

## **EDTPA is coming: Video makes embodied practices visible**

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### **Abstract**

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In this age of Facebook, Twitter, YouTube and Go-Pro cameras, video has become a part of everyday life for young adults—including those who enroll in teacher education programs. As technology advances, video recording and editing is becoming much easier and less expensive, and people are able to share images and videos with anyone over the Internet— anytime and anywhere. Video technologies are also being used increasingly in teacher preparation, to record classroom practices, to record and present exemplary teaching practices, to facilitate reflection, and for teacher assessment and certification.

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This study explores how making and reviewing videos of their own instruction impacts pre-service teachers' professional development, as well as how video can function as a tool for evaluation and scaffolding in the context of edTPA (Teacher Performance Assessment), the new pre-service teacher assessment measure that many states are now mandating. The goal of this study was to bring the voices of pre-service teachers, their instructors, and university supervisors to bear in exploring the impacts of videos and bodily techniques on teachers' professional development. These voices must be given a hearing in the current context in which edTPA is spreading to many teacher preparation programs across the nation. This study has implications not only for understanding pre-service teachers' professional development, but also for how initial teacher preparation programs can most effectively implement the videotaping requirement of edTPA.

### ***edTPA***

After more than four years of development and analysis, Stanford University and the American Association of Colleges for Teacher Education (AACTE) formed a partnership to develop and share edTPA (formerly known as the Teacher Performance Assessment), designed for determining whether or not new teachers are ready to enter the profession with the skills necessary to teach effectively. As demand grew, Stanford University partnered with Pearson, Inc. to administer edTPA. edTPA is a new approach to certifying teachers across a range of specializations. To date, 40 states, 200 teacher preparation programs have adopted edTPA as their primary mechanism for certification. A key, innovative feature of edTPA is the requirement that teaching candidates submit as part of their portfolio a video of themselves teaching. During their student teaching semester, pre-service teachers are asked to videotape themselves teaching a lesson and then to select a 20-minute segment to include in their teaching portfolios, along with their lesson plans, work samples from students, and their own reflections on the videotaped lesson.

A small but growing body of research has examined the uses and impacts of edTPA (Gale, Trief, & Lengel, 2010; Peck, Gallucci, & Sloan, 2010; Peck & McDonald, 2013; Chiu Stephanie, 2013; Madeloni, & Gorlewski, 2013). Some studies see edTPA as an advance in the professionalization of teaching. These studies suggest that edTPA is an effective mechanism to push teacher candidates to develop an understanding about what effective teaching is, as well as how it is defined and measured. For teacher preparation programs, edTPA aims to provide a valid data source that can be used for studying program effectiveness, in addition to collecting meaningful and consistent data to improve and update teacher education programs. edTPA holds out the promise of providing a new way to supervise and evaluate pre-service teachers, and may change the relationship among university supervisors, mentor teachers and student teachers. However, some scholars and educators see in edTPA the danger of over-standardization, a disempowering and de-professionalizing of university faculty, the introduction of a high-stakes, low validity test of teaching, and the introduction of further inequities into the teaching labor force. For example, Madeloni & Gorlewski (2013) wrote:

edTPA has been imposed on teacher education—an imposition that pushes aside work that matters deeply to education scholars. It narrows the possibilities of teaching and learning, distracts us from critical multicultural education, is an invitation for corporate encroachment, and restricts academic freedom. (p. 16)

They and others argue that edTPA, by underestimating the uncertainties of teaching, will narrow conceptions of what “counts” in teaching and learning. Also, edTPA distracts from social justice education, as it makes students focus on meeting the requirements of edTPA at the expense of giving attention to other aspects of the teacher preparation curriculum. In addition, when Pearson, Inc. became involved with the edTPA program, it corporatized teacher education, according to Madeloni & Gorlewski (2013), by seeking to “reap huge profits, exploit the privacy of students and teacher candidates and outsource teacher educators' labor” (p. 18). One of the most ominous parts of edTPA, they argue, is the way in which voices of dissent have been silenced by intimidation; edTPA restricts academic freedom and makes the host teachers or teacher candidates who refuse edTPA risk losing their jobs. In conducting this study, I take a neutral position towards edTPA's political controversies, as my focus is on how edTPA's video requirements will impact the development of teachers and teacher education. However, in conducting this study, I take a neutral position towards edTPA's political controversies, as my focus is on how edTPA's video requirements will impact the development of teachers and teacher education.

