

What Happens in Student Teaching, Stays in Student Teaching: Variability of Practice in Similar Residency Settings

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Abstract: *In this study, we closely followed two teacher candidates (Scott and Dan) and their mentors through their student-teaching residencies using the following two questions to guide our investigation: (1) what did teaching look like in Scott's and Dan's classrooms? and (2) how did key student-teaching residency structures and forces enable and constrain Scott's and Dan's teaching practices? Using cultural historical activity theory (CHAT) as a theoretical lens, we found that although both candidates were given marks of proficient to excellent on the formal student-teaching assessments, the social and cultural complexities in their contexts held significant supports for professional growth for one candidate and hinderances for the other. This holds implications for teacher preparation programs with regard to program and candidate evaluation.*

The process of selecting and pairing teacher mentors and teacher candidates for the student teaching experience is an important one (Cochran-Smith & Zeichner, 2005). In 2005, Darling-Hammond and Hammerness outlined four characteristics of excellent teacher education programs: (a) university and partner-school faculty held common knowledge and beliefs about teaching and learning; (b) they closely integrated coursework and clinical experiences to reflect and reinforce key ideas of the program; (c) programs were constructed around a shared vision of good teaching practice; and (d) common standards of practice were used to guide and assess preservice candidate learning. Although the programs included in their study were regarded as successful, these researchers noted how mentor and candidate practices could vary widely in how they aligned with teacher education program goals and directives, “depending on how cooperating teachers are recruited, whether and how the process is guided, and what the expectations are for performance by novice and cooperating teachers” (p. 409).

Graham (2006) reported that research had yet to provide a clear understanding of the mentor's role in fostering candidate learning. Similar to Darling-Hammond and Hammerness (2005), she noted differences in how mentors conceptualized and operationalized their roles during the residency and how these differences impacted the quality of the experience for the candidates. Specifically, Graham identified two contrasting approaches to professional mentoring. One less-effective approach emphasized technical and managerial skills of teaching, expecting candidates to replicate procedures and conceptualizations of teaching and learning rather than assisting candidates in constructing what it means to teach. In the second, more effective approach, mentors

were seen as providing support by guiding candidate learning in a more recursive than linear fashion. Mentors using the second approach expected candidates to possess strong content knowledge; they also saw the residency experience as a time for candidates to view and experiment with content and pedagogy in different ways to improve their teaching skills.

Acknowledging the potential for variability and conflict, Smith (2010) called for a clearer construct of the student-teaching experience. Reconstructing the candidate residency as a place where variability of experience and its resulting conflicts are to be expected, planned for, and learned from offers possibilities for improving candidate learning. To this end, identifying and understanding key factors shaping how mentors and candidates collectively conceptualize and operationalize teaching and learning are beneficial to residency participants.

Today, the Council for the Accreditation of Educator Preparation (CAEP) requires teacher educators to collect valid and reliable data from student-teaching fields of practice to monitor and improve the quality of clinical experiences. The data currently collected, such as formal evaluations of candidate performance from mentors and university supervisors, candidate evaluations of mentor performance, and value-added measurement systems can be important toward providing some indication of a candidate's level of performance. However, there is much more that takes place in the day-to-day experiences that can reveal a much richer understanding of the quality of each placement and determination of what candidates learn, why they learn, and how they learn.

The purpose of this multicase study was to examine sociological factors impacting the developing teaching practices of two candidates, Scott and Dan (pseudonyms), whose student-teaching placements shared several important characteristics. Research questions guiding this study were: (1) what did teaching look like in Scott's and Dan's classrooms? and (2) how did key residency structures and forces enable and constrain Scott's and Dan's teaching practices? In this study, structure was defined as the recurrent patterned social arrangements in a field of practice which emerge from or shape the actions of individuals. Forces involved the persons, groups, and institutions enabling or constraining developing knowledge, skills, and teaching practices. Systematically identifying such factors shaping candidate classroom practices may provide teacher educators with important insights for program evaluation.

THEORETICAL FRAMEWORK

CULTURAL HISTORICAL ACTIVITY THEORY

To reveal more this complex process, we used cultural historical activity theory (CHAT) to map and analyze the constellation of operations, actions, and activities taking place in candidates' classrooms during their 16-week residencies. CHAT offers researchers a framework for evaluating sociological structures and forces impacting human activity and learning in complex, real-world work environments, or "activity systems" (Yamagata-Lynch, 2010). The foundational premises of CHAT were based on three intertwined concepts: (a) Marxist notions of material production and historical change, (b) Vygotsky's (1978) emphasis on individual intermental processing initiated through external mediated activity involving subjects, objects, and tools, and (c) Leontiev's (2009) focus on the mediating role of human collectives. These theorists offered concepts of human development in contrast to a Cartesian dualism that separated individual psychological processes and development from activity and learning in a social world (Stetsenko, 2005).

