

Designing Equity and Diversity into Online Strategies to Support New Teachers

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Abstract

School districts face several interrelated challenges in developing strategies and infrastructure for new-teacher support: motivating teachers to seek assistance from colleagues and experts; building district capacity to provide a diverse pool of expertise; providing support equitably and in a timely fashion; and assuring the support is high quality and aligned both with the needs of the teacher and policies of the district. Each challenge is difficult to address in its own right; finding solutions that address them all in a cohesive way can overwhelm the resources and capacity of districts. Meeting these challenges requires a sustainable and scalable strategy that is economical and efficient, as well as responsive to teachers' cognitive, professional, and affective needs. We are working with Milwaukee Public Schools (MPS) and the Harvard Graduate School of Education to address these issues by helping to design online support structures and activities that engage new teachers, accomplished teachers, district staff, and partners. Our research approach blends two roles for SRI staff—as partners in the design and implementation of online tools, services, and support strategies and as strategic planners, analyzing the conditions and partnerships necessary to implement, sustain, and scale up support strategies in cooperation with teacher education, induction, and professional development efforts in the district.

National Context: Teacher Retention Strategies

Research on teacher learning (Loucks-Horsley et al., 1998; Darling-Hammond & Sykes, 1999; Strong & St. John, 2001; Kaufman, 1988; Feiman-Nemser, in press) and on teaching standards (NRC, 1996; NCTM, 2000; NBPTS, 2001) increasingly calls for mentoring, coaching, and peer support to meet the professional development needs of teachers at all stages of the career development continuum (Kaufman, 1988; NCTAF, 1996). In response, state and local policies designed to address the shortage of qualified teachers are beginning to mandate mentoring, coaching, and peer support to increase induction and retention of new teachers and renew the skills and motivation of veteran teachers.

Providing equitable access to the appropriate mentor, coach, or collegial support is a challenge that strains the resources and human capacity of many school districts, particularly in large urban

districts, which tend to have larger proportions of new and underqualified teachers. New teachers' needs are so variable and immediate that the appropriate combination of expertise, experience, and cultural background is unlikely to reside in one mentor who is available when needed. In many cases, the expertise needed in a given situation resides somewhere in the district and/or in the district's professional development partners (e.g., universities and private providers). New strategies are needed to identify the pool of available expertise, motivate and reward experts for sharing their expertise, deploy expert resources more effectively, and continuously foster the recruitment and development of new support providers.

Project Focus: The MPS Professional Support Portal Initiative

Recognizing the benefits of providing informal mentoring, coaching, and peer support for its teaching workforce, Milwaukee Public Schools (MPS) has implemented these strategies in several of its professional development initiatives. The district has found it difficult, however, to build a strategy that is sustainable and scalable without more equitable, economical, and efficient means to support these activities across a diverse teacher workforce. Consequently, MPS has established a strategic initiative, the *Professional Support Portal* (PSP), designed to use technology in innovative ways to support teacher induction, retention, and continued professional growth at all stages of the teaching career continuum through online tools, resources, and expertise.

The initial focus of the PSP initiative is the chronic problem of new-teacher retention (Moore-Johnson, & Kardos, 2002). MPS hires approximately 800 to 900 new teachers each year, and approximately 37% of those teachers leave within the first 3 years of employment. The goal is to help improve the new teacher retention rate by addressing three categories of needs expressed by new teachers and cited in the teacher retention literature: (1) access to high-quality teaching resources, (2) frequent access to experts (i.e., mentors and coaches), and (3) ongoing peer support. The overarching approach is to build the social and technical infrastructures needed to easily find and interact with resources, experts, and peers, both face to face and mediated by technology. The reader is encouraged to see the companion paper in this session (Dede, Nelson, & Eddy-Spicer, 2003) for a more comprehensive overview of the PSP initiative.

In this paper, we focus on one component of the PSP initiative—the *Online Professional Support Community* project—in which we are working closely with MPS PSP staff and Harvard research staff to address the following needs identified through MPS new-teacher focus groups:

- Peer support and information-sharing groups for new and recent hires
- New-teacher meetings to address common issues
- Connections with institutions of higher education
- Connections with more experienced colleagues
- Ability to receive advice or answers to questions from master teachers
- Multiple modes of communication (e.g., email, listserv, bulletin boards, chats)
- Feeling of belonging to the districtwide community through notification of initiatives, opportunities, and events (e.g., courses, workshops, textbook adoption committees, projects, topical discussions, and informal groups).

