

Pinning and Practice: Using Pinterest as a Tool for Developing Pedagogical Content Knowledge

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Abstract

Pinterest (<http://www.pinterest.com/>) is one of the fastest growing social media sites (Duggan & Smith, 2013) and teachers are using it more and more for pedagogical ideas. In response to the increased use of social media in K-12 classrooms, it is highly important to prepare preservice teachers to incorporate these tools into their pedagogy. In this practice-based article, we reconstruct how Pinterest was incorporated into two university-based teacher preparation programs. These two descriptive accounts are arranged and presented from the viewpoint of the two authors who experienced the events firsthand.

An increasing amount of information is being shared through social media. This was illustrated in a recent Pew Research Center survey (Duggan & Smith, 2013) that analyzed telephone interviews from a sample of 1,801 online adults. The survey found that approximately 73% of online adults were using social net-working sites. Among the most used social media venue was Facebook with 71% of online adults participating. This was a slight increase from the 67% of online adults who used Facebook in late 2012. In addition to this finding, the Pew survey also reported that the percentage of Pinterest users increased from 15% to 21% within the last year; making it the social media site with the largest increase of users in 2013 when compared to Facebook, Twitter, and Instagram.

Not only are more adults using social media, but an increased use of social media for educational purposes is also being reported.

Havey (2013) shared a recent study released by Pearson Learning Solutions and the Babson Survey Research Group in which approximately 8,000 faculty members were surveyed about their pedagogical use of social media. Forty-one percent of respondents reported using social media for educational purposes in the classroom. This is an increase from the 34% of college professors who self-proclaimed incorporation of social media into their courses in 2012. Not only are university faculty members using social media more, but Stansbury (2011) reported that K-12 classroom teachers are also increasing their use of social media and that they are using it for multiple purposes such as professional development, community outreach, class assignments, parent communication, distance learning, collaborative learning, networking with colleagues, and integrating real-world application into teaching. So why are educators of all levels using more

social media for professional activities and in their pedagogy? Devaney (2013) shared that “advocates of social media in the classroom say that, when used properly, social media tools can boost student engagement, link students to content experts and real-world examples of classroom lessons, and help them establish an online body of work” (para. 2). In response to the increased use of social media in K-12 classrooms, it is highly important to prepare preservice teachers to critically incorporate these tools into their pedagogy and professional development. In this practice-based article we reconstruct how Pinterest, one of the fastest growing social media sites in 2013 (Duggan & Smith, 2013), was incorporated into our two undergraduate courses.

What is Pinterest?

Social media tools are transforming our lives both inside and outside of educational settings. Pinterest is a social media phenomenon that K-12 educators have quickly adopted as a way of sharing ideas for the classroom. These ideas can range from classroom organization to pedagogical options. Launched in 2010 (Glenn, 2012), Pinterest has risen from being a non-existent presence to having approximately 25 million unique visitors in September of 2013 (Malik, 2013). Even more significant, these 25 million visitors only account for those living in the United States and not those living globally.

How many individuals use Pinterest?

According to McBride (2013), who reported on Pinterest in February, this cloud-based bookmarking site has grown to have 48.7 million users globally. This section provides a descriptive overview of this growing phenomenon and provides some answers to the question. “What is Pinterest?”

In the past, non-digital resources were collected and saved in scrapbooks or in other collection tools such as 3-ring binders. With the increased availability and use of electronic resources, these hardcopy organizational venues have become outdated and less helpful. Along with the increase of available digital resources, the need to save and organize these resources has also increased. Initially, saving websites under the “favorites” tab on a computer’s toolbar was the method of choice for saving online resources. However, this method of collection was limited to saving only web addresses and was not open to social sharing. Pinterest, combining the word “pin” with “interest”, is a web-based social book-marking site that allows users to visually arrange and save a variety of digital resources. Designed as virtual bulletin boards, users may collect, organize, and share a variety of web-based resources such as blogs, websites, and videos. In addition, resources saved on Pinterest are sent through “feed updates” to other users, thus information spreads very rapidly — making it a more collaborative tool than the “favorites” tab. The organizational and sharing features of Pinterest has led some users to describe it as a management tool, virtual pinning board, a tool for digital curation, and a collaborative learning hub.

