Introducing Co-Teaching and Co-Generative Dialogues in a Pre-Service Teaching Practicum: Stepping in and Remaining Contradictions

Ekaterina Arshavskaya^{1,*}

Received: August 13, 2014 Accepted: August 28, 2014 Online Published: September 8, 2014

Abstract

This article reports on collaborative teaching practices and co-generative dialogues incorporated into a Master of Arts (MA) in Teaching English as a Second Language (TESL) practicum at a large northeastern U.S. university with a focus on uncovering the processes associated with learning-to-teach. The paper describes the contents of the existing pre-service teaching practicum as well as the supplementary activities that were introduced. The article presents two main findings: (1) Co-teaching opportunities provided critical support to the pre-service teachers as they began teaching, and (2) Although the co-generative dialogues were set up to mediate a reflexive dialogue around the nature of teaching, we found that the pre-service teachers retained some teaching beliefs that were in conflict with those of the mentors even at the end of the practicum. Despite the extended opportunities to discuss their respective teaching beliefs, the mentors were not prepared to deal with the pre-service teachers' unresolved concerns, which bears important implications for how to prepare mentors to work with novices in the context of an MA TESL practicum.

Keywords: pre-service teacher education; teaching practicum; co-teaching; co-generative dialogues; contradictions

1. Introduction

1.1 Teacher Mentoring

Teacher mentoring is an important issue in much recent research in the context of general teacher education (Bradbury, 2010; Orland-Barak, 2010; Siry, 2011; Wang & Odell, 2007). A number of early research studies on teacher mentoring clearly show that a mentor can play an important role in the development of a pre-service teacher's teaching expertise during a field-based practicum experience (Guyton & McIntyre, 1990). However, more recently, researchers have focused on how collaboration with a peer or a group of co-teachers affects pre-service teachers' experiences during the practicum (Bullough et al., 2003; Roth & Tobin, 2004; Tobin & Roth, 2005). Whereas a traditional model of mentoring requires a single mentor to work with a single pre-service teacher, a partner (or peer) teaching model places two pre-service teachers with one mentor. It has been found that this alternative mentoring arrangement has a positive impact on learners (school children) because compared to established approaches it offers increased support for participating pre-service teachers and provides more opportunities for teaching-related discussions (Bullough et al., 2003).

Similarly, proponents of the co-teaching model of teacher mentoring emphasize the collaborative nature of the re-structured mentoring experience (Roth & Tobin, 2004; Tobin & Roth, 2005; Tobin, 2006). This model engages a teacher in her induction period with a number of more experienced co-teachers in the collaborative activities of co-planning and co-teaching. During these activities, all co-teachers share responsibility for the students' learning (Roth & Tobin, 2004; Tobin, 2006). In addition, this model engages co-teachers and a small number of students from the class in co-generative after-class dialogues, during which all the participants refer to direct evidence from a recent class in the form of videos and student work and on this basis collaborate on generating possible solutions to instructional problems that anyone of the participants experienced during the class (Tobin, 2006).

Several studies have reported on implementing Roth and Tobin's (2002) model of co-teaching (Salles El Kadri & Roth, 2013; Siry & Lang, 2010; Siry, 2011). For example, Siry (2011) explains that while collaborative teaching practices allow novices to engage in the actual activities of teaching at the elbow of more expert educators,

¹Department of Languages, Philosophy and Communication Studies, Utah State University, Logan, USA

^{*}Correspondence: Department of Languages, Philosophy and Communication Studies, Utah State University, Logan, USA. E-mail: ekaterina.a@usu.edu

co-generative dialogues facilitate the co-teachers' reflections on their shared experiences in the classroom and their deconstruction and planning of alternative instructional activities designed to maximize student learning in the future. Siry (2011) also found that by the end of the teaching practicum the novices were particularly appreciative of the support received from more than one teacher as they co-taught their lessons. Furthermore, Salles El Kadri and Roth (2013) demonstrate how engagement in the collaborative activities of teaching and co-generative dialoguing promote an EFL in-service teacher's development of a more caring relationship with her students and opening herself to the contributions made by her more experienced colleagues in relation to her teaching of English.

Following this line of research, the present study reports on a set of co-teaching activities and co-generative dialogues incorporated into an existing Master of Arts (MA) in Teaching English as a Second Language (TESL) pre-service teaching practicum at a large northeastern U.S. university. This article describes the contents of the re-structured practicum experience and shows how the collaborative teaching experiences served as a basis for reflective discussions and learning during the co-generative dialogues, while uncovering some of the beliefs held by the pre-service teachers that conflicted with those of their mentors even as the practicum came to an end. In so doing, the article draws implications for implementing collaborative approaches in a pre-service teaching practicum showing the complex character of this experience and the potential contradictions inherent in the social tasks related to teaching and mentoring. A unique contribution of this research to the field is that it depicts the practices of stepping in and reveals the contradictions associated with the processes of learning-to-teach in the context of the MA TESL teaching practicum, as these unfold in the participating mentors' classrooms and after-class discussions, discussing their implications for pre-service teachers' development of professional expertise and student learning.

1.2 A Collaborative Approach to the Pre-Service Teaching Practicum

Among the persistent concerns that pre-service teachers report with regard to their experience during the pre-service teaching practicum is the perceived disconnect between their practicum experiences and their university coursework (Kagan, 1992). In fact, this disparity between theory and practice and the importance of bridging this gap have been widely discussed in the context of general teacher education (Korthagen, 2001). As for the mentors, it was found that they generally provide emotional support and attend to the technical needs of novice teachers rather than focus on issues related to teaching (Wang & Odell, 2002). It appears that this has to do with the mentors' inadequate preparation for mentoring and the limited time they generally have available to devote to this responsibility.

In order to improve both the mentors' and the pre-service teachers' experiences during the practicum, different approaches to teacher mentoring have been proposed. Among these, recently the co-teaching model proposed by Roth and Tobin (2002) has become increasingly popular. According to this approach, not only do teachers share lived experiences in the same classroom, but they are also able to co-reflect on their teaching practices during after-class co-generative dialogues (Roth & Tobin, 2002). The co-generative dialogues allow all the co-teachers to ground their discussions about teaching in concrete evidence from classroom teaching, and the more experienced teachers are able to help the novices broaden their understanding of teaching.

