




8-2013

# Bridging the Gap: 21st Century Media Meets Theoretical Pedagogical Literacy Practices

Divonna M. Stebick  
*Gettysburg College*

Mary L. Paxton  
*Shippensburg University of Pennsylvania*

Follow this and additional works at: <http://cupola.gettysburg.edu/edfac>

 Part of the [Educational Assessment, Evaluation, and Research Commons](#), and the [Educational Methods Commons](#)

**Share feedback about the accessibility of this item.**

---

Stebick, Divonna M. and Mary Paxton. "Bridging the Gap: 21st Century Media Meets Theoretical Pedagogical Literacy Practices." Innovative Methods and Technologies for Electronic Discourses Analysis. Eds. Hwee Ling and Fay Sudweeks. Hershey, PA: IGI Global, (August 2013), 1-18.

This is the publisher's version of the work. This publication appears in Gettysburg College's institutional repository by permission of the copyright owner for personal use, not for redistribution. Cupola permanent link: <http://cupola.gettysburg.edu/edfac/11>

This open access book chapter is brought to you by The Cupola: Scholarship at Gettysburg College. It has been accepted for inclusion by an authorized administrator of The Cupola. For more information, please contact [cupola@gettysburg.edu](mailto:cupola@gettysburg.edu).

---

# Bridging the Gap: 21st Century Media Meets Theoretical Pedagogical Literacy Practices

## **Abstract**

In this chapter, the researchers used an ethnographic stance to demonstrate how conversation evolved within a social media platform. They investigated the online discussions and face-to-face dialogues between teacher educators and pre-service teachers. They compared the participants' reciprocal conversations within this case study to analyze patterns in the language used in each forum in order to identify the affordances and constraints of perceived understanding. Through this discourse analysis the authors sought to identify indicators of each participant's metacognitive development while engaging in an online book discussion through a social media platform. Data analysis indicated that there was metacognitive growth when comparing the initial reciprocal conversations with the final conversations.

## **Keywords**

language, social media, book discussion, literacy practices

## **Disciplines**

Education | Educational Assessment, Evaluation, and Research | Educational Methods

# Innovative Methods and Technologies for Electronic Discourse Analysis

Hwee Ling Lim  
*The Petroleum Institute, UAE*

Fay Sudweeks  
*Murdoch University, Australia*

A volume in the Advances in Human and  
Social Aspects of Technology Book Series  
(AHSAT)

**Information Science**  
**REFERENCE**

An Imprint of IGI Global

Managing Director: Lindsay Johnston  
Editorial Director: Joel Gamon  
Production Manager: Jennifer Yoder  
Publishing Systems Analyst: Adrienne Freeland  
Development Editor: Monica Speca  
Assistant Acquisitions Editor: Kayla Wolfe  
Typesetter: Erin O'Dea  
Cover Design: Jason Mull

Published in the United States of America by  
Information Science Reference (an imprint of IGI Global)  
701 E. Chocolate Avenue  
Hershey PA 17033  
Tel: 717-533-8845  
Fax: 717-533-8661  
E-mail: [cust@igi-global.com](mailto:cust@igi-global.com)  
Web site: <http://www.igi-global.com>

Copyright © 2014 by IGI Global. All rights reserved. No part of this publication may be reproduced, stored or distributed in any form or by any means, electronic or mechanical, including photocopying, without written permission from the publisher. Product or company names used in this set are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark.

#### Library of Congress Cataloging-in-Publication Data

Innovative methods and technologies for electronic discourse analysis / Hwee Ling Lim and Fay Sudweeks, editors.  
pages cm

Includes bibliographical references and index.

Summary: "This book highlights research, applications, frameworks, and theories of online communication to explore recent advances in the manipulation and shaping of meaning in electronic discourse"--Provided by publisher.

ISBN 978-1-4666-4426-7 (hardcover) -- ISBN 978-1-4666-4427-4 (ebook) -- ISBN 978-1-4666-4428-1 (print & perpetual access) 1. Online chat groups. 2. Discourse analysis. 3. Communication--Technological innovations. I. Lim, Hwee Ling, 1964- II. Sudweeks, Fay.

HM1169.I56 2014  
004.693--dc23

2013014318

This book is published in the IGI Global book series Advances in Human and Social Aspects of Technology Book Series (AHSAT) (ISSN: Pending; eISSN: Pending)

#### British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher.

# Chapter 1

## Bridging the Gap: 21<sup>ST</sup> Century Media Meets Theoretical Pedagogical Literacy Practices

**Divonna M. Stebick**  
*Gettysburg College, USA*

**Mary L. Paxton**  
*Shippensburg University, USA*

### ABSTRACT

*In this chapter, the researchers used an ethnographic stance to demonstrate how conversation evolved within a social media platform. They investigated the online discussions and face-to-face dialogues between teacher educators and pre-service teachers. They compared the participants' reciprocal conversations within this case study to analyze patterns in the language used in each forum in order to identify the affordances and constraints of perceived understanding. Through this discourse analysis the authors sought to identify indicators of each participant's metacognitive development while engaging in an online book discussion through a social media platform. Data analysis indicated that there was metacognitive growth when comparing the initial reciprocal conversations with the final conversations.*

### INTRODUCTION

Conversation is an aspect of a social setting that reflects the verbalized interactions of the participants. The study of the interactions within that reconstruction is useful in ethnography. Ethnography is defined as the analytic descriptions or reconstructions of intact cultural groups (Spradley & McCurdy, 1972). Educational ethnographers often assume the stance of participant-observer, becoming a member of the group who collects

data that occur within the group in an identified setting (LeCompte & Preissle, 2003). One way the conversation within a group can be examined is through the use of some type of discourse analysis. In this chapter, the researchers will use an ethnographic stance to demonstrate how conversation developed within social media can be used as a base for discourse analysis.

One intention of this study, utilizing the examination of the flow of conversation, was to determine the social structure existing within the

DOI: 10.4018/978-1-4666-4426-7.ch001

group. Since the group would consist of students, an instructor and the author of the text under discussion, the researchers hypothesized the initial conversations might reflect the students presuming they had less power due to less expertise and assuming the stance of being expected to respond to directions. They were interested in evaluating any identifiable shifts in perceived power based on changes in turn taking in subsequent group discussions.

As teacher-researchers, they utilized these theoretical underpinnings to develop a study that would examine the reciprocal social interactions between the invited members of a book study group. Using a social networking platform, the group had conversations based on a shared understanding of a text. Those conversations were collected and analyzed for perceived shifts of power from teacher to students as their level of expertise evolved.