What does this mean for teacher preparation programs?

Teaching can be an isolated practice (Lortie, 1975; Scholastic & Gates Foundation, 2010); however, social media provides a convenient and powerful venue for teachers to connect to one another. Currently when searching the Internet for pedagogical ideas, Pinterest posts are among the top resources listed. This is partly because teachers are increasingly using Pinterest to post their photographed original or adapted ideas,

connect to their blogs, or re-pin the ideas of other teachers (Hussy, 2013; Messner, 2012). Other suggestions for using Pinterest in the classroom range from collaboration and professional development ideas to using it as a research tool, or for classroom decor and gift ideas (Lawver, 2013).

While visiting elementary campuses this past year, we found that not all educators, campus leaders, or members of administration are fans of the Pinterest revolution. In fact, we noticed some signs of frustration when Pinterest was mentioned. One campus leader commented, “We’ve been taken over by cute.” This comment and others that are similar in nature, point to a frustrating fact — not all educators are critically examining the activities and materials on Pinterest before implementing them in the classroom. Additionally, some of the principals we spoke with mentioned that in some instances the “cute” activities found on Pinterest have presented the content incorrectly.

When using Pinterest, educators can find themselves wading through a range of material including colorful anchor charts, descriptive and engaging videos, valuable book recommendations, and clever manipulatives; as well as the other extreme packets of artistically embellished worksheets and miscategorized activities. As with all resources, whether traditional print or digital, we need to develop a critical stance when evaluating activities and materials to support learning goals and objectives.

What does this mean for teacher education programs? Individuals currently between the ages of 17 and 36-years-old are considered part of the Net Generation, or Net Genners (Tapscott, 1998, 2008). This

age span includes most undergraduate and early career teachers. Net Geners have grown up with the Internet and social media. In their lifetimes, information has been available at the touch of a keystroke and they have been able to connect to others locally and around the globe. Additionally, they have been able to contribute to the content on the web by posting videos; blogging; and sharing their thoughts, ideas, and status updates through social media.

While undergraduates are adept users of social media for personal use, as university faculty members, our responsibility includes supporting the transformation of this use into professional formats. Navigating these tools together with our students, we look for ways to use them in designing pedagogy. In this journey, we find our tech savvy students still need to develop a critical stance when evaluating the quality of the educational resources found in both print and electronic formats.

As we observe more and more preservice teachers following the lead of inservice teachers in utilizing Pinterest for lesson ideas and content, we find it necessary for teacher preparation programs to develop teacher candidate’s ability to think critically about the materials and ideas posted on social media. Preservice teachers’ trust practicing teachers’ curation, and this often leads to curation without critique. In relation to this issue, we have made it a point to incorporate Pinterest into our teacher preparation programs and to provide opportunities for preservice teachers to develop critical stances, which are necessary for identifying appropriate materials and effective ideas. These opportunities are recreated and illustrated in our stories below.

Globalizing the Learning Community —Stephanie’s Experience

Learning communities, when well implemented, create a collaborative environment where students can exchange ideas, develop the habits of mind to tackle real-world issues, and learn from one another. It was through Pinterest that 18 preservice teachers enrolled in my literacy methods course at a private university of less than 10,000 students and established a global learning community. This section recaptures this collaborative event.

The collaboration. I have been teaching literacy methods courses to preservice teachers for over eight years and throughout these eight years one thing has stood out — a majority of the preservice teachers in my courses struggle with understanding phonological awareness. One day in the spring of 2013, I entered my university classroom and greeted my 18 preservice teachers. With a carefully planned and purposefully constructed lesson, I was going to place my students into groups and have them construct an activity around a specific phonological awareness skill. Some groups would address rhyming, while others would address segmenting syllables or blending pairs of onsets and rimes to form single syllable words. What I had not planned for were the impromptu and spontaneous responses of my students. One particular response caught my attention — my students were using Pinterest to extend our learning community past the four walls of our classroom.

As planned, the lesson began with me grouping my students heterogeneously according to their quiz grades. The students were not aware of my grouping criteria. The quiz that I chose as my grouping tool was previously completed online for homework and it measured their basic understanding of phonological awareness. My hopes for

grouping my students heterogeneously was to have them collaborate with one another and to build one another’s knowledge. This is in opposition to having all my struggling preservice teachers in one group. Ultimately, two groups of four and two groups of five were formed.

