Nice to Tweet You: Supporting Rural Preservice Teachers through Twitter Chats

Joanna Zimmerle

Austin Peay State University

The challenges new rural teachers face often lead to stress and attrition. In response to a growing need to better prepare teachers to work in rural schools, teacher educators may consider incorporating Twitter chats into their coursework. Previous findings demonstrate Twitter chats enable preservice teachers to access new resources, direct their own professional development, and connect with other educators for support. One chat in particular, #RuralEdChat, can connect prospective rural teachers with inservice rural educators and supporters. This paper provides a theoretical basis, highlights previous research, and includes recommendations for using Twitter chats with rural preservice teachers.

New teachers in rural schools will likely face tight budgets, assignments to teach multiple subjects, limited access to highquality professional development, geographic and professional isolation, and the pressures of accountability policies (Lazarev et al., 2017; Preston et al., 2013). This kind of work stress leads one in five new teachers to leave the profession within the first five years of teaching (Gray et al., 2015). Teacher attrition in rural schools has historically been, and continues to be, a problematic issue (Ingersoll, 2001; Malkus et al., 2015; Williams & Cross, 1985).

Preparing effective teachers to teach in rural schools is the work of teacher educators (TEs). However, some researchers argue new teachers are not prepared for the realities they will face in rural schools because rural life is generally absent from university programs (Barley, 2009; Barley & Brigham, 2008; McDonough et al., 2010). Barley (2009) and Schafft (2016) assert teacher preparation programs tend to be tailored toward the needs of urban or suburban schools rather than rural schools.

In response to a growing need to better prepare teachers to work in rural areas, TEs may turn to social media as one way to

support preservice teachers (PTs). According to the PEW Research Center, one in five American adults use Twitter (Perrin & Anderson, 2019), and nearly half of these users are between the ages of 18-24, which is the age range of traditional college students. By harnessing the power of Twitter, a popular social media tool already used by many young adults, TEs may find new and innovative ways to equip PTs for the challenges of rural teaching. Twitter chats in particular are one way to involve PTs in realworld conversations with inservice rural educators and rural education supporters, potentially gaining valuable insights, ideas, and encouragement before beginning their teaching careers.

Theoretical Support

Twitter chats are live conversations in which a group of people meet virtually at a set time and on a regular basis to discuss a topic. Dozens of Twitter chats focused on education take place each week, attended by handful or even hundreds of people globally. In order for all participants to follow and participate in the conversation, each tweet must include a hashtag that is unique to the

chat. The chat host generally moderates the chat by posting predetermined questions and encouraging professional discourse during the chat. For example, #RuralEdChat, hosted by Matt McKee, @try_rebooting, occurs weekly on Tuesdays at 4:30 PM PST/8:30 PM EST and is primarily attended by rural educators and supporters.

From a theoretical perspective, Twitter chats offer participants the opportunity to form online communities of practice (CoP) (Lave & Wenger, 1991). CoP through Twitter chats can address key issues and that undergraduate practices teacher education students need to understand in order to prepare for teaching. Extensive research shows CoP provide participants opportunities for authentic and interactive learning (Smith et al., 2017). Twitter chats are a novel experience for PTs to connect with inservice teachers and educational leaders on a national and even a global scale. Rural PTs in particular, who will likely be isolated professionally, have the opportunity to utilize Twitter to establish a professional online presence and connect with rural educators and supporters in a way that would not be possible in a standard teacher education course. Thus, the use of Twitter chat-based CoP offer an innovative path for preparing PTs to teach in rural schools by way of enabling them access to a kind of virtual teacher's lounge.

Preparing Effective Rural Teachers

In order for TEs to train effective rural teachers, narratives of rural teaching must be explored (Moffa & McHenry-Sorber, 2018). Moffa and McHenry-Sorber (2018) suggest misconceptions of rurality be addressed by allowing PTs to hear directly from rural teachers. One way to link PTs with rural teachers is through Twitter chats. During chats, rural inservice teachers can discuss the challenges they are facing, clear up any

misconceptions or generalizations, and enumerate the benefits of teaching in rural communities. They can also share teaching resources and strategies they have found to be effective in the classroom.

