and novices in their weekly interactions. We hope that having the teachers identify contextual aspects of their teaching situation, identify the area(s) of greatest concern to them, and identify clearly what they would like to take away from an interaction will make these meetings more efficient and satisfying for everyone involved. The idea is that for some teachers this one initial meeting may be sufficient to meet their needs. If not, next steps are determined and both faculty and teachers set the course for further collaboration.

The results of this initial meeting in ecology were threefold with each person contributing from his/her area of expertise. The Curry professor assigned a doctoral student to spend some hours compiling local and state ecology resources, field trip ideas, and funding options for projects. These resources were shared with the teachers recently, and we guided the teachers in matching resources and funding sources with specific projects they had in mind as well as mapping out next steps for getting the projects going. The next step was holding a planning meeting for curriculum revision work that will take place this summer, being led in part by the novice teachers. At this meeting, the University faculty members were also there to contribute to the discussion which centered on identifying the key components of an exemplary ecology curriculum, splitting participants into groups according to who would work on developing which components, and determining logistics for the summer work. The next step in the process, now that these components have been identified, will be a workshop in May on inquiry labs in ecology

presented by the Environmental Sciences professor involved in the process. This is just one example of how we are trying to connect our work with novice teachers to the faculty resources available at the University and expand the benefits of those interactions throughout the districts. We are currently hosting such small group sessions in history, physics, and psychology/special education as well. The work generated by these interactions has been fantastic and extremely beneficial to the novice teachers involved. Again, however, the numbers of teachers involved is extremely small compared to the total number of novices served in the mentoring component of our program. An additional issue involved in this work is the difficulty of coordinating people from institutions with vastly different cultures and timeframes. The timeliness of establishing meetings is not ideal, and it can take longer than desired to get interactions set up. We will continue to pursue this model and see how we might systematize some aspects so that they become more useful for others in the future.

Evaluation of the Work To Date

Evaluation of this local program is in its first full year of implementation. We faced considerable difficulty in getting our initial program evaluation approved by the University's Institutional Review Board, primarily because of the fact that all novices were required to participate in the induction program, and there was some sense that novices might not feel free to decline participation in the evaluation study. After some reworking of the proposal, we have undertook a pilot in the spring 2005 semester that focused on a reduced amount of data collection from volunteer participants. Advisors and novice teachers who volunteered to participate were also asked to help critique evaluation tools and instruments, and revisions were made prior to full implementation of the evaluation system this past fall.

The program evaluation project was introduced to the teachers at their New Teacher Academy in August prior to school opening. The teachers were provided with information and consent forms at that time, and we had a large number of positive responses. Over the course of this school year, novices will complete four surveys: a demographic survey, a self-efficacy scale,

a mentoring experiences survey, and a teaching knowledge and skills survey. Advisors will complete a demographic survey, a mentoring experiences survey, and a rating of novice teacher knowledge and skills survey. Novices have been observed twice already and are preparing now to complete the third and final round of observations with two different observation instruments: the Classroom Assessment Scoring System (CLASS) developed by Dr. Robert Pianta at the University of Virginia and the Teacher Performance Record (TPR) which has been developed by TNE faculty at the University of Virginia. We hope to have data analyzed this summer as to the successful aspects of the program as well as those needing further refinement.

Initial numbers regarding novice teacher retention reveal successful results, with a retention rate of 82% in Albemarle County and 71% in Charlottesville City. Without past numbers – data was not disaggregated by novices versus experienced teachers leaving the district in past years– comparison to previous years is impossible.

GRADUATE DISTANCE INDUCTION

Research Basis and Conceptual Overview

The local induction program is providing high-quality, consistent mentoring and support for novice teachers in the Charlottesville City and Albemarle County school districts, many of whom are Curry School/University of Virginia graduates. Yet the *Teachers for a New Era* project has charged the induction program at each University with providing high-quality support for all of its graduates regardless of where they end up teaching. Many of the graduates of the Curry School/University of Virginia end up teaching in locations distant from the Charlottesville area. Many graduates teach in the Northern Virginia or Richmond areas, and, due to the fact that they are teaching in Virginia, we know that they are expected to be provided with some sort of mentoring or induction program. What this means from district to district or even between schools in any given district is difficult to determine. Other graduates teach in locations at much greater distances where we have even less information about the nature and quality of the

