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Educator Professional Conversations via Twitter Chat: Speech Acts and Intentions in #PDBookClub

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Introduction

For some people, the phrase "summer vacation" brings childhood images of sleeping late, lazy days of no schedules, and most importantly, no school. But for some educators, summer is the ideal time for more learning – reading the stack of books that went untouched during the school year, attending conferences without having to create substitute lesson plans, and connecting with other educators.

Nine years ago, three educators from across North America compared their list of summer professional books and decided to hold an online book study. An invitation to other educators to join the book club went out through their blogs and Twitter. The #PDBookClub hashtag was created to gather and collect educators' contributions to the shared conversation about the professional books. Each Spring since, educators post their list of summer reads and the hosts select the most common title for a book study. Participants post their reflections of the chosen book through blogs, Twitter, Google+ and Voxer. As a culminating event, the organizers also invited the author of the professional book to join the conversation during a synchronous Twitter chat.

This paper considered the #PDBookClub an affinity space and used a Computer-Mediated Discourse Analysis (Herring, 2001; 2004) approach to better understand the one-hour Twitter chat held on July 30, 2014 about the book *Reading in the Wild* by Donalyn Miller (2013). The purpose was to examine how the conversations using Twitter conventions developed and what topics were most significant to the participants.

Much of the research on educators' use of Twitter depends on methodologies of self-report through surveys (Carpenter & Krutka, 2014b) or social network analysis (Gao & Li, 2017). This paper dives deeply into a single Twitter chat event to increase understanding of how conversations develop in a chat and how the conventions of Twitter help foster links between ideas. Rather than focusing on a network analysis or content analysis, this paper considers how knowledge was built together through the generation of conversations.

LITERATURE REVIEW

Twitter continues to gain popularity as a platform for self-directed professional development for educators. It provides voluntary, participatory, ubiquitous, and tailored professional learning for participants (Visser, Evering, & Barrett, 2014). There have been several studies about the motivations for educators using Twitter as professional development and what educators gain from their use of Twitter (Britt & Paulus, 2016; Budak & Agrawal, 2013; Carpenter & Krutka, 2015; Power, 2013; Visser et al., 2014). Teachers use Twitter for professional learning and improving practice through sharing resources, collaborating, building a professional learning network, participating in Twitter chats, and for emotional support (Carpenter, 2015; Carpenter & Krutka, 2014a; 2014b). Twitter is especially useful for educators to connect with professionals outside of their local context and those connections provide insight, challenge, and resources that impact their professional lives (Forte, Humphreys, & Park, 2012).

Twitter is a microblogging platform, which means users have 280 characters to express their thoughts. However, previous to November 2017, the limit was 140 characters. Each 280-character message is called a tweet and may include a link to a webpage or an attached photo or video. Some conventions of Twitter include the @ symbol to indicate a user name and allows specific tweets to be addressed to a user, which can be a person (@coolcatteacher) or organization (@ISTE). The hashtag symbol # tags the tweet with a keyword that other users can search. For example, for the International Society for Technology in Education (ISTE) annual conference, the hashtag is #ISTE19 or the hashtag #Literacies is for people interested in literacy-related topics. People who use Twitter can access the platform through a variety of ways, which makes the individual's experience of Twitter unique, even within a chat format. The typical Twitter feed provides a chronological viewing of tweets as they are posted. However, other applications, such as TweetDeck or HootSuite provide multiple ways to view a Twitter feed.

By using these conventions, Twitter chats, both synchronous and asynchronous, provide a public forum for users to discuss a particular topic by assigning a specific hashtag to the discussion. Popular educational Twitter chats include #satchat, #edchat, and subject area chats such as #engchat, #mathchat, and #sschat (Carpenter & Krutka, 2015). For an updated list of educational Twitter chats, check http://cybraryman.com/chats.html.

Twitter chats are one of the more interactive uses of Twitter as the format of a chat encourages conversation that includes responses and replies. Most Twitter chats have a theme for the chat and the moderator or host posts individual questions for participant response. Synchronous chats are typically scheduled for a particular date and time and tend to last 30-60 minutes, though "slow chats"

spread the conversation out over several days or a week. Participants respond to the questions, or each other, and include the designated hashtag in the tweet. Others can search the hashtag to read the conversation. Often hosts will create an archive of the chat for easy review and post the archive on a website or blog.