## **BACKGROUND**

In an educational setting, teachers often make use of a reciprocal teaching model. The concept of reciprocal teaching (Palinscar & Brown, 1984) is grounded in the use of a conversation between teacher and students to come to a shared understanding of a text. It is the use of conversation that allows for interactive teaching of strategies for predicting, questioning and clarification, modeled first by the teacher and then transferred to the students as they take on the role of “teacher” to lead discussions. Teachers become adept at monitoring the flow of the conversation in order to understand when the students are ready to assume the leadership role. It was this type of conversation monitoring that provided the foundation for this work. As the researchers examined the research on the use of conversation analysis as an ethnographic means of discourse analysis, they were led to a broader view. Gee (2004) posited that critical approaches to discourse analysis

treat social interactions in terms of “implication for things like, status, solidarity, distribution of social goods, and power” (p. 33).

Likewise, Sharrock (1989) suggested that the flow of conversation within a social structure can be used to examine who is in charge, or has the most perceived power, based on turn taking. The flow between participants who perceived themselves as equals tended to be a balance in turn taking. However, between participants who see one as having more power, the turn taking is disproportionately as response to the person with more perceived expertise. Sharrock (1989) likened this to air-traffic control, one is in charge and the others respond to directions.

By its very nature, conversation develops a detectable flow. Blimes (1988) theorized that conversation analysis should not evaluate meaning as inherent; it is not “fixed at the moment of production” (p. 162). Instead, the participants negotiate it over the natural course of the conversation. In fact, the conversation, produced by and for the participants, forms its own social structure. The participants create the structure and its features through their own interactions. As such, it doesn’t fit in a pre-designed format.

The quality of discourse within a group interaction can be analyzed. That analysis provides an opportunity to consider both the sociolinguistic and ethnographic aspects of discourse and the cognitive aspects of peer learning (Chinn, O’Donnell, & Jinks, 2000). It is possible to consider the changing patterns of self-efficacy and building of knowledge through analyzing the types of utterances within the group. To consider the uses of response patterns, one must look at the level of explanations, elaborations, and clarifications. To consider how peer discourse supports learning, one must look at individual student’s talk during interactions. “Peer discourse provides speakers with an opportunity to integrate their ideas while speaking, and listeners may receive new information that helps them construct new ideas” (Chinn et al., 2000, p. 78).

## **MAIN FOCUS OF THE CHAPTER**

### **Social Networking, Online Chats, and Discussions**

There appears to be a clear connection between social networking applications and discourse analysis of group conversations. In fact, social networking can be considered as the use of collective intelligence tools to develop a product or for collaborative knowledge creation through group conversations (Gunawardena, Hermans, Sanchez, Richmond, Bohley, & Tuttle, 2009). The group uses a socio-cultural context that moves through forms of discourse, action, reflection, and reorganization toward a socially mediated metacognition. Gunawardena et al. (2009) suggested that social networking is the practice of expanding knowledge by making connections with individuals of similar interests. Sites, such as Facebook, provide a virtual environment where users interact. In fact, reciprocal conversations within the group build a group zone of proximal development, the juncture where new learning can take place (Vygotsky, 1978).

Gee (1996) defined discourse as the artifacts of thinking, feeling, believing, valuing and acting that a member of a community uses within a social network. Group members bring with them their own understanding, perceptions, voice and their own view of themselves as a member of various social networks.

Goos, Galbraith, and Renshaw (2002) delineated expert-novice interactions and interaction between members of similar status within a community. Peer collaboration is built on a mutually developed understanding that includes the reasoning and viewpoints of all group members. In juxtaposition with that concept is Bandura's (1997) position that the individual sense of perceived abilities shapes his behavior as a reflection of self-efficacy. The more confident the individual of her own ability to perform or respond, the more likely she is to engage in that behavior. It would follow

that, within a group of peers who perceive their own abilities to be equal, the interactions between group members related to a topic would increase.

If metacognition is viewed as a social collaborative process (Goos et al., 2002), it should include reciprocal collaborative interactions. A balance of interactions that include self-discourse, feedback request, and the monitoring of the metacognition of others reflect a sense of mutuality. This creates a collective intelligence by the shared and overlapping knowledge of the group.

Virtual group interaction analysis must be done in a way that considers if there is a difference in the amount of knowledge one has with which to explain one's own behavior compared with other's behaviors. By interacting with several members of the group, a member is able to observe multiple sources of group behaviors and responses (Bazarova & Walther, 2008). Thus, in considering peer mediated learning, it is important to consider both the content of the individual student's comments and the overall structure of the discourse within the interaction (Chinn et al., 2000).

As a foundation for this study, the researchers considered several factors when selecting a social networking platform. The participants were young adult college students who were frequent users of Facebook. Their status was reflected in data included in the Pew Institute Research Report (2010) on social media use among young adults. The Pew report indicated that 72% of online 18-29 year olds use social networking websites. Another Pew Institute Research Report (2011) on social networking indicated that on an average day, 15% of Facebook users update their own status, 22% comment on another's post or status, 20% comment on another user's photos, 26% "like" another user's content, and 10% send another user a private message. Furthermore, users received a wide range of support from their social networks, including advice, information and understanding.

The researchers took into consideration that they were selecting a platform that the students, while very comfortable in this network and fairly

adept at using it, considered its use a leisure and entertainment venue. Misztal (2001) noted that literacy is used to render transactions in virtual words as “predictable, reliable, and legible” (p. 313). These same practices are important in the construction and maintenance of social groups. While participating in online forums and groups may sometimes be viewed as a frivolous use of time, the underlying reasons for participating in the group is what determines its importance, not the format.

In order to clarify the underlying reasons for participating, they developed a structure for the online discussions. To foster collaboration and a feedback cycle, they used a teacher directed inquiry stance that would support the online conversation. These areas were selected as extensions of interaction, collaboration, and contribution identified by Gunawardena et al. (2009) as needed for the construction of the collaborative understanding and thinking of a group.

Within inquiry, they identified a goal of examining classroom contexts through ongoing reflection. In the centralized environment of Facebook, there was an opportunity for reflection in that archived posts were displayed in reverse chronological order. The participants were able to look back at the end of the group meeting, as well as the semester, and observe their own growth over time. This provided an expanded opportunity for metacognition, or, thinking about one’s thinking (Bransford, Brown, & Cocking, 1999), in which students could reread their posts and literally reflect on their reflections.

Within collaboration, they identified a goal of socially mediated learning through social interface. The participants engaged in conversations based on their peers’ reflections. This feature allowed them to operate in an online professional community, giving and receiving feedback from peers, an instructor and the author of the text under discussion. The feedback was quickly available, permitting participants to use it almost immediately in their classroom pre-service placement, a critical feature to support theory-into-practice.

