

Creating Personal Learning Networks (PLN)
in Teacher Preparation Programs Through Twitter
Marialice B.F.X. Curran, Ph.D.
University of Saint Joseph

Abstract

This paper describes research conducted over two semesters (fall 2011 and fall 2012) on teacher candidates' perspectives on using virtual mentors through Twitter to enhance elementary field experiences in an elementary science and social studies methods course. The research will yield qualitative data about teacher candidates' experiences using Twitter as a tool for professional development as a new teacher.

The onset of social media and social networking sites has revolutionized how we connect, communicate, collaborate and learn in the 21st century. Teacher candidates come to our college campuses already programmed and networked with social media. Teacher preparation programs need to provide our teacher candidates ample opportunities to expand these social networks to include a personal learning network (PLN). The micro-blogging website Twitter has emerged as a tool for teacher professional development. Twitter allows educators with similar interests to connect, communicate, collaborate and learn as a PLN. Through Twitter, teacher candidates experience this type of learning and teaching from a global and networked perspective.

Using hash tags (#) teacher candidates can connect with elementary teachers (#elemenchat), as well as other new teachers (#ntchat) across the country and around the world; changes the traditional approach to teacher preparation and fully supports the 21st century learning expectation. As a result, our teacher candidates are connected and networked with other educators, new teachers and educational experts, in addition to the local field placements and colleagues in their licensure program courses.

What is a PLN?

The term personal learning network (PLN) has been a part of educational technology for more than ten years (Downes, 2009). According to Johnson (2013), a PLN is defined as a "self-created set of experts, colleagues, and resources...that meet one's daily learning needs." A PLN is more than just following a lot of people and sharing links and resources; the real power of a PLN is when you have a plan and purpose on how to build your PLN, as well as the conversations and collaborative opportunities (Nussbaum-Beach, 2013). In a blog post, *A Little Like Casablanca*, My PLN is compared to the 1942 movie, *Casablanca* when Rick said to Captain Renault at the end of the movie, "I think this is the beginning of a beautiful friendship."

I feel empowered. My newly started PLN is what I've always needed and wanted in my professional career. Teaching is all about relationships, relationships with our students, our colleagues, our parents and community. But now, my vision is expanded and it doesn't have walls or boundaries for either teachers or students! The possibilities are really endless! Thank you, PLN! This really *is* the beginning of a beautiful friendship! (Curran, 2011)

The Importance of PLN's and Teacher Preparation

In a recent study by Visser & Calvert-Evering, Twitter has emerged as an integral part of professional development for older and more experienced teachers rather than preservice and new teachers (2013). Research suggests that young people represent the majority on social media sites for personal use (Ajayi, 2010; Ondrejka, 2008), why is it such a challenge to get preservice teachers, new teachers and second career teacher candidates hesitant to join Twitter? Scott McLeod (2011) shared what educators are missing by not joining Twitter in his blog post, *If You Were on Twitter*:

Because you're *not* on Twitter, what you don't realize is that *Twitter is the back fence you share with your neighbors. Except your neighbors are people all over the world* who share your interests and passions and can help you accomplish your personal and professional goals. Every day you have a chance to learn from these online neighbors. Every day you have a chance to receive resources that you otherwise never would have found. Every day you have a chance to intersect with people who care about what you care about and are willing to help you be more productive and save time. And much of it is banal or just friendly chatter, but much of it also is useful.

Collecting data on the use of Twitter and PLNs with teacher candidates is a relatively new concept in teacher education. Greenhouse & Gleason (2012) suggest that we need more studies of teachers embedding social media such as Twitter in both secondary schools and higher education. In a case study in New Zealand, Wright (2011) conducted a case study with eight teacher candidates during their practicum experience. The teacher candidates posted to Twitter as a way to self-reflect during the practicum. The study examined the value of using Twitter to “initiate and develop self-reflection during a teaching practicum where teacher education students were posted to a wide range of secondary schools (p. 68). The participating group of graduate students: four women and four men volunteered to be a part of the study. None of the graduate students had used Twitter before and a closed Twitter group was established for the purposes of this study. The participants were expected to make three daily tweets in response to their experiences from any of the following questions choices:

- What am I learning now?
- What do my students say about their learning right now?
- What do I need to overcome or solve?
- Where am I learning right now?
- What am I going to do next?
- What is getting in the way right now? and
- What am I thinking about right now?

After the practicum was over, the participants met as a focus group to discuss their Twitter experience. The participants tweeted 494 times over the 7-week practicum. Although one graduate student tweeted 94 times, the average was about 60 tweets per person. Forty-nine tweets focused on curriculum and planning, 123 tweets on pedagogy and 175 tweets were concentrated around reflection (p. 69). The focus group discussion revealed that supportive tweets were highly valued and “reduced participants’ feelings of isolation and emotional overload” (p. 70). It was also revealed that the brevity of the 140-characters of Twitter made reading tweets a “fast task” (p. 70). The teacher candidates indicated that another benefit of Twitter was the accessibility via mobile

phones that allowed the participants to send tweets immediately. As they progressed through the practicum, the content of their tweets changed from what they did to how and why.