Educators report that participation in Twitter chats is one of the top reasons they use Twitter (Cartpenter & Krutka, 2014b) and they find that hosted chats help them reflect on their teaching, provide new resources and ideas, and, for some, are more valuable learning experiences than other training (Carpenter & Krutka, 2015). There have been descriptive studies of some of the more popular chats including #edchat, a general education hashtag (Power, 2013; Gao & Li, 2017); #sschat, a social studies chat (Krutka, 2017); #mathchat, a math-based chat (Power, 2013); and #sachat, a student affairs and higher education chat (Guidry & Pasquini, 2013). Multiple theoretical frameworks have been applied to understand the nature of the interactions including communities of practice (Gao & Li, 2017); affinity spaces (Carpenter & Krutka, 2014b); Community of Inquiry (CoI) framework (Powers, 2013) of social, cognitive, and teaching presence (Garrison, Anderson, & Archer, 2000); or professional learning networks (Visser et al., 2014). These studies also used a variety of methods to understand the process of the chats including historical review (Krutka, 2017); social network analysis and content analysis (Gao & Li, 2017); case study (Guidry & Pasquini, 2013; Powers, 2013); and Computer-Mediated Discourse Analysis (Guidry & Pasquini, 2013). Each of these frameworks and analytical methods provides a unique view into the macro to micro processes of Twitter chats. However, according to Willet, Koehler, and Greenhalgh (2017), the understanding of how educators interact with each other within chats is just beginning to emerge. In this study, the framework of affinity spaces (Gee, 2005, 2017) was used to focus on content and social interactions as indicated by retweets, addressing other users, and mentions of other users (Willet et al., 2017) along with computer-mediated discourse analysis (CMDA) methods (Herring, 2001; 2004) to examine the conversations that developed within a single hour-long Twitter chat.

THEORETICAL FRAMEWORK

An affinity space is a real or virtual space where people gather together with a common goal, interest, or endeavor. It is not based on the person's characteristics, background, or expertise level (Gee, 2005; 2017). In other words, all people are welcome to the space as long as they are interested in the same thing. The common interest is the content or generator of the space. In the case of this study, the generator was the #PDBookClub hashtag, which indicated that anyone using the hashtag has a common interest in discussing the book selected for the summer book study. To gain access to the content, people need portals or entryways into the content. #PDBookClub had multiple portals including Twitter, Google

Communities, or Voxer. However, for this particular study, the focus was on the portal of Twitter. In addition, an affinity space has particular grammars, or designs and structures of how particular signs are used to indicate interaction between content and people (Willet et al., 2017). In this study, some of the content interactions were indicated by retweets or retweets with modification, which indicated someone's use or copy of another person's tweet or content. The social interactions were indicated by using the @ symbol and the person's name, which indicated the tweet was addressed to the particular person.   In addition, there were mentions, when a @UserName was included in the tweet to invite a person into the conversation.

Recognizing that the affinity space of #PDBookClub can be examined through its content and social interactions, computer-mediated discourse analysis (CMDA) methods (Herring, 2001; 2004) are useful in analyzing the tweets that occurred during the discussion. CMDA can focus on four domains of analysis including: 1) structure, 2) meaning, 3) interaction, and 4) social behavior (Herring, 2004). Structural analysis includes attention to typographical choices and sentence structure, which would include Twitter convention use. Meaning analysis focuses on the speech acts of an utterance. An utterance is "a sequence of one of more words that is preceded and followed by silence (space) or a change in communicator" (Herring & Androutsopoulos, 2015, p. 131). Utterances, both verbal and textual, communicate a meaning with an intent to accomplish something.

The types of action that are intended are called speech acts, which have been categorized by Searle (1976) in his taxonomy of speech acts. These categories include: assertive, directive, expressive, commissure and declarative intents. Interactional management highlights how participants stay on topic and develop topics, link ideas, take turns, awareness of non-responses, and repairing misunderstandings. The social level of analysis concentrates on participation over multiple exchanges and how "expressions of play, conflict, power, and group membership" (Herring, 2004, p. 340) is expressed. Speech act analysis provides the opportunity to explore the way conversations develop and the potential intent of the speaker.

METHODS

CONTEXT

This study focused on the Twitter chat for a professional book club held in the summer of 2014 on the book *Reading in the Wild* by Donalyn Miller (2013). Previous to the Twitter chat, participants read the book and posted individual reflections on blogs, Google+, or Twitter over the course of three weeks. The Twitter chat was the culminating activity for the book study. The host for the chat was one of the founders of #PDBookClub and the author of the book also joined

the chat. There were 55 active participants in the chat – meaning they posted at least one tweet during the chat. The participants included classroom teachers, librarians/media specialists, reading teachers/specialists/coaches, teacher educators, and independent consultants. According to their Twitter profiles, participants came from 16 states and Canada and a variety of grade levels. Twitter, being a public space, allowed for anyone to participate within the chat. Being an affinity space, the status, experience, or even location of the participants were not significant factors in the educators' participation in the chat. The participants were engaged in the chat because of the content (discussion of the book) and each had equal opportunity to post and respond.

DATA SOURCES

The chat consisted of a total of 543 tweets throughout the chat – including replies and retweets. The host used the Q1/A1 format – which meant that the host posted a question (Q1) and the tweets in reply to the question should have been labelled A1 – although not all replies were labelled. In addition, each tweet needed the #PDBookClub label to be included in the searchable chat list. Most of the tweets were in response to the host's questions, for a string of single statements. The eight questions posted by the host during the hour were:

1. What is the first thing you will tell your colleagues about the book?
2. What is one strategy or idea that you will implement this school year to grow wild readers?
3. How can we build connections with other readers to help grow our reading communities?
4. How will you dedicate time for your students to read in school?
5. What is one takeaway you have after reading *Reading in The Wild*?
6. What is one challenge you anticipate when growing wild readers? Please share possible ideas and solutions to the challenges shared!
7. Share a quote that caught your attention in your reading.
8. Share a book you read this summer that you can't wait to share with students!

