Heintz, A., Borsheim, C., Caughlan, S., Juzwik, M. M., & Sherry, M. B. (2010). Video-based response & revision: Dialogic instruction using video and web 2.0 technologies. *Contemporary Issues in Technology and Teacher Education*, *10*(2), 175-196.

# Video-Based Response & Revision: Dialogic Instruction Using Video and Web 2.0 Technologies

<u>Anne Heintz, Carlin Borsheim, Samantha Caughlan, & Mary M. Juzwik</u> *Michigan State University* 

Michael B. Sherry Bloomsburg University of Pennsylvania

#### **Abstract**

This article documents the curricular decisions made by a teacher educator research team whose guiding theoretical focus for intern practice is dialogic instruction. Over a 2-year sequence, teaching interns used video and Web 2.0 technologies to respond critically to and revise their teaching practices in collaboration with peers and instructors. This article describes how a focus on dialogic instruction and an adoption of a multiliteracies pedagogy guided the implementation and use of technologies within the project. Through multiple examples of curriculum, including excerpts from course materials, screencasts of the adopted networking platform, Voicethread, and video of class sessions, the authors describe how a focus on the dialogic creates spaces for interactions that allow responsive and revisionary attitudes toward not only teaching practices, but the potential and place of technologies in teacher education.

Twenty years ago, if a teacher intern, "Ms. 1990," desired to broaden her view of what other teachers do, what they say, what they are like in front of students, how could she go about gaining this perspective? She had access to her previous experiences and her mentor teacher's style. Perhaps she had seen a couple of videos of exemplary teaching. Perhaps she sat in on a couple of classrooms. Perhaps she reviewed a videotape of a fellow intern in her classroom, and they discussed it.

Today, a teacher intern, "Ms. 2010," sits at home, turns on her laptop, enters a social networking site and uploads a clip of herself teaching. She proceeds to watch multiple video clips of her fellow interns' classrooms. She sees that one colleague, Ms. K., is sitting in a circle with her students, teaching poetry in an urban middle school; another, Ms. M., is projecting slides onto a whiteboard, struggling with classroom management in a class of checked-out seniors. One clip shows her good friend, Ms. R., in a wig for spirit day; Ms. 2010 notices a kid sending a text message right under the nose of Ms. R.

The possibilities for sharing and communicating around captured evidence of practices in which teachers engage is growing exponentially. Video technology is increasingly available, and most computers now come with simple editing software. Flip cameras, cameras in laptops, family video cameras, and cell phones can all be used to create digital files, which can be converted to a common file type and shared. A number of online video depositories now enable commenting on video. They vary in price (many are free), features, security, and reliability. Within the context of a broader popular culture in which sharing and communicating around video online has been variously taken up, for example, to reinforce family ties, form social networks, motivate political action, and perhaps most often, prompt a giggle, we have considered how this literacy may contribute to our work of educating future English teachers.

The use of video to capture evidence of teaching is a longstanding practice in teacher education. Technologies have advanced the potential for increased facility and mobility of sharing and communicating around such videos, and a number of scholars have described the use of video, in particular, to make the process of learning to teach visible and portable in teacher education (Basmadjian, 2008; Grossman, 2006; Rosaen et al., 2008; Sherin & van Es, 2005).

We, a team of teacher educators, are currently engaged in Video-Based Response and Revision (VBRR), a 2-year research project incorporating the use of video and Web 2.0 networking into a secondary English teacher preparation program. Teacher candidates in their final, intern, year videotape their teaching practices four times in their placement classrooms. They share their 5-minute clips of these videos with a small group of peers through a social networking platform called Voicethread. To contextualize the videos, interns upload syllabi documents, class handouts, and transcripts of the clip they have chosen. Each intern comments on the videos through text, voice, or video. Then, interns write or record reflections based on observing their own and their peers' practices. At the end of the year, each intern creates a digital reflection on her growth as a dialogic instructor using clips, music, and narrative.

This article is not a presentation of research findings. Rather, it is a description of how the theoretical and pedagogical priority of dialogic instruction situates technology adoption and use in our teacher education program. We describe our curricular decisions and initial impressions of the way dialogic instruction—as a guiding focus—has cast ours and the interns' interactions with technologies. We begin with a theoretical framing of our focus of interest: supporting the development of dialogic instructional practices. Next, we describe how digital technologies support this focus in each phase of our multiliteracies pedagogy: overt instruction, situated practice, critical collaborative practice, and transformed practice. We conclude by describing how a focus on dialogic instruction enables us to engineer pedagogical spaces that support flexible and persistent interrogations of technologies' roles and affordances, resulting in teacher practice that is productively in dialogue with the technologies being used.

#### **Dialogic Instruction**

Dialogic instructional practices are curricular and instructional designs that structure interactions in order to foreground the responsive interweaving of voices in the classroom (Juzwik, Nystrand, Kelly, & Sherry, 2008). Dialogic discourse, as a fundamental principle of language-in-use, recognizes the multiplicity of social voices at play within any exchange of utterances, or indeed, within utterances themselves (Bakhtin, 1981).

Although no discourse is ever truly monologic (bereft of the voices and echoes of others) (Bakhtin, 1981), certain traditions of schooling pull toward the monologic (Nystrand,

Gamoran, Kachur, & Prendergast, 1997), for example, the pervasive monologue of teacher lecture (although lectures can be more and less dialogic, depending on the extent to which they incorporate diverse social voices). Dialogic instructional practices attempt to promote, take up, and build on a multiplicity of student voices during classroom talk and curriculum. The relative rarity of such practices is illustrated by a finding from a nationwide study of secondary English language arts classrooms, which found that open discussion, in which three or more students converse freely for at least 30 seconds, occurred on the average of 1.7 minutes per every 60 minutes of class time (Applebee, Langer, Nystrand, & Gamoran, 2003).