The present study takes a sociocultural perspective (Vygotsky, 1978) on teacher learning, arguing that teachers learn to teach by engaging in the concrete activities and contexts of teaching. Vygotsky (1978) insisted that humans learn through engaging in learning tasks, and he was especially aware of the role of symbolic mediation such as language as a mediating tool facilitating learners' appropriation of existing cultural knowledge. In all the principal teacher mentoring activities such as, for example, learning conversations with a mentor, symbolic mediational means such as language play a major role. Yet, the process of learning is not a straightforward process of appropriation of knowledge and skills from outside in. Vygotsky (1978) characterized the process of human development as uneven, complex, and dynamic. In other words, it is through the process of articulating and attempting to resolve perceived contradictions between our everyday and scientific conceptions of the world and between our beliefs and practices that development occurs (Roth & Tobin, 2002).

Overall, in the present study, we examine the ways in which both the co-teaching activities and the co-generative dialogues supported the pre-service teachers' efforts to develop a greater understanding of second language (L2) teaching during the re-structured version of the pre-service teacher practicum. Through the co-generative dialogues, which afforded all the participants opportunities to discuss their lived experiences in the shared classrooms, it was found that the pre-service teachers could not resolve some of their contradictory beliefs about teaching that were in conflict with those of their mentors even at the end of the practicum. The article examines the kinds of contradictions that emerged as a result of the collaborative activities of co-teaching and co-reflecting with the purpose of raising the mentors' awareness of both the difficulties that arise from such disagreements and the basis they offer for the development of novice teachers and more expert teachers alike. Based on the examination of the collaborative

teaching activities and dialogues, the paper considers the implications of involving both the mentors and the pre-service teachers in the activities of co-teaching and co-reflecting in the context of the MA TESL practicum.

1.3 Context of the Research

It was decided to integrate collaborative strategies into the teaching practicum in order to attend to both the pre-service teachers' persistent concerns—i.e., the perceived disconnect between university coursework and the practicum experience—and to provide additional support to the mentors. The co-generative dialogues served as a space wherein the novices could connect their reflections on their teaching practices in the classroom with higher-order thinking about it. In addition, through this approach the pre-service teachers were able to participate in the shared activities of teaching at the elbow of more expert educators and to co-reflect on these experiences during the co-generative dialogues about teaching, whereas the mentors were provided with a set of ideas and resources designed to facilitate their own efforts to make the mentoring sessions more productive. The guidelines for the mentoring sessions were based on the recommendations outlined in recent studies on teacher mentoring (Easton, 2008; Jonson, 2008; Malderez & Bodóczky, 1999). A sample of the guidelines for one of the mentoring sessions is provided in Appendix 1.

The data for this study were drawn from a larger doctoral project, which took place within an existing MA TESL practicum at a large northeastern U.S. university (Author, 2013). There were eight participants: four pre-service teachers and four mentors. This article focuses on two of the four pairs and highlights the experiences of the two pre-service teachers, Amber and Sergey, and of their mentors, Samantha and Konstantin. One of the pre-service teachers (Sergey) had more than nineteen years of experience as an educator, whereas the other (Amber) was new to teaching. Similarly, one of the mentors (Samantha) had mentored more than twenty novice teachers before participating in the present study, whereas the other mentor (Konstantin) was fairly new to mentoring, i.e., he had previously served as a mentor to one mentee in the same MA TESL program. Additionally, the participants varied with regard to their respective language backgrounds: Samantha and Sergey were native-speaking ESL instructors, and Amber and Konstantin had learned English as their L2 in South Korea, their country of origin. The differences in the participants' educational and cultural backgrounds made it possible to capture the diverse character of learning-to-teach experiences during the teaching practicum.

Amber's teaching practicum took place in an intensive English program offering ESL classes to international students many of whom intend to attend a university in the U.S. The ESL courses are designed for students with various levels of English proficiency (from beginner to advanced) and aim to develop students' skills in speaking and listening, reading, writing, and grammar. As her teaching practicum placement, Amber was assigned to Samantha's ESL reading level-2 (intermediate) course. The goals of this course are to help students improve their abilities in academic reading comprehension and enrich their vocabulary. As for Sergey, he was assigned to observe and co-teach in Konstantin's ESL academic writing course at the same university. The ESL academic writing course is designed to teach international first-year undergraduate students common practices associated with academic writing, such as how to summarize an academic text, how to paraphrase and quote from sources, how to organize textual and other kinds of evidence, and others.

The pre-service teachers and their mentors co-planned and co-taught one ESL lesson, and the pre-service teachers each taught two more solo classes by themselves. Each of these lessons was followed by the mentors' and pre-service teachers' discussions during co-generative after-class dialogues. The key component of the practicum was that the participants had shared experiences in the same classrooms. This common experience allowed the participants to engage in a collaborative analysis of their experiences in the classroom during the co-generative dialogues. Their reflections focused not only on what had gone well in their classes, but also on how they could improve their performance in future classes. The reflections and dialogues also served another useful purpose: they revealed some differences with regard to how the mentors and pre-service teachers viewed some of the components of L2 teaching (i.e., new vocabulary instruction and grading of written student work)—differences that have important implications for how to structure practicum experiences for both mentors and pre-service teachers in the future and student learning.

2. Method

Using grounded theory (Bogdan & Biklin, 1992; Glaser & Strauss, 1967), all the co-taught and individual teachers' lessons as well as their collaborative after-class dialogues were video recorded, digitized, and analyzed to identify the key phrases and sentences that represented the participants' emergent understandings of their experiences during the

practicum. The transcripts were coded based on recurring concepts, patterns, and categories. To confirm these categories, the researcher (also, the author) conducted face-to-face, semi-structured interviews with all the participants throughout the duration of the study. In particular, the researcher interviewed the participating mentors and pre-service teachers individually at the beginning and end of the teaching practicum experience and after each of the mentoring activities as a basis for accurately refining interpretations of the data. These interviews were audio-recorded and transcribed. The interviews thus served as a member check (Lincoln & Guba, 1985; Maxwell, 2004) and were integrated into the data analysis below. In addition, the researcher clarified her interpretation of the data in a series of email exchanges with the participants upon the completion of the research. Therefore, the data analysis reflects the collaborative, co-constructed interpretation of the collaborative activities of teaching and discussing teaching, which enhances the validity of the final analysis. Consequently, it was possible to identify the key segments representing the moments of co-teaching and the key excerpts that showed the contradictions inherent in the co-teaching activities as experienced by the participants making sense of their experiences in the classroom during the after-class dialogues.

