# Integrating Content and Pedagogy: Developing Collaborative, Interdisciplinary Social Studies Teacher Education

Michelle D. Cude Ashley Taylor Jaffee Philip David Dillard John Hulsey Alison Sandman

James Madison University

This case study investigated how a collaborative, interdisciplinary partnership supported preservice teachers' approach to integrating content and pedagogy in coursework and field-based experiences at a large, public university. The collaboration involved articulating shared goals and objectives, planning and teaching co-requisite courses, and sharing a vision of shaping future social studies teachers. The research questions that framed this study were: What elements contributed to a successful collaborative, interdisciplinary partnership? How did faculty involved in the collaboration conceptualize supporting pre-service teachers' development of pedagogical content knowledge (PCK)? The voices of the faculty members involved in this collaboration are highlighted to illustrate how they conceptualized meeting the needs of preservice social studies teachers. Findings included identifying the constraints and benefits of partnerships as well as contributing factors to a successful interdisciplinary partnership. Identifying the evolving definition and role of PCK in the training of future social studies teachers is also addressed.

*Key words*: social studies, teacher education, pre-service teachers, interdisciplinary partnership, collaboration, pedagogical content knowledge

#### Introduction

Teacher education involves an allegiance to two priorities, content and pedagogy, the balance of which has been a matter of debate in the social studies for decades (Adler, 2008; Barton & Levstik, 2004; Darling-Hammond, 2006; Fallace, 2009; Fantozzi, 2012; Misco, 2013; Zevin, 2007). In practice, the dichotomy can represent a precarious balancing act as social studies methods professors endeavor to develop a new focus on teaching while also supporting the existing content mastery of their students. This situation is compounded by a tendency for undergraduate students to see themselves as content majors since pedagogical education coursework is frequently disconnected or a minor part of their undergraduate career. For students who will be secondary social studies teachers, this means convincing them that superior content knowledge is not enough; they must also be able to translate that content into meaningful lessons (Adler, 2009; Misco, 2013; Salinas & Blevins, 2013).

While the importance of a solid content background is well accepted, its role within teacher training can be problematic (Ball, Phelps, & Thames, 2008; Darling-Hammond, 2006; Hawley, 2012; Salinas & Blevins, 2013; Zevin, 2007). Pedagogues still frequently cite Lee Shulman's (1986) pedagogical content knowledge (PCK) to describe the content knowledge most intimately tied to pedagogy; yet, how they define PCK has varied (Auseon, 1995; Fernandez, 2014; Grossman, 1990). One definition, for example, identifies PCK in social studies

as having a "deep and accurate understanding of how historical knowledge is constructed" (Barton & Levstik, 2010, p. 36), and knowing how this is translated to the students. We are challenged to rethink and revisit the nature of PCK by highlighting the inherent pedagogical side of content knowledge (Segall, 2004).

The problem is well documented; even when beginning teachers know PCK and can cite the pedagogical jargon, they still prioritize the coverage of content and teach the isolated facts of history (Barton & Levstik, 2004; Brinkmann & Twiford, 2012; Fantozzi, 2012; van Hover & Yeager, 2003). The issue becomes how to strengthen pre-service teachers' dedication to PCK by convincing them of the inseparable nature of the two, rather than prioritizing one over the other. We consider if pre-service teachers more consciously integrate both content and pedagogy early in their academic program, would the integration between them grow stronger rather than being loosely superimposed prior to graduation? This article investigates a case study (Stake, 1998) of how a collaborative, interdisciplinary partnership supports pre-service teachers' approach to integrating content and pedagogy at a large, public university. The research questions, therefore, framing this study were: What elements contributed to a successful collaborative, interdisciplinary partnership? How did faculty involved in the collaboration conceptualize supporting pre-service teachers' development of PCK?