Expanding on Vygotsky's and Leontiev's ideas, Engestrom (2008) articulated a more complex diagrammatic model of the integrated and interactive nature of six constitutive entities comprising an activity system: *subject*, *object*, *tools*, *community*, *rules*, and *division of labor* (see Figure 1). Briefly, the subject is comprised of individuals or groups of individuals involved in a specific activity. The object represents the motive or desired outcome for activity (may be different for different subjects). Tools include physical and symbolic resources available to subjects acting within the system. Rules consist of formal and informal regulations affecting how activity takes place. Community encompasses the ways in which a social group engages in activity. The sixth entity, division of labor, refers to the vertical and horizontal delineation of shared tasks within an activity system (Yamagata-Lynch, 2010, p. 3).

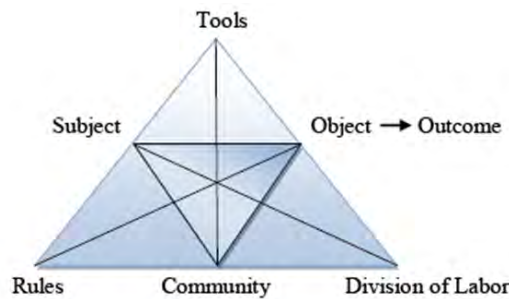


Figure 1. Activity System (adapted from Engestrom, 2009).

This third generation of activity theory, or CHAT, provides a conceptual tool for identifying and contextualizing human activity and development occurring in single and interlinking systems of activity, such as those encountered by candidates in student-teaching residencies. By centralizing the focus on human development as a contextually-situated phenomenon occurring within and across activity systems, CHAT and activity systems analysis offer a framework and process for evaluating sociological factors impacting subjects of learning (Engestrom, 2009).

METHOD

We designed this inquiry as a qualitative multicase study. As outlined by Yin (2003) and Merriam (2009), case-study research is an appropriate approach when researchers seek to understand relationships between phenomena, variables, and context, especially when variables are impossible to separate from context. It has been used extensively in educational research to evaluate and recommend improvements to field programs, processes, and practices. In this study, our case is the student-teaching activity system; the phenomenon of focus is the training of teacher candidates; the context includes the institutions in which teacher candidates, mentor teachers, and university supervisors worked; and targeted variables are the components of an activity system as outlined by CHAT (Engestrom, 2009). Rather than attempting to predict causal relationships between observed behavior and isolated variables or aiming to generalize results across multiple contexts, case-study research is valuable for expanding and generalizing theories as well as for understanding particulars about a case or cases and transferring deep, personal knowledge about a situation to similar situations (Merriam, 2009). Therefore, our choice was informed by the characteristics and outcomes of case studies, such as they are particularistic, descriptive, and

heuristic, and thus provide opportunities for deep, holistic accounts of complex, real-world situations (Merriam, 2009).

In addition to the general design, we also included measures to ensure a trustworthy, credible, and reliable account. This included an eight-month prolonged engagement in data collection and analysis; purposeful collection of and rationale for multiple sources of data (described more in-depth below); triangulation of data—interviews, member-checks, observations, field notes, analytic memos, collection of artifacts, use of participants' voices in the presentation of findings; data analysis that included a search for discrepant evidence and negative cases; and researcher reflexivity (Merriam, 2009).

DATA COLLECTION AND ANALYSIS

We collected data in the form of field notes of observations of Scott's and Dan's classroom teaching practices; artifacts, including curriculum guides, curriculum documents, and lesson materials; the conceptual framework from the participating teacher-education university; the university's teacher-education handbook; Scott's and Dan's midterm and final teaching observations; and post student-teaching interviews with Scott, Dan, and their respective mentors. Brian visited each candidate on 10 separate occasions and conducted formal teaching observations on eight of those visits, totaling nearly 600 minutes of instruction for each participant (roughly 75 minutes of instruction per lesson). Throughout the semester he also kept a journal to record notes from the field and reflections of observations, discussions with study participants, and analysis of artifacts. We centralized eight classroom teaching observations for each candidate, classroom artifacts and materials, and post-residency interviews with Scott, Dan, and their mentors for analysis and drew upon other data for providing a richer context for the study.

Our data analysis followed a naturalistic mode of inquiry, utilized the constant comparative method found in grounded theory with three coding stages: open coding, axial coding, and selective coding (Yamagata-Lynch, 2010; Strauss & Corbin, 1990; Strauss, 1987). Major coding categories included: conceptualization and construction of the student-learning object; construction and use of instructional tools and supports for learning; rules, norms, and procedures for lesson planning and classroom learning activities; characteristics and dynamics of the teaching and learning community; and approaches to dividing labor for lesson planning and classroom teaching and learning.

In the final data analysis step, we built upon the emerging themes of teacher-centered and student-centered pedagogies. We used observational data analysis and coded data from candidate and mentor interviews to map onto the six activity system elements. We then used properties and dimensions for each activity system element to differentiate between lesson planning and teaching and learning activities reflecting a more teacher-centered transmission of knowledge paradigm or a more student-centered construction of knowledge paradigm. Table 2 presents a summary of these coding categories.