The groups were then told that they would each be assigned a specific phonological skill and within their groups they would design a classroom activity to build that skill. My plan was to have students work in their groups for 20 minutes and then present their activity to their peers. For the first 10 minutes, I observed my students brainstorming possible activities and identifying appropriate materials. I also overheard a few students defining for one another important concepts such as phonemic awareness and the alphabetic principle. These behaviors were exactly what I was hoping for.

Sharing. The last 10 minutes of the group activity brought about something I had not planned. As I walked from group to group, I noticed that one particular group of students was actively taking pictures with their cell phones. As I approached the group, I wasn’t quite sure what their reasoning was for taking multiple pictures of their activity. I think the puzzlement was clear with my facial expression because a student quickly and proudly said, “We’re going to share this on Pinterest”! They then proceeded to explain that they wanted to share their activity with other teachers, not just their classmates.

My students’ actions prompted me to explore the following question — Has social media created a greater appreciation for global collaboration? I had planned a collaborative activity, but it was restrained by the four walls of our classroom. On the other hand, my students’ initial response

was to virtually knock down the walls of our classroom and to collaborate globally with other educators. Since that day, I have engaged in many conversations with my students; many of which focus on Pinterest. I have since learned that my students don't just share information on this social media site, they also retrieve information.

What do I have planned next? If my students are retrieving information from social media sites, I need to have a discussion with them about taking a critical stance when selecting material from such sources. I plan to incorporate more opportunities in my courses to use social media sites for retrieving information. In addition, we will examine the retrieved information in class for accuracy and identify the relationship that it holds to best practices.

Using New Tools for Critical Curation --Sheri's Experience

In many undergraduate literacy courses, students are expected to collect instructional strategies. In the past this practice included three-ring binders full of paper on which ideas taken from both print and Internet sources and were cited, summarized, and retyped. As more and more K-12 educators and university faculty members move away from hard copies of files to more digital formats for organizing and retrieving resources, course assignments within teacher preparation programs must also be updated with new tools and resources. Here I, a second-year assistant professor, will share my story of using digital tools for collection, or curating in my higher education classroom.

Curating. My students begin literacy course work their junior year. Students typically enroll in two concurrent literacy courses, one focused on foundations of reading and

the other focused on writing and Language Arts. These courses are then subsequently followed by a children's literature course and a literacy assessment and instruction practicum. In the foundational reading course, one assignment requires students to construct a collection of literacy strategies to support what is typically called "The Five Pillars" of literacy (NICHHD, 2000). These pillars include comprehension, vocabulary, fluency, phonics, and phonemic awareness. Although we use Taberski's (2011) revisioning of the pillars, this assignment is in alignment with the state required reading and licensure exams.

As I planned this assignment, I reflected upon my own experiences. Since the advent of electronic documents, teacher curating practices have evolved. In my own practice, I have moved from papers in file folders and binders, to electronic files that I have had to move from expiring computers to external hard drives. I then graduated to bookmarking favorite sites that were still tied to a specific computer, to more web-based approaches such as Livebinders (<http://www.livebinders.com/>) and Pinterest. I find that my web-based curation practices make it easier to collect, organize and access information as opposed to my former 3-ring binder and computer-based practices. Additionally, my curated resources are also easier to share with higher education colleagues, K-12 teachers and preservice teachers. So, rather than have the students create notebooks that would probably not be used in their future practice, they were given choices on curating formats, including Pinterest pinboards, to evaluate and collect pedagogical ideas for teaching basic reading concepts. The initial response to the digital options was enthusiastic and positive. The students were excited about using Pinterest, mostly citing how "cute" the ideas are that other teachers

pin. Throughout the semester, we had many discussions in which we contrasted “cute” and best practices. Within these conversations I found myself repeating, “We have to move past cute.”