Finally, the individualized and interactive nature of each discussion allowed the participants to direct the conversation to their own situation.

Within feedback, they identified a goal of providing multiple levels of feedback, with participants constantly receiving a stream of responses from their peers, an instructor and the author about specific, practice-based instances from their own classroom experiences. The online forum provided a safe space for real-time conversations.

Using these goals, the researchers would be able to analyze the conversations for the generation of content that “enables sharing, co-creating, co-editing, and construction of knowledge” (Gunawardena et al., 2009, p. 12). This, in turn, allowed for consideration of whether or not the social networking platform was creating a place for the mediation between knowledge of the individual and their contribution to knowledge building in the community.

A final consideration of the group conversations would be the effectiveness of the selected platform. Conole, Galley, and Culver (2011) chose Facebook as the platform to examine the development of academic practice. They reported that the initial conversation centered on the need for the participants to become adept at using the tool. However, over time, members were able to gain proficiency in using the platform, personalize the use of the tool, and see ways the tool could replace their standard form of group interaction. The researchers were interested in examining if the participants would become able to see Facebook as a way to support a community that included a cognitive presence, a teaching presence, and a social presence.

## **Theoretical Framework**

The researchers revised the theoretical framework created by Gunawardena et al. (2009) to capture collaborative learning within social networking as they investigated inquiry, reflection, collaboration, and feedback. They discussed the skills that were used to build the foundation of a pedagogically



## Bridging the Gap

sound literacy environment and then identified the five phases in the learning process: context, discourse, action, reflection, and reorganization (Gunawardena et al., 2009, p. 13). These phases progressed as users contributed more thoughtful, less teacher-directed responses (see Figure 1).

As shown online discussions provide a setting for collaborative learning and group inquiry without the need to travel and schedule face to face discussions. Looking at the learning wheel, the spokes emanate from the Facebook conversation. These spokes represent the knowledge and tools that students needed to use when participating in the process of an online book discussion.

Questioning the Author is a protocol of inquiries that students can make about the content they are reading. This strategy encourages students to think beyond the text and to consider the author's intent for the selection and his or her success at communicating it (Beck, McKeown, Hamilton, & Kucan, 1997).

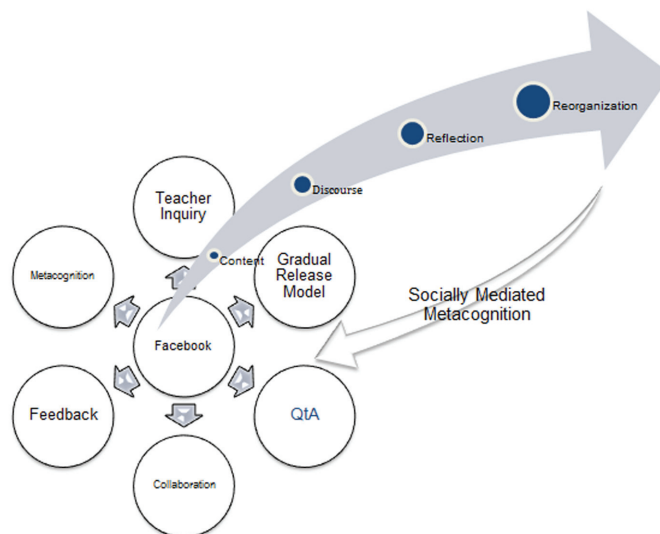
Metacognition refers to one's knowledge concerning one's own cognitive processes or anything related to them, e.g., the learning-relevant properties of information or data. For example,

"I am engaging in metacognition if I notice that I am having more trouble learning A than B; if it strikes me that I should double check C before accepting it as fact" (Flavell, 1976, p. 232).

Gradual Release of Responsibility Instructional Model requires that the teacher, by design, transition from assuming "all the responsibility for performing a task . . . to a situation in which the students assume all of the responsibility" (Duke & Pearson, 2002, p. 211). This gradual release may occur over a day, a week, or a semester. Stated another way, the gradual release of responsibility "emphasizes instruction that mentors student into becoming capable thinkers and learners when handling the tasks with which they have not yet developed expertise" (Buehl, 2001, p. 67). This gradual release of responsibility model of instruction has been documented as an effective approach for improving reading comprehension (Lloyd, 2004).

Teacher Inquiry focuses on the concerns of teachers (not outside researchers) and engages teachers in the design, data collection, and interpretation of data around their question.

Figure 1. Social networking conversational flow



*There are many benefits:*

*(1) Theories and knowledge are generated from research grounded in the realities of educational practice;*

*(2) Teachers become collaborators in educational research by investigating their own problems; and*

*(3) Teachers play a part in the research process, which makes them more likely to facilitate change based on the knowledge they create” (Dana, 2009, p. 4).*

Collaboration occurs when educators come together to collaborate and put forth an intellectual effort to better themselves in order to benefit their students’ learning (DuFour, DuFour, Eaker, & Many, 2009).

Feedback was captured within the context of the discussion and offered in “real-time” during the instructor – student discussions. Feedback was provided by author after discussion and was available for students to refer to and reflect on at any time.

Since Gunawardena et al. (2009) identified a process of context, discourse, action, reflection, reorganization, and socially mediated metacognition to emanate from a strong conversation, the researchers included these same elements. “The collective intelligence creation within the social networking is initiated within the context of the site” (Gunawardena et al., 2009, p. 13). As Resnick, Levine, and Teasley (1991) shared, “most knowledge is an interpretation of experience, an interpretation based on schemas, often idiosyncratic at least in detail, that both enable and constrain individuals’ processes of sense-making” (p. 1).

Each discourse is shaped, negotiated (Wenger, 1998, p. 52). Through an analysis of these discourses, one can see how identity and power integrate to

negotiate meaning (Barton & Tusting, 2005). As an online book study, the group developed their own way of using language to convey meaning. A sub-culture formed as participants brought their life experiences, knowledge from other courses, questions for the author, and insights for future classroom implications to the group through discourse (Gunawardena et al., 2009). Negotiation of meaning reinforced the strength of the interaction as a foundation formed and members developed rapport among one another.

Participants shared insights, questions, opinions, and personal experiences in order to connect with one another. Some of these interactions were teacher to student, others were peer to peer, and others were author to students. Gunawardena et al. (2009) suggested that an action phase can be used to initiate the “process of socially mediated cognition” (p. 13).

This led to the reflection phase, characterized by the interaction of personal experience and group thinking and questioning. Again, Gunawardena et al. (2009) posited the reflection phase could be used to focus on “the consideration and integration of unfamiliar points of view” (p. 13).