#### **Review of the Literature**

Collaboration as an effective teaching strategy is well represented in the literature, as most concur there are multiple benefits of a community of learners working closely together (Berry, Daughtrey, & Wieder, 2009; Brinkman & Twiford, 2012; Graziano & Navarrete, 2012; York-Barr, Bacharach, Salk, Frank, & Benick, 2004). As the Center for Teaching Quality found in a large-scale mixed method study, "collaborative teachers are effective teachers" (Berry et al., 2009). The current popularity of professional learning communities builds upon the foundation of the collaborative training approach (Levine & Marcos, 2010; Rigelman & Ruben, 2012; Santagata & Guarino, 2012).

While we agree future teachers should learn to collaborate, research on co-teaching and collaborative models in higher education has failed to keep pace with Kindergarten-12 initiatives (Bacharach, Heck, & Dahlberg, 2008; Fantozzi, 2012; Graziano & Navarrete, 2012; Levine & Marcos, 2010; York-Barr et al., 2004). While there is some literature claiming the effectiveness of the approach, researchers often call for more case studies of how it actually works, especially apart from the more frequently studied special education model (Bacharach et al., 2008; Brinkman & Twiford, 2012; Fallace, 2009; Santagata & Guarino, 2012; York-Barr et al., 2004). One notable exception is the work of Nancy Bacharach, Teresa Heck, and Katherine Dahlberg (2008) who implemented and studied co-teaching at their own institution. Their project involved pairs of professors co-teaching an experimental course for one semester. The impact was reportedly positive for those involved, but limited to individuals' brief, isolated experiences (Bacharach, Heck, & Dahlberg, 2008).

One model describes an environment where successful counterpoint seminars were cotaught by an education professor and a historian (Fallace, 2009). This model of collaboration rested upon an already secure foundation of both disciplinary and pedagogical training before the integration of the two. However, this collaboration was not sustained due to opposing purposes and lack of support from the institution (Fantozzi,2012). Most recently, a group of five professors at UC San Diego documented their successful collaboration in teaching science; however, their model was a top-down initiative, requiring a restructuring of the entire program,

something few professors are in a position to undertake (Seethaler, Czworkowski, Remmel, Sawrey, & Souviney, 2013).

These studies primarily identified the challenges of maintaining meaningful collaboration between professors across traditional academic boundaries. Reviewing the literature revealed no other comparable partnerships in social studies education in terms of their collegial nature and longevity (Fallace, 2009; Fantozzi, 2012; Graziano & Navarrete, 2012). Our research potentially adds a new dimension to the existing research, and hopes to encourage others to experiment with this collaborative model and add further iterations to the literature.

#### Conceptual Framework: Pedagogical Content Knowledge

We began our study using Shulman's (1987) notion of pedagogical content knowledge (PCK), which he defines as:

That special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding ... of how particular topics, problems, or issues are organized, represented and adapted to the diverse interests and abilities of learners, and presented for instruction. (p. 8)

We sought to unpack that special amalgam within the context of interdisciplinary social science and teacher education coursework, seeing PCK at the "intersection of content and pedagogy" (Shulman, p. 227). More recently, scholars have expanded and revised Shulman's original conception of PCK to include the intersection of three distinctive sets of knowledge: subject matter knowledge, general pedagogical knowledge, and knowledge of contexts (students, school, community) (Auseon, 1995; Fernandez, 2014; Grossman, 1990). Our understanding of Shulman's work and later expansions of PCK was further deepened by considering some of the critical reviews, which argue the nature of PCK is more organic, rather than invented (Hu, 2014; Segall, 2004). In revisiting PCK, Avner Segall (2004) argued content is inherently pedagogical; stating, "Knowledge is always by someone and for someone, always positioned and positioning and, consequently, is always already pedagogical" (p. 491). We aim, therefore, for an integrative understanding of PCK in future social studies teachers.