Using Virtual Mentors in Teacher Preparation to Build a PLN

As a result of implementing virtual mentors, iMentors into my elementary science and social studies methods courses over two semesters, the data provided new perspectives on how to best prepare our teacher candidates for 21st century classrooms and is a paradigm shift in implementing next generation learning (Curran & Chatel, 2013). It is imperative that our teacher candidates establish PLNs as they prepare to meet the diverse needs of a networked generation of students.

In the fall of 2011, I asked members of my PLN to volunteer and be virtual mentors for my elementary licensed teacher candidates. There were eleven teacher candidates enrolled in the course; two were males and nine were females. Each teacher candidate was paired up with a virtual member from my PLN. Originally, the teacher candidates were paired up with a virtual mentor who taught a particular grade. Once the introductions had been made, it was planned that the virtual mentor would introduce and welcome the teacher candidate to a specific Twitter chat. What developed naturally was beyond anything I could have ever imagined.

The original list of virtual mentors from my PLN included seven from the New England area, three from Canada, and three were from other areas in the United States (Louisiana, Hawaii, and South Carolina). As the course progressed, more members of my PLN requested to be part of the virtual mentoring experience and we had teachers from Chicago, Massachusetts, Ohio, Tennessee, and two teachers from Calgary join the original list of virtual mentors. Even though it was not originally planned, each week one or more virtual mentors skyped, tweeted and blogged into our class. Between the eleven teacher candidates and the multiple virtual mentors, the classroom environment focused on the intrapersonal aspects of learning and a classroom of a community of learners was the result. This learning environment supported a willingness to take risks and try new things. The eleven graduate students shared that this virtual experience was transformative in their teacher preparation.

In written narratives, the teacher candidates consistently shared how much it meant to them to have the perspective of the virtual mentors, “We were able to Skype with educators from around the country, or the world for that matter, who started out just like us; as students. These educators were quick to give us advice, answer our questions, show us what it looks like, talk to their students, and even share valuable resources with us.” A pattern emerged that the teacher candidates were in awe of their virtual mentors, “It really is incredible that someone [virtual mentor] I don’t know took the time to help someone they’ve never met [face to face].” Another teacher candidate shared, “I loved hearing from all the different people who have skyped into our classroom. I view all of the people that skyped into our classroom as my virtual mentors. Their warmth, reflection, wealth of knowledge, interest in helping other educators, and all around advice was nothing I’ve ever experienced.”

Another teacher candidate reflected on her intent to apply what she had learned from the experience of the virtual mentors:

The use of social media definitely dictated the overall dynamics and learning of this course; it opened up our learning beyond the four walls of our classroom. I

hope to be able to create a similar ‘infinite’ boundary to learning when I have my own classroom.

What made the virtual mentors so valuable was the fact that they modeled through social media what it meant and looked like to be a networked, global educator:

[The virtual mentors] helped to show me that there is a community of teachers, who are also learners, who care and want to share. I smile to think that these teachers are out there, ready to share their knowledge and experience and advice. It’s not just about teaching, but about humanity, and I am thankful for the kindness of these teachers we met on Skype.

The idea of implementing virtual mentors into this course began as a thought. It naturally unfolded and became something so positive that I wanted to adjust and plan the syllabus for the following semester to include more virtual mentoring experiences.

Transformed from the virtual mentoring experience, I made changes and updates to the syllabus for fall 2012 to reflect the additions of the benefits of virtual mentoring. With sixteen graduate students (fifteen females and one male) enrolled for the course, I was ready for a “power-house” first class. We didn’t go over the syllabus on the first class. Instead we jumped right in with three virtual mentors skyping in and sharing the power of Twitter and having a PLN. Tweeting educators from my PLN, @cybraryman1, @ncarroll24, and @engaged skyped in and shared their passion and commitment for breaking down the four walls of their classroom to connect and collaborate with other teachers and students through Twitter. Three local networked educators, @vr2ltch, @kindergarten113, and @MrCaBIOne also came to this first class, so the graduate students could rotate in small groups to hear about the importance of being a networked educator. The first class was electric, so I had thought, except that this new group of teacher candidates was overwhelmed on the very first day of class.

Common Roadblocks

Surprisingly, I found resistance to Twitter and the concept of virtual mentoring. What I had experienced the previous year I taught the course was not the case the following semester. I had a student refuse to open a Twitter account or connect with a virtual mentor and many others were hesitant. As a result, I had to personalize and scaffold many of my assignments. I made myself readily available outside of class and met students on campus (face to face) to walk them through a Twitter chat. I also found myself on speakerphone on my home phone, mobile phone and Skype simultaneously during a Twitter chat to walk the teacher candidates who were interested in Twitter through their first chat.

After the experience in the fall 2011, I would never have anticipated a new group of teacher candidates being intimidated and overwhelmed. A teacher candidate from fall 2012 shared her hesitations from the first class:

I think it would be helpful and less stressful to ease your students into the class a bit more slowly! I was overwhelmed the first 2 or 3 classes when we were Skyping with all sorts of people and had extra instructors coming in, and did not have much time to go over the syllabus. I know that the housekeeping type details are not very exciting, but it would definitely be helpful to take the beginning of the course to really explain the course overview, syllabus, projects, deadlines, expectations, etc.