As issues of teacher effectiveness mount, some states have decided the responsibility for helping new teachers improve rests on the very institutions that helped prepare them to teach in the first place. For example, effective January 2019, the Tennessee state legislature state-approved holds preparation programs accountable for first-year teachers' low evaluation scores by requiring these institutions to provide low-performing firstyear teachers with free remediation, such as online coursework (Tennessee General Assembly, 2018). In light of this, TEs may look to new ways of preparing PTs for the work that lies ahead, particularly in rural areas where unique challenges are likely to negatively impact teachers' effectiveness. Twitter chats offer an innovative way for PTs to engage with inservice teachers and may provide insight into rural teaching and learning that helps prepare them for success in the classroom.

How Twitter Chats May Help

Research concerning the impact of Twitter chats on PTs is limited. Using Twitter in teacher education programs and studying its impact remains a novel approach. However, the limited findings indicate several benefits of Twitter chats for PTs; these include providing resources such as curricular materials, self-directed professional development, and a supportive community.

Access to Resources

For inadequately funded rural schools, a lack of access to high-quality resources can significantly widen achievement gaps for students with disabilities and English language learners (Cheung & Slavin, 2012). Limited access to high-quality resources negatively impacts the ability of rural teachers to prepare students to compete with their suburban peers on standardized tests and college readiness. Barley (2009) also points out rural educators are often responsible for teaching multiple subjects in multi-grade classrooms, for which they were not prepared to teach.

Twitter chats may assist rural PTs who lack adequate curricular materials for their assigned grade levels and subject areas as they chat with teachers who share their materials. During Twitter chats, teachers are generally vocal about the resources they use and how those resources impact student attitudes and achievement. Some chat hosts ask participants to share websites, apps, and other resources they have found to be effective in the classroom. Twitter users can provide the hyperlink to each resources or include the Twitter handle of the resource so others can learn more.

Twitter users can also directly tweet or send messages to other users. PTs and inservice teachers alike can directly communicate with rural educators via Twitter in order to ask for curricular support such as lesson plans and online materials.

Self-Directed Professional Development

Besides gaining valuable physical and virtual resources to add to their repertoire, PTs can utilize Twitter chats to direct their own learning outside of the classroom. The importance of effective professional development (PD) cannot be minimized; teachers who spend more time on PD have greater pedagogical knowledge, which suggests increasing time spent on PD may boost knowledge of instructional practices (Glover et al., 2016). However, significant challenges hinder the PD opportunities of rural schools, including geographic isolation, limited resources, and lack of funding and staff (Glover et al., 2016).

Twitter chats can be used to help support the PD needs of rural teachers by offering opportunities to pursue interactions with other educators on topics they are interested in exploring further. Teaching and learning ideas are often shared openly during Twitter chats, which helps PTs understand applications of pedagogies learned about in methods courses. The knowledge gained in Twitter chats may serve to fill the gap for ongoing, effective PD for rural teachers.

Supportive Community

In addition to filling the gap for PD, Twitter chats can also help alleviate some of the professional isolation new teachers experience early in their careers by helping PTs establish a supportive online community. According to Luo et al. (2017), PTs who were asked to participate in Twitter chats for a course assignment found the chats to be an engaging and innovative way to connect with other users. In addition, PTs discussed the value of conversing with inservice teachers who have first-hand experience in the field. In their study, more than half of the PTs surveyed indicated they planned to continue participating in Twitter chats even after they graduated and had classrooms of their own (Luo et al., 2017).

Furthermore, empirical evidence shows the mentorship of inservice teachers has a positive effect on new teachers' quality of instruction, retention, and ability to improve students' academic achievement (Ingersoll & Strong, 2011). Teachers in their first 3 to 5 years of the profession who receive support from a mentor are less likely to exit the profession early (DeAngelis et al., 2013).

In conjunction with, or in the absence of, a high-quality new teacher induction program, new rural teachers may enjoy mentor-type relationships via Twitter chats. Interactions with other professionals via Twitter can be used as a way to expand their

personal learning networks (PLNs) (Ward, 2017) as well as promote community building (Whitby, 2012). Perhaps these connections may help new teachers stay and flourish in the profession.