For the purposes of this study, we used the terms content and pedagogy to express the perspective and disciplinary field of the faculty member. In the words of one participant, "It is not what we do, but rather who we are...an institutional definition rather than theoretical." In practice, the two components of teacher training—content and pedagogy—have been the domain of two parts of the university: the content experts in the College of Arts and Letters and the pedagogical experts of the College of Education (Bacharach et al., 2008; Fantozzi, 2012). Thomas Misco (2013) calls for blurring the division between content and teacher education departments on the university campus, and our research seeks to understand how the implementation of a collaborative partnership supports this blurring to encapsulate the heart of the PCK teaching model. The development of preservice teachers' understanding of PCK, thus, is indistinguishable between the fields of content and pedagogy.

#### Method

#### **Research Context: The Collaboration Partnership**

In an attempt to draw attention to the integration of the two fields of content and pedagogy, we have formed an Interdisciplinary Social Sciences (ISS) partnership comprised of two professors in the history department (Doug and Amanda), one professor in the political science department (Jay), and two social studies secondary education professors (Melinda and Andrea). This team has worked together for over six years since its inception, with the addition

of two new faculty members along the way. The authors of this study included all five members of the ISS partnership. Each faculty member contributed equally to the collaboration including teaching, attending meetings, development of the program, advising, scholarship, etc.

Our program graduates approximately 25 Master of Arts in Teaching (MAT) students every spring with a broad certification to teach any of the social sciences. While most students are history majors, all students are required to minor in ISS taking a set of required courses to broaden their exposure to the other areas of social studies. Students, additionally, have a preprofessional program in secondary education, comprised of six undergraduate courses in education, as well as three semesters of graduate work in the College of Education. This partnership is a unique collaboration across the normal divide between the College of Arts and Letters and the College of Education at a large public university, originally founded as a Normal School, with a strong commitment to teaching and learning.

The stated purpose for this partnership is balancing the training of future educators in a solid content base appropriate to the needs of their future workplace (and appropriately collegiate in nature) with the advanced pedagogical skills used to help organize curriculum, lesson plans, make meaning of content, and impact the world around them. As an ISS team, we have implemented this focus in numerous ways. We, for example, co-teach content and methods courses so our students can learn historical content knowledge in a way that models current best practice in Kindergarten-12 teaching and learning (Seethaler et al., 2013). We created a cohort of content and pedagogy courses, which work together in an interdisciplinary approach. Finally, we meet to discuss how best to support the development of an integrated understanding of PCK in our pre-service teachers. A secondary purpose of the partnership was to deconstruct the artificial boundaries and to allow students to experience how the content communicated is a pedagogical choice (Salinas & Blevins, 2013; Segall, 2004).

#### **Data Sources and Analysis**

This qualitative case study illuminated the collaboration between professors from separate university departments pursuing a common outcome for future social studies teachers: integrative content and pedagogical development. According to Robert Stake (1998), there is value in telling the story, with the complexity of authentic lived experiences, recording both the uniqueness and the points of commonality.

Data collected included university course observation field notes, meeting notes, and focus group interviews with the five professors involved. The interviews were facilitated by the two College of Education faculty members, and were audio taped as well as transcribed verbatim. Sample questions included: How did you revise the course to support the development of future social studies teachers? How is co-teaching useful for the students in integrating pedagogy and content? How do you evaluate the student's successful integration? We asked questions to contextualize each faculty member's perspective of the project including: What are your goals for this collaboration? Can you speak about what this relationship or process means to you and, how do you measure the success of this collaboration or work? The faculty members involved in this collaboration all conducted classroom observations. We felt being intimately involved in the data collection was critical in helping us understand the successes, challenges, and influences our partnership had on pre-service social studies teachers.

The first two authors of the study conducted the data analysis and interpretation of the data. Inductive data analysis (Lincoln & Guba, 1985) was used to analyze the interview data, through coding and sorting, to identify trends and themes in the documents and interviews. *In* 

*vivo* codes emerged from the data rather than being preconceived, as both authors read carefully through the data several times. We hoped to illuminate the voices of the faculty members involved in this collaboration to see how we conceptualized meeting the needs of our pre-service teachers by asking the following research questions: What elements contributed to a successful collaborative, interdisciplinary partnership? How did faculty involved in the collaboration conceptualize supporting pre-service teachers' development of PCK?