The final stage would be the reorganization phase that utilizes the reflective process as members synthesize their new understanding and insight to reach a common goal. Participants are required to adjust their meanings and understandings within the social networking environment. This phase utilizes a social constructivist process and may be mediated through interactive technology. Participants reflect on and adjust their understanding, to examine their understanding (Gunawardena et al., 2009).

Through the previously described five phases, from context through discourse to action, reflection, and reorganization, participants mutually reflected on the reasoning and developmental process as a group (Gunawardena et al., 2009). It is critical to note that this peer-peer learning was the result of

reciprocity, where participants could individually and collectively share and respond. It would appear that this made a connection between peer-to-peer mentoring and “a collaborative zone of proximal development” (Goos et al., 2002, p. 207). Further, a “collaborative metacognitive activity proceeds through offering one’s thoughts to others for inspection, and acting as a critic of one’s partner’s thinking” (Goos et al., 2002, p. 207). The group generated reflective feedback through the Facebook discussions in order to capture the group’s metacognitive monitoring and regulation as they embarked on the reflective process in an online forum.

### **Research Design**

The researchers studied the implementation of using online discussions via a social networking site during an outside of class book study group. They used a qualitative case study methodology, selected for its ability to look closely at bounded situations of interest (Stake, 1995). The idealized instructional context certainly created a situation of interest because it allowed them to look past issues of implementation yet began to provide an opportunity for them to take an initial look at the growth of pre-service teachers through reflective, online discussions. They specifically focused on understanding the ways in which online discussions outside of class assignments facilitated inquiry, collaboration, and reflection. They collected and analyzed data in a variety of forms, including regular online discussion threads from the social media platform, as well as, field notes from face-to-face communications.

### **Context**

This case study focused on an out of class book study discussion with invited participants. Once again, this ideal situation allowed researchers to develop close instructor-student-author relationships and avoid some of the implementation issues faced by other teacher educators. Because of the constraints inherent in this, and any methodology, findings from this study are not intended be generalized to the larger population. However, the researchers hope they can provide insight transferable to educators of all forms looking to integrate instructional technology into higher education classrooms (Donmoyer, 1990). They focused on the relationship between reciprocal socially mediated conversations, and the outcomes as mediated by one particular technology, Facebook discussions. Lessons from their critical case study can be translated to a variety of teaching and learning contexts using information technology as a pedagogical tool.

### **Participants**

The researchers worked with three pre-service teacher candidates during the spring semester of 2010 (see Table 1).

All students’ names were replaced with pseudonyms in order to maintain confidentiality and to mitigate researcher bias during the coding process. All students were education majors at one university, two females and one male. Data from all three participants were used for analysis. The pre-study face-to-face conversations indicated

*Table 1. Characteristics of students using discussions on Facebook and study participants*

<b>Student Name</b>	<b>Gender</b>	<b>Prior Facebook Experience</b>	<b>Year</b>	<b>Major/Concentration</b>
Stacy Lynn	Female	Yes	Junior	Reading
Kerry	Female	Yes	Senior	Early Childhood
Jack	Male	Yes	Senior	Reading

that, while all students were familiar with a variety of forms of information technology, including email, internet, and social networking, they had never participated in an academic discussion on Facebook. Two of the three had previously used Facebook discussions for other, social reasons. None of the participants had used Facebook for any academic reasons. Despite this inexperience regarding using Facebook for academic purposes, students generally found the Facebook discussion thread easy to navigate and reported no substantial technical difficulties.

The book, *Comprehension Strategy Instruction for Your K-6 Literacy Classroom: Thinking Before, During, and After Reading* (Stebick & Dain, 2007), integrated theory and practice in relation to effective comprehension instruction. Expectations for the book study included reading assigned chapters, taking notes to prepare for scheduled synchronous Facebook discussions, and participating in each Facebook discussion. The notes included the pre-service teachers' questions for the author but also future classroom implications and connections to current field experiences.

## Procedure

As instructor and author, the researchers invited the pre-service teachers to read a theoretically grounded, pedagogically sound textbook that was written to be accessible to beginning teachers. They explained that this online discussion opportunity would provide a method to express their questions, insights, and confusions and an opportunity to apply theory to practice. Student participation in the group was voluntary. They would not receive any extra class credit and it was not tied to a grade in any of their courses. This group was strictly a professional development opportunity in which they were welcome to participate, but not required to join. Group members would be required to join a designated private group created in Facebook by the instructors.

In order to develop collegial relationships with peers and the instructors, the book study began with a face-to-face meeting and the distribution of the textbook, expectations, and questions for discussion regarding the logistics of the discussion. After the initial group meeting, the remaining group discussions occurred through the online platform, with meeting times scheduled in advance. Each group meeting lasted for no more than one hour.

## Instruments

The researchers collaborated to develop a rubric specifically designed to interpret student responses. The rubric took into account the informal language used in social networking discussion threads, while attempting to identify the deeper meaning and ideas being shared among the participants. Close attention was paid to identifying and interpreting reciprocal conversations. They analyzed the data using the categories of inquiry, collaboration, and reflection. In order to better understand the development of inquiry abilities over time, they coded the Facebook entries using a rubric that captured the depth of the discussion and the synthesis the participants were able to create (Table 2).

The rubric provided clear standards to allow for consistency when evaluating discussion threads, comments, and questions. The rubric captured individual levels of inquiry as well as change in inquiry over time and according to topic.

*Table 2. Discussion initiation and synthesis of ideas*

Rating	Description
Low	Conversational – not related to topic
Mid	Related to topic but simple, surface reply
High	Reply shows evaluation of topic under discussion and examples from beyond the text synthesize topic.