In accordance with the premises of the grounded theory method (e.g., Charmaz, 1990), the analysis was also informed by previous research on pre-service teacher learning (Siry, 2011; Tobin, 2006). The researcher was particularly interested in the kinds of assistance that the mentors afforded to the mentees, the potential contradictions that either of the participating teachers experienced and the ways in which either of the participants attempted to attend to the conflictual beliefs. Yet, as in most investigations, the method chosen bears its limitations (Bryant & Charmaz, 2006). For example, with regard to both the researcher's own social and physical role in the study, she was a colleague of Konstantin's. During her doctoral studies, she had taught classes in the same ESL writing program as Konstantin was working in, although she did not share either the classes nor taught the students in the classes observed. Thus, she had a deeper understanding of Konstantin's and partly Sergey's situation than she did of either Amber's or Samantha's. It can be argued that it must have been impossible for her to remain non-judgmental and avoid imposing personal and societal expectations as she analyzed the participants' words and behaviors during the practicum. However, at the same time, the similarity between the researcher's and Konstantin's backgrounds only meant that she had a greater understanding of his experience and could, therefore, offer a more elaborate account of his and Sergey's experiences as compared to the respective experiences of the other mentor–pre-service teacher pair.

Through the process of coding the transcripts and conducting interviews, the following central research question emerged:

How do the collaborative teaching activities and the co-generative after-class dialogues mediate pre-service teacher learning?

3. Results

As mentioned above, this study aims to trace the ways in which collaborative teaching activities and co-generative after-class dialogues mediated the process of the pre-service teachers' learning-to-teach. The main findings demonstrate the importance of providing shared experiences in the same classroom to the pre-service teachers and mentors during the practicum and the necessity of paying attention to the contradictions that the pre-service teachers may experience during the practicum due to differences between their views and those of their mentors in relation to teaching. The findings thus show: (1) the ways in which the mentors provided the pre-service teachers with critical emotional and professional support and (2) the ways in which the analysis of the participants' co-generative dialogues revealed the differences between the mentors' and pre-service teachers' views on some aspects of teaching, particularly with regard to vocabulary instruction and grading of written student work. The sub-sections below discuss the two main findings with reference to examples from the data.

3.1 Co-Teaching with Mentors Provided Support to the Pre-Service Teachers

While previous research established the utility of the activities of co-teaching and co-reflecting in particular with regard to providing spaces to step in, affording both emotional and professional support to the novices, and promoting the opportunities to talk through the diverse perspectives on teaching (Roth & Tobin, 2002; Siry, 2011), the present study shows how in addition to stepping in, the mentors can go even further by making their mediation more explicit during, for example, a subsequent co-planning session. In addition, discussing the second mentor–mentee pair, the article demonstrates how the mentor (Konstantin) not only provided necessary professional support (modeled teacher talk for a certain instructional activity) to his mentee, but also prompted the teacher to show more empathy for the ESL students.

In the context of the present study, the pre-service teachers and mentors collaboratively planned an ESL lesson, co-taught it, and then engaged in a collaborative discussion about it. Whereas the collaborative teaching allowed the mentors to step in and help the pre-service teachers on the spot (as they taught), the collaborative after-class dialogues allowed the mentors to predict the challenges that the pre-service teachers were likely to face in subsequent classes and provide necessary support. The following vignette features Amber, who led the vocabulary section of the co-taught ESL lesson and Samantha, her mentor, who was able to step in and help Amber proceed with her explanation as she experienced certain difficulties during the co-taught lesson.

As Amber taught her part of the co-taught lesson, she struggled to provide the students with an adequate explanation of a new word ("to yield"). Amber's difficulty with explaining the meaning of the word "to yield" can be particularly seen in turns 5 and 7, during which while speaking she glances at Samantha with the purpose of prompting the latter to contribute to her explanation of the word. Amber managed the difficulties by relying on the textbook examples together with Samantha's contribution to meet the goal of this section of the lesson.

- 1. Amber: "Yield"? Ah, let's see examples here [glances through the textbook]. Ah, okay. When I think of "yield," the first thing that comes to my mind is the traffic sign. Have you guys ever seen like a triangle-shaped, it says "yield"? ...
- 2. Student 1: Yield on green?
- 3. Amber: Huh?
- 4. Student 1: Yield on green.
- 5. Amber: Yeah, kinda like "slow down." And then another word is [looks through the textbook], like as the example it provides ah- is something that you can, you know, get in return by producing, like, especially on the farm. ... Or, ah- another example would be like- not example, but another definition would be like "give up something," if I am correct [looks at Samantha].
- 6. Student 2: Give up?
- 7. Amber: Give up or like give over something. That's what I can think of, ah-[looks at Samantha].
- 8. Samantha: And that's the traffic sign symbol.
- 9. Amber: Yeah.
- 10. Samantha: Because basically when you are yielding, you kinda are giving the right to somebody else to go.
- 11. Student 2: So, you first.
- 12. Samantha: Yeah. Right.
- 13. Amber: Yeah. Was it clear? [smiles] (Amber's 1st lesson, 3.47–5.01, February 20th 2012)

In the classroom transcript, we see that even though Amber explained both senses of the verb "to yield," her first explanation (turn 1), though correct, was completely unrelated to the definition given in the textbook, and it appears that this caused confusion on the part of the students.

One of the key elements of co-teaching is stepping in, i.e., this happens when a more experienced educator provides on-the-spot support to a novice teacher during a co-taught lesson (Roth & Tobin, 2002). Stepping in not only provides support to the pre-service teachers, but also maximizes the students' learning opportunities (Siry, 2011). In the episode above, as Amber struggled to explain the meaning of the verb "to yield" to the students, Samantha stepped in (turns 8 and 10) and clarified Amber's explanation, which contributed to the students' grasp of the word's meaning and provided Amber with a sense of security with regard to this part of the lesson. In addition, Samantha's contribution to Amber's explanation is noteworthy since Amber received this assistance as she taught the class. Novice teachers often rely on a limited repertoire of teaching strategies (Roth, 2002) and, therefore, Amber's experience of the way in which Samantha handled student confusion can potentially be helpful in her attending to similar classroom situations in the future. According to Roth and Tobin (2004), the 'value that comes from learning by doing, especially if others are able to co-teach and participate collaboratively' is of the utmost significance for the development of teaching expertise (p. 44).