#### **Findings**

Based on analysis of the data collected on how the ISS partnership supported social studies pre-service teachers' development of PCK, two significant findings emerged:

- Finding #1: Successful collaboration hinged upon three foundational elements: ongoing communication, shared vision, and goodwill.
- Finding #2: The development of students' PCK happened through designing or revising pedagogical and disciplinary coursework.

# Finding #1: Developing a Successful Collaboration: Three Foundational Elements

Review of the data revealed a sincere and deep commitment to the collaboration, resting upon these three key components: ongoing communication, shared vision, and goodwill.

Communication takes the form of both frequently planned meetings and informal conversations between classes or email correspondence, both of which were seen as vital to the strength of the collaborative effort, despite the investment of time required. Doug, the leader of the ISS team, highlighted the value of communicating about what we teach: "Just talking to each other about what we were trying to do...I learned an awful lot about what we're doing ... [by] talking about themes. It helped us to talk intelligently to each other." Even the tough conversations of figuring out connections, which stretched across the courses, were fruitful in the way they modeled to students the purposeful, and often challenging, effort of collaborative work. As Andrea said in an ISS meeting last October (10/28/13), "We need our students to see us struggle with these concepts too, because ... they do."

Communication is valued even when spontaneous and brief. Doug reported that stopping by Melinda's office between their classes to reflect on his earlier lesson in HIST/POSC 457: Comparative Empires was beneficial. After hearing about the lesson using primary source images of various empires posted around the room, Melinda was able to begin her methods class with an evaluation of the pros and cons of the gallery walk instructional strategy:

I know you've been doing this in HIST/POSC 457 (pointing to items on the walls), so let's talk about how you might use this strategy in other lessons. What are the benefits you see in using a gallery or graffiti walk? How did it help you frame your own understanding of empires?

In this case, Melinda remembers, students were "powerfully sold on the strategy" that had helped them draw connections in new ways. Although the discussion distracted from her originally planned lesson, the strength of the instructional strategy became very clear and impactful through the lived experience of the class community of learners.

Doug described his early frustration in trying to collaborate before there was anyone willing to "spend the time to discuss." This highlights the other necessary dimension of communication--the sizable investment of time required to communicate frequently and deeply about your goals and your choices. Such effort is only possible through a shared sense of purpose.

Shared vision about the integral relationship of content and pedagogy was the second

element of cohesion which helped make the collaboration successful and able to weather inevitable challenges. Jay, the political scientist on the team, described this as, "a shared understanding of what makes a good teacher and particularly the idea that content informs pedagogical decisions, and pedagogy informs content decisions." In practice, frequent communication about our shared beliefs results in a united front to the students. Doug described the benefit as:

The best thing in the world is to put you and me, or you and Jay, in the same room and we're both saying the same things. In microteaching last week, you're (Melinda, teacher educator) sitting there picking on their content, and I'm (historian) messing with their pedagogy!

This common vision sustained us amidst the early criticism and skepticism of our work, such as "people who say we're dumbing down a course, or we're adulterating it in an unreasonable way" or, "we're wasting our time." Transcripts of the interviews revealed a sense of camaraderie for having survived the earlier stages of hostility, whether from colleagues or students. By this point within the study, the partnership had become an accepted piece of all three academic departments, and a model for what chairs and colleagues have expressed wanting to spread to other disciplines and departments. As Amanda reflected, "I keep meeting faculty on both sides who say 'I wish we could do what you're doing." Doug ended with the quip, "If co-teaching was easy, everybody'd do it."

Goodwill among the faculty involved is the third factor identified by the interview as integral for the success of the collaboration. Doug expressed this as, "We're [ISS partnership] still such a small operation, based partly on the goodwill, personalities, [and] willingness to help. We have good people who are committed to this collaboration because we believe in the value of it." Amanda added the indispensable goodwill of the department chairs and deans:

It's not just [professors'] goodwill that's necessary. This takes resources. This takes changes in teaching loads. This takes meeting rooms...Anybody who is setting up this thing needs that kind of administrative commitment or it doesn't really work at all. Several references were made in interviews regarding the trust required, as Doug expressed:

We're asking people to do something that's very difficult, to walk away from their disciplinary foundation--and that's just on the content side of it. I think we ask a lot of all of us because, on some level, we have to make ourselves very vulnerable...to trust someone that is outside of our discipline.