### ***Research on edTPA and Similar Programs***

edTPA is controversial, as it enjoys great support from some quarters and is bitterly attacked in others. Some educators are favorable towards edTPA; they think it is a new way to improve teacher education programs by identifying problems and helping teacher educators to fix them. Darling-Hammond (2006) introduced some research and assessment strategies used to evaluate program outcomes in the Stanford Teacher Education Program, discussing the possibilities and limits of different tools for evaluating teachers. Through her research, we can look back at the history of edTPA through their program and learn the potential contributions of multiple measures of candidates' performance. As Darling-Hammond (2010) stated,

A reliable and valid system of performance assessments based on common standards would provide consistency in gauging teacher effectiveness, help track educational progress, flag areas of need, and anchor a continuum of performance throughout a teaching career. (pp. 3-4)

Scholars such as Darling-Hammond and other educators have supported edTPA, highlighting that it builds on decades of teacher performance assessment development and research regarding teaching skills and practices that improve student learning.

In contrast, Cochran-Smith, Piazza, and Power (2013) used “a discourse approach” to analyze three complicated and evolving contemporary accountability initiatives in the United States, one of which is edTPA. Their analysis revealed many contradictions and tensions within these new policies. They argued, “given restrictions on access to portfolio materials and the subcontracting of scoring to a distant corporate entity, the quality and extent of teacher educator participation in the process has emerged as a controversial issue” (p.16). They argued that

edTPA creates conflict between a widely standardized professionalization of teacher education and local control interests in teacher education. Without access to comprehensive information on specific local contexts, they argue, the results of edTPA will be invalid and unreliable.

Miletta (2014) also argued that edTPA brings more negative side effects than benefits to the preparation of “highly qualified” teachers. On April 19, 2014, She posted some comments and concerns about edTPA on her blog, in which she summarized some concerns about edTPA, such as its unreasonably high costs and time consumption, problems with protecting students’ private records and data, equity issues, and a lack of context for the videos. As she argued, “Outsourcing the scoring of the edTPA to Pearson, known for inadequate and online training of scorers who are underpaid, means a loss of local control where knowledge of context means everything”; the scores of edTPA may not represent the real situations or abilities of pre-service teachers.

Okhremtchouk, Newell, and Rosa (2013) conducted a study that focused on pre-service teachers’ perspectives regarding the process of completing the Performance Assessment for California Teachers (PACT), a program similar to edTPA. They argued that the videotaping component should not be limited only to PACT, and suggested that bringing “videotaping into university coursework would contribute to more authentic and substantive reflections by preservice teachers on their own teaching practice” (p. 20). This is a useful point for my research, because the data came from one teaching methods course in which the researchers combined a video component with course assignments and sought to improve teacher’s professional skills. This study offers important implications for how to use videos in the teacher preparation programs.

The eSupervision instructional program in San Diego State University is another example. To satisfy the requirements of the PACT, the eSupervision program was designed with a cognitive apprenticeship framework to support the performance of student teachers, cooperating teachers, and university supervisors, using a variety of technologies during field experiences. Kopcha and Alger (2011) explained the eSupervision program as follows,

eSupervision engages in a number of technology-enhanced supervision activities, such as video reflection with an expert, online discussion of classroom management strategies with peers and experts alike, and building lesson plans with a performance support system. (p. 50)