All tweets analyzed in this study were publicly available and when permission for research was sought through institutional review board, this research was determined to be exempt from requiring informed consent. Twitter's Privacy Policy states that Twitter is public and that tweets are immediately viewable and searchable by anyone. In considering the ethics of principles of the *Ethical Decision-Making and Internet Research: Recommendations from the AoIR Ethics Working Committee* (Markham & Buchanan, 2012), this research analyzes public data, is not focused on a vulnerable population, and doesn't involve sensitive topics. The material used in

the analysis comprises educators' reflections on a professional text and, as such, risk is minimal. However, @UserNames and the #PBBookClub label have been renamed to reduce identification of any individual and identifiable contextual information has been removed.

MODES OF INQUIRY

According to Meredith and Potter, "electronic discourse is inherently interactional" and has the necessary components to be categorized as conversation including: sender/receiver(s); sequence of initiation and response with anticipation toward the next response; and the need to recognize the context and imbedded action to understand the interaction (2013, p. 370). The conventions of Twitter, such as the reply feature and use of the @ symbol and # hashtag, allowed the tweets to be linked together in conversations that included multiple people. The first level of analysis pulled the conversations out of the Twitter chronological feed and provided the opportunity to focus on the development of multi-participant conversations.

LEVEL 1 ANALYSIS: ORGANIZATION OF CONVERSATION

Although there were hundreds of tweets within the course of an hour, the most interesting points for analysis were distinct conversations that emerged during the Twitter chat. These conversations consisted of 78 tweets across the distinct conversations and included 28 people.

Twitter links conversations when the user includes the @ symbol to address a tweet to another user or if a user clicks "Reply" to a statement. In both cases, the @UserName was attached to the reply. Although not all uses of the @ symbol indicate a user's intention to address another user, in several studies, it was used in this manner the majority of the time (Honey & Herring, 2009). When the #PDBookClub Twitter chat was collected in its entirety, the posts were copied in chronological order. However, the conversations that were linked were separated and organized so the tweets showed a nested discussion group-style format to follow the flow of the conversation and illustrate who was addressing another person.

These conversations were the sites of interactive discussion in which an initial post generated replies using the @ symbol. Most of the short linkings of tweets were replies of two people and consisted of retweets (RT) or simple tweet/reply/response reactions. Since a conversation did not develop, these interactions were not analyzed. However, there were 14 conversations during this chat that included two or more people interacting with four or more nested tweets. After reading and re-reading each nested conversation, each conversation was labeled based on the main theme of the discussion, as indicated in Table 1. These thematic labels emerged from the conversations and were not predetermined.

Table 1:
Conversations in #PDBookClub by participants, tweets, retweets and layers

Topic	Participants	Total Tweets	RT	Layers
Q1: Giving students choice	5	8	1	6
Q2: Connecting with authors	4	6	1	5
Q2: Wild readers need community	3	4	1	3
Q2: Blogging with students	2	4	0	4
Q3: Organizing a classroom library	3	7	0	7
Q4: DEAR time	5	6	0	3
Q4: Reading built in	4	4	1	3
Q5: Book recommendations	3	4	1	4
Q5: Reading time and struggling readers	4	4	0	2
Q6: Presentation to parents about Wild reading	5	7	1	4
Q6: Negative attitudes from other staff – showing off	7	10	1	3
Q6: Facing adversity from other teachers – helping students find books	4	4	0	4
Q7: Quote – ALL readers deserve opportunities to grow	4	4	1	3
Q8: Book buying hiatus	3	6	1	6

These conversations were sites of interaction and discussion, rather than just an announcement or presentation of a thought. Therefore, these conversations provided a glimpse into the issues of interest of the participants.

An example of a nested conversation appears in Table 2. In this conversation, there were four participants – the initial poster (@JH); a retweet (@T4) of the initial post; a reply (@MB2) to the initial post and the retweeter, and a reply (@TTW) to the initial post. When placed into a nested discussion-board style format, there were a total of three layers of responses. The first layer was the response to the posted question. The second layer was any response (original or retweet) to the response to the question. The third layer was a response to the second layer.

Through the chat, a single conversation may have multiple examples of a second layer of responses, as multiple people may respond to the same tweet at the same time. Megele (2014) calls this a multilogue conversation which is defined as:

> a many-to-many communication, where each message is addressed to more than one potential receiver and may be answered by more than one potential replier. Furthermore, each reply in itself is implicitly addressed to more than one potential receiver and may receive replies from more than one source (p. 47).