Amanda summed up the appeal of working in the collaborative team as, "being part of a program where we identify a problem and then solve it successfully and reasonably quickly and efficiently, is just awfully rewarding actually." This sense of satisfaction was echoed around the room during the interview process.

#### Finding #2: Developing PCK: Designing and Revising Coursework

The second finding highlighted how the ISS partnership conceptualized supporting preservice teachers' development of PCK by developing a structural foundation for our collaboration through designing or revising courses. When ISS faculty members were asked to describe the changes, two themes emerged: revising courses to support social studies pre-service teachers:' 1) broader content knowledge, and 2) focus on pedagogical skills.

Faculty explained the content changes and course design for social studies pre-service teachers by: using the state standards as a guideline, re-conceptualizing the content taught to focus on broader concepts and themes, and emphasizing their role in choosing what content is

important to teach. Jay discussed his choice to focus on themes as trying "to give them concepts they can use to describe in a comparative way, things that they see in the world." He continued by offering an example:

I spend more time on comparative political institutions than I otherwise would [in content classes for non-teachers], meaning, since they're going to have to teach the Constitution, I think it's useful for them to have some idea of what the alternatives are. When I ask somebody what the opposite of federalism is, they come from their American class, [and] they say the opposite of federalism is the anti-federalists, who are, in that sense, "states' rights" kinds of people ... Whereas in the broader, international context, the opposite of federalism is a highly centralized state power, which they cannot even conceive of it until we start talking about it ... So all these kind of fundamental concepts, I think we take them outside the confines of their relatively narrow debate and put them in a broader global context, then we can make them more interesting and fuller.

Jay described the choices he made in his comparative government course to emphasize teaching the content through concepts that students might already know (e.g., federalism, in this case), and examine what the "alternatives are" or transfer the concepts "out of their real context" and into a "broader, international context." He hoped this analysis of larger themes or concepts offered students a fuller understanding of concepts they will teach in the future. Jay not only wanted to frame his course based on these larger themes or concepts for pre-service teachers, but he also wanted to challenge their understanding of these concepts so that they can transfer their conceptual content knowledge to other courses and contexts. Developing a conceptual understanding of the content, as Jay has suggested in his course, is part of the process of making the content more accessible and useful, and perhaps increasingly ready for instruction.

Faculty described how they have also made changes to their courses to support what they believe are the pedagogical skills needed to successfully integrate content and pedagogy for their pre-service social studies candidates. These changes included: re-framing class discussions to focus on how you would teach the content in the classroom, making oral presentations in front of peers, and creating websites for teachers in the field. Doug explained one of the key pedagogical changes he has made over the years:

One of the most effective [changes I've made] is to step back from the topic and say, 'Okay let's talk about the problems with teaching this in the classroom.' For instance, talking about slavery ... how to teach the difference between fairness and cruelty ... It's a very self-conscious process to try and make it useful to them but also a certain transparency: 'Okay we're doing this because...'

Doug spends about 15 minutes in his history classes for social studies teachers reflecting on what they thought about the content and how it could be taught in their classrooms. While a "simplistic" change to his course, as he described, it gains "far more student buy-in" than anything else he does to modify the course.

Doug, Jay, and Amanda discussed key pedagogical changes involving the assignments they have students complete for their courses. Jay and Amanda ask students to teach their classmates on various topics in their classes. Amanda explained:

The other thing that I do is, because this is a group of students who want to be teachers, I use more oral presentations than I do in my classes that are much more people who want to be historians. I use oral presentations in those [such as] 'introduce something to the class,' 'take a map and tell me--not only explaining the map to the class--but also, what

sorts of lessons will you tie this into?' so that it winds up being the link between what you know and what you want to teach.