Dialogic instruction supports the collaborative exploration of a multiplicity of perspectives, and—as we conceptualize it—dialogic instruction is not always synonymous with classroom discussion. Discourse is inherently dialogic, that is, containing both authoritative and internally persuasive discourses (Bakhtin, 1981). However, in schools, discourse is often designed by the teacher to be more monologic; to support airing of the authoritative perspective alone. A teacher can design a discussion that is monologic: that is, even though students' voices may be heard, the only views they are authorized to express are those of the teacher or those expected by the teacher. By contrast, a recitation can be designed that is highly dialogic. While the teacher alone may be speaking, she may be restating the contributions the students have made, elaborating on them, and affording them authoritative status.

Teachers who engage in dialogic practices convey to students through a variety of pedagogical choices that they are curious about students' words and ideas. The paradigmatic example of dialogic instruction within the research literature on classroom discourse in English language arts is open discussion, defined as at least 30 seconds of open-ended talk, not controlled by the teacher, among at least three people (Nystrand et al., 1997). Other practices that would fit within our broad framework of dialogic instruction include question/answer sessions, in which student ideas are probed and elaborated through devices such as authentic teacher and student questions; responsive narrative genres (Juzwik et al., 2008); and certain organizations of group collaboration, for example, peer response groups in writing classrooms. Distinguishing dialogic from monologic classroom practices involves evaluating the extent to which multiple voices are included as part of a teacher's instructional repertoire.

The documented scarcity of dialogic instructional practices in US schools is unfortunate, because large-scale research has indicated that a dialogic instructional approach in a context of high academic demands is significantly related with student achievement in English language arts (Applebee et al., 2003; Nystrand et al., 1997). This scarcity is not surprising, however, because dialogic instruction does not always strike busy teachers as the most efficient way to prepare students for tests and other accountability measures.

Our project seeks creative solutions that address the challenges of fostering dialogic approaches in English teacher preparation. The challenges are many: Scholars note that even experienced teachers have difficulty appropriating dialogic methods in the classroom (e.g., Alvermann & Hayes, 1989; Chinn, Anderson, & Waggoner, 2001). Beginning teachers tend to rely on the traditional practices they observed during their apprenticeship of observation as secondary students, which makes taking up new practices even more challenging (Lortie, 1975/2002; Wideen, Mayer-Smith, & Moon, 1998). This tendency underscores the importance of disrupting counterproductive teaching practices before they become habitual; opportunities to repeatedly attempt new practices with adequate support are rare (Feiman-Nemser, 2001; Ronfeldt & Grossman, 2008).

Because dialogic instruction is challenging, teacher educators need to consider resources that may help teacher interns to critically observe and analyze their attempts over time in collaboration with others. Hence, our teacher education team prepared a learning sequence incorporating technologies designed to support dialogic interactions and reflective practices.

#### **Multiliteracies Pedagogy**

With close theoretical ties to New Literacy Studies (Brandt, 2001; Gee, 2008; Lankshear & Knobel, 2003; Street, 1995), multiliteracies theory emphasizes the complex, multisemiotic, multivocal nature of digital media texts and practices, as well as the literacy practices associated with those texts, particularly highlighting how various social and other affinity groups manipulate cultural symbol systems to make meaning (Cope, Kalantzis, & New London Group, 2000). Multiliteracies pedagogy emphasizes expanded notions of literacy beyond the genres, texts, and technologies traditionally associated with schooling (e.g., basal readers, textbooks, essays, pencils, and so on) to foreground educational experiences that enable students actively to design, critique, and engage in social and situated literacy practices.

From this stance, technologies are most effectively integrated not for their own sake but when situated in authentic literacy practices (Hicks, 2006; Myers, 2006; Swenson, Rozema, Young, McGrail, & Whitin, 2005). From the beginning planning stages of this project, our theoretical focus—dialogic instruction—for the expected work of the teacher interns has guided the adoption and use of new technologies. Within our project, particular technologies supported interns as they engaged in critical collaboration to inquire into their own dialogic efforts.

Our curriculum created spaces and provided resources for teacher interns to engage dialogic instructional practices in their placement classrooms. Therefore, our decisions regarding technologies, our presentation of technologies to intern teachers, and our crafting of assignments requiring technologies were all designed to support this key element of teaching practice.

We adapted the New London Group's (1996) multiliteracies pedagogy to guide our incorporation of online and Web 2.0 technologies in support of improving interns' understanding and facility with dialogic instruction. Rather than simply using multimodal texts and digital technologies, we took advantage of them to create communicative environments where our interns could interact, share, reflect, and collaborate on their shared goal of improving their teaching practice.

Four general processes characterize multiliteracies pedagogy as we appropriated it in our teacher education work:

- Through modeling and *overt instruction*, interns understand what dialogic instructional practices look like.
- Through situated practice, interns develop the know-how and practical knowledge to enact these practices in different ways according to the particularities of their own present and future classroom contexts.
- By engaging in *critical collaborative study* of practices, interns receive ongoing feedback from peers.
- This feedback, in turn, allows interns to refine and revise their dialogic instruction beyond initial efforts, thus *transforming practice* over time.

These processes were used recursively, not in the top-down ordering their placement on the page may imply.

#### **Overt Instruction**

The New London Group described overt instruction as "all those active interventions on the part of the teacher and other experts that scaffold learning activities...and that allow the learner to gain explicit information at times when it can most usefully organize and guide practice" (1996, p. 34). In contrast to direct instruction, overt instruction happens in collaborations among teachers and students. One aspect of the work involved supporting interns in learning how to operate various hardware and software systems (see <u>Appendix A</u> for a more detailed description of the tools and platforms we used).

We created quests in which interns worked together to master operation of the camera, the tripod, the editing software, and the video-sharing platform, Voicethread. We created handouts with diagrams and screenshots and step-by-step instructions, which we made available to students online.

Because intern teachers were already steeped in novel situations during this year, we attempted to create pedagogical contexts where yet another new thing—in addition to their new roles as educators, their new relationships with mentor teachers and other staff, their new understandings of the expectations of schools and school districts—would be introduced with an appropriate degree of support and exploratory space.

