



Professional kinship using social media tools: Bridging and bonding to develop teacher expertise

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Abstract

The purpose of this collective case study research was to discover the impact school culture, internal factors, and the state of flow have upon motivating a teacher to develop teaching expertise. This research was designed to determine why and how individual teachers can nurture their existing internal factors to increase their motivation to seek expertise development and to explore how school culture, internal factors, and state of flow may encourage or limit the development of expertise. One major finding of this study concerned how experts choose their professional learning experiences and build professional learning networks based on their perceived weaknesses in content, pedagogy, or social-emotional attributes. They seek to improve their weaknesses to improve student learning through the key motivating factor of Teacher-Student Kinship representing an almost family-like relationship. Expert teachers bond with peers within their school, but also bridge with peers outside of their school. This bonding and bridging have become more accessible with the use of various social media technological tools from YouTube to professional learning networks on Twitter. The use of social media and other technology tools has allowed experts to develop Professional Kinship and enhance their practice regardless of location and proximity with peers within their professional learning community. These major findings hold implications for theory, practice, and future research particularly in the realm of teacher quality and the change of mindset towards the profession and the standards of education.

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Introduction

In the beginning of the COVID-19 global pandemic, educators found themselves quickly transitioning from teaching in-person in their classrooms to teaching virtually from their homes in as little as twenty-four hours. This sudden shift left teachers feeling even more isolated than previously noted (Flinder, 1988; Ostovar-Mamegui & Sheikahmadi, 2016). Additionally, many were unprepared for their new technological reality of virtual teaching. Teachers quickly began seeking tools and resources to navigate a virtual teaching world. Previous research concerning teachers who consistently seek expertise, demonstrates such professionals will leverage the skills and knowledge of peers within their schools to develop professionally. However, if the professional learning within their schools is found to be insufficient, teachers will seek a nurturing learning environment (Mayeaux & Olivier, 2016). The crisis of the pandemic highlighted the existing need to understand how and why teachers use social media to develop professionally and to form networks and relationships. The purpose of this collective case study research was to discover the impact school culture, internal factors, and the state of flow have upon motivating a teacher to pursue teaching expertise through their engagement in online teacher communities on social media platforms.

Social capital is defined as the networks and relationships built upon trust that allow professional learning to occur (Paxton, 1999, 2002; Putnam, 2000). For this study, bonding is defined as the peer networks and relationships within the school and bridging is defined as the networks and relationships outside of the school (Putnam, 2000). Prior to the last 25 years, such bridging required teachers to seek outside development through professional organizations, conferences, and/or higher education opportunities. Online communities have removed the barriers of distance and created opportunities for teachers to bridge a variety of professional learning, both formally and informally organized (Beach, 2017; Kelly & Antonio, 2016; Lantz-Anderson et al., 2018; Marcia & Garcia, 2016; Rehm & Notten, 2016; Trust et al., 2016). Research is needed to create a deeper understanding of how, what, and why teachers are using online communities for their own professional learning, both through bridging and bonding.

The study is an extension of a previous study of teachers who pursue expertise development (Mayeaux & Olivier, 2016). The previous study found teachers who pursue expertise development seek deep-impacting professional learning both inside and outside of the school. Experts choose their professional learning experiences and build professional learning communities based on their perceived weaknesses in content, pedagogy, or social-emotional attributes. Teachers who pursue expertise seek optimal professional relationships that exemplifies maximized social capital, which we will term *professional kinship*.

Interestingly, teachers pursuing expertise will choose their professional learning experiences and build professional learning networks based on their perceived weaknesses in content, pedagogy, or social-emotional attributes. They seek to improve these weaknesses to improve student

learning driven by this Teacher-Student Kinship (Mayeaux & Olivier, 2016). Expert teachers bond with peers within their school, *if* peers meet the perceived professional needs (Mayeaux & Olivier, 2016). However, teachers who pursue expertise also bridge with peers outside their school while seeking knowledge or skills unavailable through and within their school (Mayeaux & Olivier, 2015). Teachers who pursue expertise value their students through reflective and effective teaching practices as defined in the research (Good & Brophy, 2008; Hattie, 2003, 2009; Hattie & Clarke, 2019; Marzano et al., 2003).