While she has students conduct oral presentations in all her classes, Amanda's focus for her social studies students is on skills – as well as content – needed for a successful oral presentation. Pedagogical skills Amanda hoped her students would develop as a result of conducting their oral presentations included the ability to: speak extemporaneously, set the topic within a context, and answer questions from the audience. These skills, she suggested, helped her students to link the content they have learned in class to the methods they will decide to implement when teaching this information in their future classrooms. Similarly, Jay had his students "teach a significant portion of the class" for up to 30 minutes. He explained, "They teach really hard stuff –they're teaching college-level conceptual work, which is really hard to do, so I push them to do some really difficult teaching." While students rose to the challenge, sometimes there were some "really disastrous teaching presentations," Jay shared. This, however, was part of the development of pre-service social studies teachers' understanding and enactment of PCK.

Overall, the content and pedagogical changes made to the courses designed or modified by ISS content faculty members clearly supported the development of PCK. As Doug explained, his goal was to teach students to transform the content and "use it in other contexts like the classroom;" therefore, encouraging pre-service social studies teachers to further develop their identity as a teacher. Members of the ISS partnership consider this identity shift an essential goal to the development of future social studies teachers, and the redesigning of coursework was one way of supporting the continued development of PCK.

#### **Discussion and Conclusion**

#### **Discussion**

The data collected reported positive results of this partnership. Had interviews been conducted four years ago, the opinions shared might have been less positive and less conclusive. Certainly this collaboration has morphed, flexed, and somewhat stabilized over the years; yet, this path has not been as straightforward as it appears in hindsight. In reviewing the data, we found a dissonance confounding the generally positive experience.

Challenges arose and continued requiring negotiations and flexibility. Two challenges were significant enough over time to merit collaborative discourse: the problem of tenure and the issue of mediocre performance of a pre-service teacher. One member of the team was seeking tenure, and the question "will this count?" loomed large in his thoughts. As Amanda expressed:

[The] costs of a program like this is that it necessarily takes time and energy for the collaboration that could otherwise be spent in the home department. So it requires [for example] either double service for the people involved, or understanding from unit heads that the people will do less service in their home departments.

Buy-in from our respective departments has ebbed and flowed. Those from the content side question the alliance with the education professors who might "dumb down the content." Administrators in the College of Education sometimes questioned the willingness of content professors to consider the impact on future public school children when mediocre candidates were allowed to progress in the program. Indeed, this has been a point of dissention at times within the collaboration. We, however, reached a point of consensus that all parties would discuss whether a student should remain in the program or receive remediation. The loyalties of the professors on both sides were always to the pre-service students, but the education professors

can appear more critical as they consider the effect on future middle and secondary school students.

In one instance four years ago, a student was asked to leave the MAT program, despite much disagreement amongst faculty. In another instance, around that same period, a different student was allowed to continue in the program despite significant concerns with their aptitude. There are no easy answers. Collaboration does not make decisions infallible or comfortable. If anything, in our experience, it makes those decisions tougher, as the interests of the other players become factors to consider and negotiate. The deliberations resulted in better, more thoughtful choices. Our partnership has not necessarily made our lives easier, but it has made them better in many concrete and meaningful ways. Philosophically, we feel the training we designed and implemented is a highly successful model for integrative, rigorous social studies teacher education.

#### Limitations

Limitations of this study included its unique situation; thus, as a case study, the findings are not generalizable (Lincoln & Guba, 1985; Stake, 1998), though evidence in our data suggests it may directly relate to other faculty involved in such a partnership. It may serve to encourage others to experiment with their own iterations of a co-requisite, co-taught course in their teacher preparation programs. As is the nature of self-study research, we were intimately involved in the study, and used this involvement as a means to inform our practice as professors. Self-study among teacher educators is becoming more widely recognized for its value in reflective and reformative practice (Adler, 2008; Dinkelman, 2003; Hostetler et al., 2013). The findings, hence, hold meaning not only for the act of reflective self-study itself, but also for evidence specifying changes that might shape future iterations of this partnership and strengthen the continued development of collaborative programs.