As we scaffolded interns' facility with the technologies, we also scaffolded a deeper understanding of dialogic instruction. We read Adler and Rougle's (2005) book, *Building Literacy Through Classroom Discussion: Research Based Strategies for Developing Critical Readers and Thoughtful Writers in Middle School.* Interns wrote weekly journals to highlight their understanding of key concepts from the reading and relate them to their experiences in the classroom. We discussed the readings and their journals in Socratic seminars held in class. The Adler and Rougle book proved invaluable for providing concrete strategies, anticipating common challenges, and helping English teacher interns articulate the purpose behind dialogic instruction for themselves, their students, and their mentor teachers. The Socratic seminars provided a space for us to model possibilities for dialogic instruction and for the English teacher interns to pose their own questions.

We also introduced interns to the idea of video-as-tool to analyze practice. In one section's first class meeting, we showed an NBC Olympics-coverage clip in which Michael Phelps, his coach, and Bob Costas analyzed a video of one of Phelps' races to demonstrate that experts in many fields engage in these practices. We then narrowed in on teaching and shared the Carnegie Gallery of Teaching and Learning's videos on classroom discussion (<a href="http://gallery.carnegiefoundation.org">http://gallery.carnegiefoundation.org</a>), primarily those of instructor, Yvonne Hutchinson (n.d). Around these videos, we practiced using the meta-language introduced in the Adler and Rougle text and supplementary articles to describe and comment on the interactions taking place in the videos.

We have constructed an imaginary intern, Ms. 2010, who will describe the process of engaging in VBRR in a series of screencasts cited throughout this article. While fictional Ms. 2010's general tone of enthusiasm for her work does not wane, the actual intern experience was, naturally, variable across time and across interns. Accompanying each Ms. 2010 screencast is a transcript from one of the interns in our program (pseudonums are used). Because we have just begun our analytic work on the data, we cannot present

these data as representative of larger patterns at this point; what we include here may be viewed as descriptive snapshots. The screencasts serve to demonstrate the general procedures and routines associated with each turn in the Voicethread process, and the transcripts serve as examples of actual intern experience. Each example comes from a different intern or intern group.

To follow the intern's journey, see Video 1 - Step 1: Getting to know dialogic instruction, also available from <a href="http://www.screencast.com/t/YmI3NTI0MmQt">http://www.screencast.com/t/YmI3NTI0MmQt</a>.

Read a journal response from an intern regarding getting to know dialogic instruction in  $\underline{\text{Appendix B}}$ .

#### Situated Practice

The New London Group characterized situated practice as "immersion in meaningful practices within a community of learners who are capable of playing multiple and different roles based on their background and experiences" (p. 33). Within the VBRR project, both course instructors and students took on multiple roles based on the situation. In their individual classrooms, interns were novices. However, in their review communities in Voicethread, they served as critical colleagues.

More than one group characterized the early interactions in the review community as "the blind leading the blind"; however, because the students were immersed in these communities over two semesters' time, their growth as teachers was intricately bound up with their growth as critical reviewers of their own and colleagues' practice. While in the teacher education classroom and in the larger teacher education community we instructors occupied roles as experts, in the Voicethread review communities, for the most part, we did not enter the students' conversation. We designed the way the interactions would play out but rarely participated in the discourse.

As reflected in our literature review, dialogic instruction is a challenge, even for experienced teachers. Several key aspects seemed to be particularly important for nurturing interns' facility in overcoming these challenges. First, immersion in one key area of focus, rather than on teaching generally, provided focus and depth. Second, collaboration with both those more expert (course readings and instructors) and those engaged in the same learning process (fellow interns) provided scaffolding during the process. Third, the cycle of practice and reflection over time afforded repeated attempts, continually orienting interns toward "next time": both the next time for taping and the next time for trying dialogic practices. Fourth, situating the project in their experiences in their placement classrooms contributed to relevance and immediacy for learning.

In this way, each video functioned more as a draft than a final product, and collaborative response functioned much like peer review in process writing instruction. We saw each recording as an occasion for students to reflect on what happened, to give and receive a response, and to plan to revise their practices based on the conversation. We viewed each recording as copy, a draft in the ongoing process of responding to and revising one's teaching practices.

Because the interns were invited to select the 5 minutes of teaching for which they desired feedback, they often chose the clip in which they considered themselves to be the *least* successful, so as to receive advice on what they could have done or may consider next time. Conceiving of the process in this way encouraged reflection and revision within a larger scheme of developing teacher practice. Giving interns the opportunity to try

dialogic instructional practices while encouraging them to hold the dialogic stance in mind (anticipating future opportunities and reviewing past trials) upheld our vision of teacher preparation.

The four video post assignments varied slightly to scaffold higher levels of proficiency over time. The first assignment defined the purpose of the posts as follows:

To generate video that will help you:

- to practice structuring dialogically organized whole class interaction in your focus classroom (NOTE: This does **not** have to be an open discussion: it can be any form of whole-class instruction in which your goal is to move toward dialogic instruction),
- to take an inquiry stance toward your efforts by making this practice public to a small group of colleagues,
- to offer thoughtful, detailed, analytically insightful, and collegial feedback to others' practices, and to reflect on insights you have generated about your teaching practice through this inquiry process and ideas you have developed for revising your practice in future lessons.
- to reflect and respond to teaching over the year as intern and as supportive
  colleague to your colleagues. In the same way you are asking your students to
  engage dialogically, you will engage dialogically with your colleagues about
  your work as teachers. This post serves as a point along your developmental
  trajectory as a teacher that you can look back and reflect on as your
  internship year progresses.

Once again, the multiliteracies and dialogic instruction are closely interrelated. The use of video and online technologies made these key aspects of our focus on dialogic instruction possible. In other words, video and online technologies afforded possibilities for nurturing dialogic instruction more effectively than would have been otherwise possible. Voicethread enabled interns to collaborate across space and time from their respective school communities, as well as to share their experiences and collaborate with each other as novice experts. Similarly, video allowed us to foreground their experiences in their placement classrooms as central to our collective course of study. Video also allowed interns to document and witness their grappling with dialogic instruction over time.

To follow the intern's journey, see Video 2 - Step 2: Preparing a clip of situated practice doing dialogic instruction for sharing in Voicethread, also available at <a href="http://www.screencast.com/t/MjczNjA1">http://www.screencast.com/t/MjczNjA1</a>.