As a mentor, Samantha also did show her responsiveness to Amber's emergent concerns as a novice non-native ESL teacher by shifting the nature of her mediation from an implicit to a more explicit level. For example, during their second co-planning session Samantha went through the new vocabulary items with Amber in preparation for the latter's second lesson. In addition, she explicitly pointed out a particular new vocabulary item (the word "liberty")

that she thought might prove to be a source of difficulty for the students (turn 5) and modeled her own instructional talk to explain the meaning of this word to the students (turn 7).

- 1. Samantha: Any words that you think may be the ones that will come out?
- 2. Amber: Ah, "weave."
- 3. Samantha: Uh-hm. Yeah.
- 4. Amber: Maybe "boundary"?
- 5. Samantha: Uh-hm. Definitely [points to the word "liberty" in the textbook].
- 6. Amber: Yeah, "liberty."
- 7. Samantha: Yeah, "liberty" is gonna be like- that's a confusing one. I always bring up, for example, like the Statue of Liberty. What does it stand for? ... Because that's just a really weird word [laughs]. It is not the one that is that commonly used. (2nd co-planning session, 24.29–25.13, February 21st 2012)

Samantha started the teaching practicum experience by giving Amber implicit directions regarding carrying out new vocabulary instruction. However, as the practicum unfolded, she re-calibrated (Lantolf & Thorne, 2006) her mediation in order to make it more explicit. Similarly, in Clarke's (2006) study of mentors' developing understandings of their work with pre-service teachers, over time the mentors developed a greater sense of responsibility for the pre-service teachers' learning. That is, the mentors realized that their feedback was not always explicit enough for the pre-service teachers to succeed in the classroom and made it more explicit for exactly this purpose. Furthermore, Nolan and Hoover (2007) point out that pre-service teachers represent a special case in teacher education because they typically require more feedback from their mentors than either teachers during their induction periods or in-service teachers do. Therefore, Samantha's realization that Amber required more explicit mediation is not surprising; however, Samantha's ability to re-calibrate (Lantolf & Thorne, 2006) her mediation in response to Amber's needs is noteworthy.

Apart from providing Amber with the necessary professional support, Samantha offered her emotional support, insisting that Amber had something unique to offer to these students. During the same co-planning session, Samantha shared the following: 'Because I don't think they even notice that [Amber's status as a non-native ESL instructor], because they always see you in the class as something positive to them because you can sympathize with them.' (2nd co-planning session, 23.15–30.15, February 21st 2012)

As the classroom transcript shows, during her second lesson, Amber was indeed able to imitate some of Samantha's instructional practices (in particular, with regard to the word "liberty"), which indicates that Samantha's more explicit mediation facilitated Amber's development of teaching expertise (turn 5).

- 1. Amber: What about "liberty"? [looks around the classroom]
- 2. Student 1: Freedom.
- 3. Amber: Freedom. Ah. But did you guys have trouble understanding the examples? ... So, freedom from ahfreedom from what? So, the first example. It's talking about how Brazil became free from Portugal in the 19th century. ... ah- the Statue of Liberty in New York. Have you guys all seen the statue?
- 4. Student 2: Have we seen the statue?
- 5. Amber: Yeah, a large copper statue of a woman holding a torch in New York harbor, I think. So, I think, it's freedom from any kind of obligation. (Amber's 2nd lesson, 10.32–12.20, February 22nd 2012)

Overall, through the co-teaching experience Amber was able to learn at the elbow of a more expert educator, as Samantha stepped in during the new vocabulary instruction. And, during a subsequent co-planning session, Samantha was also able to more explicitly prepare Amber for the new vocabulary instruction by going over the new vocabulary examples in the textbook with her.

As for the second mentor-pre-service teacher pair, we can also witness the mentor (Konstantin) providing crucial support to the pre-service teacher (Sergey) by, for example, predicting that the students will have difficulty apprehending a video related in British English. In order to help the pre-service teacher cope with this potential difficulty, he modeled his own instructional talk for teaching this part of the lesson.

Konstantin: I mean the British video may be difficult for them ... because of the accent.... Well, I personally found it difficult to understand the previous one [the British video] but ... at first the students may not understand what, you know, what they are talking about... Maybe just briefly explain the situation.... So, this is a kind of comedy... and

the context is an argument clinic... you just briefly give them the content. 'So, there is gonna be this man, he is going somewhere to do something and then he will go into the room to buy an argument.' (3rd co-planning session, 14.50–18.00, March 14th 2012)

Importantly, Konstantin not only modeled his own instructional talk for this part of the lesson, but he also explained his rationale for introducing this kind of talk, i.e., the ESL students' proficiency level. Furthermore, given Konstantin's status as a non-native speaking ESL teacher, he prompted Sergey, a native ESL instructor, to show more empathy towards the students by drawing Sergey's attention to the potential student difficulties associated with comprehending a video related in British rather than American English. The classroom transcript shows that Sergey indeed incorporated Konstantin's suggestion by showing his empathy towards the students ('So it may be more difficult to understand...') and re-voicing his instructional talk.

Sergey: Okay, so let me tell you a little bit about that video. It is in British English. So, it may be more difficult to understand than American English. What it is ah- it is about a man going into an office, he wants to buy an argument. So, he goes to the receptionist. He is gonna go (to the wrong door) and then he will find the right one. And there are four parts, and what I want you to do is... (Sergey's Solo Lesson 2, 11.00–12.20, April 5th 2012)

To conclude, the vignettes above show how the opportunity to co-teach allowed the mentor (Samantha) to step in, whereas the co-generative dialogues allowed the same mentor to make her mediation more explicit. In the second pair, the mentor (Konstantin) predicted the difficulties that the students would experience with the British accent, prompted his mentee to show more empathy towards the students, and modeled the necessary instructional talk, which the mentee was able to subsequently imitate.

3.2 Uncovering the Contradictions

Previous research suggests that co-teachers and their students can successfully negotiate their various approaches to teaching and learning (Roth & Tobin, 2002). And even though the researcher concedes with Siry (2011) who counters the conception that there exists one right way of teaching, the article argues that both mentors and pre-service teachers should be provided with opportunities to articulate and discuss their various perspectives on teaching. Yet, despite being provided with spaces to discuss teaching in both pairs the mentors could not always successfully handle the concerns raised by the pre-service teachers.

The transcript below demonstrates Amber's articulating her disagreement with the idea of teaching vocabulary from a required textbook containing a list of unrelated sentences with the new vocabulary items (turn 1), while Samantha seems to disregard Amber's remark (turns 2 and 4).