They used both quantitative and qualitative methods in their research, with two cohorts of student teachers during their field experience; one cohort participated in eSupervision and the other did not. They studied student teachers’ knowledge and performance, self-efficacy, and the impact of the technologies used in the eSupervision program, arguing that traditional supervision (i.e., a series of observations from a supervisor) may not be as effective for supervising student teachers during their field experience. Therefore, they suggested that San Diego State University should seek alternatives to the traditional approach to supervising student teachers. eSupervision, as Alger and Kopcha (2009) concluded, is “a technology-supported cognitive apprenticeship model that appears to be a powerful framework for structuring the student teaching field experience and managing student teaching supervision” (p. 44). In addition, in this paper Kopcha and Alger suggested that “teacher’s performance and self-efficacy influence and are related to each other” (p. 68), and video-cued self-reflection can add to pre-service teachers’ self-efficacy. This concept can be usefully contrasted with the concern about self-confrontation. In a supportive climate, video may help to increase pre-service teachers self-efficacy, in contrast to reducing it through self-confrontation.

In Kopcha and Alger’s (2014) recent paper, “Student Teacher Communication and Performance During a Clinical Experience Supported By a Technology-Enhanced Cognitive Apprenticeship,” they examined the differences in communication and performance among two groups of student teachers and found out that “there was a statistically significant difference in the current study favoring eSupervision students in the area of planning” (p. 55), and that online discussions through both public and private channels may have positive effects on eSupervision students’ ability to plan lessons. Lesson planning is a crucial part of pre-service teachers’ methods courses, so these findings may help the teacher preparation program to revise curricula. Reviewing the two programs’ implementations of the PACT may bring out some useful insights for implementing edTPA at other teacher preparation program.

### ***Using Video in Teacher Education***

Video can be used in many different ways in teacher preparation programs. Firstly, video can be used to capture teaching episodes, to illustrate classroom cases, and to review teaching practices, and in these ways, as a tool for developing flexible pedagogical thinking. For example, Calandra et al. (2009) conducted a study on the effective use of video editing to help enhance teachers' reflection on their practice. In this research, they used a qualitative research design to examine two guided reflection activities for two groups of novice teachers. The first group attended a "debriefing" session with their supervisors or course instructor immediately after teaching their lessons, and later wrote about critical incidents that occurred during their teaching. The second group had no debriefing, but the participants were asked to videotape their teaching, edit the video for two critical incidents, and reflect on the incidents in written form using the same rubric as the first group. Even though the two groups used the same reflection guidelines, they found that students who developed video vignettes produced longer and more multifaceted reflections; Calandra et al. stated,

They [i.e., the second group of students] were allowed time to draw from multiple sources of knowledge, including their own, to think about whether or not their teaching decisions made sense. (p. 87)

Calandra et al. found the implications of these results to be an important contribution of using videos to facilitate novice teachers' development.

Borko and Jacobs (2008) conducted a study to understand how classroom videos can be a productive tool for fostering discussions about teaching and learning. Video can capture the classroom environment for later review, which provides teachers with a chance to notice any points they missed, reflect on their teaching from different angles, and start a discussion with their peers. The data suggested, "the participants in their program engaged in increasingly reflective and productive full-group conversations around video from one another's classrooms" (p. 435), and one possible reason for these changes is "an expanding ability and willingness to learn by analyzing and sharing ideas about classroom video" (p. 432). Sharing classroom videos and discussing the issues and concerns is a good way for novice teachers to develop their teaching practice. Also, video is a useful tool for fostering productive discussion in teaching methods courses.

Video can function as a tool to improve teachers' professional vision. Sherin's a series of studies (Sherin, 2001, 2007; Sherin & Han, 2004; Van Es & Sherin, 2008) explored how reflecting on videos of peers' teaching could support in-service teachers' learning. Furthermore, Sherin & Van Es (2009) explained, with reference to repeated remarks on the part of participants in these studies, that "not only have the video clubs themselves been a valuable experience but that watching video, and the video clubs in particular, have influenced their teaching" (p. 32). Sherin & Van Es (2009) studied mathematics teachers' learning in a two-year-long video club in which teachers met monthly to watch and discuss videos of each other's teaching. The authors found that participating in a video club and reflecting on the videos developed teachers' professional vision and improved their ability to notice and interpret the crucial moments of classroom interactions. Also, the results suggested that "professional vision is a productive lens for investigating teacher learning via video" (p. 20). Although these studies pertained specifically to in-service teachers, the results can be equally used in studying the development of pre-service teacher's professional vision.