To read a transcript of a technology workshop class session, see <u>Appendix C</u>. This edited-for-space transcript features Michael Sherry, research assistant; Samantha Caughlan, instructor; and teacher interns hammering out logistics of preparing a clip for sharing in Voicethread.

#### **Critical Collaboration**

According to the New London Group's (1996) framework, critical framing emphasizes the importance of teaching learners to extend, apply, and critique in ways that set a learner up for transformed practice. A distinctive feature of our project is the way it centers critical teacher collaboration *across time and space*. Voicethread came loaded with dialoguing options, such as being able to comment through text, voice, video, and even doodling. We anticipated that without giving the interns common vocabularies of the

English language arts discipline, the deeper pedagogical potentials of the technology would go untapped. The instructions of the Video Post assignment regarding the nature of the dialog to be conducted around videos illustrate our efforts to facilitate critical collaboration:

#### Reviewing colleagues' work

- Review the clips that have been posted by your classmates in your group.
- Respond to their questions and add interpretive commentary that reflects your interpretation of what is going on in their teaching, using the tools VoiceThread provides and using the terminology we have been developing about dialogic instruction
- Include any questions you may have for the teacher, or any other comments you might have
- In your posts, please strive to take a professional and collegial inquiry stance.
   Please avoid sarcasm and cynicism: it is not easy to make teaching practice public in this way.

To follow the intern's journey, see Video 3- Step 3: Reading and responding to colleagues in Voicethread, also available at http://www.screencast.com/t/OWRiY2Q2.

To read a transcript of interns reading and responding to colleagues, see <u>Appendix D</u>. The text in this transcript was cut and pasted from the Voicethread platform. Interns' explicit references to challenges regarding technology are highlighted in italics.

Proficiency and flexibility with online platforms facilitated collaboration with peers across time and space, helping to bridge the gap between the field and coursework and between theory and practice. Specifically, video in combination with the social features of Voicethread gave English teacher interns an opportunity to look into their peers' classrooms and invite their peers to look into theirs. This process opened up the reflection process from being private and independent to being quasipublic and collaborative. These affordances supported our efforts to build a community of collaborative professionals, as well as to honor (and model) our commitment to dialogic instruction.

Understanding that dialogic discussion can be challenging for even experienced teachers, we committed to supporting the English teacher interns' attempts at it during the internship year. In addition to the small group collaborations, we projected Voicethread clips as a large group in our teacher education classrooms, and used the interns' clips and colleagues' responses as a springboard to introduce and ground our lectures and discussions on dialogic instructional practices. We increasingly drew upon intern clips throughout the semesters to provide starting points for discussion.

The videos allowed us to move away from more distant examples, such as textbooks or videos of classrooms available via, for example, Teachertube, and make our community learning rooted in our community's experiences. As a result, the critical collaborative practices in their small groups were brought into our larger group for consideration. Video 4 shows our teacher educator classroom for an example of how we brought the interns' videos and reflections into the classroom. In this clip, as a large group, we have just watched an intern's video on the drop-down screen at the front of the classroom. The intern, Eve, has just read her reflection on her video post aloud. Juzwik, the instructor, is leading the class in a discussion of the purpose of the video post reflection.

#### **Transformed Practice**

Transformed practice is the result of multiple opportunities for practice, collaborative critique, and revision. To demonstrate understanding and growth with dialogic instruction in their own classrooms, interns created digital reflective essays, the rhetorical function of which was to narrate their experience as a dialogic instructor.



Click to view Video 5

The interns' Voicethread posts were tangible evidence they could use to mark their own progress over the course of their program. Video 5 is the opening seconds of one intern's digital reflective essay. Following this introduction, the intern's video puts footage of him greeting students in the school hallway and teaching in his classroom in conversation with his colleagues' comments and his own reflections, to support his central thesis about establishing a classroom community.

Our own practice was also transformed though the process of critically evaluating the technologies we were using with interns. Although the response and revision work took place in Voicethread, a number of technologies were supporting our work in instruction. Over time, as we all became more comfortable with the technologies, our discussions progressed to examining the ways the technologies did or did not support our goals of dialogism. For example, in some of our sections we initially selected a wikispace as our primary course management tool precisely for its dialogic affordances. We quickly noticed, however, that although a wikispace affords dialogic possibilities, students did not necessarily take it up that way. In other words, we found ourselves using the wiki in monologic ways. When we took the opportunity to reflect collaboratively on our interactions via the wikispace, it became another lesson in dialogic instruction. Eventually, we started thinking together about pedagogical affordances of different modes, media, and platforms for different reasons, thereby pushing toward critical analysis and, ultimately, transformed teaching practice.

A number of our teacher education practices have been transformed based on our dialogs with our students and the interactions with the technologies. Interns' feedback to us revealed that many of them would appreciate opportunities to gather around their practice in multiple spaces, not just technologically mediated spaces. For example, they appreciated being able to see their colleagues' videos anytime, but many expressed a desire to talk over these videos in person in class. They interrogated the affordances of the technologies and concluded that the affordances of face-to-face interactions—such as more immediate interaction, decreased opportunities for misunderstanding, and the possibility for increased simultaneity of expression—may be more fruitful for them. We have considered this feedback and are working to create more flexibility in reviewing processes. Our own revisions and responses to our practice, based on the dialog of the work, maintain our theoretical commitment, as well as attempt to create an empathetic bond with our interns. We understand that revision is a process of multiple steps, of fits and starts, and well worth the significant effort.

**Table 1**2009-2010 English Teacher Interns' Rhetorical Framework for Considering Technology and Pedagogy

Form (a specific technology or platform)	Audience	Purpose (some possible pedagogical affordances)
Wikispace	Students in our classrooms	A wiki has democratic and dialogic affordances built in; it can facilitate online collaboration for a large group; it can facilitate online collaboration for small groups outside of class; it can be used to compile resources as a class or for a small group; it supports online discussions.
Blog	Our students, their parents, authentic audiences outside the classroom	It can add a public dimension to traditional journal writing; it allows students to interact around their journal entries; it can archive a string of journals on a single text or topic in one place over time; it can reach an authentic audience; it can be used to share ideas or interact with others outside the classroom; it can be used to publish work online to showcase to parents.
Googlesite	Ourselves as teachers	It can be used to create an online presence for my future classroom that students and parents can access; it can store online professional resources; it can be used to create an online profile for future employers to access.