- 1. Amber: ... I don't know. Vocabulary? I guess ... it was sort of new to me ... because I never learned vocabulary explicitly, that way.
- 2. Samantha: Uh-hm.
- 3. Amber: I was just- keep trying to think of other ways you can teach vocabulary.... ah, the fact that the students, they are actually finding the evidence and they are actually doing- working on the transparencies, they are actually sharing them with the classmates-. I think that really prepares them. ... I think that's a good practice-
- 4. Samantha: Yeah, they seem to do a good job with that-. (1st co-reflection session, 58.51-59.41, February 21st 2012)

In a subsequent post-session interview, Amber explained that teaching new vocabulary from a required textbook stood in opposition to her teaching beliefs.

Amber: I mean knowing that I have a textbook and then if I wanna show them a text, then I have to literally create ... because it's the opposite way, you start with these lexical items and you try to expand from them, which is very difficult. (Amber's clarification interview, April 20th 2012)

Furthermore, in a post-session interview (which followed their co-planning session for the first co-taught lesson), Amber admitted that she still did not feel confident with regard to her ability to carry out vocabulary instruction during the co-taught lesson. And, similarly to many other novice teachers, Amber doubted her ability to give a successful lesson (Ritchie et al., 2013).

Amber: ... the only thing is that just students ask a lot of questions and I have to come up with like examples and very quickly and Samantha, of course, she gives a lot of good examples and that would be the only thing that I would be worried about, but I think I will be okay- . (Post-session interview, February 17th 2012)

Overall, even though the co-generative dialogues afforded opportunities for the participating teachers and mentors to

discuss teaching to a certain extent, they allowed us to identify some of the pre-service teachers' beliefs that remained in conflict with those of their mentors even at the end of the teaching practicum. The excerpts from the co-generative dialogues of the second pair continue to illustrate exactly that.

In the excerpt below, we see how Konstantin by sharing his own experience on grading attempted to address Sergey's recurrent concern about grading ESL students' written work (turn 2).

- 1. Sergey [reads from the protocol]: How do you assess what the students have learned? Now, this is something that I've wondered about. And, I also wondered about grading. How do you grade them? Do you grade them based on what a native American speaker does or ah-?
- 2. Konstantin: ... I basically follow the rubric I have in the syllabus. So, there are four or five main categories, so content, the ideas ah- content, organization ... and so coherence and cohesion, that's another- and the last thing is form. So, grammar, punctuation, vocabulary, the formal aspect. So, I try to look at all of them.... (Orientation to the course session, 07.46–10.37, January 17th 2012)

In the transcript above, Sergey frames his question about grading in terms of how non-native students' written work compares to native English students' writing. However, Konstantin responds by saying that he 'basically follows the rubric.' Thus, Konstantin makes no attempt to directly address Sergey's question as to whether non-native students' writing should be evaluated based on native-speaker norms. This concern remained with Sergey throughout the practicum and seems to have been at the root of his inability to develop a clear sense of how to grade ESL students' essays fairly. In fact, Sergey had articulated this concern even during his pre-semester interview.

Sergey [repeats the researcher's question]: What should or do I consider when assessing L2 student work? ... I'm not sure about that. I wondered about that. If I'm teaching them an L2 writing class, do I hold them to native-speaker standards? Because I want them to learn ah- how to write as a native speaker would write. Or, do I base my grades on ah- the fact that they are in an L2 language? And so, do I give a higher grade to someone who ah- than I would give to a native speaker that presents the same quality of work? I don't quite know how to do the grading. (Sergey's pre-semester interview, January 12th 2012)

As the researcher asked Sergey to explain his position on grading the work of ESL students, Sergey explained that as the students would be evaluated by native-speaking English professors in their other courses he considered using the same criteria for grading the work of the students without reference to the ESL status as fair (turns 1 and 3).

- 1. Sergey: ... Do I hand a paper back (to) who is best in the class? And if you go by 'best in the class' being an A, do I give that person an A or do I look at it from the standpoint of a native speaker and (I say that) 'this is really a C paper' and I give that grade? I don't- I don't understand that idea.
- 2. Researcher: I think this is a dilemma.... So, they [L2 students] are creating a hybrid, not really English, so it's a mix-...
- 3. Sergey: ... but still I have a hard time there. ... And, I think in order to succeed in an American university, or an American job, or ah- as an American professor, you do need to have a certain level of proficiency. (Sergey's pre-semester interview, January 12th 2012)

Overall, the data suggest that in part Sergey's lack of comfort with grading is related to his lack of understanding of how harshly he should evaluate ESL students' written work and how closely ESL students' writing should resemble native-speaker norms. Unfortunately, his mentor did not directly address these issues; it fell to the researchers to ask Sergey to consider the issues further. From a sociocultural theory perspective, internal contradictions represent a locus for development (Lantolf & Thorne, 2006; Roth & Tobin, 2002); however, Sergey did not receive sufficient support on this point.

As the practicum experience unfolded, Sergey again returned to his persistent concern over grading; however, his concern evolved such that he raised the issue of evaluating students' improvement as writers. In his reply, Konstantin shared his own previous professional experience related to grading (turn 2).

- 1. Sergey: Okay, I have another question. In your grading, do you look at the improvement they make during the course of the semester? ...
- 2. Konstantin: No. I am just adding up all the grades for all the assignments. That's what I do. It's hard to do because we have various assignments which are not necessarily connected.... Well, on that note, at the last instructors' meeting ... so, one of the suggestions was ah-, 'Why don't we do it as a course project?' So, at the end of the semester, the students can produce a lengthy essay... So, if the syllabus is like this, then it would be easier for the teacher to see the improvement- . (Looking together at student work, 2.33–4.36, April 27th 2012)

The excerpt above clearly shows that Konstantin, too, feels that there are pedagogical problems associated with not reflecting improvements in writing in the grades the students receive. In fact, he mentions that this is also an issue for his fellow instructors. Thus, despite being provided with an additional mediational space (a separate session devoted to assessment), Konstantin was unable to fully address Sergey's pre-occupation due to his own inability to evaluate the extent of student improvement in the writing course they co-taught. However, as the session unfolded, Konstantin shared other similar experiences on this point (from his home country). Thus, even though Konstantin felt dissatisfied with not being able to evaluate the extent of student improvement in the ESL writing course, he still ventured to share a relevant experience he had previously, apparently pursuing the goal of helping Sergey resolve his concern (turn 2).