Teachers pursuing expertise are highly focused on the teaching process and work harder to achieve the next level of expertise due to their high self-efficacy (Mayeaux & Olivier, 2016). In their teaching, they often experience flow - the mental state of operation where a person is so fully immersed in an activity or experience a feeling of extreme energized focus, complete involvement, and success in the activity occurs - which motivates them in their relationships with students and with peers (Csikszentmihalyi, 1990; Mayeaux & Olivier, 2016). Such teachers also hold high internal factors, which include efficacy, craftsmanship, flexibility, interdependence, and consciousness (Costa & Garmston, 1998; Mayeaux & Olivier, 2016). These factors increase and decrease based on external situations and experiences but play highly into individual motivation and persistence. Teachers pursuing expertise have strong internal factors and experience flow in their teaching due to their teacher-student kinship and seek strong professional kinship to continually develop their craft (Mayeaux & Olivier, 2016).

This closely relates to our understanding of professional capital, which is the summation of human capital, decisional capital, and social capital (Hargreaves & Fullan, 2013). Over the past decades, research on the impact of professional learning communities has demonstrated bonding of teachers within a school is critical to the growth of the individual teacher (Hall & Hord, 2020; Putnam, 2000). However, teachers who bridge outside of their schools, to develop, share, and receive innovative ideas (Putnam, 2000; Bommel et al., 2020). When teachers bridge outside of their school, their social capital or professional networks expand to encompass a more diverse group of educators, which in turn creates opportunities for exponential growth (Bommel et al., 2020; Fukuyama, 2001; Hall & Hord, 2020; Hargreaves & Fullan, 2013; Putnam, 2000).

Such growth has primarily occurred through formally-developed professional learning communities, which have been the source of research for decades (Darling-Hammond & McLaughlin, 1995; Dufour, 2004; Guskey & Sparks, 1996; Hall & Hord, 2020; Hord & Rutherford, 1998; Huffman, 2000b; Huffman et al., 2001; Hughes & Kritsonis, 2007; Lantz-Andersson et al., 2018; Moller, 2006). The emergence of online learning communities has increased the option of informally-developed online learning communities. However, research of this new community structure is lacking. Lantz-Andersson et al. (2018) define informally-developed online learning communities as social-media based communities, where teachers share, filter, and curate new ideas. Additionally, the authors identify such

communities as a source of emotional and professional support for teachers (Lantz-Andersson et al., 2018).

Informally-developed online learning communities also possess critical attributes which appeal to teachers who pursue expertise. The professional learning is available in an asynchronous format, which allows people to engage at their leisure and at their own comfort level (Carpenter & Krutka, 2015; Trust et al., 2016). Such design may appeal to teachers pursuing expertise as they can engage in what content appeals to them, when the need arises. The reach of such communities spans the globe and offers ideas to teachers possibly not found within their school community. Finally, the level of engagement is individual and optional. One could simply be lurker, active listener, or the person leading the discussion.

For the past 20 years, social media has increasingly become a vehicle for professional learning for teachers (Beach, 2017; Kelly & Antonio, 2016; Lantz-Anderson et al., 2017; Marcia & Garcia, 2016; Rehm & Notten, 2016; Trust et al., 2016). The use of social media and other technology tools has allowed teachers to develop professional networks to enhance their practice regardless of location and proximity with peers in such a network. Understanding how and why teachers who pursue expertise may bridge with peers in informally-developed online learning communities is important in our understanding of how teachers form social capital through social media.

Methodology

The collective case study design was chosen to explore how teachers use social media to bond and bridge to create social capital. The qualitative collective case study focused on the social media presence of teachers followed by others for their teaching expertise. Lantz-Anderson et al. (2018) share informal teacher networks via social media have grown over the past twenty years.

Sample

Twenty teachers, who have a YouTube channel with consistent posts, were chosen based on four criteria related to the channel: (1) over one-million views, (2) at least ten-thousand subscribers, (3) managed by a classroom teacher, as opposed to an organization or school; and 4) focused primarily on classroom practice. The teachers ranged from teaching pre-school to high school subjects. All information is publicly accessible, and all teachers remain anonymous in this study.

Research questions

Three research questions were formed to drive the study. The questions were directly related to questions suggested in multiple studies in an effort to better understand teachers' professional learning activities in informally-developed online learning communities (Lantz-Andersson et al., 2018; Marcia & Garcia, 2016; Bommel et al., 2020).

Research Question 1: How do teachers use social media to share and receive content?

