Using Technology to Promote In-service Teacher Education and Enhance Professional Capital

J. Edward Frick
Western Governors University

Follow this and additional works at: https://pdxscholar.library.pdx.edu/nwjte

Part of the Education Commons

Let us know how access to this document benefits you.

Reviews: Practice and Curriculum

Using Technology to Promote In-service Teacher Education and Enhance Professional Capital

J. Edward Frick, Ed.D,
Western Governors University

Abstract

Collaboration has been identified as a vital component to enhancing the educational context and is a key component to professional capital (Hargreaves & Fullan, 2013). With that being said, technology offers a viable and productive venue for such collaboration to take place. The dilemma for districts is determining how to provide in-service education opportunities that promote the use of technology for the purposes of enhancing collaboration. This article explores how in-service opportunities that utilize technology for collaboration can enhance professional capital within the educational context. Recommendations for both district-level leadership and the individual practitioner are outlined.

Introduction

In looking at recent educational literature, much emphasis has been placed on the value and importance of collaboration among educators for improving practice. Recently, Hargreaves and Fullan (2013) discussed the concept of professional capital and how it can affect the future of teaching and public education. Professional capital consists of three kinds of capital: human capital (the individual talent base); social capital (the collaborative power of the group); and decisional capital (the wisdom and expertise to make sound judgments about learners that are cultivated over many years) (Hargreaves & Fullan, 2013, p. 37). All these capitals promote teacher professional learning and teacher efficacy through their practice.

Integral to the idea of professional capital is collaboration on a variety of levels. It is clear, from their work, that teachers report effective support and motivation when educational entities promote both internal and external collaboration. In a broader context, the importance of collaboration is not lost when considering effective learning systems. Ash and D'Auria (2013) discuss a blueprint for establishing an effective learning system that includes five major tenets – one of which calls for collaboration in all directions and elevating the importance of teamwork (p. 44). Research is replete with evidence demonstrating that greater collaboration will foster collegial trust, enhance job satisfaction, promote teacher success in the classroom, and improve student responsibility (Fullan, 1993; MetLife, 2010; Mourshed, Chijioke, & Barber, 2010).

Even with the extensive underpinning research provides regarding collaboration, schools and/or districts are responsible for creating environments and promoting structures that help build teachers' professional capital and, thus, increasing in-service teacher education. Technology offers a venue for both building professional capital and providing a structure to do so. The results and recommendations of a recent study looking at the relationship between technology and the development of social capital (collaboration) within six rural secondary schools in Pennsylvania reiterates that technology and collaboration are vital to the development of a rich professional culture (Frick, 2012).

The aforementioned study examined the relationship between attitudes of administrators and faculty at the secondary level toward Internet-based technology and virtual networking and the development and support of social capital within schools' organizational contexts that can lead to school improvement as demonstrated by student outcomes (e.g. achievement and a sense of community welfare or connectedness). A mixed method approach utilized a questionnaire, focus group discussion, and site observation conducted in six selected secondary schools in Pennsylvania. The study's findings demonstrate a positive correlation between (teacher and administrative) perceptions of Internet-based technology and virtual networking and the development of social capital within these schools.

The study revealed that perceptions of technology and collaboration within a secondary school context are highly correlated, making it evident that an educator's skill, aptitude, and desire to utilize technology will significantly impact the professional learning environment (Bonk, 2009). Ultimately, through effective and innovative use by the organization (in this case a school or district), Internet and virtual technology have the capacity to place faculty and administrators into safe and secure communities. Within these secure communities, schools and districts can provide administrators and teachers with access to familiar social networking tools, allowing them to establish meaningful, relevant and authentic learning relationships with partners of varying skills, opinions and backgrounds. Such access helps teachers collaborate in discussions, share tasks, review and assess each other's work and co-construct knowledge – arriving at a shared understanding and deep learning in alignment with core skills and standards.

The ability to belong to multiple learning communities, all with their own defined points of contact, enables faculty and administrators to break free of the constraints of the traditional organizational setting. This freedom allows both faculty and administrators to supplement and transform existing practice by extending access to learning opportunities beyond the constraints of the school day irrespective of time and location; making learning and their own professional growth a part of daily living rather than a narrowly defined span of time (Bonk, 2009; Zhao, 2009). The aforementioned use of technology within education may seem ideal, but literature surrounding technology and its impact on collaboration within

155   Northwest Journal of Teacher Education

these contexts supports such findings given the level of capacity building within the organization.