In this first year of the project we have three goals: (a) design and pilot test an online community venue in the Tapped In[®] system to support online activities; (b) initiate a set of

support strategies that meet the teachers' needs and roles that give experienced teachers and district staff flexibility in the kind and amount of support they choose to offer their new colleagues; and (c) collect and analyze data that will assist PSP staff and partners in building a roadmap for implementing the professional support community in a sustainable, scalable, and cost-efficient manner.

Theoretical Foundations of Our Approach

Our efforts to develop new-teacher support strategies and infrastructure are guided by the *Community of Practice* theoretical framework (Lave & Wenger, 1991; Brown & Duguid, 1991; Wenger, 1998). The framework suggests that a teaching professional's community of practice can have a direct (positive *or* negative) impact on professional growth through various forms of informal collegial interaction (Barab & Duffy, 2000; Brown & Duguid, 2000; Schlager, Fusco, & Schank, 2002; Schlager & Fusco, in press). This framework provides an analytical lens for understanding how less-expert members, or newcomers, gain increasing mastery in a practice.

From a community of practice perspective, professional practice and professional development are inextricably entwined through work and dialogue with peers and more-experienced colleagues. Thus, a community of practice is not only a context for professional practice and development; it is also a *social network* of individuals, in various types of social and professional relationships. Newcomers gain access to the community's professional knowledge, tools, and social norms through participation in authentic activities and communication with other community members who represent a range of roles and expertise. As new members of the community gain greater expertise in the practice, their roles and positions in the community change, and they themselves begin to guide newcomers, participate in new forms of professional activities, innovate the practice, and become more central in the activity of the community.

The recognition that communities of practice can play an important role in professional learning has spurred a great deal of interest in how to harness the power of such communities in the context of systemic school reform and professional development projects. Researchers (Garet, et al., 2001; Smylie, et al., 2001; Loucks-Horsley et al., 1998; Little, 1990 and in press; Stein et al., 1998; Schlager & Fusco, in press), practitioners (Wilson & Berne, 1999; Rényi, 1996; AACTE, 2000), and policy-makers (PCAST, 1997; National Commission on Mathematics and Science Teaching for the 21st Century, 2000) are converging on a shared vision of effective teacher professional development as more than a series of training workshops, institutes, meetings, and inservice days. It is a process of learning how to put knowledge into practice through engagement in practice within a community of practitioners.

Recent studies (Stein et al., 1998; McLaughlin and Talbert, 2001, Bransford, Brown, & Cocking, 2000) describe the positive effects on professional development when the district office works together with education professionals who work in a school district (teachers, aides, librarians, administrators, technology specialists, etc.) and outside professional development partners (e.g., district staff developers, university faculty, content experts, private consultants) in a districtwide community of practice. Other studies (Elmore & Burney, 1999; Honey, Carrigg, & Hawkins, 1998) demonstrate that the local education community of practice helps build the capacity of, and provides social incentives for, teachers to participate in formal and self-organized activities for professional growth.

Our work is guided by an online community of practice infrastructure model developed over several years to support professional collaboration and peer support among teachers (Schlager &

Schank, 1997; Fusco et al., 2000; Schlager, Fusco, & Schank, 1998, 2002; Gray & Tatar, in press; Tatar, Gray, & Fusco, 2002; Derry, Gance, Gance, & Schlager, 2000). In adapting our model to the district context, we were influenced by the findings of a series of pilot studies designed to develop a scalable model of Web-based mentoring and peer-support for new teachers by Evertson, Smithey, & Hough (2000). The major conceptual components of the model are:

- *Access to online technology.* The model requires a low technical threshold for access to a browser-based online environment from school and home. Access to the system must not require downloading plug-ins or an Internet connection faster than basic dial-up service (although the system may require additional bandwidth or software for optional capabilities). Users must be able to gain access to basic information and assistance through multiple channels (e.g., phone, email, and online help) during and after school hours.
- *Multiple interaction formats and technologies.* Our model calls for a range of tools and workspaces that (a) support work practices of large numbers of different groups; (b) enable users to know whom they are interacting with and what is going on around them; (c) allow users to create, store, and share discourse objects (e.g., notes, overhead slides, Web page bookmarks); (d) communicate in real time or asynchronously, as the need arises; and (e) engage in group activities hosted by organizations as well as their own circle of colleagues.
- *Competence with online discourse strategies.* Barriers to effective participation are as often social as they are technical. Users must be given the opportunity to develop and practice their online discourse skills through peripheral participation in low-pressure, high-interest activities prior to their engagement in sessions explicitly designed to be learning experiences.
- *Identity and trust.* Support, user profiles, and induction activities are aimed at building trust in the system and developing a strong sense of community and group identity.
- *Ownership.* The model encourages a sense of ownership in the community by encouraging members to contribute to community activities and resources, assist other members, and use the online environment to support their own collaborations and groups.
- *Heterogeneity.* A key indicator of community health is the participation of a population with diverse interests and a range of expertise. The model encourages the participation of teachers at all levels and from all disciplines, as well as district staff, researchers, university faculty and students, staff developers, and administrators.
- *Community management and leadership.* No professional community can be sustained without management and committed community leadership. In a typical district, professional community leadership is often erroneously equated with district leadership and community management functions are replicated (redundantly) across individual reform initiatives and professional development projects. Recognizing and rewarding informal leadership and centralizing community management functions can help coordinate activities across projects, increase efficiency, and create economies of scale.

We use these concepts to guide both our design and our evaluation of the implementation and outcomes.

Project Research and Evaluation Agenda

Our overarching research question is: *How can the technology-supported teacher support network be most effectively rolled out and scaled up to meet teachers' professional support needs in accordance with the district's vision for the PSP?* More specific questions include:

- What are the prevailing perceptions of teachers, administrators, and partners concerning teachers' support needs and existing structures to meet them?
- What technological and cultural conditions exist that could facilitate or hinder the scaling up of the teacher support network?
- What are the opportunities for the PSP project to leverage and/or support other MPS departments' and partners' existing or planned teacher support programs?
- How might PSP capabilities and capacity grow and be deployed over time to most effectively and efficiently enhance teacher support programs and initiatives districtwide?

SRI staff are currently conducting initial analyses of local conditions to assess the readiness of MPS educators to engage in online activities, their access to online technology and technical support at school and home, and the existing culture and organizational infrastructure in the district. We recently completed the first of two data collection efforts—23 interviews with key district and partner staff. The interviews were intended to understand the organizational context within which the PSP project is being developed and the opportunities and obstacles that district leaders see for the PSP project. The interview protocols were tailored to the position of each interviewee. The second component of our data collection—a survey of more than 800 teachers stratified by years teaching—is currently being fielded. The survey contains questions covering educational and teaching background, teaching assignment and school, technology proficiency and access, professional support, and professional development opportunities. The teacher survey will also provide baseline data against which we will evaluate our progress.

Our evaluation efforts are scheduled to begin in August 2003, as the PSP project begins its first full implementation. The evaluation will assess the usability and obstacles to using the online community system, effectiveness of the online community in meeting new teachers' needs for professional and socio-emotional support, as well as in providing all participants with meaningful incentives and professional interactions. The evaluation will also address the district's efforts to develop the capacity necessary to adopt, scale, and sustain the community.

Design and Pilot Testing Progress

The balance of this paper will focus on design and pilot-testing activities in preparation for first roll out, planned for August 2003. The overall goal is to design a technology-supported teacher support network (with both online and offline components) that meets teachers' needs for emotional, social, and professional support; that teachers use and value; and that supports and enhances district teacher support programs. Specific design and implementation goals include:

- Establishing an online network infrastructure (technical and human) that promotes peer support and provides access to help, information, and resources on a sustainable basis
- Cultivating a community of new and veteran teachers who support one another, exchange ideas and resources, and take ownership of the community support infrastructure

- Conducting online and offline events that enable teachers to develop online discourse skills and norms, as well as gaining new knowledge, and building trust in, and commitment to, the community
- Expanding the types and quality of support and professional development opportunities available to teachers online.