Research Question 2: What forms of knowledge are shared and received?

Research Question 3: How do teachers use social media platforms to increase their social capital?

Processes

The teachers' social media use was investigated to identify platforms teachers used primarily for professional learning purposes, knowledge they shared, and how others engaged with these teachers. First, the channels were analyzed for demographic data including teaching level and content of the teacher, number of subscribers, views, and other social media connections. Secondly, videos on each channel for the past five years were analyzed for topic and content. Finally, the top three videos of each channel were viewed for content, topic, and viewer engagement as evidenced by the comments. The data from these videos were coded and analyzed for themes. The content was then reanalyzed for purpose and audience. Finally, the comments of the viewers and the hosts' responses were analyzed for content, engagement, and themes. All individuals remained anonymous. All information in the third part of the study was public access and public knowledge.

Results

Demographics

The twenty teachers hosting YouTube channels ranged from elementary teachers to high school (or secondary) teachers. Experience was not explicitly stated on all channels, but five of the twenty teachers began their channels during their first year of teaching and each had less than six years of experience. Six teachers indicated they had over 15 years of experience. 18 teachers were from the United States. Two teachers indicated they taught in private schools with one sharing ideas for religious lessons. Seven teachers were male and 13 were female. Table 1 presents the number of teacher participants for each teaching level.

Table 1: Level of teachers (N = 20)

Teaching Level	Number of Teachers
Elementary	11
Middle School	2
High School	7

Engagement

The engagement on each channel demonstrated the reach of the informally-developed online learning community. Engagement was determined by the number of subscribers, views, and user engagement each channel produced. There

was a wide range in the engagement with one channel garnering a high of 736,000 subscribers, while the lowest one had 36,000 subscribers. The oldest channel was started in 2008 and the newest channel began in 2020. Channel views indicated a high of 48,402,317 views for the most viewed channel to 1,616,922 views for the lowest viewed channel. The most viewed channel was initiated in 2015 and the least viewed channel began in 2008. With average views of 9,059,560, these 20 channels are daily reaching a wide range of individuals around the globe, as evidenced by the comments posted. The individual channel engagement is not shared to maintain anonymity. Table 2 presents the channel engagement including averages and range for subscribers and views.

Table 2: Channel engagement

Engagements	Sum	Mean	Maximum	Minimum
Subscribers	7,291,550	364,000	736,000	36,000
Views	172,121,635	9,059,560	48,402,317	1,616,922

Research Questions

Three research questions were developed to guide the exploration of how teachers engage, share, and receive professional learning to develop social capital through social media.

Research Question 1

How do teachers use social media to share and receive content?

Each channel was primarily connected to one teacher who shared the information via videos. The videos ranged in length from 2 minutes to 76 minutes. The most popular videos were under 20 minutes.

The female teachers primarily shared information either within their classroom setting or a modified virtual classroom in their homes. The information was shared using a personal style with a focus on facial expressions and voice inflections. These personal style hosts spoke to the audience as if the viewers were present and there was a friendly conversation occurring. The hosts made comments like, "I know you have had this experience, too" or "We have all struggled with situations like this..." These videos were colourful and often found the host walking around and sharing specific elements in the classroom. These hosts also shared personal stories about their teaching and teaching experiences. In some videos the hosts were emotional about an event in their school or classroom, particularly when they were struggling to find a solution. The elementary teachers were also more likely to connect their content to online marketplaces, either their own on such places as Teachers-Pay-Teachers or a sponsors' website. The secondary teachers also shared connections to sponsors, but not as consistently as the elementary teachers. All the teachers were very open

about the monetization of their channels and openly shared when they were being sponsored by a company for using a service or product. The male teachers were primarily focused on tech tools and were straight-forward with step-by-step guides. These videos tended to have less of the teachers' faces and more recording of the screen demonstrating how to use the tech tool. Two male teachers used drawing software to create a storyboard to share their content and they were seldom seen on the videos.

Additionally, teachers connected their YouTube channels with other social media and marketplace sites. Instagram was the most popular site with eleven of the channels connecting to a partner Instagram page. These connections were used by the younger teachers. The older teachers primarily used Facebook and/or Twitter. Twelve of the channels linked to a website with blogs. These allowed the channel owners to connect resources and other elements for viewers to use. Additionally, through one video, partnerships between three of the teachers were discovered. One of the channel hosts made a comment about partnering with two other channel hosts. Further exploration found two of the teachers had created a joint podcast linked to both of their channels. Table 2 indicates the number of teachers using the identified platform.