Table 2
Coding Key for Observation and Interview Data Analysis

Major Code	Teacher-Centered Paradigm	Student-Centered Paradigm
Object	Knowledge as something transmitted	Knowledge as something constructed
Tools	Separate and static	Intertwined and varied
Rules	Inflexible	Flexible
Community	Individualistic	Participatory
Division of Labor	Hierarchical	Reciprocal

CONTEXT OF THE INVESTIGATION

SELECTION OF PARTICIPANTS AND RESIDENCY SETTINGS

An initial convenience sample of potential participants included a cohort of 25 secondary social science teacher candidates. These candidates had just completed Brian's social studies methods course, and Brian was assigned as their university supervisor during the upcoming residency semester. In this way, Brian's role in this study was that of a full participant/researcher, giving him an inside view of the cases in focus (Merriam, 2009); Melanie's role was situated as an outside observer and analytic collaborator. After analyzing residency placement information, two secondary teacher candidates teaching U. S. History classes from the same school district were purposively selected for the multicase study. This decision was guided by three important factors for case-study research as outlined by Merriam (2009). First, homogenous sampling may be used to examine human cases that share common characteristics or conditions and compare cases in one or across multiple contexts (Merriam, 2009, p. 49). Scott and Dan shared several similarities that supported such sampling. For example, Scott and Dan were white males of nearly the same age and were closely matched in other important characteristics, such as ACT Composite Score, GPA, and their grades in the Social Studies Methods II course. They also shared the following characteristics and beliefs:

- Undergraduates in the same teacher-education program
- Valued constructivist approaches
- Taught the same content courses in the same school district (at different schools)
- Followed the same curriculum requirements
- Espoused interest in fostering critical thinking in their students
- Declared a disagreement with pedagogical approaches to history in which students just memorized facts about events, ideas, and people
- Valued the use of historical primary documents to critique secondary sources
- Desired to teach using a variety of pedagogical approaches beyond lecture
- Looked forward to working collaboratively with mentor teachers
- Showed enthusiasm for designing their own lessons

In addition, mentors for each of the candidates were similar in background and experience: both were white males, had significant social studies teaching experience at their respective high schools, and had prior experience mentoring candidates from their university partner. These commonalities presented an opportunity for our research to focus more pointedly on how and why the collective work of mentor-candidate dyads varied and thus impacted candidate classroom

practices and learning opportunities. As a matter of note, all district and school names are pseudonyms for confidentiality purposes.

Second, in contrast to the similarities, Brian's initial interviews and observations of Scott and Dan in the field revealed interesting patterns of differences, which as Merriam (2009) suggested, makes for a more compelling interpretation. Finally, in harmony with how Merriam (2009) described the nature of qualitative research, we aimed to interpret and understand candidate experiences and the meanings attributed to those experiences. Thus, one challenge for qualitative researchers in general, and CHAT researchers specifically, involves the need to spend a significant amount of time in the setting under study to collect data and to develop an intimate understanding of participants, actions, and contexts. In this study, the districts hosting the initial 25 teacher candidates were 50-200 miles apart. Therefore, selecting Scott and Dan enabled Brian to conduct the necessary observations and to collect the in-depth data demanded by qualitative case-study analysis.

Scott and Dan were placed in different high schools of the Emerson School District (ESD), a district located in a city of roughly 50,000 residents in the Rocky Mountain region. The district served over 13,400 students in grades K-12 and encompassed 34 school sites. The graduation rate at ESD was 72%. Students, as identified by ethnicity, included 91.25% who identified as White, 18.52% Hispanic, 4.56% Black, 2.77% American Indian or Alaskan Native, 1.89% Asian, 1.36% Native Hawaiian or Pacific Islander, and 2.88% two or more Races. Over 40% of students qualified for free or reduced-priced meals. The two participating high schools included grades 9-12, with Washington High School (WHS) serving over 1,300 students, and Lincoln High School (LHS) serving over 1,000 students. Average ACT scores for the schools were 20.7 and 21.4 respectively. These schools were important partners for the university teacher-education program, which placed many teacher candidates at both Washington and Lincoln High Schools over the past several decades.

A couple of years before this study, Emerson School District began to develop a uniform history (World and U.S. History) and U.S. government curriculum, known as Essential Curriculum (EC), to be used by all of its high school social studies teachers. Through course-level meetings with teachers and administrators, pacing and curriculum guides and assessments were created to align instruction and assessment across the district, to assist teachers with planning, instruction, and assessment, and to gather data towards further assisting teachers and administrators in evaluating and improving instruction. Two key EC documents required for use by U.S. History teachers were curriculum maps (in the form of unit-plan outlines) and end-of-unit assessments (selected-response, short-answer, and essay-question exams). History teachers were free to craft their own lesson plans and formative assessments but were required to follow district curriculum maps and administer district unit assessments for each of ten units of study.

FINDINGS

As a reminder, the two questions we asked were: (1) what did teaching look like in Scott's and Dan's classrooms? and (2) how did key student-teaching residency structures and forces enable and constrain Scott's and Dan's teaching practices? We found Scott's and Dan's emergent forms of practice were uniquely influenced by three key shared structures and forces present in their respective student-teaching contexts. First, mentor and candidate interpretations and uses of EC guidelines and requirements (tools and rules) differed within the two student-teaching contexts, impacting planning, instruction, and assessment decisions and actions. Second, the ways in which

mentors and candidates divided labor for lesson planning, delivering instruction, and assessing student performance impacted the construction and use of tools for teaching and learning, interactions between candidates and their mentors, and the learning opportunities afforded to candidates, both inside and outside of their classrooms. Third, mentor interpretations of effective candidate performance along with informal and formal evaluations of candidate performance (tools and rules) impacted candidates' views and actions associated with planning, instruction, and assessment. We describe these three key shared structures and forces more in-depth in the individual case descriptions that follow. Each case will begin with a description of observed classroom practice as it relates to the activity systems teaching paradigms followed by a synopsis of the structures and forces impacting practice drawn from analysis of interview data.