#### **Closing Thoughts**

In our project, Ms. 2010 not only views video, she views videos whose theme and content sit within a focus for inquiry she shares with colleagues. She may explore a range of contextualizing material: Along with the 5-minute clips of practice are lesson plans and class handouts available with a download; transcripts of the clip, available for examination of talk patterns; and questions each intern would like their colleagues to specifically address. Ms. 2010 may, for example, click on an audio file and listen to the advice Ms. K. had recorded for Ms. R. about using anticipatory think sheets to her advantage. Ms. 2010 may type a comment to Ms. R, agreeing with Ms. K., and may include a link to a wiki she uses where these kinds of think sheets are available.

Ms. 2010 enters her group workspace prepared to listen and contribute to colleagues who share a mutual focus. Our purpose in promoting response and revision in technologically mediated spaces is to provide teacher interns the opportunity to capitalize on dialogic affordances of these spaces in the service of a *targeted* inquiry around teaching practice. When using technologies, a great deal of the work to be done by educators is in providing supports to engage students around a common point of inquiry.

Using video to consider closely one key element of teaching (in other programs it might be differentiating curriculum, promoting citizenship, developing a toolbox of formative assessments, or investigating problem-based learning) is in keeping with pedagogical priorities supporting intentioned adoption of technologies. By characterizing the nature of the discourse suited to engaging in our particular inquiry focus—dialogic instructional practices—we attempt to create a bounded arena in which interns may take on a set of shared principles and collaboratively explore their growth in a particular area of instructional practice.

A happy byproduct of the use of technology, however, is that it creates artifacts that can then be used *beyond* our scope of attention. Artifacts can be used as seen fit by the intern teachers. Through the use of video, we create for the intern teachers sources of data that are, to a degree, raw. Interns may return to these videos with their *own* scope of inquiry, as many did, conducting inquiry projects related to everything from the use of music as a prewriting strategy to experimentation with various English as a Second Language vocabulary strategies.

Although interns selected 5-minute clips to share with colleagues, they also possessed a record of an entire class session upon which they could make several analytic cuts. By way of contrast, if we were to assign intern teachers to write a journal entry on their assessment of their progress as a dialogic instructor four times a year, much of the evidence of teaching within the paper would be formulated and directed toward a theme of dialogic instruction.

By directing focus and conversation around the products of the technologies, it is possible to create rich conversations that construct meaning-making in ways that cohere. The affordances of technologies in creating and storing data, however, allow the interns to direct and focus their *own* inquiry simultaneously, for whatever purposes they need so as to develop according to their own targeted areas for growth. The presence of a stable corpus of captured teacher practice, combined with the capacity to support and capture talk around it, may support a privileging of the voices of critical colleagues. This corpus may support many types of dialogic interactions to occur around the videos of practice. Revision of teacher practice may occur through review of these dialogic interactions. Further research will seek to explore this phenomenon.

The technologies themselves pushed our own thinking about dialogic instruction, as interns took up these technologies in surprising ways. As a result, we see the relationship between the specific technological platforms we chose as complexly interrelated with our notion of dialogism. In fact, we selected particular platforms specifically for their dialogic affordances—visibility, flexibility, polyvocality, and collaboration. By giving the technologies more and less credit than was their due as the project unfolded, we realized that a dialogic stance toward technology use itself was key to maintaining our shared focus.

By listening to our interns, we learned that a dialogic stance is not just appropriate in interactions with students, but in interactions with technology as well. We are learning that a persistent interrogation of our assumptions about technology's affordances helps

us to maintain and shows us new directions for achieving our main priorities for English teacher education.

#### References

Adler, M., & Rougle, E. (2005). *Building literacy through classroom discussion:* Research-based strategies for developing critical readers and thoughtful writers in middle school. New York, NY: Scholastic.

Alvermann, D.E., & Hayes, D.A. (1989). Classroom discussion of content area reading assignments: An intervention study. *Reading Research Quarterly*, *24*, 305–335.

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal*, 40(3), 685-730.

Bakhtin, M. M. (1981). *The dialogic imagination: Four essays*. Austin, TX: University of Texas Press.

Basmadjian, K. G. (2008). Watching what we say: Using video to learn about discussions. *English Education*, *41*(1), 13-38.

Brandt, D. (2001). *Literacy in American lives*. New York, NY: Cambridge University Press.

Caughlan, S. (2003). Exploring the gap between espoused and enacted cultural models of literature discussion. *National Reading Conference Yearbook 52*, 150-161.

Caughlan, S., Juzwik, M.M., Sherry, M., Heckman, A., & LaVoy, M. (2009 November). *Video-based response and reflection: A technology-enhanced design to promote dialogic instruction.* Paper presented at the annual convention of the National Council of Teachers of English, Philadelphia, PA.

Chinn, C. A., Anderson, R. C., & Waggoner, M. A. (2001). Patterns of discourse in two kinds of literature discussion. *Reading Research Quarterly*, *36*, 378-411.

Cope, B., Kalantzis, M., & New London Group. (2000). *Multiliteracies: literacy learning and the design of social futures*. New York, NY: Routledge.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055.

Gee, J. P. (2008). What video games have to teach us about learning and literacy, revised and updated. Basingstoke, England: Palgrave Macmillan.