This also means that multiple different conversations based on the same initial post can develop simultaneously. In face-to-face conversation, this would be considered talking over someone. However, the digital format of Twitter allows people to respond to the same thing at the same time. As Twitter users all view tweets in the Twitter feed in a different way, the conversation may not appear linear in their experience. However, for the purpose of analysis, they were arranged in a linear fashion.

Table 2: Example of the layers of a conversation in Twitter

Description	Layer	User	Tweet
Q7: Share a quote that caught your attention in your reading. #PDBookClub			
Initial response posted to question	1	@JH	A7: "We must remember that ALL readers deserve opportunities to grow (p.121)" #PDBookClub
Retweet (RT) of initial post	2	@T4	RT @JH A7: "We must remember that ALL readers deserve opportunities to grow (p. 121)" #PDBookClub
Reply to initial poster and retweeter (layer 2)	3	@MB2	@T4 @jh Parent education is key - and I am convinced more so after reading this book #PDBookClub
Reply to initial poster	2	@TTW	@JH YES! My daughter who reads at a high level is sometimes ignored because she "doesn't need help!" Ugh! #PDBookClub

The #PDBookClub chat took place online through written responses of 140 characters or less using the platform of Twitter. As Herring states, "Online interaction overwhelmingly takes place by means of discourse" (2004, p. 339) and can be analyzed through the approach of Computer-Mediated Discourse Analysis (CMDA). Like discourse analysis of spoken discourse, CMDA can focus on four domains of analysis 1) structure, 2) meaning, 3) interaction, and 4) social behavior (Herring, 2004).

Employing methods drawn from speech act theory and Searle's (1976) taxonomy of speech act, each tweet was labeled with the a priori code for each speech act. Searle identified five speech acts: 1) Commissive – a commitment to future action, 2) Directive – attempt by the speaker to get the listener to do something, 3) Representative/Assertive – describe or assert a statement of truth, 4) Expressive – an expression of a psychological state, and 5) Declarative – statement that changes the state of things. In addition to labeling the tweets using Searle's taxonomy, each person's possible intent of the tweet was considered, which was the researcher's interpretation based on the context and on-going responses (See Table 3).

To ascertain the writer's possible intentions, the researcher read the tweets before and after each tweet and considered the Twitter conventions used to form an interpretation of the intention. After re-coding each Twitter for intention, the researcher collected all the codes and consolidated them into 12 categories.

- **Complaint** - a statement that a situation was unsatisfactory or unacceptable.
- **Empathy** - the ability to understand and share the feelings of another because one has experienced it
- **Appreciation** - the recognition and enjoyment of the good qualities of someone or something.
- **Solidarity** - unity or agreement of feeling or action, especially among individuals with a common interest; mutual support within a group.
- **Commitment** – a promise or intent
- **Inquiry** – to elicit information
- **Encouragement** - the action of giving someone support, confidence, or hope
- **Praxis** – to share practice
- **Condolence** - an expression of sympathy
- **Humor** - the quality of being amusing or comic
- **Assurance** – seeking assurance or support
- **Quote** – quote from the book

Using both speech act a priori coding and codes for intentions, the researcher classified tweets according to their action and intention.

Table 3: Coding scheme for analyzing tweets based on Searle's (1976) Classification of Speech Acts; with Verbs and Examples

Speech Act	Defined	Possible Verbs	Example from #PDBookClub	Writer's Possible Intention
Commissive	Commit the writer to some future action	Promise, pledge, threaten, vow, offer, guarantee, confirm,	I will invite my teammates and our library staff to chat about giving students CHOICE when choosing books	Commitment
Directive	Attempts by the writer to get the reader to do something	Ask, order, command, request, beg, invite, permit, advise, dare, question	Do students currently not have opportunities for choice at your school?	Question
Representative / Assertive	Describe or assert a statement as true	Stating, describe, reporting, boast, instruct, conclude	we are still living under the dark cloud of AR and literal application of lexile scores. Kids aren't trusted.	Complaint
Expressive	Express psychological state	Thank, congratulate, apologize, condole, deplore, complain, greet	Nervous and excited to try it!	Seeking Assurance
Declaration	Statement that creates immediate change	Declare, resign, fire, name, nominate, hire,	None	None

RESULTS

A total of 78 tweets comprised the 14 conversations during the hour-long Twitter chat. The majority of the tweets within these conversations were assertive statements or statements of facts (48%) and expressive statements (27%), which were statements of feeling. There were no tweets identified as declaratives (See Table 4 and 5).