SCOTT: A TEACHER-CENTERED APPROACH

TEACHING AND LEARNING PRACTICES. Scott's practices largely followed the teacher-centered paradigm. His actions defined the teacher's role as information provider while characterizing his students' roles as information receivers. For Scott, the object of activity was strongly tied to transmitting didactic understandings of content knowledge from teacher to students, from video to students, or from written text to students. For example, in relation to Bloom's (1956) taxonomy for the cognitive domain, only 17 out of the 104 questions (16%) posed by Scott to his students during lesson activities (oral and written questions) targeted students' content knowledge or comprehension and required them to apply, analyze, evaluate, or synthesize information (higher-order thinking linked with critical thinking). Also of note, five of the 17 questions he posed were included in a district-required common assessment completed by students, and six were created by Scott for a university-required assessment, meaning that in reality, he only designed 12 out of the 104 questions (12%) to direct his students toward critical thinking.

Scott also employed limited, separate, and static tools to support student learning, and he did not make explicit connections to targeted content and/or skills across lesson exercises, creating a separation between targeted content information and the use of tools and instructional approaches to support student learning. For example, much of Scott's instruction involved extended lecture combined with worksheet exercises following the lecture. For these activities, Scott provided partial lecture notes for students to fill in missing key names, terms, and events to complete the notes. After the lecture, students used textbooks to respond to roughly a dozen true/false questions (R/W activity) that were loosely related to the preceding lecture. If students believed an answer to be false, they would write a sentence to support their response.

The teacher/student learning community in Scott's classroom was largely individualistic and exhibited a hierarchical division of labor incorporating inflexible formal and informal rules for participation. The low level of dialogue between and among teacher and students along with the absence of communal sense-making activities fostered a focus on the role of the individual student versus collective meaning-making. For example, his questions focused mostly at the knowledge or comprehension levels and offered few probing, clarifying, or follow-up questions to student responses. During worksheet tasks such as the true/false worksheet activities noted above, students were asked to work independently. When students were allowed to work in pairs, their collaboration typically involved sharing answers to worksheet questions.

Finally, Scott typically integrated one or two distinct lesson activities during each lesson. Excluding a five-minute quiz and 12-minute demonstration, each activity ranged from 30 to 88 minutes in length, resulting in extended periods of time where students listened to Scott deliver content or worked individually on teacher-provided worksheets. For example, three of Scott's

observed lessons involved one speaking/listening-based activity along with one reading/writing-based activity (such as the lecture and worksheet activities described above), three lessons involved a single worksheet-based activity for the entire period, and one lesson involved one speaking/listening-based activity for the entire period. Over the course of the semester, Scott's actions became operationalized into a routine of using commands to transmit information and for monitoring student's independent seatwork.

CURRICULUM TOOLS AND THEIR USES. Scott's mentor, Mr. Ferguson (pseudonym), viewed the EC assessments as "quite frankly... pretty poor assessments." Mr. Ferguson stated that the EC and accompanying assessments created "this drive to get through... the content. It's almost like it doesn't matter how well students understand the content; we just got to get through it." When turning over teaching responsibilities to Scott, Mr. Ferguson emphasized "these are the things that I need to have covered," but "you can present the material in any fashion that you want." Mr. Ferguson described his preferred approach to teaching as "presenting material, teaching the lessons."

Mr. Ferguson attributed the deficiency of the assessment to its three-part structure of "multiple choice, a short answer, and then a full-blown essay." He believed that students focused too much of their time on the multiple-choice and short-answer questions and were unwilling to attempt or unable to successfully complete the essay portion of the EC assessments. Mr. Ferguson stated that students "get to the end where that essay and they're fried, they don't want to do it, so they blow that off."

Scott shared similar views on the curriculum as those expressed by Mr. Ferguson. Scott characterized the EC as "a bulleted list that, just, we're checking off that we asked a question about this. We don't care at what level you know it. We just want to put a question on there that has something to do with it." While Scott saw the EC as "directing what needed to be covered but not dictating how material needed to be taught," he came to value and use teacher-centered approaches encouraged by his mentor over his previously-stated preference for constructivist student-centered approaches. Commenting on EC requirements and the value of transmitted knowledge approaches, Scott stated, "I do really value lecture. I just think that if you're going to give me things I have to teach them... you're going to know something about it, and I'm going to tell you."