Grossman, P. (2006). *How do we prepare teachers to lead student-centered, text-based discussions in their classrooms?* Retrieved from the Carnegie Foundation Inside Teaching website: <a href="http://quest.carnegiefoundation.org/~pgrossman/">http://quest.carnegiefoundation.org/~pgrossman/</a>

Hicks, T. (2006). Expanding the conversation: A commentary toward revision of Swenson, Rozema, Young, McGrail, and Whitin. *Contemporary Issues in Technology and Teacher Education 6(1)*. Retrieved from <a href="http://www.citejournal.org/vol6/iss1/languagearts/article3.cfm">http://www.citejournal.org/vol6/iss1/languagearts/article3.cfm</a>

Hutchinson, Y.D. (n.d.). A friend of their minds: Capitalizing on the oral tradition of my African American students. Retrieved from the Gallery of Teaching and Learning website: <a href="http://gallery.carnegiefoundation.org/collections/castl-kl2/yhutchinson/">http://gallery.carnegiefoundation.org/collections/castl-kl2/yhutchinson/</a>

Juzwik, M.M., Nystrand, M., Kelly, S., & Sherry, M. (2008). Oral narrative genres as dialogic resources for classroom literature study: A contextualized case study of conversational narrative discussion. *American Educational Research Journal*, 45(4), 1111-1154.

Lankshear, C., & Knobel, M. (2003). *New literacies: Changing knowledge and classroom practice*. Buckingham, UK: Open University Press.

Lee, B. (2005). We're all in this together. On *Awake is the New Asleep* [CD]. Austin, TX: New West Records.

Lortie, D.C. (1975/2002). *Schoolteacher*. Chicago, IL: University of Chicago Press.

Myers, J. (2006). Literacy practices and digital literacies: A commentary on Swenson, Rozema, Young, McGrail, and Whitin. *Contemporary Issues in Technology and Teacher Education, 6*(1). Retrieved from http://www.citejournal.org/vol6/iss1/languagearts/article5.cfm

New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, *66*(1), 60-91.

Nystrand, M., Gamoran, A., Kachur, R., & Prendergast, C. (1997). *Opening dialogue: Understanding the dynamics of language and learning in the English classroom.* New York, NY: Teachers College Press.

Nystrand, M., Wu, L. L., Gamoran, A., Zeiser, S., & Long, D. (2003). *Questions in time: Investigating the unfolding structure of classroom discourse.* Albany, NY: National Research Center on English Learning and Achievement.

Ronfeldt, M., & Grossman, P. (2008). Becoming a professional: Experimenting with possible selves in professional preparation. *Teacher Education Quarterly*, *35*(3), 41-60.

Rosaen, C., Lundeberg, M., Cooper, M., Fritzen, A., & Terpstra, M. (2008). Noticing noticing: How does investigation of video records of practice change how teachers reflect on their experience? *Journal of Teacher Education*, *59*(4), 347-360.

Sherin, M. G., & van Es, E.A. (2005). Using video to support teachers' ability to notice classroom interactions. *Journal of Technology and Teacher Education*, *13*(3), 475-491.

Street, B. (1995). *Literacy in theory and practice*. Cambridge, England: Cambridge University Press.

Swenson, J., Rozema, R., Young, C. A., McGrail, E., & Whitin, P. (2005). Beliefs about technology and the preparation of English teachers: Beginning the conversation. *Contemporary Issues in Technology and Teacher Education, 5*(3/4). Retrieved from <a href="http://www.citejournal.org/vol5/iss3/languagearts/article1.cfm">http://www.citejournal.org/vol5/iss3/languagearts/article1.cfm</a>

Wideen, M., Mayer-Smith, G., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research*, 68(2), 130-178.

#### **Author Notes**

We wish to acknowledge Kelly Merritt for her work on the VBRR curriculum design and research. Much of the curriculum work described here, along with our ongoing research on that work, was made possible by the Bates-Byers Award for Technology and Curriculum, funded by the Joe C. Byers and Lucy Bates Byers Foundation.

Anne Heintz Michigan State University email: <u>heintza1@msu.edu</u>

Carlin Borsheim Michigan State University

email: <a href="mailto:carlinborsheim@gmail.com">carlinborsheim@gmail.com</a>

Samantha Caughlan Michigan State University email: <u>caughlan@msu</u>.edu

Mary M. Juzwik Michigan State University email: mmjuzwik@msu.edu

Michael B. Sherry Bloomsburg University of Pennsylvania email: sherrymic@gmail.com

#### Appendix A Nuts and Bolts

Within our overall goal of dialogic instruction, we wanted to both take advantage of English teacher interns' familiarity interacting in online social networking sites and help them become flexible users and designers of new modes and media. In order to create dialogic spaces where interns could collaborate on reflection of their attempts at dialogic instruction in their placement classrooms, we knew we needed some basic technologies: recording equipment, editing software, and a Web platform.

Through research into various options, we decided to purchase materials that would let us achieve maximum recording device-to-student ratio along with editing software-to-student ratio for the available money.

Recording equipment. We purchased 10 Canon cameras, along with 10 tripods in the first year. In the second year, we purchased an additional five cameras. In the first year, equipment sharing was a challenge, despite our best efforts. Many interns described feeling frustrated because they could not record the lesson they wanted because it "wasn't their week for the camera"; now, into our second year, we are finding that there are cameras and laptops going unused by the students. Increasingly more students are using their own laptops for recording and for editing.

Editing software. We purchased 10 Mac laptops for the project which are also recording devices. These Mac laptops came equipped with iMovie editing software. Each small group of five shared one laptop and one camera amongst themselves. For many, the laptop was necessary for editing, even if they had used the camera for recording. The Canon cameras came with an editing software package for PCs; however, if students used their own PC laptops for editing, most used Windows MovieMaker (a software which we did not provide them).

Web platform. We purchased a subscription to the Web 2.0 network, Voicethread (<a href="http://voicethread.com">http://voicethread.com</a>). This is where video posts were required to be uploaded along with contextualizing materials. Of all the technologies used for the videomaking and sharing in this project, this was the one technology—which functioned as more of a location—that each and every student had to use in common. Students could choose for themselves what to record with, how to edit it, whose equipment to use, and so forth, but the one "meeting place" for their posts and communication was Voicethread.

Key factors in deciding to use Voicethread were its privacy and ownership legal protections, its freedom from advertisements, and its ability to bundle video, text, and comments into one exportable Quicktime file. This allowed us to confidently and safely back up not only the videos, but all the contextualizing materials and comments that accompanied them. Had we not been working to protect material as sensitive as classroom interactions and had we not been using the videos and online communication as data within a research project, a greater range of technological options for videosharing would likely have been possible.