In September 2002, approximately 200 of the 475 new teachers who had applied were to be offered the opportunity to receive a free laptop computer in exchange for their participation in the PSP initiative as a pilot cohort. Their participation required being trained to use the computer and the Tapped In® online environment, attending four face-to-face meetings over the course of the school year, participating in prototype peer support cadres led by a facilitator, and completing assignments in which they were to log into the information portal component of the PSP to interact with and provide feedback on the content, navigation, and usability of the portal. In addition, approximately 50 teachers who had participated in the initial design phase of the PSP the previous year were invited to continue their participation as facilitators for the new-teacher cadres. In return, they would get to keep the laptop they were given the previous year.

The SRI team joined project in August 2002, at which time the PSP was still a set of design specifications and mock-ups. The design team—composed of MPS PSP staff members, the SRI and Harvard research teams, and the Web developers contracted to build the information portal—had a month to prepare for the cohort. Below, we describe our activities and challenges in the first eight months of the project.

MPS Professional Support Community Building in Tapped In®. SRI's first task was to build an online community environment for the cohort to use for online meetings, discussions and events. To help assure that all participants have ready access to online technology, MPS provides each teacher with an email address and dial-up access to the Internet through the district (the PSP cohort also had their laptops). The district also provides training and follow-up support on the use of the computer and MPS network capabilities.

We have worked with MPS staff to create additional online interaction formats and technologies using SRI's Tapped In® V2.0 system (TI2, www.tappedin.org/new) as a prototype for piloting online tools and activities. Tapped In is a Web-based online community environment that uses a campus metaphor to organize tools, groups, and activities. SRI staff built MPS has its own virtual building in TI2¹, which currently has four floors:

Ground Floor:

- Reception (where users find help desk staff, announcements, and news)
- Forums(used for periodic public events)
- Lounge (a place to engage in social conversation)
- Member Orientation (FAQ and files about what users can do in Tapped In)
- Technical Support (FAQ and files about technical aspects of Tapped In)

Second Floor:

- New Teacher Support rooms (reserved for new teachers and their facilitators and mentors)

Third Floor:

¹ Guests are welcome to visit TI2 and the public areas of the MPS building at www.tappedin.org/new. For a personal tour, please email the lead author or ti2contactus@tappedin.org.

- MPS Groups (rooms created by PSP Community members for groups that they lead)

Fourth Floor:

- MPS personal offices (all MPS PSP Community members are entitled to their own office)

Virtual rooms on the third and fourth floors are available to any individual or group of MPS professionals and partners that needs an online venue to collaborate on a project, supplement face-to-face professional development sessions, form a group, or share expertise and resources on a particular topic. Each room contains communication tools:

- Text-based chat with private messaging for side conversations
- Threaded discussion boards with email distribution for asynchronous dialogue
- Automatic transcripts of all conversations via email
- Saved messages stored for someone who is not logged in
- Awareness of who is logged in

and information storing and sharing tools:

- Web page projection to show others a web page in real-time
- File sharing to upload and download files (e.g., Word, PowerPoint, Excel) in a personal office or group room
- Web page link sharing allows users to create an annotated link to any Web page or a set of shared bookmarks to favorite web pages
- Room notes to post a welcome message, meeting agenda, syllabus, featured files or links, or a graphic that people see when they enter the room

Each member is entitled to own a personal office and up to 2 group rooms. To join a group, users browse through a list of MPS groups. The group's owner determines whether the group is open to all, membership by request, or membership by invitation only. Only members of a group can enter the group's room. This ability to create new spaces on the fly has helped increase the diversity of expertise and sense of ownership in the overall community. Several groups that are outside the PSP pilot cohort (e.g., National Board candidate support program, Literacy Coaching Program, school librarians, District Teaching and Learning Department Staff, Assistive Technology Staff, School Counselors) have heard about the Online Support Community building and have inquired about creating their own group workspaces. We are working with the PSP staff to help support these groups as they begin to use the system.

The content and user interfaces of the PSP virtual building are also being updated in response to user feedback. One example is a way for new teachers to more easily find, select, and join a cadre. Another example is the creation of a new type of room with special features that enable teachers to anonymously submit questions to an experienced teacher whose responses are posted publicly (see *Dear Millie*, below).

Defining support roles. In accordance with the community management and leadership feature of our model, one of our first tasks was to help define the roles of the staff and facilitators, so that teacher from the prior year who chose to stay with the project would know what they were signing up to do. Many of the 50 who had participated the prior year were concerned that they would not have the time to devote to a task as intensive as new teacher

support. The email below from one of the veteran teachers to the PSP community manager illustrates the concern.