Reviewing experienced teacher's teaching videos is a regular way for developing professional teaching skills in most teacher preparation programs. Although any videotapes of teaching could potentially provide meaningful ideas for novice teachers, viewing their own classroom videos will have different influences and may benefit new teachers more. Video selfanalysis has been used for many years, and studies have generally shown that using video for self-analysis benefits pre-service teachers. One advantage of using video for self-analysis is that videos can be kept permanently and viewed multiple times (Brouwer, 2011; Calandra, Brantley- Dias, & Dias, 2006; Wu & Kao, 2008). Another benefit is that watching videos of their own teaching can help pre-service teachers see themselves from different perspectives (Downey, 2008; Dye, 2007; McCurry, 2000; Shepherd & Hannafin, 2008).

Bakker et al. (2011) conducted a study about using video portfolios to develop a useful procedure for assessing teachers' teaching competence. The researchers used video portfolios to record teachers' teaching in the classroom. Six trained assessors scored three video portfolios, and two aspects were examined: first, the inter-

rater agreement between assessors was examined as an aspect of the reliability of the scores; second, they explored the assessors' opinions about the utility of the assessment procedure with respect to making reliable judgments. The "inter rater" agreement was determined for scores assigned to the performances shown in individual video episodes and for the overall teaching performance. Then, teachers were interviewed about their experiences in scoring and judging video portfolios. They found that supporting information, such as descriptions of learning activities, summaries of what happened during the video episodes, and information about context, could help assessors to evaluate the videos. Their findings shed more light on issues regarding the construction and use of video portfolios as a method for teacher performance assessment. In implementing assessment tools that, like edTPA, use video as a key component for performance assessment, students' scores will hinge partly on whether they provide such supporting information through their videos and narrative reflections.

Still, video assessment methods can also bring negative influences to teacher education and teachers' performance. One concern is that a focus on tacit and implicit, embodied aspects of teaching in our pre-service programs can draw time and attention away from more explicit activities, such as lesson planning and written reflections. In turning attention to the body, we should avoid falling into a mind/body binary and instead view teaching as an activity that combines the use of the teachers' minds and bodies. We need to thoughtfully consider how best to balance attention among the conscious/verbal/planned and embodied/ implicit/spontaneous aspects of teaching. We should also remember that some embodied practices are conscious/ intentional/planned, while some non-embodied teaching practices are implicit/unplanned/ unconscious.

Another concern is how much and in what ways people change their behaviors in front of the camera. Using videos as an assessment tool, we hope the camera can capture the spontaneous and natural behaviors of pre-service teachers. However, as Mohl (2011) claimed,

Everyone who has experienced filming knows the special effect the camera has on people being filmed and on what they are doing: they may go on living their lives, but they do so in a slightly different manner. One gets the impression that they are performing their own lives. I have defined this 'slightly different' manner, this *mise en scène*, as a semantic densification, to use Edwin Ardener's notion [1987], a densification that occurs when the camera is turned on. (p. 232-233)

Mohl's concept of densification may be helpful for understanding why teachers may appear to perform better or worse or simply differently in their videos, because of their conscious effort to perform like an effective teacher.

Admiraal et al. (2011) argued that "the richness and complexity of video portfolios endanger both the reliability and validity of the assessment of teacher competencies" (p. 1019). They evaluated the assessment of video portfolios with regard to its "reliability, construct validity, and consequential validity," and argued that video portfolios come from complex contexts and are likely to be interpreted differently by different assessors, which raises reliability and validity issues. Therefore, they suggested that the assessment of video portfolios should be combined with many other strategies—such as "peer debriefing, prolonged engagement, crosschecking, using a dependable strategy, considering multiple sources of information, and holistic examination" (p. 1019)—so that the overall reliability and validity of teacher assessment can be improved. Nonetheless, the majority of the literature suggests that videos bring many benefits to teacher education, and educators and scholars can use video in different ways to improve teachers' performance.