The question that immediately comes to mind is how districts begin to address the use of technology to increase teacher professional learning. A focus on providing explicit in-service teacher education related to productive uses of technology for the purpose of enhancing professional knowledge is an effective starting point. Hughes (2004) provides four guiding principles that should be considered when evaluating, constructing, or redeveloping technology learning opportunities at the in-service level that, if implemented strategically, might facilitate teacher reflection, observation, experimentation, and, ultimately, develop teachers into effective users of technology. The principles, which focus on the ability to evaluate for use rather than the procurement of specific skills, are (1) connecting technology learning to professional knowledge; (2) privileging subject matter and pedagogical content connections; (3) using technology learning to challenge professional knowledge; and (4) teaching many technologies.

To illustrate how these principles could be applied at the district level to promote in-service teacher education, consider the following example:

> Teachers can be directed to group themselves (along with curriculum coordinators, administrators, and/or media specialists) into subject-specific, collaborative groups that meet in an ongoing fashion. During group meetings, teachers can discuss issues within their teaching to identify problems-of-practice that determine future inquiries into technology (Principle 1 and 2). Alternatively, group members can demonstrate new technologies and propose possible integrated uses (Principle 1) or allow the technology to inspire discussion into contemporary issues within teaching and learning (Principle 3). Finally, teachers need access to technology (Principle 4) to facilitate their inquiries into problems-of-practice, to examine as possible solutions, and to spur discussion about theory and practice (Hughes, 2004, p. 356).

Given the previous example, it is evident that district-level leadership should focus on capacity building at the practitioner level as a way to effectively engage in-service teacher

education. The articulated use of technology should be relevant to needs (content, instructional, time) and relevant to technical ability and interests. As evident in the quantitative data of the Frick study, the perception variables significantly correlate to the collaboration variables. Specifically, if a teacher's perception of technology is positive through exposure and usage of it, then the likelihood that greater collaboration can take place within the given context. Therefore, strategies or initiatives put in place should reflect that understanding. Qualitative data of that same study showed that familiarity with a technology's specific purpose played a significant role in practitioner perception.

Several courses of action are suggested below for district level leadership and classroom teachers to pursue that will focus on enhancing perception of technology and ultimately supporting the development of social capital (collaboration) in that context. Certainly a commitment is needed from both the district and individual to devoting teacher professional development and teacher in-servicing (through a technology coach, mentor, train-the-trainer model, or collaborative inquiry groups) to learn how to effectively navigate and utilize the technological venues available to both connect and challenge teacher professional learning.

School Wide/Administrative Suggestions

1. Institute a district and/or school blog (or wiki) where events and class achievements are posted. This blog (or wiki) could also be a venue for posting innovative class activities/projects and for announcing upcoming student learning endeavors.

2. Start a district and/or school Twitter or Facebook page and ask all school personnel to participate and follow the school. Make this Twitter or Facebook page a place for sharing with teachers and the community – connecting the school, teachers, parents, and students.

3. Encourage each teacher to create a Twitter account and provide each department with a specific hashtag to follow, relevant to their content (e.g. #mathchat, #sciencechat…there are most likely hashtags specific to each content area). Encourage each department to check in with the hashtag at least once before the department meetings and bring an interesting article/blog/posting to discuss to their

department meeting. Such sharing and reflecting on content related topics will promote in-service teacher education by fostering collaboration, reflection on practice, bringing new ideas or creating topics for debate to help teachers learn and grow in their knowledge and support of each other.

4. Find relevant webinars or live conferences and provide the time for teachers to meet and participate in these. Everyone could be on their personal computer and participate and respond or they could be placed in smaller groups with a designated computer person who responds (usually these live events provide avenues for responding via chat panels).

5. Create an online community, such as Moodle, where resources are shared, discussion topics are posted and teachers can respond and reflect and ask questions. Post a weekly discussion and give teachers time to respond asynchronously. Provide 'live chat' times where a designated facilitator (colleague) leads a topic of discussion relevant to content or education or strategies or new tools, etc. Such online communities provide non-threatening forums for participation and collaboration.

6. Use Facebook to "like" Facebook Pages that relate to specific subject matter. Facebook can also be used to create a Group for the teachers in your school, district, or subject matter association. Doing so provides on-demand opportunities for in-service teacher professional development, knowledge exchange and the ability to easily share content.