This example supports the argument that adult learners are used to a traditional approach to learning and further supports the need for implementing a flipped classroom approach where you evaluate how to best use your in-class time with students (Sams & Bergmann, 2013). Applying this approach would allow the teacher candidates to use their out-of-class time to research the benefits of using Twitter and creating a PLN prior to experiencing the virtual mentors on the first day of class.

A common statement from the teacher candidates in 2012 included fear, lack of experience and time as roadblocks to using Twitter:

At first, I found Twitter nerve-wracking, but now I feel comfortable coming out of my lurker shell and have found the interconnectivity of Twitter shockingly easy to use.” Another teacher candidate stated, “I still do not tweet myself, but I do like searching for new ideas and resources using hash tags.

Another candidate shared her frustration using Twitter, including her inexperience, the 140-character limitation, and time. Weekly Twitter chats for specific grades, content and topics are held once a week for an hour at a predetermined time. These chats happen seven days a week and accommodate global time zones. Additionally, many of the chats happen during the evening hours:

I did not participate in the Twitter chats because I felt too inexperienced, but did find the chat helpful.” Some other concerns included the limitation of 140 characters, “I fell short using twitter. While I recognize its value as a professional tool, I did not feel that I was able to master using it. My obstacles included a struggle with the limited number of characters available to me to tweet and the time necessary to jump on a chat at 8 or 9 in the evening.

How can we encourage and support our teacher candidates to get beyond these roadblocks? In a blog post on Storify, *Twitter and Teacher Candidates*, I pondered the challenges and struggles that teacher candidates encounter using Twitter. The post was tweeted and educators around the country responded and shared their opinions: teacher candidates don’t need it yet; they don’t feel isolated (Curran, 2013). Paul Bogush, tweeted, “@mbfxc isolation connected to desperation...not desperate yet, and one cannot connect to something which one has not yet experienced.” Katy Gartside responded, “@mbfxc they don’t need it yet! When in own c’room [classroom] & realize they have a thousand q’s [questions] & don’t know who to ask – then they’ll get chats!” Judy Arzt shared a solution in her tweet, “@mbfxc @teachingwthsoul the chats might be too fragmented, but the shared links to resources can be valuable. Have them check links.” Lisa Dabbs, facilitator for the new teacher chat, #ntchat also tweeted a solution, “Thinking @mbfxc that having them join a chat via a class as @jheil65 does so he can support them maybe the best place to start @JudyArzt” (Curran, 2013).

The two semesters were complete opposites and I found myself reflecting on what the magic formula was during the fall 2011 semester, why it was not the case during the fall 2012 semester, and how can I best prepare for the fall 2013 semester? Looking at the data, the 2011 cohort had really started off as an idea and turned into a natural progression. As a result, this allowed the teacher candidates not to feel any pressure or feel intimidated or overwhelmed. The 2012 cohort began with a structured plan and began on the first day of class unfortunately causing anxiety and stress. Implementing the flipped classroom approach in fall 2013, I’m hoping to merge what I’ve learned in the two semesters to better prepare our teacher candidates on being interconnected educators

Conclusion

This case study examined two semesters of graduate students experiencing Twitter, virtual mentoring and the power of having a PLN as an integral part of your teacher preparation. Both semesters were vastly different in their outcomes. Reflecting on how to learn from both experiences, instead of having the first class be a “power-house” first class filled with virtual mentors on Skype and local networked educators, I’ll use the flipped classroom approach and have my next group of graduate students, explore and learn about the benefits of creating a PLN during their teacher preparation outside of class prior to introducing them to virtual mentors, Twitter, and PLNs.

The data revealed that virtual mentors via social media are essential in preparing teacher candidates for 21st century classrooms. Future recommendations will include flipping the classroom when introducing Twitter to ensure that the teacher candidates have an understanding on the benefits of networking with a PLN prior to being introduced to virtual mentors. Additionally, the teacher candidates will search hash tags and share resources on a weekly basis, as well as search previous Twitter chat archives. The teacher candidates will also continue to be paired with virtual mentors who will introduce and welcome them to a Twitter chat. Assignments will include participation in #ntchat (new teacher chat) to make sure that the candidates participate in a chat with other preservice and new teachers. Furthermore, Google Hangouts and Skype sessions will be planned during class to allow the teacher candidates an opportunity to see other teachers, classrooms and students.

A future recommendation includes understanding the dispositions of teacher candidates who are open to using Twitter and creating a PLN compared to candidates who feel overwhelmed and intimidated. Further data is needed to follow teacher candidates into their practicum experiences to observe if they reach out to their PLN during student teaching. How does building a PLN during your teacher preparation program enhance your teaching, curriculum and instruction during student teaching and your first year teaching? Does having a PLN help preservice and new teachers as they begin their teaching careers? Or as suggested by veteran teachers in *Twitter and Teacher Candidates*, why do teacher candidates and new teachers not join Twitter because they don’t need it and they don’t feel isolated (Curran, 2013)?

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