Recommendations for Using Twitter Chats with Rural PTs

As discussed in the literature review, the responsibility of preparing rural PTs, and offering remediation when their effectiveness is low, falls squarely on TEs. In the pursuit of new and innovative ways to better prepare prospective teachers for working in rural schools, TEs may find Twitter chats useful. Twitter chats enable rural PTs to access new resources, customize their professional development, and gain support from other educators. The following recommendations demonstrate how the author, a TE who teaches an undergraduate Instructional Technology course, maximizes the use of Twitter chats with PTs who indicate a desire to teach in rural areas.

TE Preparation

Twitter chat participation should be scaffolded for PTs in the classroom with a series of in-class chats hosted by the TE. Thus, TEs should begin by familiarizing themselves with how Twitter chats work. A tweet management system such as TweetDeck is useful in organizing chats for Twitter users, especially those who are new to chats. An online tutorial such as How to Find Twitter Chats and Use Tweetdeck may be helpful.

Next, the TE will need to pre-determine the topics of the in-class Twitter chats. Questions for each chat may be posted in advance, but doing so is not necessary. The TE may select topics for Twitter chats based on topics related to rural education, instructional technology, specific content areas, pedagogy, educational theories,

classroom management, or other educational matters. The TE may even poll PTs about the topics they wish to discuss.

Another consideration that should be made is deciding how participants' contributions to chats will be evaluated. Will PTs be assigned a minimum number of tweets and replies to make? Will the quality of those tweets and replies be assessed? If so, will the TE make a rubric available?

Creating Twitter Accounts

Next, PTs will need to create their own professional Twitter accounts. If PTs already have Twitter accounts, they should be cautioned about the problems with unprofessional social media use, which may impact employment opportunities. A professional Twitter handle, profile photo, and bio section should be encouraged.

The TE may need to give constructive feedback to PTs whose profiles do not meet professional standards. Besides showcasing their own Twitter profiles, TEs may share other Twitter users' profiles as guides for PTs. Non-examples may also be helpful to ensure PTs are aware of the expectations.

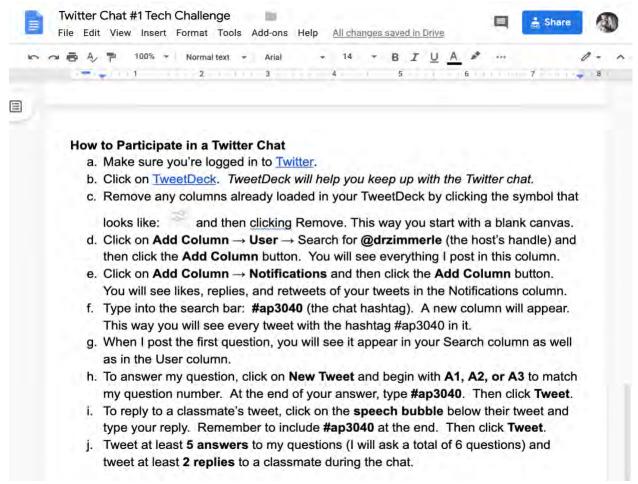
Scaffolding Twitter Chat Participation

After PTs have created professional Twitter profiles, the process of how to participate in a Twitter chat must be demonstrated in a step-by-step format and inperson so the TE can address specific issues with individuals as they arise. Despite being comfortable using social media on a daily basis, many PTs have never participated in Twitter chats before. Each semester, the author proactively arranges for three in-class Twitter chats before giving PTs the assignment to participate in an out-of-class Twitter chat. This provides ample opportunities for PTs to hone their skills and become confident with chatting. Figure 1 shows the directions the author provides to PTs regarding how to participate in an inclass Twitter chat. These directions are in a Google Doc that has been shared with PTs who are enrolled in the course. PTs access the Google Doc as the author models the directions during each of the three in-class Twitter chats. PTs also have access to the directions when participating in their official out-of-class Twitter chats in case they need to refer to the steps.

Figure 1.
Twitter Chat Directions

conversation to be followed among all interested parties. The TE should ensure the hashtag they choose is unique to the class. Searching the chosen class hashtag on Twitter will reveal if it is already being used.