# **Implications**

This study supports continued research on developing PCK in social studies teacher education. We hope our work sparks meaningful conversations with methods instructors about how they might support their students in understanding PCK by embedding it into their methods courses in deep and purposeful ways. This may take the form of partnerships between content professors and teacher educators across campus as we have illustrated here. We believe this work addresses some gaps in what we know about pre-service social studies teacher education coursework and the ongoing disconnect between subject-matter understanding and pedagogical skills knowledge. Additional research could also include how pre-service teachers are, or are not, enacting the integration of content and pedagogy in their beginning teacher experiences. While we originally saw this partnership as making a difference in our pre-service social studies teachers' preparation, we have also found that this collaboration has greatly influenced our own development as teachers and scholars.

Correspondence concerning this article should be addressed to:

Michelle D. Cude, Department of Secondary, Middle, and Math Education, College of Education, James Madison University, Harrisonburg, VA, 22807. Contact: <a href="mailto:cudemd@jmu.edu">cudemd@jmu.edu</a>

#### Acknowledgment:

The authors would like to express our gratitude to our administrators and colleagues who have believed in this experiment and supported our "leap of faith" in numerous ways.

#### References

- Adler, S. (2008). The education of social studies teachers. In L. Levstik & C. Tyson (Eds.) *Handbook of Research in Social Studies Education* (pp. 329-351). New York, NY: Routledge.
- Bacharach, N., Heck, T. W., & Dahlberg, K. (2008). Co-teaching in higher education. *Journal of College Teaching & Learning*, 5(3), 9-16.
- Barton, K. C., & Levstik, L. (2004). *Teaching History for the Common Good*. Mahwah, NJ: Lawrence Erlbaum.
- Brinkmann, J., & Twiford, T. (2012). Voices from the field: Skill sets needed for effective collaboration and co-teaching. *International Journal of Educational Leadership Preparation*, 7(3), 1-13.
- Darling-Hammond, L. (2006). *Powerful Teacher Education: Lessons from Exemplary Programs*. San Francisco, CA: Jossey-Bass.
- Dinkelman, T. (2009). Reflection and resistance: The challenge of rationale-based teacher education. *Journal of Inquiry and Action in Education*, 2(1), 91-108.
- Dinkelman, T. (2003). Self-study in teacher education: A means and ends tool for promoting reflective teaching. *Journal of Teacher Education*, 54(1), 6-18.
- Fallace, T. D. (2009). Historiography and teacher education: Reflections on an experimental course. *The History Teacher*, 42(2), 205-222.
- Fantozzi, V. B. (2012). Divergent purposes: A case study of a history education course co-taught by a historian and social studies education expert. *The History Teacher*, 45(2), 241-259.
- Fernandez, C. (2014). Knowledge base for teaching and pedagogical content knowledge (PCK): Some useful models and implications for teachers' training. *Problems of Education in the 21st Century*, 60, 79-100.
- Graziano, K. J., & Navarrete, L. A. (2012). Co-teaching in a teacher education classroom: Collaboration, compromise, and creativity. *Issues in Teacher Education*, 21(1), 109-126.
- Grossman, P. L. (1990). *The Making of a Teacher: Teacher Knowledge and Teacher Education*. New York, NY: Columbia University, Teachers College Press.
- Hawley, T. (2012). Purpose as content and pedagogy: Rationale-development as a core theme of social studies teacher education. *Journal of Inquiry & Action in Education*, 4(3), 1-17.
- Hu, Jing-Jing (2014). A critical review of pedagogical content knowledge components: Nature, principle and trend. *International Journal of Education and Research*, 2(4), 411-424.
- Levine, T. H., & Marcos, A. S. (2010). How the structure and focus of teachers' collaborative activities facilitate and constrain teacher learning. *Teaching and Teacher Education*, *16*, 389-398.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic Inquiry. New York, NY: Sage.
- Misco, T. (2013). What knowledge is of most worth? Divergent content knowledge filters in social studies education. *Journal of Curriculum and Instruction*, 6(2), 10-32.
- Rigelman, N. R., & Ruben, B. (2012). Creating foundations for collaboration in schools: Utilizing professional learning communities to support teacher candidate learning and visions of teaching. *Teaching and Teacher Education*, 28(7), 979-989.
- Santagata, R., & Guarino, J. (2012). Preparing future teachers to collaborate. *Issues in Teacher Education*, 21(1), 59-69.