Table 4: Classification of tweets by conversation theme and Searle's (1976) taxonomy

Question and Theme	Total tweets	Commissive	Directive	Assertive	Expressive
Q1: Giving students choice	8	2	2	4	0
Q2: Connecting with authors	6	3	0	2	1
Q2: Wild readers need community	4	0	0	4	0
Q2: Blogging with students	4	2	0	1	1
Q3: Organizing a classroom library	7	1	4	1	1
Q4: DEAR time	6	0	0	6	0
Q4: Reading built in	4	0	0	1	3
Q5: Book recommendations	4	1	0	0	3
Q6: Reading time and struggling readers	4	0	0	4	0
Q6: Presentation to parents about Wild reading	7	2	1	0	4
Q6: Negative attitudes from other staff – showing off	10	0	0	7	3
Q6: Facing adversity from other teachers – helping students find books	4	1	0	3	0
Q7: Quote – ALL readers deserve opportunities to grow	4	0	0	4	0
Q8: Book buying hiatus	6	1	0	0	5
Total	78	13	7	37	21

The thematic topics of the conversations were arranged chronologically, according to the questions that were asked during the chat. The question that generated the most conversation was Question 6: *What is one challenge you anticipate when growing wild readers? Please share possible ideas/solutions to the challenges shared!* This question generated four distinct conversations with a total of 25 tweets. Another question, Question 2: *What is one strategy/idea that you will implement this school year to grow wild readers?* generated numerous conversations (3) and tweets (14).

The most prevalent speech act within this Twitter chat was assertive, which was a statement that something was true. For example, @RSM stated, "[M]y summer school developing readers are loving our blog. Starting to share books." At the same time, this assertion also shared the educator's practice or praxis, the use of blogs to share books. @G79 explained how having her students arrange their classroom library helped her learn about them, stating, "@DB when mine helped arrange I learned tons about what they knew (& didn't) about books/genres. @LSL." This was an assertive statement that also described her practice.

Table 5: Percentage of tweets classified using Searle's taxonomy
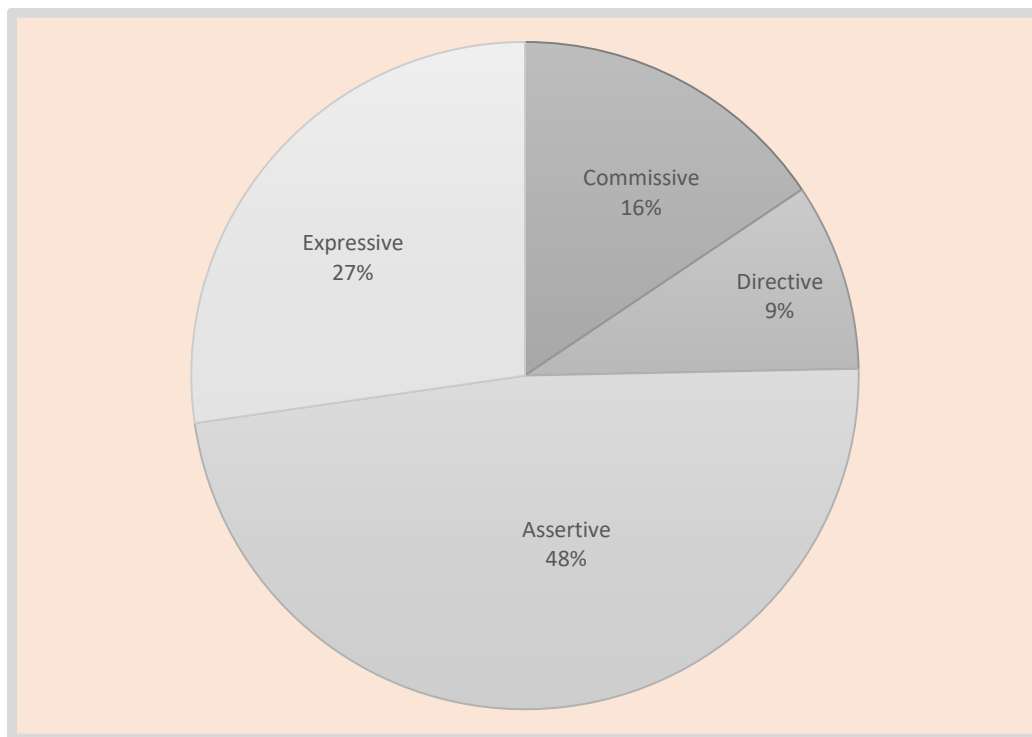
Sharing praxis was the most common intention across the entire chat, with 18 out of the 78 tweets sharing an educator's practice in some way. Most praxis statements occurred within assertive statements, but practice was also shared with two commissive statements and two directive statements (See Table 7).

An assertive praxis statement was @G79's statement mentioned above in which she described a successful practice about how her students help her arrange their classroom library. A commissive example of a praxis statement happened when @MB2 stated, "Just got the ok today to do a wild reading presentation to parents at the beginning of the year!" In this statement, her intention was to commit to the presentation to parents in the future, which she received permission to do. But, it was also an example of her intent to share praxis because she was showing how she provided education to parents about her reading expectations for students.

The conversation about organizing a classroom library was a good example of how statements of praxis could span multiple speech acts (See Table 6). The third question of the chat was "How can we build connections with other readers to help grow our reading communities?" In response, @LSL asked for help, "Would like suggestions on how to sort my classroom library?" @DB asked for further clarification, "What would work best for your students and you? How would you like them to use the library?" In response, @LSL expressed a commissive, "I want it to be used daily. It's leveled and I want to redo it to start the year." This was a commitment to future action, but also a description of her current practice that she would like to change.