Due to the live, public nature of Twitter chats, anyone with a Twitter account may use the class hashtag to join the chat. In fact, the TE may wish to invite other students, faculty, and educators to the chat in order to diversify the ideas presented. PTs are especially interested in hearing about teachers in the field have to say (Luo et al., 2017). Thus,



This figure shows a set of directions given to PTs about how to participate in an in-class Twitter chat.

As noted in Figure 1, the TE must give PTs the class hashtag, and PTs must use the class hashtag in their tweets in order for the inviting rural educators and supporters to participate in the class Twitter chats may have a positive impact on PTs and help them establish early connections with potential mentors.

Official Out-of-Class Twitter Chat Assignment

After three in-class chats, or when the TE determines PTs are ready, they should be given an assignment to participate in at least one official out-of-class Twitter chat. A list of education Twitter chats can be found at https://sites.google.com/site/twittereducation-chats/education-chat-calendar. While this list is extensive and may be helpful as PTs select a chat, it should be noted many inactive chats are on the list. In order to determine if a chat is still active, PTs should search the hashtag and/or the chat host's name, if given, and post a tweet or send a direct message to the host in order to inquire

about the next scheduled chat.

There is one currently active chat focused on rural education. #RuralEdChat is held on Tuesdays at 4:30 PM PST/8:30 PM EST. Matt McKee, whose handle is @try_rebooting, hosts the chat. TEs should encourage rural PTs to participate in this chat; however, rural educators and supporters participate in many other chats as well, so rural PTs should not feel limited to participating in this chat only.

Evaluation

Following participation in an official out-of-class Twitter chat, the TE may wish to evaluate the assignment using a tool such as Google Forms. First, PTs should identify the name, date, and time of the chat in which they participated and briefly explain why it was selected. Screenshots or copies of the tweets PTs contributed to the chat may be required. A Twitter chat archive might also be useful for both assessing chat participation and looking back at the chat at a future time; Wakelet provides a tutorial on how to archive a Twitter chat in the article 10 Steps to Easily Archive a Twitter Chat.

Further, TEs can ask PTs to respond to writing prompts in which PTs must think critically about the usefulness of Twitter chats. These reflections may help PTs articulate the benefits and challenges of chatting with educators and provide insight to the TE, which may be used to revise Twitter chat activities in future semesters. Examples of writing prompts include:

- Discuss the purpose of the official out-of-class Twitter chat in which you participated.
- Describe your participation level in the out-of-class Twitter chat. Were you more of a listener or an active participant, and why?
- What did you learn during your Twitter chat, and what lingering questions do you have?
- What is your overall reaction (thoughts, ideas, or feelings) to the out-of-class Twitter chat?
- How did the official out-of-class Twitter chat you participated in impact your understanding of rural education?
- Discuss any new resources, teaching and learning ideas, or relationships with other users made during the chat.
- Do you plan to continue participating in Twitter chats after this course ends? Why or why not?
- Besides Twitter, what other tool(s) could you use to access curricular materials, direct your own professional learning, and connect with other educators for support?

Conclusion

PTs who wish to teach in rural areas need effective preparation programs to equip them for the realities of teaching in rural schools, such as limited funding for high-quality resources and professional development as well as professional isolation. TEs who wish to better prepare rural PTs should consider innovative methods such as utilizing Twitter chats to improve PTs' access to resources,

self-driven professional development, and connections for support from rural educators in the field. These benefits may help keep new rural teachers in the classroom, and they may positively impact new rural teachers' effectiveness.

Future studies should examine what Twitter chats have impact on the effectiveness of PTs who have graduated and obtained jobs in rural districts. Currently, there is no published research on the achievement of rural students whose teachers participate in Twitter chats. Research is needed to determine how participating in Twitter chats impacts rural teacher effectiveness and student achievement. Research is also needed to survey rural teachers who participate in Twitter chats to ask about whether they plan to stay in or leave the profession and what role, if any, Twitter chats have had in their decision.