Table 3: Platforms connected to YouTube channels

Platforms	Number of YouTube Channels
Amazon	2
Teacher-Pay-Teachers	5
Twitter	8
Instagram	11
Facebook	8
Pinterest	3
Podcast	2
Blog/Website	12

The comments on the top videos of the channels revealed several interesting elements. First, viewers on these channels were not only teachers. Many comments came from students who shared things like, "I wish you were my teacher." One of the most positive and common types of comments came from students expressing the videos had inspired them to become teachers. Others came from parents who shared comments such as, "I shared this channel with my child's teacher to help her with organization."

Overall, the comments were generated from teachers and were categorized into four major themes. The first theme represented simple *appreciation* for the teacher sharing the information. Most of the comments began with "Thank you so much for sharing this idea" or "I really appreciate this video." The overwhelming gratitude demonstrated teachers are truly seeking help with specific issues. This willingness to find solutions is evidence of teachers seeking to increase

their internal factors of efficacy, craftsmanship, flexibility, interdependence, and consciousness (Costa & Garmston, 1998).

The second theme represented *inquiry for additional knowledge* and was evident through the requests of more information from the host or from others viewing the video through a question or a simple request. Some hosts responded to such requests, but other teachers also responded with more information. Sometimes, the host would create another video to meet the need of repeated requests and then link it in the comment box.

The third theme, *personal sharing* of their own struggles and need for support through the interdependence of other. These comments included words illustrated the teachers' frustration and stress over figuring out how to navigate solutions to their problems. The frustrations were particularly high after the start of the pandemic and the move to virtual teaching platforms. The teachers sometimes shared frustration with their schools and districts by stating "I have to use this tool tomorrow for my class and I have never even heard of it until today. Thank you for helping me." The trend of expecting teachers to successfully utilize tools and strategies in which they had not yet been trained was evident through the tech tool videos. However, their willingness to learn and learn quickly again demonstrated their desire to develop their internal factors of efficacy, craftsmanship, flexibility, interdependence, and consciousness (Costa & Garmston, 1998).

The final theme, *professional and personal sharing*, represented teachers shared how they used the information, adapted the solutions, and the results achieved. These types of comments often received comments from other peers and occasionally the host.

Research Question 2

What forms of knowledge are shared and received?

The channels were primarily used to share tools and tips about teaching. The analysis of the videos revealed topics represented seven categories. Tech Tools videos accounted for the greatest number of videos at 33% of the views. These videos were straight-forward, how-to videos about tech tools teachers can use. The most popular tools were those connected to Google Classroom. The Tech Tools videos were created primarily by male teachers and were more straight-forward with less personal examples. Videos about what to do and how to teach virtually accounted for 19.8% of the videos. These videos focused on how to use the tech tools in an instructional manner. Teachers often modelled a lesson and showed how to use the tool to support students. In these videos, teachers were more personally engaging, often showing pictures of their lessons and sharing insights into how their students engaged in the lessons. They also were more reflective about their own teaching.

Organizing the Classroom videos accounted for 14.1% of the videos. These videos were about how to organize the classroom to support better student engagement and

behaviours. The most popular videos were classroom set-up videos or first day of school videos where the teacher showed step-by-step how to set up a classroom. These videos were the highlight of the teachers teaching elementary education. The secondary teachers did not share as many videos of this type. Similar to the Teacher Life videos, the Organizing the Classroom videos were often sponsored by a company with sharing links of where to buy the products suggested in the videos. Often the products were produced by the teacher and connected to their teacher store on Teachers-Pay-Teachers or Etsy. Formal Professional Learning included videos about graduate school experiences and professional conferences.

Teacher Life videos focused on tips about life as a teacher and accounted for 10.8% of the content on the twenty channels. These videos included everything from what to wear for events, such as Meet the Families, to what type of lunch box is the best. These videos were often sponsored by the product company teachers recommended with links to where to buy the products.