- 1. Sergey: ... I am still confused.... I still don't know what exactly I would do.
- 2. Konstantin: ... So, let me just tell you. This is one of the examples that I had when I was working at a teacher education center in South Korea, just before I got here ... so, the students are basically the English teachers ... and the assessment we used was an English test.... It was like pre-test and post-test.... So, the issue [the extent to which each had shown improvement] was brought up. But we cannot just look at the improvement only.... So, we kinda made a compromise. We averaged the two scores ... and then we also calculated the improvement.... We kinda mixed them and produced the new score. (Looking together at student work, 12.33–21.20, April 27th 2012)

Yet, even by the end of the teaching practicum, Sergey stated that he was still 'up in the air' (in his own words) with regard to how to grade ESL students' essays. In addition, this dilemma was compounded because of Sergey's concern regarding how to evaluate student improvement.

Likewise, in the other pair (Samantha and Amber), even at the end of her practicum experience, Amber was not sure if Samantha's or her own way of teaching vocabulary was more beneficial for the students. Interestingly, Amber shifts her attention to wanting to know the students' rather than her mentor's view on which approach to vocabulary instruction was experienced as more beneficial.

Amber: So, I kinda wanted something that can be different, but effective at the same time.... Throughout the semester, well, I tried two different ways of teaching, one was going over the questions [Samantha's approach to vocabulary instruction] and the other one was like PowerPoint [Amber's approach to teaching vocabulary]. But I wish that I knew what they [the students] thought about- ... I wish I heard more from the students. (Amber's post-semester interview, April 27th 2012)

According to a sociocultural perspective, contradictions constitute an integral part of a developmental process, and it is through attempts to attend to and resolve these contradictions that development occurs (Lantolf & Thorne, 2006). At the same time, however, certain contradictions are inherent to the overall educational system and, therefore, may not always be easily resolved. For example, Roth and Tobin (2002) showed how the limited educational resources both in the homes and school context of an African-American urban community constrained opportunities for educational success, and an individual teacher's efforts (e.g., buying the necessary textbooks for one class) made very little difference for this group of students. Yet, it is important to uncover the potential contradictions and consider ways to address them.

Overall, the co-generative dialogues allowed both the mentors and the pre-service teachers to co-reflect on their shared experiences in the classroom. However, in both pairs, while the pre-service teachers externalized certain contradictory beliefs, i.e., some of their views on teaching differed from the respective views held by their mentors, these contradictory beliefs were not fully addressed by their mentors—at least not during the practicum experience, bearing important implications for pre-service teacher professional development during the practicum, mentor preparation, and student learning.

4. Discussion

Teacher educators have long argued for the mentoring experience as a legitimate site for pre-service teachers' professional development and have argued that mentors should intervene in pre-service teachers' thinking about teaching (Feiman-Nemser, 1998; Freeman, 1990). Yet, a recent critical review of studies on teacher mentoring reveals that mentors tend not to regard mentoring as a professional development activity and mainly provide emotional and technical support related to teaching (Wang & Odell, 2002). In addition, due to the isolated nature of teaching, mentors often lack the skills necessary to observe and discuss teaching with others (Feiman-Nemser, 1996; Little, 1990). As for the pre-service teachers' learning, even though this has been the subject of considerable research, especially in the context of L2 teacher education (Golombek & Johnson, 2004; Johnson, 2009), issues relating to the

impact of teacher mentoring on pre-service teachers' learning-to-teach, particularly with regard to pre-service teachers' engagement in mentoring sessions, have received little attention (Harvey, 2011).

In this context, it is necessary to understand how teacher mentoring is actually carried out and whether and to what extent the additional mediational tools (mentoring protocols) and spaces (mentoring sessions) can support pre-service teachers' development of professional expertise in L2 teaching and mentors' development of mentoring skills. Due to the mentoring sessions that were set up for the present study, it was possible to gain information about the processes through which pre-service teachers' learning actually unfolded. Thus, the present study provides a foundation based on which teacher educators can design better learning-to-teach experiences for L2 pre-service teachers.

The analysis of the co-teaching and co-reflecting experiences showed that while the co-teaching activities allowed the participating teachers to have shared experiences in the same classrooms and provided the novices with on-the-spot critical support, the co-generative dialogues further facilitated the mentors' efforts to provide the mentees with both critical emotional and professional support. Yet, the dialogues also revealed certain contradictory beliefs, which the pre-service teachers continued to hold even at the end of the teaching practicum.

Although each mentor-pre-service teacher pair followed its own unique professional development path, the following themes were present in the experiences of both the pairs during the practicum: the mentors' modeling of expert teacher thinking and the pre-service teachers' internal conflicts as areas for growth. Individually and collectively, these themes suggest ways to think about and conduct both meaningful professional development for language teachers and research related to L2 teacher learning.

4.1 Mentors' Modeling of Expert Teacher Thinking

Learning to teach is a highly complex, non-linear, and individualized process (Johnson, 2009). Therefore, it is essential to tailor mentoring in order to take into account what a novice teacher already knows, any key information and skills she lacks, and her strengths and weaknesses. Likewise, in the present study the mentors were found to re-calibrate the extent and timing of their modeling of expert teacher thinking and their interventions. During the mentoring sessions, the mentors in both pairs modeled expert teacher thinking, and the mentoring protocols created spaces that facilitated this modeling. For example, Samantha adjusted her mediation over time from a more implicit to a more explicit level. In addition, Samantha modeled her own instructional talk, which Amber subsequently re-voiced as she taught on her own. Similarly, Sergey re-voiced Konstantin's instructional talk as he taught on his own.

Overall, from a sociocultural perspective, this re-voicing and imitation can be considered as constituting the first steps in the novices' development of professional expertise in L2 teaching.

4.2 Pre-Service Teachers' Internal Conflicts as Areas for Growth

According to the proponents of sociocultural theory, teachers' internal conflicts represent areas for professional growth (Roth & Tobin, 2004). This is because a perceived contradiction between a teacher's beliefs and practices, i.e., emotional dissonance (Golombek & Johnson, 2004) can drive teachers to re-examine their current teaching beliefs and practices, search for alternative modes of engagement in the classroom, and finally embrace and implement alternative views and practices in their own teaching. However, in the context of the present study, it was found that the mentors did not always effectively address the pre-service teachers' inner conflicts. For example, in the case of Konstantin and Sergey, even toward the end of the practicum, Sergey was still struggling with the issue of defining fair grading, whereas Amber was still hesitant as to which method of vocabulary instruction was more beneficial for the students.