In class meetings we examined various literacy Pinterest post together, and I chose some that would provide some good critical thinking opportunities around which we had some illuminating discussions. We did a comparison of two anchor charts both titled “Inferences” designed to support the comprehension strategy of inferring. One anchor chart featured a picture of a zebra with the title and definition of inferring as “Reading Between the Lines”. The other anchor chart featured a drawing of a book and a student’s head with a thinking bubble labeled “Information from the TEXT + Background Knowledge” respectively. Below the pictures the caption said, “When you make an INFERENCE you go beyond the author’s words to understand what is not said.” We were able to make connections to one of our texts, *Strategies That Work* (Harvey and Goudvis, 2000, 2007), and my preservice teachers could see a clear connection between credible resources of our course work and critical social media curation. The discussion that followed provided access to better understanding of both the course content as well as a pedagogical consideration of explicit teaching. This launched much more discussion about the thoughtfulness and critical stance that has to take place when choosing lessons, materials, and examples; and again, moving past “cute”.

Developing a critical stance. In addition to curating resources, students also chose one of their activities to demonstrate and use with their classmates. Their “students” were their classmates who were charged with examining the presented resource in terms of integrity of the resource for the component

of reading chosen and determining strengths and limitations of the tool or instructional strategy. They were also charged with determining scenarios in which the resource might be appropriately used to address the needs of a learner. This dialogue provided opportunities for critical discussions that helped strengthen content knowledge and pedagogy. Some of the presentations provided defining opportunities for the development and reinforcement of content knowledge as well as clearly understanding the need to be critical consumers and contributors of teaching ideas. One such presentation was offered by my student Sarah (pseudonym).

Sarah was one of the first to present that semester, and she chose an alphabet riddle manipulative activity for one of her phonics activities to demonstrate with the class. As she opened a binder under the document camera, small alphabet keyword picture cards were attached to Velcro strips inside the cover. She read the first riddle and we searched the array of picture cards for the “apple” to complete the riddle. As we viewed the picture cards, I noticed a picture of an owl and panicked a bit as to how to address what I anticipated as a poor keyword example for the short or long sound associated with the letter “o”. Because “owl” begins with a diphthong, it would not be an appropriate choice for an emergent reader’s beginning phonics instruction. I asked Sarah to show us and read the riddle for the letter “o”. She did and the answer to the riddle was “owl”. I asked the class if any of them had a concern about this choice of picture keyword.

After a long pause, a timid hand crept up — “Isn’t ‘ow’ a diphthong?” We examined the rest of the vowel keywords and discovered “eagle”, “igloo”, and “UFO” as the respective keywords for the letters “e”,

“i”, and “u”. The mix of short and long vowel sounds as well as a letter name, “U” in “UFO”, made this activity potentially confusing and ineffective for the purpose chosen.

This example in conjunction with our ensuing discussion uncovered the considerations and challenges of using picture keywords for phonics reinforcement and how the activity could be improved by choosing keywords that initially highlight short vowel sounds, then long vowel sounds, and later digraphs and diphthongs. In addition to being a great touchstone lesson for the need to critically examine all aspects of a teaching tool or idea, this exchange also provided a great conversation around teaching phonics in the context of authentic reading. I thanked Sarah for providing the class with such a rich discussion, and, later at the end of the semester in her reflection, she commented that she learned so much about carefully examining all aspects of an activity or manipulative. Ultimately, Sarah gave the class a context for understanding the need to be critical of all sources in terms of concept and content.

Final Thoughts

Preservice teachers are using social media sites such as Pinterest, whether sanctioned or not, to develop content and pedagogical knowledge. Therefore, we see a great need for teacher preparation programs to assist their candidates in developing critical stances when using such resources. This need is heavily grounded within our concern that the items posted on social media sites have neither been peer-reviewed for accuracy of the content nor application of best practices. The credibility of these non-peer-reviewed posts can be quite different than the teaching tips you may find in published journals where multiple content specialists review the activities. This

concern has led us to ask the three questions below.