## **Bridging the Gap**

The researchers initially scored the responses in isolation, and then compared findings to ensure inter-rater reliability at ninety percent. They scored the responses between one and three, with one indicating low inquiry and three indicating high inquiry. We agreed a level one inquiry consisted primarily of non-related conversation:

**Stacy Lynn:** *I was very excited and honored to be asked to be a part of the group (not to mention to be included with the 3 Amigos!) I was worried about adding the extra work but decided to look at it as another career move and then it didn't seem to be as threatening.*

Furthermore, they agreed a level two inquiry identified a conversation related to the topic, but the engagement into the topic remained at the surface level:

**Kerry:** *Also, I thought that the organizer about: "I Do, We Do, and You Do" was AWESOME. It clearly lays out the responsibilities of teacher and student in each section of the literacy block, before, during, and after. It shows how much support the student should be given and how much independence the students should have.*

Finally, the researchers identified the highest level of engagement, level three, to include an evaluation and synthesis of the topic being discussed. Many of the students' questions, thoughts, and confusions were anchored in theory. In this example, the student linked her experiences from the field to the apprehensions she felt as a result of the assigned reading and began to ask synthesis-type questions:

**Kerry:** *I think ideas about conferencing with students: like questions or what we should be looking for would be good. I like the idea of meeting with students on a weekly basis to get a picture of where each individual is,*

*but how do we as teachers make the time to fit this into our literacy block? Between modeling, working in small groups, assessing individual practice, we must spread ourselves very thin. How do we make sure we meet with each student and ask the "right" questions and still are thorough in all areas? I 'm an all or nothing kinda girl, and my worst nightmare would be doing all of these jobs halfway. I want to be sure that I am thorough in all activities. A few suggestions on how to do that would be great.*

Using these benchmarks, the researchers categorized initial discussion threads and their change over time.

Researchers concurred that student-to-student comments on discussions in order to better understand the nature of collaboration taking place. Initially, they coded these comments as superficial versus constructive with theory. This analytical process helped us to better understand the content as well as the structure of peer collaboration in each discussion. Superficial feedback was largely descriptive in nature, praising the students' ideas without offering concrete suggestions for improvement or making connections to theory:

**Kerry:** *There is nothing more rewarding than opening the world of books to a child and instilling the love for reading in them. Jack, you gave me chills!!!! I whole-heartedly agree. Reading is an escape from the world. When times get tough, kids can escape to their special place and the characters in books become their friends. If only all children would turn to books instead of drugs, violence, etc.... the world would be a much brighter place.*

On the other hand, constructive feedback analyzed the initial post and offered questions or suggestions to enhance understanding:

**Kerry:** *That's a great idea Jack! I do that all the time to kind of skim and get an idea of what I should be thinking of. It sort of allows me to get my schema prepped and ready to read. It's like doing mind stretches before stretching, learning, and reading . . .*

Some of these responses even included theory and methods drawn from the text and other education courses. The following comment connected to the gradual release model using in reading classes:

**Kerry:** *The guided reading group that I'm working with has the above benchmark students in it. When I ask them to make connections to their own lives and other texts or the world, they are able to do that. When they struggle I give them a scaffold by providing an example from my own life and then they build off of that or off of one another.*

Finally, they analyzed student responses from the field notes from face-to-face meetings using the same categories as previously mentioned, to integrate student feedback into their analysis and examine student growth in inquiry, collaboration, and reflection. These data provided students' perceptions of the process as they experienced it and supported the desire to integrate student feedback into the analysis.

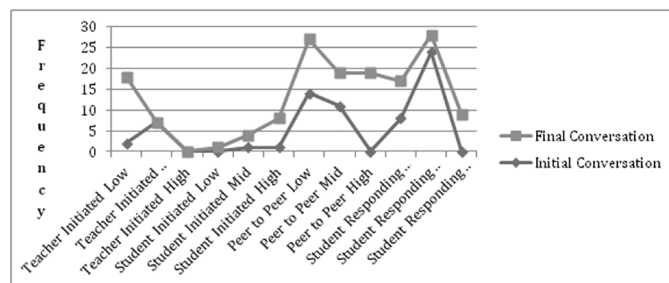
In investigating the use of Facebook discussions in this pre-service teacher book study, the researchers worked together as teacher educa-

tors and author. They saw this study as a co-construction of knowledge, with blurred lines between investigators and participants. Although the teacher educators were primarily responsible for designing and implementing the books study and the pre-service teachers coming prepared to the book study, they worked together to analyze their experiences. They saw this collaboration as an extension of, rather than a departure from the constructivist approach they took in other courses. They also saw this collaborative self-study as enhancing, rather than detracting from the validity of the research (Lather, 2001).

## Results

The data from this study supported the use of social networking in a constructivist-oriented pre-service teacher education sequence. The data showed that pre-service teachers improved their reflection abilities on an online discussion over the course of four months and most reached a high level of self-reflection. The researchers' data also indicate that the feedback among peers was supportive and helpful. They found the interaction among peers as overwhelmingly constructive and traced the development of some lessons directly to student-initiated posts. Data from surveys however, suggested that online discussions via a social networking site, Facebook, should does not meet all students' needs.

Figure 2. Graph showing student collaboration and inquiry level as measured by the rubric over the four months of the book discussion



## **Inquiry**

Scored student discussions (see Figure 2) showed the discourse analysis that collaborative abilities and levels of inquiry, as demonstrated in the discussion, consistently improved over time.

Even though students started out on different levels, all students continually advanced in their collaborative abilities propelling the conversation to deepen and develop into an effective inquiry book study. In the initial book discussion, there were nine teacher-initiated responses, only two student initiated responses, 25 peer to peer responses, and thirty-two student responses to the teacher. Of these, only one response rated as a high level of inquiry, forty-three were within the middle level of inquiry, and twenty-four were rated as low level inquiries. In the final book discussion, there were sixteen teacher-initiated responses, ten student initiated responses, forty peer to peer responses, and twenty-two student responses to the teacher. Of these, thirty-five responses included high levels of inquiry, fourteen responses were middle levels of inquiry, and twenty-six responses were low levels of inquiry.

**Kerry:** *In the beginning, students shared descriptive, surface level ideas, reluctant to commit to an opinion through a synthesis of information:*

*It's basically what we're doing here at times. As we read the text, we're pretending that the authors are here with us and we're challenging what they are saying and asking questions about what we've read. As teachers, we'll be listening to our students to see if they can come up with the questions and how they respond to the questions. They need to be a higher level of questioning, literal questions would worry me. Yes and no questions would also be of concern. We would need things like "what does the author mean ..." "What are they referring to?"*

A later post within the same discussion thread illustrates a bit more depth:

**Kerry:** *It's important for us to teach our students to QtA so that they prove for deeper understanding. Also, they challenge the facts that don't correlate with their beliefs or schema. It pushes them to read on and grab a deeper understanding of what they are reading. Also, it requires students to use a higher level of thinking.*

In this post, Kerry referred to the Questioning the Author (QtA) instructional strategy they learned about in class. However, the group was also implementing the QtA strategy through this book discussion as well. However, through further discourse analysis, the authors identified that Kerry simply mentioned a lot of education jargon, but did not synthesize this new knowledge to demonstrate her own higher-level thinking.