Over the course of the 2-year program, English teacher interns engaged with wikispaces, googledocs, iMovie or Moviemaker, Voicethread, Scribd, and Divshare, to name a few. A commitment to using technologies in the teacher education classroom, in our case, necessitated a significant time commitment. We faced a series of irreducibly practical

questions: Which camera is best? Why haven't the computers arrived? Why doesn't this program read this file? Where is the extra power cord? Why is all I see a black screen when I'm trying to see a lesson on the role of zeugma and synecdoche in Theodore Roosevelt's letters? Addressing and troubleshooting these questions became deeply satisfying. Indeed, there is a seductive pull to stay in the moment when competence is achieved, once everybody can log on or get there, and just let the technology do its thing. However, our larger commitment of dialogic instruction pushed us toward deeper levels of interaction with and understanding of our uses of these technologies, and the multiliteracies pedagogical processes helped us combine our instructional focus with technology use.

## Appendix B Lydia Leander: Practical Guides for Discussion & Envisionment

Chapter Five of Adler & Rougle offers several suggestions to guide students' envisionment building as they work through the text. The Stand and Deliver activity reminds me of the four corners one that we have discussed many times in class. The only downfall to this activity is I think some students will have difficulty thinking for themselves and will follow their friends. I wish that I could do this activity with a blindfold on them so that they will be able to make decisions for themselves!

I also like the "Taking a Stand" or Anticipation Guide activities. This gets students thinking about controversial issues that may or may not take place in their novel, and gets them to think critically about the characters and the events taking place. It also might push students to look into the text to find support for whether they agree or disagree with these controversial statements.

I think that if we, as their teacher, do decide to step into the conversation, it should always be to "up the ante" of their discussion. A great way to do this is to do just as the book suggests, and to tell students to "Find it. Show textual evidence." I recently led a short discussion in my class about Arthur C. Clarke's *The Secret*. I asked students if they thought that Cooper, the main character, should tell the human race "the secret" (that people can live twice as long on the moon) or not. Many students said he would not because it would create panic and chaos on Earth. Some said yes because he could gain notoriety or money by telling the secret. When I asked them to think about whether he would or not based on his character traits, they then had trouble. They could easily think of reasons why he would or would not based on things outside of the text, but had trouble connecting who he was as a character (a hard-headed journalist who became obsessed with finding out the secret) and predict how he might act based on his personality.

#### Socratic Seminar Questions:

How can we urge students to think for themselves and to form their own opinions and not just do what their friends are doing?

How can we get students to connect and find evidence to the text other than by just leading them to these parts of the reading?

### Appendix C Transcript of the "Technology Workshop" Class Session

Mike: All right. Hi folks.

Class: Hi. Hello....Howdy!

Mike: Um, I'm gonna try to give you kind of an overview of what you're doing today so you have a picture in your mind of how this all fits together and this should be the easiest of the three steps that we have just gone through. So again, I'll kind of come around and try and help but uh hopefully it will be easy. So, you've done the part where you do some recording on the camera and then you download it into iMovie, did some editing, and the next step is to upload the video that you have to this website, um called Voicethread that allows you to then juxtapose it with other things like documents, maybe a lesson plan, um, you know handouts that you give to students and then make comments. This is the part that we'll be talking about today...At each spot for a group there are two Mac laptops—yes the laptops came—and so the first thing you'll do is just unpack the stuff that's in there, we've gotten it all kind of configured and everything it's ready to go, you take it out of the box, plug it in, turn it on, take a look at...And when you um get together with your groups, the inquiry groups, you're gonna share videos and comments. . . . go to Voicethread.com, and then here are the things you'll do when you get there, you'll sign in, and I'll tell you about that in a minute, then you'll upload a video which is already on the desktop so we're kind of figuring this is the stage after you've done your filming, and it's already on your computer.

Student 1: So, once it's on Voicethread, is it viewable from any type of PC?

Mike: Yup, as long as you sign in in this way, and shared it with someone. We're just doing that, using the Macs today because it's possible that you'll be filming and then downloading using the Mac and we want to give you a chance to try out using the laptop.

Student 1: Ok.

Mike: But you could access Voicethread through your PC or any computer.

## Appendix D Transcript of Interns Reading and Responding to Colleagues

Note: Italics highlight interns' explicit references to challenges regarding technology.

Title	Brasfeld video post 1	
Metadata	My first videotaping, my students' first experience with discussion, twenty-third time trying to upload the videoI really hope this works	
	Created October 7, 2008 4 views 14 comments 12 pages	
Contextualizing	This was one of the most "discussion-like" parts of this discussion; we finished up shortly after this clip takes place. As the students are very inexperienced with this type of classroom interaction, they did not respond to one another at all, except maybe once or twice. It was mostly me asking a question, one student responding, me asking for more information, that student or another student chiming in, me asking what everyone else got etc. etc. There were also a lot of blank stares. I thus worried that this "discussion" was a little bit too close to a normal non-dialogic class, only with everyone sitting in a circle. Next time, I plan on implementing a requirement for each person to say at least one thing. I did not do that this time around and predictably, I mainly heard from the same few kids over and over unless I specifically called someone out to speak. It was very interesting to see who responded well to discussion and type of class though, as many kids who normally do not participate in class or are hard to keep under control made some great contributions.	
Response	Slater: I think this is a pretty good discussion for it being the Ss first time in this type of setting. They seem to be comfortable asking quesions of you and of one another, which is key in discussions. One of the questions you posed asked if having Ss raise their hands is appropriate for discussion. I think that depends on the maturity of the class and the comfort level of you, the teacher. You also asked if there are other ways to better prepare your Ss for this type of discussion. One thing that we do a lot in our classroom is follow the formula: individual, then small group, then whole class discussion, then individual reflection. This way Ss that have a harder time thinking about their ideas can take time and get them on paper. Then as a small group they can gain confidence sharing their idea and are more likely to discuss within the large group. It seems to work well for us. I hope it helps you.	