DIVISION OF LABOR BETWEEN MENTOR AND CANDIDATE. A key division-of-labor feature during Scott's residency semester involved Mr. Ferguson's decision to retain significant responsibilities for lesson planning and for evaluating student performance. He provided Scott with lecture notes, worksheets, and other instructional tools to be used for planning and teaching and modeled his expectations for delivering classroom instruction using these tools. In addition, Mr. Ferguson monitored and evaluated all student work, including daily assignments and assessments. Scott confirmed a positive aspect of this division-of-labor arrangement, stating, Mr. Ferguson "definitely planned it all and graded it, and I taught it." Scott elaborated on this point declaring, "Mr. Ferguson wrote all the notes, but I was the one that gave the lectures, so I needed to know what I was talking about."

Scott described this division of labor as a plus, because he "had someone to do his grading" and could concentrate on his instruction, "which I think is more important as a teacher." Scott acknowledged that, although this was not the typical candidate/mentor relationship, he thought it was effective because having Mr. Ferguson grade assignments and assessments allowed him "see the results that were coming from" his teaching and provided more time to focus on his delivery

of content. As the semester progressed, Scott was given room to alter his teaching practices, but parameters (formal and informal rules) were firmly established. Scott stated that Mr. Ferguson “definitely let me take whatever road I wanted to along the lesson but gave me the ground work.” When asked what he meant by “groundwork,” Scott stated, “You know, these, these are the notes; find the lecture within them,” and “this is the worksheet, introduce it how you want to introduce it.”

MENTOR INTERPRETATIONS AND EVALUATIONS OF CANDIDATE PERFORMANCE. Mr. Ferguson stressed the importance of candidates possessing strong content knowledge before beginning their residencies. On this point in particular, Mr. Ferguson viewed Scott as a highly effective candidate, stating, “I knew what I needed to have out of a student teacher. The expectation is that they had the content, and he does. He’s really, really sharp.” Mr. Ferguson noted on Scott’s final student-teaching evaluation that Scott “continues to prove himself among the most knowledgeable residents with which I’ve worked.” During his interview Mr. Ferguson declared, “This was the best experience I’ve had with student teachers.” Scott received “Distinguished” marks in all 15 final evaluation rubric categories with the exception of “Working effectively in a variety of ways with parents,” where he scored “Proficient.”

In addition to Mr. Ferguson’s emphasis on the importance of content knowledge as a measure of candidate effectiveness, Mr. Ferguson shared his thoughts about Scott’s development as a teacher over the course of his residency semester. For example, Mr. Ferguson described how Scott’s ability to relate to students improved once he lowered his expectations of their abilities and behaviors. He viewed Scott as a “very, very knowledgeable” candidate who “came in with very high expectations as far as the ability of his students.”

DAN: A STUDENT-CENTERED APPROACH

TEACHING AND LEARNING PRACTICES. Dan’s observed teaching practices closely aligned with a student-centered approach to teaching and learning. His actions in the classroom aimed at constructing knowledge between teacher and students across a range of interconnected, highly dialogic, and explicitly supported activities. In contrast to Scott, of the 157 questions posed to students by Dan (oral and written questions) 46 (29%) targeted students’ content knowledge or comprehension and 111 (71%) required students to apply, analyze, evaluate, or synthesize information in order to effectively respond. Activities included primary-source analysis (images, music, and texts), secondary-source analysis, inquiry, individual and collaborative problem-solving activities, and student-led presentations.

Further, Dan wove a range of tools into lesson activities to support the co-construction of knowledge between and among students and teacher. He supported student learning by consistently integrating before-, during-, and after-task learning-support tools that explicitly connected information, ideas, and questions across lesson exercises. Examples of these support tools included anticipatory set exercises, modeling expectations for a specific activity, establishing prior knowledge connections, asking open-ended, probing, clarifying, leading, and recall questions, providing context for upcoming videos or reading activities, think/pair/share activities, and informal writing exercises. These types of supports were largely missing from Scott’s teaching repertoire.

Dan’s approach to teaching and learning fostered a participatory classroom community and a reciprocal division of labor by foregrounding student participation in learning. Dan did not focus his instruction on lecture, textbook work, and worksheets. Instead, students took a more active role

in their learning through discussion and collaboration, inquiry, problem-solving, the sharing of ideas, opinions, and support for expressed opinions, student presentations, and other student-centered activities. Ultimately, by following a more student-centered paradigm than did Scott, Dan was enabled to attempt and practice a wider range of teaching and learning approaches over the course of his residency semester.

CURRICULUM TOOLS AND THEIR USES. Dan's mentor, Mr. Johnson (pseudonym), expressed conflicted feelings about the EC. He described how it "provides a framework for just about everything you do in the classroom now" and "for the most part... assessment is kind of driving all of student learning, and there's good and bad with that." He believed "one of the greatest things [to] come out of this whole district initiative on the use of data is to literally determine the individual student needs and strengths and weaknesses and then how to tailor your instruction based upon those strengths and weaknesses of your students."