By the end of the semester, Kerry demonstrated much stronger responses to show her inquiry and collaborative thinking skills:

*We were reading a book that had bears as characters in it, but the main topic was Mother Earth preparing for the different seasons. It was sort of abstract and I was questioning whether the kids would be able to see the main idea. They were though. They were able to connect the bears hibernating to winter and how Mother Earth sleeps... they connected hibernation to other animals that hibernate like our class turtles. Also, they saw how the different seasons change Mother Nature and the bears' activities. They linked this information to how the season cycle influences our own lives. It was an amazing week! Connections!!*

The most growth was apparent when looking at a series of responses in a discussion thread. Sifting deeper into the discourse analysis of the Facebook discussion the authors identified a rich data set. After the instructor posed thought

provoking questions, based on student responses, Stacy Lynn, Kerry, and Jack participated in a collaborative inquiry discussion:

**Instructor:** *Do you see that all of you are talking about gradual release in teaching, too? We (your pros) tell you how good teaching happens, we practice it in class when you do the demo lessons, but when you work with kids, you are in the I Do stage of teaching. This is the place where we see if you are ready to do it independently. Talk about a CONNECTION!*

**Jack:** *Yea, I think what everyone is saying teach the student in a different way. It is a waste of time to go back and do the same exact thing over again if the student didn't understand the first approach they likely won't understand the same thing the second go around we have to modify our teaching to fit each individual student.*

**Kerry:** *I feel like I should have a soapbox made to stand on about reflecting . . . I don't know if I ever realized how important reflecting is until I started to teach. Yeah, we did reflections on what we saw others do, but that just gave us the knowledge. Now that I'm teaching, I reflect and change my behavior to match what I know how a lesson just went with this particular class and lesson.*

**Jack:** *Yea Kerry, and it takes a lot more maturity to see what we have done wrong or what we could do better than not give someone else feedback.*

**Stacy Lynn:** *I don't usually watch *Dancing with the Stars*, but my daughter had it on one night and I heard Kate G. talking to her partner. She said something along the lines of "I understand and appreciate that you know how to teach me and that you are comfortable with your style but you're not asking me how I learn so that I understand you." It made me think of students and reading*

*right away! It may be the most insightful thing I've ever heard her say!*

**Kerry:** *So true Jack!!! The students only become frustrated when we try multiple times to teach them one way, and we become frustrated too. We understand the concept so we have the ability to change our perception and take it from a different angle. How is it even possible to believe that a child who has no understanding of the concept can change their perception to match how we are trying to teach them? Sort of insane if you ask me, but I've seen so many teachers try to teach one concept one way over and over . . . it's really sad.*

This discussion thread illustrated improvement in the collaborative inquiry and a stronger grounding of practice in theory over the course of the book study.

## **Future Trends**

The researchers also envision future possibilities in which online book discussion use can be extended beyond the higher education context to bring in valued professionals from the field. This integration of authentic, real-world connections into the college classroom is supportive of the constructivist ideal of learning from experience (Dewey, 1938). In the context of teacher education, these online discussions could be expanded to incorporate individuals from the K-12 school setting, such as student teaching supervisors or cooperating teachers. In an even more elaborate form, the online book discussions could connect pre-service teachers with other beginning or veteran educators nationally or even internationally, providing a far-reaching professional network. Although issues of student confidentiality, pre-service teacher comfort, and commitment to the online environment would have to be addressed in order for these models to succeed, they see broad possibilities for using and even expanding



this model of information technology in teacher education. Technological refinements such as integrated university-school networks, increased sophistication of video streaming, and enhanced online artifact display would facilitate the achievement of these greater constructivist goals.

## **FUTURE RESEARCH DIRECTIONS**

This case study had a number of limitations, including its small scale, idealized instructional environment, and absence of implementation challenges. However, the in-depth examples of student inquiry, collaboration, and reflection offered a rich context for understanding the types of student learning which took place in an online book study. Further research on this topic should expand upon the findings to investigate an ideal combination of instructional methods for pre-service teacher education. The researchers acknowledge that the instrument they developed was specifically designed for this limited population and it would require adaptation before transferring it to another or larger population. Perhaps the trends that emerge using the instrument would yield different results if used with a larger population, as the coding requirement would be more intricate.

More broadly, it should also consider the integration of inquiry, collaboration, and reflection through online discussions with fields outside of teacher education. Finally, it should investigate the possibilities inherent in a more inclusive online discussion context, one that brings together individuals from higher education, K-12 schools, and beyond. Information technology has been used successfully to promote constructivist principles in teacher education, future research should move toward a more nuanced understanding of its use in supporting pre-service teachers and educators in general.

## **CONCLUSION**

The researchers used a social media tool, Facebook discussions, in the context of an outside of class book study designed around reciprocal conversations in order to navigate through a discourse analysis using an ethnographic lens. They chose Facebook because the participants were comfortable using this social media platform and it allowed the author of the text to participate, where as, the university's discussion forum was only available to university students and the university's faculty. Further, they selected Facebook because there was no implementation learning curve for all participants and the reciprocal conversations commenced immediately as online discussions. In addition, the platform Facebook archives discussion threads allowing each of them asynchronous access to the data for coding purposes. In particular, they wanted pre-service teachers to learn to think like a teacher (Crowe & Berry, 2007) and designed a variety of online and face-to-face experiences in support of that goal. The in-depth case study of student experience in this book study investigated the ways in which social media fostered inquiry, collaborating and reflection among teacher educators, author, and pre-service teachers. They found that student inquiry and collaboration increased in sophistication over the four months, from mainly descriptive to more theory-based. They also found that student collaboration within the discussion was overwhelmingly constructive and at times spontaneously linked theory to practice. However, one important pedagogical drawback to Facebook discussions did emerge. The pre-service teachers felt that the Facebook discussions was a critical element in learning through the text, however, they preferred face-to-face discussions which allowed for more group analysis and synthesis of ideas.

At the completion of the book study sessions, the researchers convened an informal, face-to-face meeting. During this meeting, the researchers sought evaluative comments and feedback from the participants about the effectiveness of

the experience. In this setting, the pre-service teachers openly shared high-level satisfaction with the hybrid characteristics of the book study. Their satisfaction was the direct result of the convenience, flexibility and the discourse during each book study session. They indicated the negotiated understandings that developed through the discussion fortified their personal schema for learning and teaching. This conclusion allowed the pre-service teachers to synthesize the theoretical learning with their practical experiences in a timely, supportive manner. Furthermore, the pre-service teachers shared that they were especially motivated to engage in an ongoing conversation with the actual author of the book being studied. This brought a sense of vitality to the text that they had not experienced previously in assigned readings in textbooks required in their teacher preparation programs. In fact, they hoped that Stebick would write another book, but beyond that, they requested a second online book study experience during the subsequent semester.