induction support offered. While mentoring has been shown to have a positive impact on novice teachers' instructional practice and job satisfaction, research also indicates that even the most successful programs can be hampered by lack of sufficient highly-qualified mentors available in a school system as well as by local school politics. In many places mentoring is conducted part-time by teachers with full-time teaching responsibilities that keep them from being able to work with novice teachers using the best mentoring practices such as observing instruction, coteaching, or planning collaboratively (Schlager, Fusco, Koch, Crawford & Phillips, 2003).

Due to the fact that many of our graduates are teaching in locations distant to the University campus, online systems of support appear to be the most viable option for providing valuable, effective interactions with mentors and faculty who can best support teachers in their first years of practice. Virtual support, if provided through a well-structured and effectively-facilitated community, can provide novice teachers with a wide range of support options. High-quality mentors can be drawn from a wider pool of exemplary teachers than those available to novices in their local contexts, and these mentors can engage in synchronous and asynchronous online conversations with both individuals and small groups of novice teachers. Online mentors and novices develop open, honest relationships due in part to the fact that the mentor is not a member of the teacher's immediate context, creating a perceived sense of anonymity. Online mentors also have the advantage of time to develop responses that are more thoughtful and reflective as opposed to those communicated "on demand" in face-to-face mentoring situations (Berry & Nussbaum-Beach, 2006). Wong and Asquith (2002) also promote the value of online support options, such as online curriculum resources, available to meet novice teachers' needs according to their own flexible timeline and when support is not available locally.

Graduate Program Beginnings

We spent the fall of 2004 investigating a variety of online support options for our graduate induction work. Dr. Glen Bull, one of our instructional technology faculty, had written a piece about Tapped In, an online platform created by Mark Schlager at the Stanford Research

Institute, and we eventually were convinced by the data that this was the platform we should focus on at least initially. The platform is set up as a virtual campus with different organizations hosting buildings on the campus. In each building there are common spaces that are accessible to any Tapped In users or guests. This can be thought of as open meeting rooms and lobby space as would be found on the first floor of any non-virtual building. Above the lobby floor, each additional floor can be configured in a variety of ways. There can be a large number of groups on each floor and the owner of the groups (in this case the university representative) can determine whether each individual group is open to the public or closed for private use. Resources can also be posted within those groups or on the floor as a whole. So, for example, you might want to post resources that everyone would find useful in common areas but have space for posting lesson plans for small group analysis in a closed group that was only accessible to a small number of people.

Members can sign up for any open groups in which they are interested and will receive postings from those groups. These postings can be accessed in one of two ways; the user can opt to receive all postings to that group as they come in or can opt to receive one summary digest of all postings to that group from the day. Members can respond to these postings for asynchronous discussion.

Through Tapped In there is also the option of members participating in synchronous discussions or other scheduled online events such as conversations with representatives from UVa's Center for Digital History Center. Tapped In also has a virtual calendar with synchronous events posted that might be of interest to novice teachers.

In the spring of 2005, we established a leadership cadre of three fifth year students who would be entering their own classrooms in the fall of 2005. The lead teacher in this cadre had extensive experience in technology and facilitating online discussion boards in a previous career and did an extensive amount of data-collection prior to establishing the components of the site. She sent surveys to the fifth year students asking what they anticipated their needs would be and

in what ways an online system could support them in those needs; first and second year local novices were surveyed for the same information given that they were already in classrooms and experiencing those needs; and advisors were interviewed and surveyed to determine in what ways they felt an online system could enhance their support for their novices. This leadership cadre then split up the various content areas, established groups to support each one, and filled the site with online resources and discussion postings to initiate conversation. Unfortunately, most of this work was done over the summer after graduates had left the area, and it is very difficult to get teachers to come to a site they've never seen before, especially in the midst of all they are faced with in starting new classrooms and beginning to teach. Therefore, conversations were few and far between and visitation to the site was limited.