I will not be able to attend either Monday or Tuesday's meeting. I am thinking that with my busy schedule, I should withdraw from the project. I do not have the time to effectively participate. I will try to return my laptop next week some time. It has been interesting to be a part of this large undertaking. Thank you for including me.

We recognized that the concept most teachers have of coaching and peer support is a one-to-one or one-to-many hub-and-spoke model, which is very time intensive and does not scale well to large numbers. In contrast, our approach, which was not familiar to the teachers, uses a network-of-support model that includes several different types of facilitation role, each requiring a different time commitment:

- **PSP Staff.** District staff who manage PSP user services, provide training, and organize PSP activities
- **Help Desk.** Provides immediate online assistance to teachers seeking information about the PSP or where to go for specific assistance
- **Cadre facilitators.** Lead a cadre of new teachers, usually in pairs.
- **Discussion leaders.** Prepare materials for and lead topical discussions and/or moderate online events
- **Idea catchers/scouts.** Gather topics of interest to new teachers; recruit experts in and outside the district to share their expertise on topics
- **Content/PD experts.** Accomplished teachers, district staff, and partner staff who serve as resources for MPS teachers, e.g., guest speaker or discussion leader

After explaining the model to the cohort and asking them to help us define new support roles, we received a second email from the teacher who had written the email above:

...So I would be able to set up a time to be online and answer questions about literacy (or whatever else)? Have you considered having an advice spot (like a Dear Abby column)? I bet you could get guest columnists to take a week or a month and try to answer the questions anonymously. I would be willing to do this from my home in real time one evening or answer questions whenever. ... I have a computer on my desk here so I can answer as I eat my lunch or in between classroom visits. ...Anyhow, I would be able to do some work for you either way.

Other potential facilitators, especially those who were only in their second year of teaching were concerned that they did not possess the expertise needed to support a new teacher. We addressed the second issue by drawing a clear distinction between being a mentor, which has a formal designation in MPS, and the collegial support role that we expected facilitators to play. We made it clear that the facilitators were not expected to have all the answers. It was equally valuable to know who did have the answer, and is able to bring that expertise to bear. Moreover, a teacher who had just gotten through her first year might be a better source of support for some issues faced by a new teacher.

Approximately 20 of the cohort agreed to serve as facilitators. The teacher who sent the emails above now runs the PSP *Dear Millie* question and answer service. To help the facilitators

share their successes and challenges with the PSP staff and one another, we established the Facilitator Support Group, and SRI staff facilitates that group to model facilitator roles and strategies. In an effort to encourage buy-in and ownership by the PSP facilitators, we help them set up private group rooms for uses other than their role in the PSP pilot project. For example, some cadre facilitators are using Tapped In to mentor other teachers or create support groups for colleagues they know who teach the same subjects. We learned that when veteran teachers are given a voice in formulating the type and amount of support they are asked to offer their new colleagues, they are more willing to commit their time and expertise.

New teacher cadres. Approximately 170 new teachers accepted the offer to participate in the project. In the first face-to-face meeting of the cohort (actually held in six locations connected by video conferencing technology), the PSP staff and SRI and Harvard researchers described the project, the network model, our expectations, and our commitment to supporting the participants. We emphasized that they were a pilot test cohort, and that the project was very much one in development.

Our first task was to divide the cohort into cadres of 10-15 new teachers led by a facilitator. We explained to the new teachers that in a network-of-support model their cadre-mates would be their first lines of support and their facilitator would arrange meetings and discussions around issues of common interest. We initially assigned people to cadres by grade, subject, and location. After completing the tedious process of sorting 150 teachers and receiving requests to switch cadres, we recognized that forming cadres in this manner for 800-900 teachers in the future would not be practical. We then developed an alternative process in which the cadre facilitators would “advertise” their background, interests, and the focus of their cadre, and the new teachers would select the cadre (or cadres) they wished to join. On the basis of these pilot experiences, the PSP community manager developed the following process for next fall:

- Facilitators create a room in the Tapped In environment, post the identity of the group that they are willing to facilitate, and invite that defined group of teachers to join.
- As new teachers read the profiles posted by the facilitators, they are free to join cadres that best meet their needs.
- When a facilitator’s room fills with 10 to 15 cadre participants, the facilitator closes the room.
- Teachers who have been assigned a cadre may find an alternative cadre that appears to suit their needs more appropriately. In that case, the teacher changes cadres, provided there is room in the chosen cadre.