A directive speech act was one in which the writer was attempting to get the reader to do something. In her response to @LSL's tweet, @G79 encouraged her to consider her students' preferences about books before arranging the classroom library, which she indicated was a practice that she does. She wrote, "Might be best to consider categories/groups once you know something about students' preferences." @DB also responded to @LSL's request for advice with a directive that shared her own practice, "It could be interesting to see how students might group them. Assessment opportunity if nothing else."

Confirmation of @G79's existing classroom practice was seen in this assertive praxis statement, responding to @DB's advice, "When mine helped arrange I learned tons about what they knew (& didn't) about books/genres." Overall, sharing of practice was done through multiple forms of speech acts.

Table 6: Conversation about organizing classroom library in response to question 3

Q3: How can we build connections with other readers to help grow our reading communities? Theme: **Organizing Library**			
Person	**Response**	**Speech Act**	**Intention**
@LSL	Would love suggestions on how to sort my classroom library? #PDBookClub	Directive	Inquiry
@DB	@LSL What would work best for your students and you? How would you like them to use the library? #PDBookClub	Directive	Inquiry
@LSL	@DBI want it to be used daily! its leveled and I want to redo it to start the year. I teach 4th grade? #PDBookClub	Commissive	Commitment
@G79	@LSL Might be best to consider categories/groups once you know something about Ss preferences. @DB #PDBookClub	Directive	Praxis
@DB	@G79 @LSL It could be interesting to see how students might group them. Assessment opportunity if nothing else. #PDBookClub	Directive	Praxis
@G79	@DB When mine helped arrange I learned tons abt what they knew (& didn't) about books/genres. @LSL #PDBookClub	Assertive	Praxis
@LSL	@G79 @DB great idea to let the ss help sort my class library! thanks! #PDBookClub	Expressive	Appreciation

Expressive statements were the next most common statements with two intentions being prevalent – appreciation and humor. Eleven tweets of appreciation took the form of thanking people for ideas or celebrating the ideas expressed. Most appreciative statements were expressive statements (showing emotion), such as @SSJ's comment on the importance of knowing research about sustained silent reading practices or Drop Everything and Read (DEAR), she stated, "I live & die by Allington's volume of reading research." When @MSK stated that her school district had a policy of 30 minutes of scheduled independent reading time, @JS6 exclaimed, "@MSK Impressive! I'm jealous!" The use of exclamation points indicated her enthusiasm for the idea @MSK expressed.

The last question, Question 8: *Share a book you read this summer that you can't wait to share w/students!* generated a long list of books that participants wanted to share with their students. In addition, there were nine linked responses

of a participant naming books and one or two other people reinforcing the value of the title by showing their enthusiasm for it, either by saying how much they loved it or how much they want to read it.

However, one comment generated a humorous and a little off-topic conversation. In response to question 8, @DB wrote, "I am on a book buying hiatus until I read 50 books I have purchased, but haven't read. Rediscovering some gems!" This inserted some humor into a chat that was generally on topic and serious. The resulting playful conversation occurred between her, @LK and @NRS and focused on the difficulty of committing to not purchasing books. Showing disbelief, @LK wrote, "@DB I'm impressed that you're still holding out on buying books!" Using a tongue-in-cheek statement @DB replied, "It's been rough. I am sure our UPS guy is wondering what happened." Using a retweet of the previous statement, @NRS jumped into the conversation with a comment using the "LOL" acronym which meant she was Laughing Out Loud to the @DB's statement. Feigning sadness, @LK replied to both, "Poor UPS guy! ;) " The ;) was a winking emoticon. Emoticons represent facial expressions using punctuation marks, numbers, or letters to express feeling in electronic discourse. The winking emoticon was used to imply humor in written discourse. In this case, @LK was indicating the sarcasm in her statement of "Poor UPS guy."

It was interesting to note that this conversation was during the last posted question and occurred chronologically right before the wrap-up, which asked for final thoughts on the book. It may be that the timing of the question allowed participants to recognize the end of the chat and, like at the end of a face-to-face meeting, encouraged the participants to engage in more idle chatter rather than the deeper sentiments expressed earlier.

Table 7:Intention of tweet in each Searle (1976) category

# OF TWEETS	Commissive	Directive	Expressive	Assertive
■ Complaint	0	0	0	8
■ Empathy	0	0	2	6
■ Appreciation	0	0	11	1
■ Solidarity	0	1	2	4
▢ Commitment	10	0	0	0
■ Inquiry	0	4	0	0
■ Encouragement	1	1	0	1
■ Praxis	2	2	0	14
▢ Condolence	0	0	1	0
■ Humor	0	0	5	0
■ Assurance	0	0	1	0
▢ Quote	0	0	0	1

Use of Retweeting

Retweets are another convention of Twitter. A user clicks on the retweet button and the original tweet is passed on to the user's followers with the tag of the original tweeter using the @ symbol. Quote tweets (QT) include parts of original tweet, but provides an opportunity for the retweeter to add a comment to the retweet. A modified retweet (MT) indicates that the user selected parts of a tweet to copy, or reworded a tweet, often to fit the 140-character limit, and often adds something original.