The Induction Coordinator approached two faculty members with the idea of presenting Tapped In to the fifth year students who were in their student teaching semester and who were required to participate in a weekly seminar with the faculty. In the fall of 2005, we presented the system to the elementary seminar and had some response and use of the site from this group. We also worked with the special education seminar leader and actually incorporated the use of Tapped In into the seminar as a requirement. The students were released from attendance at the seminar on three weeks during the semester but were asked to visit Tapped In and respond asynchronously to discussion topics posted by the professor. The conversations initiated by those postings and by subsequent student postings were very rich and high-level. Some of the students indicated on an informal survey conducted by the professor that they talked more via Tapped In that they ever had in face-to-face class meetings. Two sections of our initial Educational Technology course that is required of preservice teachers also used Tapped In with their students so that they become familiar with the system prior to graduation and entry into their first classrooms. The idea is that we want to build a community online through Tapped In early and make it a resource that teachers are not only familiar with but find valuable and want to come back to. Having undergraduates using the system and engaging in conversation with practicing

teachers should also extend the benefits of participation in the system into the preservice years and not just make this a valuable tool for the induction years.

We have learned the value of building community early and creating a feeling in students that Tapped In is easy to use and provides options for highly effective support. The 2006 graduates have not all had the experience of using Tapped In, yet we are hopeful that we will have greater participation with Tapped In in the next school year for a variety of reasons:

- We are now moving from the pilot phase to hosting a permanent building on the Tapped In campus in conjunction with a second *Teachers for a New Era* site, Stanford University. In October of 2005, the University of Virginia hosted the other eleven TNE sites at a Technology Symposium designed to initiate discussion about options for providing distance induction support for novices. Several online systems were represented, and the group heard presentations from a wide variety of technology-based programs. Mark Schlager gave a presentation about Tapped In to the group that was very well received and stimulated a great deal of interest. Stanford and UVa are the two sites who have currently begun work on the establishment of the building that will be ready next month. Several other universities are very close to joining in with us in this endeavor. Providing our graduates with access to other novices, advisors, and faculty members participating in a group building will make the discussions much richer and the support much greater as different institutions focus on providing resources and support in their areas of expertise. For example, while UVa can focus its energy on the development of history resources, online events, and human capital, other institutions can focus on other content areas or such areas as English language learners or special needs learners.
- We will be presenting our new Tapped In building to the students in the Contemporary

 Issues course this spring. This course is taken by fifth year students in the semester prior

- to graduation, and we will present the site and make registration an easy process. We will demonstrate the features of the site and the multitude of resources available.
- In a pilot effort to include Arts & Sciences faculty and Curry School faculty in the process of providing distance induction support to the graduates, we are working with a professor from the history department and both elementary and secondary social studies professors from Curry to design a system for engaging social studies novice teachers in small group online support through Tapped In. Students will be presented with the opportunity to participate in this small group prior to graduation this spring and will be guided in registering and getting passwords. They can begin to communicate with the professors over the summer as soon as they know their teaching assignments for the fall, with the history professor responding to content support questions and the two social studies education professors responding to questions regarding both content and pedagogy. This group will be closed at first so as not to overwhelm the faculty with postings. Social studies teachers who participate in the small group, however, will also be members of the larger Tapped In community and can receive additional support through a wider variety of mechanisms, including access to faculty and graduates from other universities.
- We will continue to use Tapped In with the initial Educational Technology course
 required of all preservice teachers so that comfort with the site is facilitated, making its
 use in the student teaching seminars, subsequent coursework, and in the teachers' first
 classrooms more fluid.
- We will again use Tapped In with the special education seminar for student teachers and expand its use to other seminars as well. We are hopeful that we can again present to the elementary group, this time encouraging the professor to submit some postings with a requirement for students to register, respond, and participate online. The elementary social studies methods professor has agreed to encourage her students to participate, and

since all of them are in the elementary seminar, perhaps we can achieve greater participation. The secondary social studies seminar leader has also agreed to include a requirement for her seminar students to participate with Tapped In. Thus is seems that we will at the very least be able to have elementary, secondary social Studies, and special education fifth year students using the site in the fall of 2006. We plan to present the idea also to the English, science, math, and foreign language seminar professors to see if others are interested. We will also develop a plan this summer and/or fall to encourage continued use of Tapped In after the student teaching semester and seminar are completed in the fall. The logical continuation would be to make use of Tapped In a requirement for the Contemporary Issues course, and the professor for this course is already agreeable to holding asynchronous and/or synchronous class discussions via Tapped In.