References

- Barley, Z. A. (2009). Preparing teachers for rural appointments: Lessons from the mid-continent. *Rural Educator*, *30*(3), 10-15.
 - http://epubs.library.msstate.edu/index.p hp/rurale ducator/issue/view/24
- Barley, Z. A., & Brigham, N. (2008). Preparing teachers to teach in rural schools (Issues & Answers Report, REL 2008-No. 045). Institute of Education Sciences website: http://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL 2008045.pdf
- Cheung, A., & Slavin, R. E. (2012). The effectiveness of education technology for enhancing reading achievement: A meta-analysis.
 - https://www.researchgate.net/publicatio n/267818727_The_The_Effectiveness_ of_Education_Technology_for_Enhanci ng_Reading_Achievement_A_Meta-Analysis

- DeAngelis, K. J., Wall, A. F., and Che, J. (2013). The impact of preservice preparation and early career support on early- to mid-career teachers' career intentions and decisions. *Journal of Teacher Education*, 64(4): 338–355.
- Glover, T. A., Nugent, G. C., Chumney, F. L., Ihlo, T., Shapiro, E. S., Guard, K., Koziol, N., & Bovaird, J. (2016). Investigating rural teachers' professional development, instructional knowledge, and classroom practice. *Journal of Research in Rural Education*, 31(3), 1-16.
- Gray, L., Taie, S., & Rear, I. (2015). Public school teacher attrition and mobility in the first five years: Results from the first through fifth waves of the 2007-08 beginning teacher longitudinal study. (NCES 2015-337). Washington, DC: National Center for Education Statistics.
- Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499-534.
- Ingersoll, R., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Education Research*, 81(2), 201-233. doi: 10.3102/0034654311403323
- Lave, J., & Wenger, B. (1991). Situated learning: Legitimate peripheral participation. Cambridge, MA: Cambridge University Press.
- Lazarev, V., Toby, M., Zacamy, J., Lin L., & Newman, D. (2017). *Indicators of successful teacher recruitment and retention in Oklahoma rural schools* (REL 2018–275).
- Luo, T., Sickel, J., & Cheng, L. (2017). Preservice teachers' participation and perceptions of Twitter live chats as personal learning networks. *Tech Trends* 61(3), 226-235. doi: 10.1007/s11528-016-0137-1

- Malkus, N., Hoyer, K. M., & Sparks, D. (2015). Teaching vacancies and difficult-to-staff teaching positions in public schools. https://nces.ed.gov/pubs2015/2015065. pdf
- McDonough, P. M., Gildersleeve, R. E., & Jarsky, K. M. (2010). The golden cage of rural college access: How higher education can respond to the rural life. In Schafft, K. A., & Jackson, A. Y. (Eds.). Rural education for the twenty-first century: Identity, place, and community in a globalizing world (pp. 191-209). State College, PA: Penn State Press.
- Moffa, E. D., & McHenry-Sorber, E. (2018). Learning to be rural: Lessons about being rural in teacher education programs. *Rural Educator*, *39*(1), 26-40.
- Perrin, A., & Anderson, M. (2019). Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018.
 - https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/
- Preston, J. P., Jakubiec, B. A., & Kooymans, R. (2013). Common challenges faced by rural principals: A review of the literature. *Rural Educator*, *35*(1). https://files.eric.ed.gov/fulltext/EJ1022 612.pdf

Dr. Joanna Zimmerle is an Assistant Professor at Austin Peay State University. Her research interests include teacher education, online learning, digital responsibility, and social media in education. education.

- Schafft, K. (2016). Rural education as rural development: Understanding the rural school-community well-being linkage in a 21st century policy context. *Peabody Journal of Education*, *91*(2), 137-154.
- Smith, S., Hayes, S., & Shae, P. (2017). A critical review of the use of Wenger's community of practice (CoP) theoretical framework in online and blended learning research, 2000-2014. *Online Learning*, 21(1), 209-237.
- Tennessee General Assembly. (2018). *HB*1694 SB 1629.
 http://wapp.capitol.tn.gov/apps/BillInfo
 /default.aspx?BillNumber=HB1694&G
 A=110
- Ward, R. (2017, June 30). *An introduction to Twitter education chats* https://www.edutopia.org/blog/introduction-twitter-education-chats-robertward
- Whitby, T. (2012). How does #Edchat connect educators? http://smartblogs.com/education/2012/0 8/06/how-edchat-connecteducators-2
- Williams, R. L., & Cross, W. K. (1985, October). *Early field experience: A recipe for rural teacher retention*. Paper presented at the National Rural Conference, Bellingham, WA. https://files.eric.ed.gov/fulltext/ED2847 00.pdf