In the #PDBookClub conversations, retweets tended to be expressive or assertive statements, four out of the nine retweets or modified retweets were expressive statements and three of the nine were assertive statements, but they showed varying intents. Several showed solidarity with the writer. For example, @LLZ responded with assertion using a quoted retweet to @RSM, "AMEN! RT @RSM I will invite my teammates and our library staff to chat about giving students CHOICE when choosing books." The AMEN indicated a strong agreement with the writer's statement that students needed be able to choose their own books. In another conversation, @MSK tweeted, "Our district has a policy of providing 30 min of independent reading time a day, it's built into our schedule!" @LB replied to @MSK, "That's awesome! I wish all schools/districts would do the same!!" In solidarity, @MB2 retweeted @LBarber679's tweet with modification stating, "Students deserve this! RT @LB @MSK That's awesome! I wish all schools/districts would do the same!!" By adding "students deserve this" her retweet indicated an assertive appreciate of @LB's school district's practice.

Most of the retweets were quoted retweets. In other words, most or all of the original tweet was included in the retweet, with the retweeter adding commentary. Often the quoted part was used for reference to the ideas of the original poster. For example, @RSM committed to "being the light" for students when she quoted tweeted @TLG's tweet "Be that next step towards the light" and commented, "RT @TLG @RSM @T4 Be that next step towards light! #PDBookClub --> will do!!" She added the "will do" at the end of the retweet to indicate her duty to being the light for her students.

@CMR expressed appreciation for @LLZ's suggestion of recommending books similar to ones students love, rather than the teacher stating, "I loved it, you will too". In her retweet @CMR quoted and added on to the idea when she wrote, "Loved "if you read this you might like this" thinking. Would love to see kids doing this for peers." As a directive, @MB2 asked @KML to share her agenda for a parent meeting using the RT to copy in @KML's post about holding a parent meeting about her reading program.

Table 8: Retweeting

Person	Retweet	Speech Act (Searle, 1976)	Intent
@LLZ	AMEN! RT @RSMI will invite my teammates and our library staff to chat about giving students CHOICE when choosing books. #PDBookClub	Assertive – QT	Solidarity
@RSM	RT @TLG @RSM @T4 Be that next step towards light! #PDBookClub --> will do!!	Commissive -QT	Commit
@LLZ	RT @LK A1: Wild readers need a reading community. Donalyn will inspire you to share your reading life with your students. #PDBookClub	Assertive - RT	Solidarity
@MB2	Ss deserve this! RT @LB @MSK That's awesome! I wish all schools/districts would do the same!! #PDBookClub	Expressive - QT	Solidarity
@CMR	@LK @LLZ Loved "if you read this you might like this" thinking. Would love to see kids doing this for peers. #PDBookClub	Expressive – QT	Appreciation
@MB2	Can you share your agenda? RT @MB2 Just got the ok today to do a wild rdg presentation to parents at the beg of the year! #PDBookClub	Directive – QT	Inquiry
@RSM	For sure! I get told I'm bragging about my reading! MT @RMR A6: Also anticipating negative attitudes ... #PDBookClub	Expressive – QT	Empathy
@T4	RT @JH A7: "We must remember that ALL readers deserve opportunities to grow (p. 121)" #PDBookClub	Assertive -RT	Solidarity
@NRS	Lol "@DM1: @LK It's been rough. I am sure our UPS guy is wondering what happened. #PDBookClub"	Expressive – QT-	Humor

DISCUSSION

Unlike many studies of the use of Twitter by educators which focus on large sets of data (Forte et al., 2012; Power, 2013; Visser & Paulus, 2016), this study took an in-depth look at a small slice of educators' tweets; an hour-long, synchronous Twitter chat focused on the discussion of a previously read professional book. Since Twitter is being used by educators for professional learning and developing professional learning networks (PLN) it is essential to establish an understanding of how educators are learning from and interacting with each other in this format (Coleman, Rice, & Wright, 2018).

Synchronous Twitter chats allow participants to converse in real time, responding almost immediately to postings which mimics the response time of a face-to-face conversation. However, being a multilogue conversation (Megele, 2014), the thread of the conversation is more difficult to follow.

The intent of the study was to understand the nature of a single, synchronous Twitter chat dedicated to professional learning by using the conventions of Twitter to re-construct the threads of the important conversations. This examination of a single Twitter chat substantiates the claims of Carpenter and Krutka (2014a; 2014b) and Forte et al. (2012) that educators use Twitter for collaboration, emotional support, and sharing practices as evidence by the extensive use of tweets that were supportive in nature or shared practices and advice.