- There is currently discussion on the table regarding incorporating ementors into the work on Tapped In and utilizing exemplary teachers from the Teacher Leaders Network (TLN) to provide this support. Mentors could work with novices in small, content-specific groups across universities to provide novices with online support in both content and pedagogical areas. At the same time that novices are engaged in these small, perhaps closed, groups for mentoring, they can also be part of the larger Tapped In community, engaging with peers from their own institutions as well as with teachers from across the country and accessing the other features of Tapped In such as online special events and discussions.
- Full-time advisors in the two local districts are interested in using Tapped In with their novice teachers as well, and we plan to include any who are interested in the initial training provided by Tapped In this summer. Our current second year novices have not been pleased that the level of support dropped from once a week in year one to once or twice a month during year two. Advisors see Tapped In as a vehicle for providing more

support for these second year teachers as well as for hopefully gaining some support in their role as advisors from others at other universities who are in similar roles.

Additionally, if we go with the ementoring option described above, the full-time local advisors can be mentored by the TLN mentors as well.

Evaluation Options

All of the work in creating and implementing this online system of induction support is at the very beginning stages, and the evaluation plan is being discussed and worked through currently. We do plan to conduct surveys with all of the graduates to determine first of all if they even use the site and, if they do, the usefulness of the system from a variety of standpoints: content and pedagogical resources provided, synchronous discussions posted by the group facilitator (in this case the Induction Coordinator), asynchronous discussions initiated by the group facilitator or other teachers, online events offered either by the *TNE* building or by Tapped In, and small groups facilitated by university faculty (as pertains to the pilot group in social studies).

In addition to this self-report data it is also possible through Tapped In to download and print the transcripts of the online discussions. It would be possible to analyze those transcripts for trends such as level of discussion, type of support provided, or focus on particular standards of teaching. These conversations are in the early stages, and a plan will be finalized this spring prior to implementation of the online system this summer.

PROGRAM SUSTAINABILITY

The question of program sustainability is the one that overshadows all of our work with induction at the University. In terms of the local program, we are currently in the process of clearly articulating the program components that we see as most likely to be sustained after grant funding ceases next year and strengthening the structures needed to ensure that continuation. We

have mapped out a plan for the next five months that will allow us to start the 2006-2007 school year with the program components and participants' roles clearly defined and a plan for clear communication of this information to all novice teachers. We have clarified and refined our program's mission statement and core beliefs and are in the process of coming to consensus on the desired outcomes for each group of program participants - novice teachers, advisors, students, building administrators, central office administrators, and University faculty. Next steps include identifying essential program components under the three areas identified earlier in this paper: one-to-one mentoring, professional development opportunities, and University collaboration and collecting our tools and resources connected with each of those areas into a program handbook. This step of the process will include documentation of the processes and people involved in maintaining the new links established over the past two years with the University. The third step in this process involves identifying connections between the program structure considered in step two and existing district programs and determining natural connections and ways to draw on these current programs to enhance the sustainability of our work. Finally, we need a clear plan for addressing budgetary implications within the district. Documentation of our successes in providing quality induction for novice teachers has already begun with the creation of a logo, a brochure, and a video highlighting key aspects of the program and its impact.

The sustainability of the online system for distance induction is, of course, still in the initial stages of discussion since the program is just getting off the ground. Once we know how we will be evaluating the work and can determine the most effective components, we will know what is worth sustaining and can begin to determine the best means for doing so. The cost of the Tapped In building will go down further as other institutions invest with us in the creation and sustainability of the building. The director of the teacher education program, who is also the special education seminar professor who has been using Tapped In, believes that if the system proves beneficial to novice teachers, there should be no problem identifying continued funding for the building space from within the department. Faculty involvement and encouragement of

that involvement will need to be addressed as will management of the site which will be facilitated by the Induction Coordinator over the next year. These issues will all need to be examined carefully over the next year to determine what, if anything, from this distance work is worth sustaining and the best means for creating the structures that will enable sustainability.

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