Based on this case study, the researchers concluded that social media could be considered an effective strategy for fostering high levels of inquiry, peer-to-peer collaboration, and concrete reflection based on theory and practice through an investigative discourse analysis. In doing so, online discussions supported general constructivist principles of student participation and interaction in learning. This case study in teacher education strengthened earlier work by Gomez et al. (2008), indicating a role for information technology in building social relationships and encouraging reflective teaching. It also exemplified the framework suggested by Garrison and Anderson (2003), in which information technology can be used in higher education for sense-making and community building.

This case study, together with earlier research (Kuzu, 2007), indicated that online book studies could be used successfully in teacher education. The researchers' experiences indicated however, that the key to effective use in the college classroom

is not only thoughtful implementation (Makri & Kynigos, 2007) but also a purposeful design combining online discussions with more conventional instructional methods. For example, each of the participants preferred face-to-face discussions. This reflected findings by Dickey (2004) indicating that while online book studies are successful on the whole, they may pose serious challenges for particular students. They suggest that future teacher education courses using online book discussions carefully consider the most effective combination of methods in order to achieve the best possible educational experience for students.

## REFERENCES

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barton, D., & Tusting, K. (2005). *Beyond communities of practice: Language, power, and social context*. New York: Cambridge University Press. doi:10.1017/CBO9780511610554.
- Bazarova, N., & Walther, J. B. (2008). Attributions in virtual groups: Distances and behavioral variations in computer-mediated discussions. *Small Group Research*, 40(2), 138–162. doi:10.1177/1046496408328490.
- Beck, I. L., McKeown, M. G., Hamilton, R. L., & Kucan, L. (1997). *Questioning the author: An approach for enhancing student engagement in text*. Newark, DE: International Reading Association.
- Blimes, J. (1988). The concept of preference in conversation analysis. *Language in Society*, 17(2), 161–181. doi:10.1017/S0047404500012744.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.

## **Bridging the Gap**

Buehl, D. (2001). *Classroom strategies for interactive learning*. Newark, DE: International Reading Association.

Chinn, C. A., O'Donnell, A. M., & Jinks, T. S. (2000). The structure of discourse in collaborative learning. *Journal of Experimental Education*, 69(1), 77–97. doi:10.1080/00220970009600650.

Conole, G., Galley, R., & Culver, J. (2011). Frameworks for understanding the nature of interactions, networking, and community in a social networking site for academic practice. *International Review of Research in Open and Distance Learning*, 12(3), 119–138.

Crowe, A. R., & Berry, A. (2007). Teaching prospective teachers about learning to think like a teacher: Articulating *our* principles of practice. In Russell, T., & Loughran, J. (Eds.), *Enacting a pedagogy of teacher education: Values, relationships, and practices* (pp. 153–189). London: Routledge.

Dana, N. F., & Yendol-Hoppey, D. (2009). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry*. Thousand Oaks, CA: Corwin Press.

Dewey, J. (1938). *Experience and education*. New York: Simon & Schuster.

Dickey, M. D. (2004). The impact of web-logs (blogs) on student perceptions of isolation and alienation in a web-based distance-learning environment. *Open Learning*, 19(3), 279–291. doi:10.1080/0268051042000280138.

Donmoyer, R. (1990). Generalizability and the single-case study. In Eisner, E., & Peshkin, A. (Eds.), *Qualitative inquiry in education: The continuing debate* (pp. 175–200). New York: Teachers College Press.

DuFour, R., Dufour, R., Eaker, R., & Many, T. W. (2009). *Collaborative teams in professional learning communities at work: Learning by doing*. Bloomington, MA: Solution Tree.

Duke, N., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In Farstrup, A. E., & Samuels, S. J. (Eds.), *What research has to say about reading instruction* (pp. 205–242). Newark, DE: International Reading Association.

Flavell, J. H. (1976). Metacognitive aspects of problem solving. In Resnick, L. B. (Ed.), *The nature of intelligence* (pp. 231–236). Hillsdale, NJ: Erlbaum.

Garrison, D. R., & Anderson, T. (2003). [*1<sup>st</sup> century: A framework for research and practice*. London: Routledge Falmer.]. *E-learning*, 21.

Gee, J. P. (1996). *Social linguistics and literacies: Ideology in discourses*. New York: Routledge Falmer Press.

Gee, J. P. (2004). What is critical about critical discourse analysis? In Roger, R. (Ed.), *An introduction to critical analysis* (pp. 19–50). Mahwah, NJ: Lawrence Erlbaum.

Gomez, L. M., Sherin, M. G., Griesdorn, J., & Finn, L.-E. (2008). Creating social relationships: The role of technology in preservice teacher preparation. *Journal of Teacher Education*, 59(2), 117–131. doi:10.1177/0022487107314001.

Goos, M., Galbraith, P., & Renshaw, P. (2002). Socially mediated metacognition: Creating collaborative zones of proximal development in small group problem solving. *Educational Studies in Mathematics*, 49(2), 193–223. doi:10.1023/A:1016209010120.

- Gunawardena, C. N., Hermans, M. B., Sanchez, D., Richmond, C., Boley, M., & Tuttle, R. (2009). A theoretical framework for building online communities of practice with social networking tools. *Educational Media International*, 46(1), 3–16. doi:10.1080/09523980802588626.
- Kuzu, A. (2007). Views of pre-service teachers on blog use for instruction and social interaction. *Turkish Online Journal of Education*, 8(3), 34–51.
- Lather, P. (2001). Validity as an incitement to discourse: Qualitative research and the crisis of legitimation. In Richardson, V. (Ed.), *Handbook of research on teaching* (4th ed., pp. 241–250). Washington, DC: American Educational Research Association.
- LeCompte, M. D., & Preissle, J. (2003). *Ethnography and qualitative design in educational research* (2nd ed.). San Diego, CA: Academic Press.
- Lloyd, S. L. (2004). Using comprehension strategies as a springboard for student talk. *Journal of Adolescent & Adult Literacy*, 48(4), 114–124. doi:10.1598/JAAL.48.2.3.
- Makri, K., & Kynigos, C. (2007). The role of blogs in studying the discourse and social practices of mathematics teachers. *Journal of Educational Technology & Society*, 10(1), 73–84.
- Misztal, J. (2001). Young children's literacy practices in a virtual world: Establishing an inline interaction order. *Reading Research Quarterly*, 46(2), 101–118.
- Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering, comprehension-monitoring activities. *Cognition and Instruction*, 1(2), 117–175. doi:10.1207/s1532690xci0102\_1.
- Pew Institute. (2010). *Social media and internet use among teens and young adults*. Retrieved June 10, 2012, from <http://pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx>
- Pew Institute. (2011). *Social networking and our lives*. Retrieved June 10, 2012, from <http://pewinternet.org/Reports/2011/Technology-and-social-networks.aspx>
- Resnick, L. B., Levine, J. M., & Teasley, S. D. (1991). *Perspectives on socially shared cognition*. Washington, DC: American Psychological Association. doi:10.1037/10096-000.
- Sharrock, W. (1989). Ethnomethodology. *The British Journal of Sociology*, 40(4), 657–677. doi:10.2307/590893.
- Spradley, J. P., & McCurdy, D. W. (Eds.). (1972). *The cultural experience: Ethnography in complex society*. Chicago, IL: Science Research Associates.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Stebick, D. M., & Dain, J. M. (2007). *Comprehension strategies for your K-6 literacy classroom: Thinking before, during, and after reading*. Thousand Oaks, CA: Corwin Press.
- Vygotsky, L. A. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.