The reasons for the mentors' inability to effectively deal with the pre-service teachers' concerns varied: Konstantin had not completely resolved the issue related to evaluating the extent of student improvement in writing for himself, while Samantha did not see anything problematic in her own strategies for teaching vocabulary. Due to the mentors' inability to resolve the pre-service teachers' inner conflicts, it became evident that teaching experience in and of itself does not necessarily translate to pre-service teachers' becoming more expert teachers. In addition to their engagement in the actual activities of teaching, pre-service teachers need opportunities to fully articulate their teaching beliefs and understand the rationale behind teaching practices. In addition, both professional and emotional support provided by teacher educators (in this case, the mentors) is crucial in helping the novices articulate and attempt to resolve their emergent conflicts.

Perhaps, one of the solutions to, for example, Sergey's concern over grading and evaluating ESL students' work might be mainstreaming the ESL students with their native-speaking counterparts as already practiced in some of the U.S. schools, which allows the ESL students greater access to the samples of native-speaker writing as well as

greater interactional opportunities in English in the classroom (Honigsfeld & Dove, 2012).

5. Conclusion and Implications for Teacher Education Theory, Research, and Practice

As mentioned above, previous research has reported how pre-service teachers' inner conflicts can be resolved during co-generative dialogues with more expert others and with students (Roth & Tobin, 2004). Recognizing the complexities associated with learning-to-teach and being a teacher, it is important to accept the existence of different perspectives on how teach, countering the idea that there is one right way to teach (Siry, 2011). In the present study, the mentoring sessions did not lead to the resolution of the pre-service teachers' conflicts. Yet, recognizing and attending to those unresolved concerns is important since they bear implications, for example, for how to prepare mentors to better work with novices. Consequently, it can be suggested that researchers in the field of teacher education and mentoring should pay more attention to the unresolved conflicts that novices have even as they complete their practicum experiences and attend to those concerns. Further, the various consequences of a teacher's decisions for student learning should be discussed among the co-teachers.

This observation is particularly important as it supports the importance of agency (Lantolf & Thorne, 2006) on the part of the pre-service teachers, who instead of simply replicating their mentors' practices prefer to draw on their own views on teaching and teaching-related issues. For example, in the context of the present study, the mentors and pre-service teachers disagreed on certain points with regard to the practice of teaching. In particular, in the present study, the mentors did not know how to recognize or deal with complex, socially situated tensions (i.e., regarding grading) or with philosophies of teaching (i.e., regarding vocabulary instruction) that conflicted with their own. Consequently, the mentors may need more than the resources provided in the present study to support them in working with novice teachers in ways that would lead to change rather than to mere transmission.

This finding has important implications for teacher educators. It is evident that the resources for the mentoring activities though useful aids to mentoring may not be sufficient as a support to the practice of mentoring. Attention, therefore, should be paid to how mentors conceptualize mentoring as well as to whether both the mentors and the pre-service teachers are provided with opportunities to articulate and negotiate their views on various aspects of teaching. Furthermore, as Salles El Kadri and Roth (2013) showed, oftentimes novices may exhibit resistance and negative reactions with regard to being exposed and encouraged to incorporate new approaches to teaching. However, overtime (i.e., within a two-year teacher development program), these negative attitudes can be replaced by more positive ones, e.g., by those of welcoming colleagues' suggestions in relation to one's teaching. Possibly, then, given a greater amount of time, both pre-service teachers could have developed a better understanding of the issues that were at the root of their emotional arousal (Amber, in particular) and unresolved contradictions.

To conclude, though many programs offer a pre-service teaching practicum, it is important to allow the novices to participate in co-planning, co-teaching, and co-reflecting activities at the elbow of more expert educators. In addition, the mentors need to receive additional support and fully attend to the pre-service teachers' unresolved contradictions. In addition to providing both the mentors and the teachers with additional support, investigations of the role of the student input (e.g., Roth & Tobin, 2004) during the co-generative dialogues represents a worthwhile research endeavor in the future.

Overall, among its many implications, the present study establishes the importance of providing mentoring experiences that create opportunities for pre-service teachers to enact teaching at the elbow of a more expert educator as well as spaces for novice teachers to externalize their thoughts and feelings about their teaching and open them up to the social mediation of a mentor. It also highlights the significance of the emotional and professional support provided by the mentors and the critical role that extended mentoring experiences can have on the development of pre-service teachers' teaching expertise.

References

Author. (2013). Collaborative mentoring sessions: Supporting the development of teaching expertise (Unpublished doctoral dissertation). Pennsylvania State University, University Park.

Blythe, T., Allen, D., & Powell, B.S. (1999). Looking together at student work: A companion guide to assessing student learning. New York, NY: Teachers College Press.

Bogdan, R., & Biklin, S. K. (1992). *Qualitative research for education: An introduction to theory and methods.* (Second edition). Boston, MA: Allyn & Bacon.