This process will allow for scalability as we expand the portal; it will ensure that a teacher’s needs are met as they personally see fit; and it will allow facilitators to define their area of strength and thus best utilize their expertise.

Training and Help Desk. Two critical roles of community management and leadership are training and member assistance. We have been working with PSP leadership to create community leadership positions and recruit and train MPS teachers to fill those positions. The pivotal role in the Tapped In model is the Community Manager, who conceives of and manages the activities and services that keep people engaged, connected, and feeling supported. MPS assigned a full-time staff member to the role. The model also specifies several other community management roles, including event (and calendar) coordination, Help Desk staffing, event

facilitators, trainer, and group leaders. The Community Manager has successfully recruited a part-time trainer and five part-time help desk staff, as well as the 20 teachers serving as cadre facilitators and other support roles.

We have worked with PSP staff to develop training materials and conducted face-to-face sessions to introduce teachers to online communication. The PSP staff also offers periodic face-to-face drop-in help sessions, an 800 number for computer support, and an email address for any questions a participant might have. These services help build trust on the part of the new teachers. We are also helping the community staff develop their own competence with online discourse strategies. And we are working closely (via telephone and online) with experienced teachers and district staff who do not have strong online discourse strategies to build their skills. Specifically, we have trained and continue to mentor the help desk staff to model community norms and conduct, such as introducing themselves to and assisting new users, encouraging and assisting new community volunteers, and being respectful of multiple points of view.

After-School Online Colloquia. Through the leadership of the SRI and MSP project staff, the community is establishing online social norms that express identity (e.g., profiles and introductions) and help build trust (e.g., cadre discussions of sensitive topics). To help participants develop a sense of ownership in the community and competence with online discourse strategies, we have instituted a weekly series of public events on topics suggested by the community and led by experts recruited by PSP staff.

SRI staff work with the guest speakers to prepare prior to their session and as a moderator during sessions (via telephone and online private messaging) to help speakers model appropriate norms of online discourse for discussion and Q&A sessions. Topics thus far have included *Common Sense Classroom Management*, *Introduction to CDA*, *Assistive Technology*, *IEP Questions and Issues*, *Classroom & Behavior Management*, *Violence Prevention*, and *Know Your ABC's – Academic Behavior Climate*. New teachers and their facilitators, as well as district staff who are not part of the PSP project, attend the sessions, which helps draw new people and groups into the community.

Progress Indicators and Conclusion

The pilot phase of online community implementation appears to be progressing well, but we are far from collecting evidence to support the claim of success. In our experience cultivating a well-functioning, supportive, and sustainable community infrastructure is a matter of years, not months. We do not know whether working in a single district, with teachers who presumably already have professional ties with their colleagues will shorten the process.

Our numbers are promising. Thus far, 332 MPS staff members have established Tapped In accounts, including 147 PSP new teachers, 20 facilitators, and 9 PSP staff (including help desk). The balance is from other MPS programs, district offices, and partners.² Forty MPS groups have been formed—12 are official PSP new teacher cadres, and 3 are PSP facilitator support groups. The largest cadre has 22 members and smallest has 3 members. The most active group is the Cadre Facilitator Support group (18 members), with many ongoing discussions on its discussion board. The PSP design and research staff created four groups. Six groups have been set up by district and school offices and 2 by MPS partner institutions. The remaining 13 groups were

² SRI and Harvard staff are not included in this tally.

created by individuals, small groups, mentors, literacy coaches, and district offices; most have few members. Seven of the 12 PSP cadres have begun to work online and/or meet face-to-face on a regular basis. The other four are still becoming comfortable in the system with assistance from SRI and PSP staff.

Although we are capturing the number of times people log in, the number of posts to discussions, and the time they spend logged in, we are not ready to rely on those figures to assess the progress of the project. We will begin giving more credence to those figures in the 2003-2004 school year when participants will be self-motivated to log in (recall that this year, teachers are assigned to log in). We are, however, using membership, log-in, and participation data to inform the PSP staff which participants may be having technical difficulties and which are fulfilling their obligations to keep the laptop computer.