Along with district and building leadership, teachers are responsible to engage in collaborative efforts for the purpose of improving their own practice. Given the financial constraints placed on educational organizations to engage their faculty and staff in opportunities for on-going teacher education, the use and promotion of Internet-based and virtual technological venues can serve to meet that need.

Teacher Suggestions

1. Start a Twitter account and choose one hashtag relevant to the content (for example, #mathchat, #edtech, #edchat, #science). Once this account is created, teachers can

simply read posts and click on links to read the articles/blogs they are directed to. If all teachers do is read interesting topics of interest, even if teachers do not tweet, they will be engaging in their own in-service education. In the long term, teachers might start contributing to conversations, and make connections to others who can become part of a broader learning network.

2. Find relevant content-related blogs to follow. Do content blog searches – read some posts. Set aside time every day, even if it is only 10 minutes, to read one post. Eventually, start responding and leaving comments – participate in discussions. These discussions link teachers to others who can support teacher professional learning and, in turn, create a community of teachers who engage their own communities of practice.

3. Join a community forum, such as LinkedIn. Such forums usually house group discussions – find a discussion of interest and read what people are saying. Teachers can then contribute their own thoughts and ideas to the discussion. Teachers can begin a discussion topic on their own, which in turn helps teachers build a network of peers who can challenge them, provide strategies, and help with struggles.

4. Initiate the use of a blog. For their own professional learning, teachers would focus on posting ideas relevant to what they were teaching – content, strategies, technology, etc. Teachers can start small and post what is happening in their classrooms. Alternatively, perhaps after reading an interesting article or viewing a meaningful video on YouTube, teachers can write a reflection highlighting their own insights. Teachers can also comment on things happening in the educational arena, like teacher layoffs or Common Core standards. Link referenced articles/videos/blogs and let whoever wrote it know that it is being used – this action also begins to build relationships and creates connections that will build even larger communities. Ultimately, such work is about building community and networking. Teachers who engage in such activities are reflecting, considering approaches and strategies, and beginning a process of improving their own and others' practice.

Clearly this list of suggestions is not comprehensive, but the commonality of suggestions on this list point to using technology for the purpose of enhancing collaboration, connection, and community – engaging teachers in their own in-service education. The key for district-level leadership and classroom teachers is to perpetuate a culture in which technology is perceived as a viable and productive venue for administrator and teacher collaboration. These efforts will lead to some amazing learning experiences and connections that benefit educational practice by supporting and enhancing professional capital.

References

Ash, P., & D'Auria, J. (2013). Blueprint for a learning system. *JSD, 34*(3), 42-46. Retrieved from http://learningforward.org/publications/jsd/jsd-blog/jsd/2013/06/20/june-2013-vol.-34-no.-3#.UdXS7mjD-pp.

Ash, P. & D'Auria, J. (2013). *School systems that learn: Improving professional practice, overcoming limitations, and diffusing innovation.* Thousand Oaks, CA: Corwin Press & Learning Forward.

Bonk, C. J. (2009). *The world is open: How web technology is revolutionizing education.* San Francisco, CA: Jossey-Bass.

Frick, J. E. (2012). *The relationship between faculty and administrator attitudes toward Internet-based technologies and virtual networking and the development of social capital in six selected rural secondary schools in Pennsylvania.* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (PQDT). (UMI Number 3525455).

Fullan, M. (1993). *Change forces: Probing the depths of educational change.* London, United Kingdom: Falmer Press.

Hargreaves, A., & Fullan, M. (2013). The power of professional capital. *JSD, 34*(3), 36-39. Retrieved from http://learningforward.org/publications/jsd/jsd-blog/jsd/2013/06/20/june-2013-vol.-34-no.-3#.UdXS7mjD-pp.

Hargreaves, A. & Fullan, M. (2012). *Professional capital: Transforming teaching in every school.* New York, NY: Teachers College Press.

Hughes, J. (2004). Technology learning principles for preservice and in-service teacher education. *Contemporary Issues in Technology and Teacher Education, 4*(3), 345-362.

MetLife. (2010). *MetLife survey of the American teacher: Collaborating for student success.* New York, NY: Author.

Mourshed, M., Chijioke, C., & Barber, M. (2010). *How the most improved school systems keep getting better.* New York, NY: McKinsey & Company.

Zhao, Y. (2009). *Catching Up or Leading the Way: American Education in the Age of Globalization.* Alexandria, VA: ASCD.