- Bradbury, L.U. (2010). Educative mentoring: Promoting reform-based science teaching through mentoring relationships. *Science Education*, *94*(6), 1049-1071. http://dx.doi.org/10.1002/sce.20393
- Bryant, A., & Charmaz, K. (Eds.) (2006). *The SAGE handbook of grounded theory*. London, UK: SAGE Publications Ltd.
- Bullough, R. V., Young, J., Birrell, J. R., Clark, D. C., Egan M. W., Erickson, L., Frankovich, M., Brunetti, J., & Welling, M. (2003). Teaching with a peer: A comparison of two models of student teaching. *Teaching and Teacher Education*, 19, 57-73. http://dx.doi.org/10.1016/S0742-051X(02)00094-X
- Charmaz, K. (1990). Discovering chronic illness: Using grounded theory. *Social Science and Medicine*, 30(11), 1161-1172. http://dx.doi.org/10.1016/0277-9536(90)90256-R
- Clarke, A. (2006). The nature and substance of cooperating teacher reflection. *Teaching and Teacher Education: An International Journal of Research and Studies*, 22(7), 910-921. http://dx.doi.org/10.1016/j.tate.2006.04.039
- Easton, L. (2008). Powerful designs for professional learning. Oxford, OH: National Staff Development Council.
- Feiman-Nemser, S. (1996). Teacher mentoring: A critical review. ERIC Digest, ED397060.
- Feiman-Nemser, S. (1998). Teachers as teacher educators. *European Journal of Teacher Education*, 21(1), 63-74. http://dx.doi.org/10.1080/0261976980210107
- Freeman, D. (1990). Intervening in practice teaching. In J.C. Richards & D. Nunan (Eds.), *Second Language Teacher Education*, (pp. 103-117). Cambridge: Cambridge University Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York, NY: Aldine Publishing Company.
- Golombek, P. R., & Johnson, K. E. (2004). Narrative inquiry as a mediational space: Examining emotional and cognitive dissonance in second language teachers' development. *Teachers and Teaching: Theory and Practice*, 10(3), 307-327. http://dx.doi.org/10.1080/1354060042000204388
- Guyton, E., & McIntyre, D. J. (1990). Student teaching and school experiences. In W. R. Houston, M. Haberman, & J. Sikula (Eds.), *Handbook of Research on Teacher Education*, (pp. 514-534). New York: Macmillan.Jonson, K. F. (2008). Being an effective mentor. Thousand Oaks, CA: Corwin Press.
- Harvey, J. (2011). A sociocultural-theory-based study of the impact of mediation during post-observation conferences on language teacher learning. (Unpublished doctoral dissertation). University of South Florida, Tampa.
- Honigsfeld, A., & Dove, M. (2012). *Co-teaching and other collaborative practices in the EFL/ESL classrooms*. Charlotte, NC: IAP.
- Johnson, K. E. (2009). Second language teacher education: A sociocultural perspective. New York, NY: Routledge.
- Jonson, K. F. (2008). Being an effective mentor. Thousand Oaks, California: Corwin Press.
- Kagan, D. M. (1992). Professional growth among pre-service and beginning teachers. *Review of Educational Research*, 62(2), 129-169. http://dx.doi.org/10.3102/00346543062002129
- Korthagen, F. A. J (2001). *Linking practice and theory: The pedagogy of realistic teacher education*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Little, J. W. (1990). The mentor phenomenon and the social organization of teaching. In C. B. Courtney (Ed.), *Review of Research in Education*, *16*, 297-235.
- Lantolf, J., & Thorne, S. (2006). Sociocultural theory and the genesis of second language development. Oxford: Oxford University Press.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.
- Malderez, A., & Bodóczky, C. (1999). *Mentor courses: A resource book for trainer-trainers*. Cambridge: Cambridge University Press.
- Maxwell, A. J. (2004). *Qualitative research design: An interactive approach* (2nd Edition). Thousand Oaks, CA; Sage.
- Nolan, J., & Hoover, E. (2007). *Teacher supervision and evaluation: Theory into practice*. Hoboken, NJ: John Wiley & Sons.

- Orland-Barak, L. (2010). Learning to mentor-as-praxis: Foundations for a curriculum in teacher education (Professional learning and development in schools and higher education). New York, NY: Springer. http://dx.doi.org/10.1007/978-1-4419-0582-6
- Ritchie, S. M., Tobin, K., Sandhu, M., Sandhu, S., Henderson, S., & Roth, W.-M. (2013). Emotional Arousal of Beginning Physics Teachers During Extended Experimental Investigations. *Journal of Research in Science Teaching*, 50(2), 137-161. http://dx.doi.org/10.1002/tea.21060
- Roth, W. M. (2002). Being and becoming in the classroom. Westport, CT: Ablex.
- Roth, W., & Tobin, K. (2002). At the elbow of another: Learning to teach by co-teaching. New York, NY: Peter Lang.
- Roth, W., & Tobin, K. (2004). Co-teaching: From praxis to theory. *Teachers and Teaching: Theory and Practice*, 10(2), 161-179. http://dx.doi.org/10.1080/0954025032000188017
- Salles El Kadri, M., & Roth, W.-M. (2013). "I Am a Pibidiana": Societal Relations As The Locus Of Sustained Development In A Teacher Education Program In Brazil. *Australian Journal of Teacher Education*, 38(5), 89-114. http://dx.doi.org/10.14221/ajte.2013v38n5.7
- Siry, C.A. (2011). Emphasizing collaborative practices in learning-to-teach: co-teaching and co-generative dialogues in a field-based methods course. *Teaching education*, 22(1), 91-101. http://dx.doi.org/10.1080/10476210.2010.520699
- Siry, C., & Lang, D. (2010). Creating participatory discourse for teaching and research in early childhood science. *Journal of Science Teacher Education*, 21(2), 149-160. http://dx.doi.org/10.1007/s10972-009-9162-7
- Tobin, K. (2006). Learning to teach through co-teaching and co-generative dialogue. *Teaching Education*, 17(2), 133–142. http://dx.doi.org/10.1080/10476210600680358
- Tobin, K., & Roth, W. (2005). Implementing co-teaching and co-generative dialoguing in urban science education. *School Science and Mathematics*, 105(6), 313–313. http://dx.doi.org/10.1111/j.1949-8594.2005.tb18132.x
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Wang J., & Odell, S. J. (2002). Mentored learning to teach and standards-based teaching reform: A critical review. *Review of Educational Research*, 72(3), 481–546. http://dx.doi.org/10.3102/00346543072003481
- Wang, J., & Odell, S. J. (2007). An alternative conception of mentor–novice relationships: Learning to teach in reform-minded ways as a context. *Teaching and Teacher Education: An International Journal of Research and Studies*, 23(4), 473–489. http://dx.doi.org/10.1016/j.tate.2006.12.010

Appendix 1

A Sample Protocol

Looking Together at Student Work (based on Blythe, Allen, & Powell, 1999)

The following questions, as well as assignments/prompts and samples of student work serve as mediating artifacts for the discussion. Please select from the following questions below, add to them, or make up your own.

Quality of Student Work

- 1. Is the work good enough? What is good enough?
- 2. In what way does the work meet or fail to meet a particular set of standards?

Teaching Practice

- 1. What do the students' responses indicate about the effectiveness of the prompt or assignment?
- 2. How might the assignment be improved?
- 3. What kinds of instruction support high-quality student performances?

Student Comprehension

- 1. What does this work tell you about how well the student understands the topic of the assignment?
- 2. What initial understanding do we see emerge in this work?

Student Growth

- 1. How does this range of work from a single student demonstrate growth over time or fail to demonstrate such growth (if applicable)?
- 2. How can you support this student's growth more effectively?

Student Intent

- 1. Which issues or questions is the student focused on?
- 2. Which aspects of the assignment interested the student?
- 3. Which parts of the assignment called forth the most effort from the student?
- 4. To what extent is the student challenging himself or herself? In what ways?