Discussing some negative aspects of the EC, Mr. Johnson stated, "It certainly changes how you plan because now the focal point is to just simply give students a cursory look at United States History." He also believed that "...the bad is that it doesn't allow time for students to develop critical thinking skills and just simply think and enjoy learning outside of test-taking." Although Mr. Johnson expressed apprehension whether constructive methods would produce better results on EC assessments than resorting to textbook and worksheet exercises, he saw value in helping students understand history from multiple perspectives and was committed to more student-centered approaches focused on constructing knowledge. Mr. Johnson shared, "Personally, the EC tests are multiple-choice exams taken directly from a book that is at an eighth-grade reading level and literally limits history to a study of a boring, old textbook... if you approach it that way, you pretty much diminished any purpose behind social studies education."

Dan also held mixed views of the curriculum. Although Dan occasionally strayed from the guidelines, he "tried to stick to the EC a lot and make sure I'm hitting all of those things." He believed it "made planning pretty easy because they tell you all the concepts that you needed to do." The challenge for Dan was making learning fun, interesting, and creative. He also noted that the drive by the district to collect data was prompting "an alarming shift of [focus on] these big summative assessments at the end." Dan saw the goal of data collection as "affecting his planning severely" and stated, "I wouldn't say I structured my lessons for the sole purpose of gathering data," but the EC "certainly directed the things we had to talk about, and it didn't provide a lot of time to discuss things that were outside of the EC."

Dan's response to EC requirements reflected his and his mentor's views on teaching and learning and the value of social studies education. Dan stated that he tried "to get away from the facts of history" by introducing students to "a variety of primary sources focused around the event that we were studying, all from different perspectives." This prompted Dan to state that, "as a teacher, I really want to be focused on skill-based learning, primarily writing, critical thinking, and analytical skills," because it would set students up better in the future for whatever career they're going to go into." Dan believed that "skill-based learning as a primary focus, rather than content, would be a significant way I've shifted over the semester." Even so, Dan second-guessed his decision to follow district recommendations that he avoid lecture-based teaching in part because he believed that students "liked lecture... because they don't want to critically think" and "just want to know the answers."

DIVISION OF LABOR BETWEEN MENTOR AND CANDIDATE. Mr. Johnson gave Dan wide latitude with regards to planning lessons, teaching, evaluating performance, and enacting changes to instruction over the course of the residency semester. Although he chose to follow Mr. Johnson's lesson-plan format, Dan planned all of his own lessons, selected materials for instruction, created his formative assessments, and evaluated student performance. Upon teaching his lessons, Dan was asked by Mr. Johnson to reflect on his work and to adjust his teaching methods and materials as necessary.

Dan confirmed this arrangement, stating that he received "almost no guidance for the planning from [Mr. Johnson], but ...for my sake I would just always review it with him to make me feel better." According to Dan, Mr. Johnson "always replied, that's fine, just go do it." As for observing Dan in the classroom and providing feedback, Dan shared that Mr. Johnson was "really good the first half of student-teaching" and would "actively... take notes on my teaching." The notes included "things that I could improve on and things that were good." As the semester progressed, this "kind of went away," and Mr. Johnson observed "less and less." Dan felt Mr. Johnson was "much more disengaged as the semester went on in terms of the things that I was doing," possibly because Dan "didn't need as much feedback," or "he got distracted doing the variety of things that he needed to do."

On a few separate occasions during the interview, Dan described lesson planning and the instructional approach taken by him and his mentor as a frustrating "routine." Dan stated, "I just felt like we got into a routine of doing a reading and having them talking about questions from the reading almost on a daily basis." Later he shared, "...all we really do is we would do these paragraphs every day [and] that was really the extent of it," and "[we followed] the same routine of just doing a reading and answering questions from that [reading] every day, and looking back on that, that probably wasn't that good."

MENTOR INTERPRETATIONS AND EVALUATIONS OF CANDIDATE PERFORMANCE. In contrast to Mr. Ferguson's views, Mr. Johnson foregrounded the importance of developing a candidate's pedagogical knowledge over content knowledge. Mr. Johnson stressed the value of having candidates who enter their residencies with an understanding of "the more pragmatic stuff to teaching" and the "simple facilitation of student activities." Mr. Johnson was "a firm believer that content knowledge is something that is acquired outside of teaching" as candidates prepared their lesson plans. In addition, Mr. Johnson conceptualized the object for student learning as something involving significant teacher/student dialogue and promoting critical thinking skills. He characterized Dan as "a really, really good student teacher in that he had great ideas," was able to effectively engage students in discussion, and got "kids to critically think and improve their writing skills" on a daily basis.

Dan viewed Mr. Johnson's approach to mentoring a candidate as one that provided space for him to "experiment and mess up." Mr. Johnson did not tell him "what's right and what's wrong" and instead would let him "do it and then we can reflect upon it together." He described how Dan's development as a teacher grew in three areas: classroom management, his ability to engage students, and his comfort level or ability to build rapport with students.

Mr. Johnson viewed Dan as a highly competent candidate, with ratings of "Distinguished" in nine categories, "Distinguished/Proficient" in three categories, and "Proficient" in three categories on his final student-teaching evaluation. "Distinguished/Proficient" scores were recorded in categories labeled, "Appropriate application of knowledge of human growth," "Appropriate use of technology," and "Working in a variety of ways with parents." "Proficient"

scores were recorded in categories labeled, “Positive and effective classroom climate,” “Sensitivity to school, community, and global cultures,” and “Consideration of legal and safety rules and emergency situations.” On the final evaluation form comments section, Mr. Johnson wrote, “Dan has demonstrated—and exceeded—the traits necessary to be an outstanding teacher. The following bullets highlight his competencies.” Mr. Johnson listed traits such as professionalism and ethical conduct, building rapport with students and holding them to high expectations, reflective practice, connecting instructional strategies to assessments, and participating in professional development.