Over the years, we have learned that it is very difficult, especially in the early stages, to provide unambiguous and compelling evidence that “community” is actually forming and growing. Numbers can be very misleading. Because we truly consider what we do “cultivation” rather than implementation, a gardening metaphor might best illustrate the point. You plant bulbs in the fall, and for a long time, there is little to see above ground except the trowel rows. You plant many bulbs because you never know which bulbs will sprout. One day in the spring you find a shoot breaking through the ground. The next day, others are sprouting up, some in places where you didn’t plant any bulbs. Other places are bare.

That is the way it is with the MPS online professional support community. We planted bulbs in the fall of 2002; many are now blossoming and others are not. The best evidence that we are on the right track is that we see groups forming and taking root, sometimes in places where no effort was made to cultivate one. We are pleased that many of the groups formed in the fall are not only beginning to sprout, they are also propagating new groups.

The emails below between one of the PSP project leaders and one of the authors of this paper illustrate the excitement of our gardeners when they see their garden beginning to fill out. In the first email, Judi reports on a meeting of a group of MPS librarians who are using the TI2 system for their own purposes (unrelated to the PSP project). One of the librarians excitedly reports on a chance meeting in TI2.

Judi writes:

Hello, Last night, the librarians in[names of the group leaders] group got online... There were about 5 of them total.... It was a pretty good first discussion... Getting comfy with the system and all.... [An MPS teacher] showed up and also gave them some info that was relevant so that was a nice connection too. But, the exciting thing I read from the transcript (I couldn't be active in the discussion, I just logged in and sat there and then got the transcript)... When Frieda [pseudonym] came on last week in TI2 this happened...

>Frieda: I have to share this with you all of you. Last week Tuesday, I went on at 8:00 and was talking with a famous Library Media Specialist from MA. Anyone care to guess?

>Librarian 2: Oh boy, her name is on the tip of my tongue, is it the Rutgers prof?

>Frieda: No, She is a district Library Media specialist with a terrific website sponsored by Discovery Channel

>Librarian 3: Who was it?

>Frieda: Kathy Schrock

>Librarian 3: Hope Kathy gave you some good tips!
>Librarian 4: Frieda, I understand we could plan more things like that for everyone
>Frieda: Kathy Schrock was just in the MPS area looking around. I think she must be a tapped in member and she seemed interested in visiting Milwaukee sometime in the future.
>>Librarian 2: Frieda, that is really neat about Kathy Schrock.

This is part of the power of the TI2 community and the librarians got to experience it by a serendipitous event. --Judi

The PSP leader reacts positively and mentions another unrelated group that could expand the network to partners outside the district:

Very exciting.....let's figure something out.
[unrelated paragraph]
We also want to bring in more of the MPS teachers overall - outside of the portal pilots.
[unrelated paragraph]
On another matter - Did [MPS district professional development leader] contact you about creating an I Can Learn space so the MPS teachers can have an online community with the other ICL schools nationwide for idea sharing and problem solving? It would need to be a room we control that general TI2 members could participate in.
Spring is here Judi - your garden is growing!

It may seem to the untrained eye that these emails are about groups using TI2 for their own purposes, unrelated to the PSP project and its mission. Worse, these groups may appear to be sapping the human resources of the PSP Project. The reality, however, is that with a small amount of nurturing, those groups can help the PSP community grow into a cohesive, self sustaining support network. For the purposes of the PSP project, having local librarians and the ICL group in the portal represents much-needed sources of expertise for the new teachers and their facilitators. Because scalable human and technical infrastructures are in place, the PSP has enabled new sources of teacher support to come online, essentially at no additional cost. The PSP need only use its existing training and help desk resources to help the librarians and ICL group become comfortable using TI2. The groups need only succeed in accomplishing their own goals to become contributing stakeholders in the PSP community.

Our closing message is that researchers, district leaders, and policymakers who are concerned with sustainability and scalability of school reform efforts must be shown the value in, and how to reliably and cost-efficiently cultivate, what we are documenting in MPS. Otherwise, districts will continue to engage in reform efforts that grow while the external funding lasts and then die on the vine (apologies for yet another gardening metaphor!).

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