One interesting element is there were graduate programs sponsoring the videos, as well as organizations sponsoring the videos. The monetization of the content was openly discussed. Content videos (17.2%) included videos other teachers could share with students to teach content or examples of how to teach a specific type of content. These were created primarily by secondary teachers and linked content resources for teachers to use. Primarily, these videos focused on the delivery of content, rather than on content-based strategies. Finally, Non-Teacher Related videos included videos about teachers' personal lives outside of teaching. These videos included information, such as buying a new home or life events, such as weddings. On one channel, these videos had become the second and third most popular. The comments included congratulations and well-wishes. The teachers also linked connections to any vendors mentioned in the videos. Table 4 presents the video topic categories and the number and percent of videos within each category.

Table 4: YouTube video topics by category (N = 6256)

Category	Number of Videos	Percentage
Non-Teacher Related	169	0.027
Teacher Life	678	0.108
Tech Tools	2069	0.330
Virtual Teaching	1241	0.198
Organizational Teaching	880	0.141
Formal Professional Learning	87	0.014
Content	1077	0.172

Research Question 3

How do teachers use social media platforms to increase their social capital?

The top videos and comments were analysed to understand how teachers use social media to increase their social capital. As previously stated, host teachers connected their YouTube channels to other social media and market-place outlets. Viewing teachers were able to comment on the videos, share “likes” and “dislikes” with the host. Additionally, the host and peers could react to the comments by responding or sharing information. There was a disproportionality to the engagements, which indicated more lurkers exist than those who truly engage with the content. For example, the most viewed video had 3,476,237 views with 63,154 likes and 1034 dislikes. There were only 1,034 comments for this video. These comments primarily were thanking the host for the information. The video-to-comment ratio is low across channels indicating most people watch the videos, but do not engage in discussion beyond appreciation and few suggestions. The direct building of Social Capital is not necessarily evident through the channels. Viewers are more lurkers, rather than engagers in a community dialogue. The videos do offer ideas for solutions for a variety of issues and teachers can quickly find resources to support the suggestions.

Additionally, one creator discussed the detrimental impact the creating her channel had had upon her school culture with leadership forbidding her to continue to use her classroom after hours to create videos and also monitoring her content. The issues had developed to the point where she had chosen to leave the school and move to another state. Currently, she is not teaching. As with state of flow, more information needs to be gathered through interviews and surveys to understand the impact such channels may have upon the school culture.

Conclusions

Teachers who pursue expertise are savvy in their use of social media. The hosts of the channels often shared how the practice of hosting a channel improved their own professional learning. Additionally, their passion evidenced their experience of flow in teaching. The hosts were often excited to share new ideas and suggestions with their audience. They also shared their professional and personal struggles. The use of social media allowed them to create networks with large groups across the globe and quickly find answers to issues they are experiencing. However, to further establish the evidence of flow, future research will include interviews with creators of the content.

The viewers however were much less engaged and connected. The study did not show teachers forming true professional relationships with smaller, intimate groups. There was some evidence of Professional Kinship type relationships between some of the hosts who had formed connections and then worked together to create podcasts and additional channels. However, the topics were primarily about organizing teaching or teacher life. Lacking in the

videos was consistent discussion about actual best practices pedagogy. One limitation to such videos would be the need for students to be present in the videos to model how such pedagogy occurs. The reflection of their teaching the teachers shared in their classroom blogs was particularly useful in modeling reflection, but without student work or seeing the lesson executed, the audience struggles to connect to the deeper contexts.

Another surprising element is the monetization of the content. The hosts were open about these social media elements being a source of second income for them. One shared how during the unemployment of a spouse, the income was invaluable. The amount earned is difficult to estimate without knowing the amount sponsors are spending and how much the hosts are earning on different platforms such as Teachers-Pay-Teachers.

Social media does allow teachers to develop their practice regardless of location and proximity with peers to their school. They are freely able to bridge across online communities to seek what information they need. Yet, this study demonstrated little evidence these teachers form true networks or relationships with each other. The asynchronous element is also a barrier to such relationships. Videos from five years ago are still receiving comments, but few people are engaging with each other. While such informally-developed online learning communities have been demonstrated to be sources of emotional and professional support for teachers as they asynchronously engage at their leisure and comfort-level, deeper exploration is needed to understand how this type of engagement impacts the development of expertise (Carpenter & Krutka, 2015; Lantz-Andersson et al., 2018; Trust et al., 2016).

These findings hold implications for theory, practice, and future research particularly in the realm of how teachers who pursue expertise use and engage in informally-developed online learning communities to bridge with peers and form social capital.

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