Working with Dan got Mr. Johnson “excited again about teaching” and “kind of revitalize[d]” him. Praising Dan as an “exceptional” planner, Mr. Johnson stated, “I would say that would be one of his greatest strengths was that he really planned well, on paper.” Mr. Johnson described Dan as “fairly strong in terms of instructional strategies and activities, but I think also a lot of it is dependent upon the personality and demeanor of candidates as well, meaning willing to step out of the box, to attempt to engage kids in different ways, rather than the teacher-centered paradigm... you know the ‘sage on the stage’ type teaching.”

DISCUSSION

The findings from this multicase study affirm prior research reporting on the variability of mentoring practices and candidate residency experiences (Darling-Hammond & Hammerness, 2005; Graham, 2006; Smagorinsky Jakubiak, & Moore, 2008; Smith, 2010; Tillema, 2009; Yamagata-Lynch & Smaldino, 2007). Yet we believe our findings further this previous work by revealing significant variability that can occur even when candidates, their experienced mentors, and their residencies share many important characteristics. Scott became a manager of instruction entrenched in the teacher-centered paradigm while Dan’s role was more of a facilitator of learning following the student-centered paradigm advocated by his university and his mentor (See Figure 2). These movements within their activity systems were guided by and even mirrored their mentors in three key ways: (a) interpretations of effective teaching practices in relation to shared school district curriculum requirements; (b) approaches to dividing labor for planning, instruction, and assessment of student learning; and (c) emphasis on the importance of candidate content knowledge versus pedagogical knowledge.

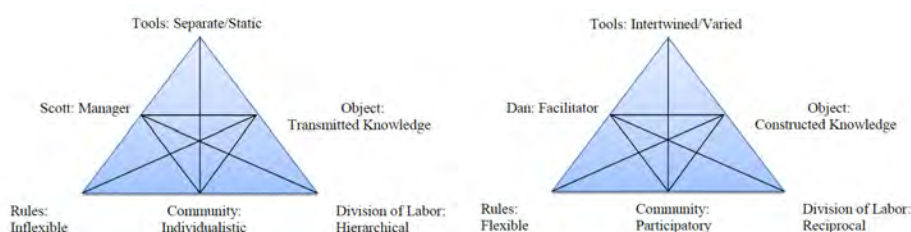


Figure 2. CHAT Model of Scott’s and Dan’s Frame of Reference for Teaching Practices

As a result, Scott exited his program with more limited opportunities than Dan to hone his planning skills, practice a wide range of teaching strategies and student learning activities, and evaluate student development related to demanding cognitive tasks. Further, Scott’s work with his mentor and his students transformed his beliefs, goals, and motivations about teaching and learning away from his previously espoused constructivist ideals. In contrast, Dan’s goals, motivations, and

practices unfolded more in line with his constructivist ideals. With the support of his mentor, Dan planned and experimented with a variety of instructional strategies and learning activities aimed at developing deeper knowledge and higher cognitive skills for his students. Even so, Dan was somewhat frustrated with how difficult it was to find time to integrate more reading and formal writing activities into his instruction, implement project-based learning opportunities, and feel the freedom to break routines and regularly implement novel and engaging learning activities.

A fundamental reason for such variability in residency experiences resides in the notion of teacher-centered and student-centered paradigms themselves. It is important to understand that one approach is not necessarily *better* than the other, but rather teachers engage in both as the learning experience demands. For example, a teacher may use a presentation tool and provide explicit instruction for students around a new topic (teacher-centered). Then they may design an interactive discussion group posing a critical thinking question and ask students to collaborate to answer that question, leading to a variety of answers and perspectives (student-centered). When considering the ideologies of transmitted and constructed knowledge, one needs to understand that these land on a continuum and are not exclusive of one another.

Therefore, we want to avoid the notion that teacher educators must evaluate mentors' teaching philosophies prior to being accepted into a program. Instead, we can use our observations of what we see in the candidate's teaching experience as a way to open up the dialogic space in which we engage in discussions about their own placement on this pedagogical continuum at a given time and context. Within that space, we could foreground the candidate's rationale for pedagogical choices and have them reflect upon alternatives.

It is important to note that despite the differences in Scott's and Dan's experiences, reliable and valid data on their performances was captured using the Teacher Performance Assessment (edTPA), and both passed that assessment. Yet, as the findings reported here illustrate, there was much more to these experiences to be taken into consideration. First, Scott and Dan received exceptional final evaluations of and praise about their performance from their mentors, and they both spoke highly of their mentors and their residency experiences. In fact, Scott received a higher final evaluation from his mentor than Dan, and in the post-residency interview, Dan expressed challenges with his mentor related to differences in classroom management styles and his mentor's reduced level of support as the residency progressed. Further, candidates who successfully complete their residencies typically receive scores of proficient or better across all ratings categories—categories that do not inform teacher educators about specific characteristics and qualities of candidate practices or mentor support for practice. Second, mentor and university-supervisor evaluations focused on candidate performances associated with specific, single, and unconnected classroom observations. Finally, national, portfolio-based assessments such as the Teacher Performance Assessment (edTPA) or the Praxis Performance Assessment for Teachers (PPAT) provide data to evaluate candidate performance on a specific set of tasks and do not provide insight into overall residency practices or levels and qualities of mentor support.