1. *Will social media lead to the “skilling” or “deskilling” of teachers?*

The recent explosion of social media is partly due to its ability to share information to a large audience fairly easily and quickly. For example, a current trend is creating videos and having them go viral. In 2013 the top trending video, “What Does the Fox Say?” received 357, 118, 367 views (YouTube Rewind 2013, n.d.). With instant sharing and a rather large audience, a large number of us quickly discovered and shared the mysterious, yet fictitious sounds of the fox. How does this relate to the skills of teachers? Social media when used correctly can spread important and accurate information very quickly. For example, a report of a missing child was posted on my Facebook newsfeed this summer and within minutes the child was recovered. Imagine if we apply this to education — a group of teachers develop a strategy that they believe increases reading fluency and the strategy goes viral. Within minutes hundreds of other teachers learn of this new strategy and they too begin to use it in their classrooms. In this example it seems that teachers are gaining skills and that social media is the tool that allowed them to develop this new skill. However, what if the strategy is actually an ineffective practice? We now have hundreds of teachers who are unknowingly practicing poor pedagogy — in other words, they have been deskilled, a term Shannon (1987) originally used to describe the loss of pedagogical skills teacher may experience when they stop designing curriculum and instead rely solely on commercially produced curriculum. We use it here to describe the loss of effective pedagogical skills a teacher may experience

from frequently practicing poor pedagogy found on social media sites.

How do we ensure that social media leads to “skilling” and not “deskilling”? It is unrealistic to put into place a screening process for everything that goes viral. Instead, we suggest that educators be equipped with the knowledge and skills to peer-review the materials posted on these sites.

2. Can information shared on social media sites assist inexperienced teachers in developing what Shulman (1987) refers to as pedagogical content knowledge?

Shulman (1987) defines pedagogical content knowledge as the ability of the teacher “to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students” (p. 15). In this view of knowledge, it is pedagogical content knowledge that separates the effective teacher from the less effective teacher (Shulman, 1986). His Model of Pedagogical Reasoning and Action consists of a cycle of six activities of cognition and practice in which a teacher should engage for good teaching: *comprehension, transformation, instruction, evaluation, reflection, and new comprehension*. Although referred to as a cycle, they are not meant to represent a set of fixed stages, phases, or steps. We share Shulman’s Model of Pedagogical Reasoning and Action with you because we believe that social media can be used to develop preservice teachers’ epistemologies within each of Shulman’s six activities. Checklist, such as the *Checklist of Social Media and Epistemological Advancement* (Grote-Garcia, St. Clair, Martinez, & St. Clair, 2014), have been developed to assist teacher educators in selecting social media for this purpose.

3. In addition to Pinterest, are there other curating resources that can be used in teacher education programs?

In this article we described the ways we and our students have used Pinterest as part of both collecting and developing resources, as well as for sharing and collaborating. In the past we have asked students to collect resources in three-ring binders. The move from *collect* to *curate* raises the critical nature of the task. There is a subtle shift in meaning from *collect*, meaning 1) *gather together, or assemble*; 2) *accumulate*; to *curate*, meaning 1) *take charge of or organize*; 2) *to pull together, sift through, and select for presentation* (dictionary.com, n.d.). *Curate* suggests some evaluative thinking in the “sifting through” and “selection” rather than simply accumulation. Moving from a practice of collection to a more thoughtful practice of curation provides an opportunity for the conversations around critical considerations of pedagogy and content knowledge. In addition to Pinterest, other curation options include Livebinders (<http://www.livebinders.com/>), Learnist (<http://learni.st/category/featured>), and Bulb (<https://www.bulbapp.com/>). Some of our preservice teachers have opted to use website tools, such as Weebly (<http://www.weebly.com>), Wix (<http://www.wix.com>), and Google Pages (<http://www.google.com>). These curation options can provide preservice teacher educators with a new, provocative tool to develop preservice teachers’ pedagogical content knowledge and to advance their epistemology — their ideas centered on learning and the development of knowledge.

Next Steps

There is a lack of published research investigating preservice and inservice

teachers' curation habits and critical stances on resources found on Pinterest and other social media curation sites. Some preservice teachers use Pinterest to expand their pedagogical reasoning. The experiences presented in this article illustrated how preservice teachers of today are turning to social media to build their content knowledge and pedagogical knowledge. As a result, additional efforts need to be implemented for sharpening undergraduates' critical stances and deepening their understanding of best practices using social media tools. In addition, it leads us to new research questions. Our plans for future research includes investigating inservice and preservice teachers' use of these types of social media sites, specifically how they determine the credibility of the posted activities. As university faculty members work toward redesign-in their own work to

model the changing nature of education in a digital world, harnessing the energy of tools used outside of formal education reveals possibilities for honest discourses and better practices in both university and K-12 contexts.

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