Melissa: I left a comment on here vesterday and I don't see it?! Oh well. I think that this classroom interaction probably went pretty well considering it was your first discussion ever - but I do see your observation about it feeling less dialogic than you hoped for (I felt that same way about mine). The Ss will probably open up and become more and more comfortable with their role as a participant as you do this more often. I think that implementing a rule that requires each Ss to say something at least once will probably help prod some Ss into contributing, however, it still won't get them all. One of your questions was asking for strategies that helps the class stay on task and tuned in (not chatting with their neighbor). Something that I find helps me in a ton (and not just in discussion) is using my physical presence as a classroom management tool - so when we're discussing or talking in class I'll be walking around and that way I can easily stand near a rowdier groups of Ss and this helps them to be quiet without me having to constantly ask them. It would be slightly harder/more awkward in a circle setting like this, my room is set up in a "U" shape so it lends itself to accommodate that strategy. This also helps because right now, while Ss are learning how to have a discussion, I am still a 'facillitator' and so I can get really 'into' Ss answers and use my hands to connect Ss with similar ideas by literally pointing to them as I'm refering to their idea/comment.

Maricela: My discussion went similar to this one. I think that especially with middle school age kids that some scaffolding toward whole class dialogic discussion would be valuable. You were keeping your questions authentic and open ended for the most part, but it is hard when so few students want to respond. Perhaps you could have walked around to help them get into it since at this age discussion is so new, they may respond well to you facilitating (as you were) but also moving around to get them to change their gazes. They will probably at first still just talk toward you, but if you move around their eyes will move around and catch glimpses of each other too. Also, I think you would be right to require each person to speak up during the discussion to get them out of their shells; what might help with this is to having some sort of object to pass around the room as a talking piece.

**Rachael**: The Ss are not constantly raising their hands, but "flowing." I like that you do implement the hand-

raising rule once they start to talk over each other. You provide positive feedback and force students to elaborate on their answers using higher-level questions to push them beyond blanket statements (i.e. "That's dumb"). I think that next time you might want to force those few students who have their heads down to sit up and pay attention because I think they are distracting from your discussion. Overall, I think this is a successful discussion; or, at least, a successful attempt on your part. They just need to get used to this classroom format. P.S. I think that your idea of making each S responsible for at least one comment will definately help:)

#### Reflection

#### Reflection

Being able to witness myself teaching from a view other than my own was a very beneficial experience. Viewing the lesson as an outsider, I saw a lot of things that I had either forgotten about or totally missed the first time around. I also saw more clearly the affect my actions and decisions about how to conduct the lesson were having on my students. These observations, along with the extremely useful comments and suggestions from my group members, gave me a whole new perspective on my teaching and a good feeling for the things I want to change for next time.

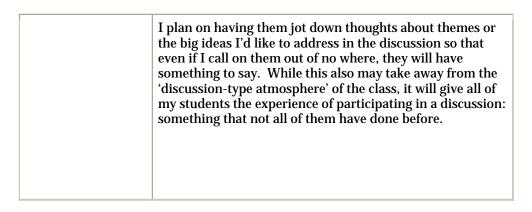
There were many things I did during this first discussion that I think worked really well and would like to continue. Giving positive feedback for comments and restating what was said were good tools for keeping everyone on the same page and giving positive reinforcement to those who took the risk of contributing to the discussion. Also, having authentic questions prepared ahead of time made all the difference in the world. My students are not yet asking very many questions themselves, so having a list of topics and questions in front of me was what allowed for any discussion whatsoever. Setting the room up in a circle and implementing a seating chart forthe discussion circle also helped. The change of seating showed the students that they would be doing something different that day and encouraged them to respond to one another rather than simply answering a question the teacher posed. The seating chart itself fulfilled the function of cutting down on side-conversation opportunities. All of these factors set up my students for a more successful discussion. There are also, however, a number of things I'd like to improve upon for our next discussion.

In my first discussion, I consciously placed myself in the circle, leaning against a desk so that I could move if

necessary, but I tried to stay in that same spot. I did this because I did not want to dominate the circle or be the focus of the students. I wanted them to interact with each other and for us all to be equal contributors. I now realize, however, that students who are inexperienced with discussions or dialogic classes may benefit from a more structured and scaffolded discussion at first. Walking around may put more emphasis on me, however, it also may hold their attention better, as Maricela and Melissa suggested. Melissa also commented about how she likes to be able to move and physically point out connections between student ideas, which I think is a great teaching tool. It also may provide more opportunities for me to use my presence to stop side conversations or engage students who are distracted or have their heads down, as Rachael suggested. Moving around will also make me more visible in my video. In the original copy of my clip, I was in the corner of the screen but when I posted the clip on voicethread. I got cut out. Next time I'd like to make sure that my group members and I can actually see myself so we can better evaluate my body language, actions, etc.

I also had trouble deciding if I should require my students to raise their hands during their discussion or not. Before we started the discussion, we talked about what a discussion should look like, what a discussion should sound like, what a discussion needs for it to be successful, etc. During this conversation, I compared discussions to conversations and told my students that as long as they were being respectful and not talking over one another. they did not need to raise their hands to talk. I thought that this would produce a more dialogic class and deemphasize the question-and-answer format that they were so familiar with. I found, however, that my students were not mature, organized, controlled or experienced enough to handle such freedom with talking. While many of them still raised their hands to contribute, if everyone got excited about something they would all start talking at once (as witnessed in my video clip). As Slater commented, requiring students to raise their hands during a discussion can be appropriate depending on the level and maturity of the students. Next time, therefore, I plan requiring them to raise their hands to contribute in effort to cut down on some of the chaos.

To increase participation, I plan on requiring the students to contribute at least once during a discussion. I think I will also play with the idea of calling students out to speak if they have not yet said anything. Slater mentioned that he had his students do pre-writing activities before discussions and that it was working really well for his classes. My students had information and answers in front of them, however, they did not have anything written on their own about the big ideas of the discussion. Next time,



Contemporary Issues in Technology and Teacher Education is an online journal. All text, tables, and figures in the print version of this article are exact representations of the original. However, the original article may also include video and audio files, which can be accessed on the World Wide Web at http://www.citejournal.org