## ADDITIONAL READING

- Alvermann, D. (2008). Why bother theorizing adolescents' online literacies for classroom practice and research? *Journal of Adolescent & Adult Literacy*, 52(1), 8–19. doi:10.1598/JAAL.52.1.2.
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In Darling-Hammond, L., & Sykes, G. (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3–32). San Francisco: Jossey-Bass.

## **Bridging the Gap**

- Bartu, H. (2001). Can't I read without thinking? *Reading in a Foreign Language*, 13(2), 593–614.
- Cazden, C. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Cambridge, MA: Harvard University Press.
- Cochran-Smith, M., & Lytle, S. (1993). *Inside outside: Teacher research and knowledge*. New York: Teachers College Press.
- Cochran-Smith, M., & Lytle, S. (1999a). Relationships of knowledge and practice: Teacher learning in communities. In Iran-Nejad, A., & Pearson, P. D. (Eds.), *Review of research in education* (Vol. 24, pp. 249–305). Washington, DC: American Educational Research Association. doi:10.2307/1167272.
- Frey, N., Fisher, D., & Gonzalez, A. (2010). *Literacy 2.0*. Bloomington, IN: Solution Tree.
- Friedman, T. L. (2006). *The world is flat: A brief history of the twenty-first century*. New York, NY: Farrar, Straus, and Giroux.
- Gee, J. P. (1999). *An introduction to discourse analysis*. New York: Routledge.
- Grimshaw, A. D. (1982). Comprehensive discourse analysis: An instance of professional peer interaction. *Language in Society*, 11(1), 15–47. doi:10.1017/S0047404500009027.
- Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a theory of teacher community. *Teachers College Record*, 103(6), 942–1012. doi:10.1111/0161-4681.00140.
- Lemke, J. (1992). Intertextuality and educational research. *Linguistics and Education*, 4(3), 257–268. doi:10.1016/0898-5898(92)90003-F.
- Lerner, G. H. (2003). Selecting next speaker: The context-sensitive operation of a context-free organization. *Language in Society*, 32(2), 177–201. doi:10.1017/S004740450332202X.
- Leu, D. J., Kinzer, C. K., Coiro, J. L., & Cammack, D. W. (2004). Toward a theory of new literacies emerging from the Internet and other information and communication technologies. In Ruddell, R. B., & Unrau, N. (Eds.), *Theoretical models and processes of reading* (5th ed., pp. 1570–1613). Newark, DE: International Reading Association.
- Levin, B. B., & Rock, T. C. (2003). The effects of collaborative action research on preservice and experienced teacher partners in professional development schools. *Journal of Teacher Education*, 54(2), 135–149. doi:10.1177/0022487102250287.
- Liang, L. L., Ebenezer, J., & Yost, D. S. (2010). Characteristics of pre-service teachers' online discourse: The study of local streams. *Journal of Science Education and Technology*, 19(1), 69–79. doi:10.1007/s10956-009-9179-x.
- Moody, A. (2010). Using electronic books in the classroom to enhance emergent literacy skills in young children. *Journal of Literacy and Technology*, 11(4), 22–52.
- Rhodes, J. A., & Milby, T. M. (2007). Teacher-created electronic books: Integrating technology to support readers with disabilities. *The Reading Teacher*, 61, 255–259. doi:10.1598/RT.61.3.6.
- Richardson, J. S., Morgan, R. F., & Fleener, C. (2009). *Reading to learn in the content areas*. Belmont, CA: Wadsworth.
- Rogers, R. (2002). “That’s what you’re here for, you’re supposed to know.”: Teaching and learning critical literacy. *Journal of Adolescent & Adult Literacy*, 45(8), 772–787.
- Rogers, R., Malanchruvil-Berkes, Mosley, M., Hui, D., & Joseph, G. O. (2005). Critical discourse analysis in education: A review of the literature. *Review of Educational Research*, 75(3), 365–416. doi:10.3102/00346543075003365.

Schegloff, E. A. (2000). Overlapping talk and the organization of turn-taking for conversation. *Language in Society*, 29(1), 1–63. doi:10.1017/S0047404500001019.

Valli, L., van Zee, E. H., Rennert-Ariev, P., Mikeska, J., Catlett-Muhammad, S., & Roy, P. (2006). Initiating and sustaining a culture of inquiry in a teacher leadership program. *Teacher Education Quarterly*, 33(3), 97–114.

Wang, Z., Walther, J. B., & Hancock, J. T. (2009). Social identification and interpersonal communication in computer-mediated communication: What you do versus who you are in virtual groups. *Human Communication Research*, 35, 59–85. doi:10.1111/j.1468-2958.2008.01338.x.

Zambo, D., & Zambo, R. (2006). Action research in an undergraduate teacher education program: What promises does it hold? *Action in Teacher Education*, 28(4), 62–74. doi:10.1080/01626620.2007.10463430.

## KEY TERMS AND DEFINITIONS

**Collaboration:** The process of working with other individuals in order to achieve the same goal.

**Constructivist Theory:** People construct their own understanding and knowledge of the world through experiences and reflections upon the experiences.

**Gradual Release:** Learning model where the responsibility for task completion shifts gradually over time from the teacher to the student.

**Inquiry:** Seeking information by questioning.

**Metacognition:** Knowing about knowing.

**Modeling:** Instructional strategy where students imitate the behavior that is reinforced and demonstrated by the teacher.

**Reflection:** Challenging and testing out what you do as a teacher and being prepared to act on the results.

**Schema:** A cognitive framework or concept that helps organize and interpret information.

**Social Networking:** Web-based services that allow individuals to construct a public or private profile within a bounded system where they share information and make connections Ethnographic.