Viewing experiences through the lens of CHAT components (subject, object, rules, community, division of labor) offers educator preparation programs an opportunity to systematically gain insight into the intricate and complex webs of activity that involve candidates' teaching development. Researchers have identified many ideas aimed at improving residency experiences, including (*italics added*):

- analyzing local *tools*, such as curriculum and assessment requirements and guidelines to better understand their implications for student teaching practices (Saka, 2009)

- tapping into *communities* to create teams for vetting candidates and purposefully matching them with mentors (Graham, 2006)
- including school-site educators in defining curricular objectives (*objects*) and learning activities occurring in the residency program (Yamagata-Lynch & Smaldino, 2007)
- involve intentional *division of labor* by building mentor/university supervisor relationships and by conducting co-teaching activities between mentors and university supervisors in both methods and school-site courses (Graham, 2006)
- revamping candidate formative and summative assessment protocols and *tools* (Smith, 2010)
- drawing on previously formed *community* to strengthen influence of university supervisors by matching candidates with supervisors from whom they have taken a course (Asplin & Marks, 2013)
- developing candidates' critical awareness of and coping skills for potential conflicts that may arise during placements (interacting with explicit and implicit *rules*) may help residency triad members identify, manage, and learn from these challenges (Smagorinsky et al., 2008)

If implemented in socioculturally responsive ways, efforts such as these and others made by teacher educators may strengthen candidate residency experiences. Furthermore, ongoing reflection and examination can be conducted to determine the continuing effectiveness of formal evaluation tools. Based on this collective body of scholarship, at least a part of the examination should involve systematic data collection and analysis across all placements to determine how current program features and program changes impact the characteristics and qualities of every candidate's clinical experience. In fact, this is required if the program is accredited by a professional governing body (e.g., CAEP or State Evaluations). Admittedly, implementing this kind of systematic approach can be time-consuming and costly with the need to train university supervisors and mentor teachers. Also, it would be more successful if there was buy-in from all stakeholders, which can be another barrier. Yet, we believe such barriers can be mitigated.

One idea we put forth is to create an easy-to-use graphic organizer for university supervisors to document key elements of the residency experience that align with CHAT. For example, they could document curricular objectives (*objects*), the types of *tools* used in the classroom (e.g., physical materials and teaching philosophies of the mentor teacher), ways *community* is built, explicit/implicit *rules and norms* of the experience, and the ways *labor is divided* between the mentor teacher and candidate along with division of labor between candidate and students. This documentation would need to be easy to use and could be implemented using a random sampling approach (e.g., 10% of the candidates each semester), so university faculty could review the residency experiences over time and identify patterns that are supporting the experiences and those that can be improved. This is just one idea for systematic program-wide data collection that is attainable. Yet one of the most important barriers to mitigate is getting stakeholder buy-in. As such, we encourage Educator Preparation Programs to work collaboratively to generate a solution that works for their particular set of stakeholders and contexts.

In conclusion, we also have recommendations for future research. There's no dearth of research about student teaching, and much of it has been qualitative in nature, that engaging in deep inquiry that can illuminate the field in new and important ways. As such, it follows that

there are a variety of findings that both align with and contradict one another. For example, Eck and Ramsey (2019) found that the cooperating teachers in their study provided feedback that aligned with the pedagogical training within the teacher preparation program. In our study, only one of the cooperating teachers provided such feedback; the other did not. Such variability demonstrates the limitations of our work and other descriptive qualitative studies with regard to generalizability. However, multi-site studies in which the same questions are addressed, and same qualitative data collection/analysis are used can be useful in generalizing insights across multiple educational settings (Herriott & Firestone, 1983).

In addition, engagement in multi-site mixed methods studies can also be fruitful. We are excited by one such approach in particular, community-based participatory research (CBPR). As described by Lucero et al. (2019), “at the nucleus of CBPR is the belief that etiologic and intervention research that incorporates community cultural values and ways of knowing is critical for improving quality of life” (p. 56). Educational institutions do not exist in isolation separate from the communities in which they reside. Yet so much of the research conducted is situated only in the educational setting. We see great affordances to reaching outside the parameters of institutional boundaries. After all, student teachers, teacher educators, cooperating teachers, and university supervisors are also all community members who live and work in their communities. Imagine the possibilities if multiple stakeholders involved in supporting teachers and teacher candidates came together to work toward the common goal of educating our children and teens to be healthy and active community members. Quantitative methods, such as surveys, combined with qualitative methods, such as interviews, observations, and focus groups (including parents and possible community partners for place-based learning) could yield rich insights into the most effective methods toward achieving this goal in socially and culturally responsive ways.

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