- Seethaler, S., Czworkowski, J., Remmel, J., Sawrey, B. A., & Souviney, R. (2013). Bridging the divide between science and education: Lessons from a fruitful collaboration. *Journal of College Science Teaching*, 43(1), 54-59.
- Segall, A. (2004). Revisiting pedagogical content knowledge: The pedagogy of content/the content of pedagogy. *Teaching and Teacher Education*, 20, 489-504.
- Shulman, L. S. (1987). Knowledge of teaching: Foundations of the new reform. *Harvard Educational Review*, *57*(1), 1-21.
- van Hover, S. D. & Yeager, E. A. (2004). Challenges facing beginning history teachers: An exploratory study. *International Journal of Social Education*, 19(1), 8-21.
- York-Barr, J., Bacharach, N., Salk, J., Frank, J. H., & Benick, B. (2004). Team-teaching in teacher education: General and special education faculty experiences and perspectives. *Issues in Teacher Education*, 13(1), 73-94.
- Zevin, J. (2007). *Social Studies for the Twenty-first Century* (3<sup>rd</sup> ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

#### **Web-based References**

- Auseon, J. (1995). The role of pedagogical and subject matter knowledge in preservice art teaching. *Marilyn Zurmuehlen Working Papers in Art Education (University of Iowa)*, 13(1), 54-68. Retrieved from http://ir.uiowa.edu/mzwp/vol13/iss1/13/
- Ball, D. L., & Phelps, G., & Thames, M. H. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education*, *59*(5), 389-407. doi: 10.1177/0022487108324554
- Berry, B., Daughtrey, A., & Wieder, A. (2009). Collaboration: Closing the effective teaching gap. Hillsborough, NC: Center for Teaching Quality. Retrieved from ERIC database. (ED509717).
- Hostetler, A. L., Hawley, T. S., Crowe, A. R., Smith, E., Janoskoc, A., Koppesb, L., Sprague, T., Ahlers, L., & Loudin, A. (2013). Self-study of practice as a framework to promote growth in the student teaching experience. *Studying Teacher Education*, *9*(2), 187-200. http://dx.doi.org/10.1080/17425964.2013.808064

#### **Author Bios**

Michelle D. Cude is an Associate Professor of Social Studies Education at James Madison University. Her research interests are global education, civic education, and transforming teacher education. Her courses include Methods of Teaching Social Studies and service learning, and community partnerships. She has a deep commitment to girls' education internationally. Email: cudemd@jmu.edu

**Ashley Taylor Jaffee** is an Assistant Professor of Social Studies Education at James Madison University. Her research focuses on social studies and citizenship education, culturally and linguistically relevant pedagogy, immigrant youth, and pre-service teacher education. She teaches courses in social studies methods, student teaching seminar, and curriculum theory.

**Philip David Dillard** is Professor of History at James Madison University. His research focuses upon the American Civil War and slavery in the Old South. He teaches courses in the Old South, Civil War & Reconstruction, Comparative Empires, and Virginia history.

**John Hulsey** is an Associate Professor of Political Science at James Madison University. He studies ethnic politics and post-conflict societies with a focus on the Balkans. He teaches

courses on Comparative Politics, Post-Conflict Societies, the European Union and Comparative Empires.

**Alison Sandman** is an Associate Professor of History at James Madison University. Her research focuses on navigation and cartography in the sixteenth and seventeenth centuries. She teaches classes on world history, history of science, and interdisciplinary social sciences.