Clearly the book itself and the questions posed throughout the Twitter chat guided what topics the educators discussed through the chat. The majority of the 543 tweets within this chat consisted of single tweets in response to the question, or simple tweet/reply/response sequences. However, 78 tweets compromised 14 conversations that were composed of two or more people interacting with four or more connected tweets. These conversations indicated the topics that were of most interest of the participating educators. The topics linked to the questions posed, but emerged from the participants' in-the-moment responses. Several questions generated multiple, distinct conversations. The majority of the topics of interest focused on particular classroom practices such as giving students choice in their reading, connecting with authors, organizing a classroom library, create a community of readers, and facing the challenges of teaching with these practices.

The form of the question significantly impacted the speech act and intention of the responses within these conversations. Most questions required a commitment by the responder – such as *Q1: What is the first thing you will tell your colleagues about the book*? or *Q2: What is one strategy you will implement*? Questions 3, 4 and 6 also required respondents to state a commitment to do

something in the future. Commissive statements were most used as an initial response to these posted questions. For example, in response to question one, @RSM stated, "I will invite my teammates and our library staff to chat about giving students CHOICE when choosing books." This generated assertive and expressive responses to the commitment.

The question that generated the most conversation was Q6: *What is one challenge you anticipate when growing wild readers? Please share possible ideas/solutions to the challenges shared!* The form of the question guided the types of responses that followed. First, the question asked participants to assert or describe something, namely a challenge they anticipate, or to express a frustration – both of these would have the intent of a complaint. At the same time, the question encouraged participants to "share possible ideas/solutions to the challenges" which would require the participant to share practices. Through these conversations, the participants complained about a particular concern they had, received possible solutions, and showed appreciation for the ideas presented through celebrating the idea or thanking the person.

The sharing of practice in responses for Question 2: *What is one strategy/idea that you will implement this school year to grow wild readers?* also included an initial commissive response that generated additional discussion of practice. In the book *Reading in the Wild,* the author suggested that teachers show and promote their own reading lives through creating reading doors that had images or summaries of the books the teachers were reading. This idea was mentioned in response to question two. @DCR committed to using wild reading doors when she stated, "Q2 Step 1 My "wild" reading door is ready to go. Part of a corporation wide initiative to get Ss excited about reading from Day 1." @CMR echoed that sentiment in stating her own commitment to creating a reading door. In response to @DCR's use of a reading door to promote reading, @LB described how her class Twitter chatted with authors of books. In response to @MCS's inquiry on how to Twitter chat with authors, @LB explained how to find authors and chat. Throughout this conversation there were two major practices shared – creating wild reading door and tweeting with authors to promote reading – and the speech act was assertive.

In the next conversation in response to question 2 *What is one strategy/idea that you will implement this school year to grow wild readers?* @EGK committed to getting her students to blog about their reading. Other people chimed in to share their practice and give encouragement. The third conversation about creating a community of readers began with an assertive by @LK that wild readers need a community. Two other participants affirmed her statement and shared that building community was a priority in their classrooms. Overall, question two expected the participants to commit to a practice, which specifically focused the conversation on a discussion of praxis.

Educators have indicated they join Twitter for a number of reasons. They want to share and acquire resources, collaborate, network, participate in a community of practice, and find support and encouragement (Britt & Paulus, 2016; Carpenter, 2015; Carpenter & Krutka, 2014a, 2014b; Forte et al., 2012). This Twitter chat had elements of all of these. The participants shared their practice, provided advice or encouragement, and offered help and examples to each other.

CONCLUSION

Twitter, being free, collaborative, multimodal, targeted and ubiquitous to educators, has the potential to significantly impact the ways in which educators share their work and learn about teaching and learning. Feeling isolated is something many teachers report, and many educators reported that Twitter helped ease that sense of isolation (Alderton, Brunsell, & Bariexca, 2011; Carpenter & Krutka, 2015). With ongoing cuts in funding, schools and educators have limited access to professional development money or time within the school calendar for it. Twitter provides a free and ubiquitous forum for professional development. Therefore, the better the medium is understood, the more it can be leverage to fulfill educators' needs for collaboration and development.

Much of the research on educators' use of Twitter focuses on network analysis, content analysis of large quantities of tweets, or survey research of how educators use Twitter. This study took a narrow slice of Twitter by focusing on one particular Twitter chat to examine the discussion among the participants, the specific ways in which they connected their responses to each other and the content of the professional book they read, and an analysis of the content of the chat. By regarding the chat as an affinity space, the focus of analysis could be on the knowledge generated and shared and on the content that was transformed through the interactions of the participants. Although small, this slice can help us understand how chats work to support educators.

Applying speech act theory to #PDBookClub provides a lens to analyze, in-depth, the communicative behavior of those participating in the Twitter chat. When linked to current research on how and why educators use Twitter (Britt & Paulus, 2016; Carpenter, 2015; Carpenter & Krutka, 2014b; Forte et al., 2012) it can illustrate the ways in which participating in Twitter chats provides opportunities for sharing resources and practices; collaboration; networking; and emotional support.

Some people think of Twitter as being a medium of limited use due to the often-asynchronous usage and limited character allowance, but this study showed the rich complexity of interactions that can take place. Understanding these complexities and affordances will enable people to better leverage this free, easily accessible medium in the future.

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