Fuller and Manning (1973) introduced the concept of self-confrontation in the use of video. Their research with pre-service teachers led them to conclude that viewing a video of oneself is a process of self-confrontation, which is difficult, stressful, and painful for some students. They reported that the students they studied felt frustrated at being videotaped; they became overly self-critical and they began to lose confidence in their teaching. Fuller and Manning argued that viewing videos of one's own teaching increases self-consciousness and resistance to feedback, and that some pre-service teachers, when watching and reflecting on their videos, focus too much on their physical appearance, which makes it more difficult for them to focus on their students' responses and how they teach. Self-confrontation may make some people feel better, but it may make others feel discouraged; it can lead to reduced self-esteem and confidence.

It is important to note that this research was conducted more than four decades ago. Now, a new generation of teachers may have different feelings when they face the camera. We live in a society that is saturated with the use of video technologies. University students these days seem keen on sharing images and videos of themselves through social media platforms such as Facebook, Twitter, and MyLife, and increasingly these students have been accustomed to doing so from a very early age. Will this generation still experience the trauma of selfconfrontation and feel embarrassed to share their videos with others? Perhaps they will only feel comfortable sharing their “casual” selves with others, but may find it difficult to show their “professional” selves to others. Or, they may feel that their casual selves are different from their professional selves, and might feel awkward reviewing their professional alter egos.

### ***Research Design***

The participants included 23 students who are registered in the initial teacher certification program in early childhood education. They also the first cohort to get their teacher license through the edTPA project. For preparing these student teachers for edTPA, as part of their coursework, they are required to take videos of themselves teaching during their internships in Pre-K classrooms and use these videos as part of their teaching portfolio. The videos made in the internships are typically 5-10 minutes long, shot on small camcorders or phones, and focused on the pre-service teacher but not on the students in the class. Student teachers were also asked to write reflections both on the lesson and on the video of the lesson. After collecting the videos and reflection papers, the next step in this research involved the video-cued multivocal ethnographic method (Tobin, et al., 1989). The scenes from the videos as visual prompts (or “cues”) guide the focus-group interviews with student teachers, their instructors, and university’s supervisors .

### ***Findings***

#### **Concerns and Pressures about edTPA**

Some of the students’ feelings about the video assignment were connected to their awareness that this was a sort of rehearsal for the video that would be part of their edTPA portfolio. Pre-service teachers felt considerable pressure in anticipation of edTPA, the high stakes assessment they knew they would have to pass when they reached their student teaching semester in a year. The pre-service teachers were especially bothered by the idea that their edTPA video would be evaluated by someone who was unfamiliar with them and their instructional context. In one group interview, pre-service teachers had a fiery discussion about how what they perceived as the lack of context in the edTPA assessment went against the principles they were learning in the program:

They know nothing about our classroom culture—what they’ve been showing us this whole time we’ve been in program. They know nothing about the culture in the classroom, the culture of this city, even the culture of this state... I will be a great teacher one day because I’m going to implement the things that I’ve learned here. edTPA isn’t going to be able to see what we’ve learned here because we’re not able to put that in our videos.

The focus of their concerns was on whether a 20-minute video could present enough information for the edTPA evaluators to make a reasoned judgment of their teaching. The video camera cannot capture everything that happens in the classroom, and a 20-minute video can easily be misunderstood without knowing what transpired before and after the recording.

Anticipating the edTPA assessment impacted some of the pre-service teachers’ decisions about what kinds of lessons to teach, how to teach them, and how to choose which students should be included in the video. The pre-service teachers talked about strategies they could use to get a good edTPA score, such as teaching an easy-to-grasp concept and practicing their lesson several times with students before making their “real” video or choosing a select group of students who are easier to work with. Some pre-service teachers even chose the quiet and better behaved students to take part in the video activity: “The two boys in my group get distracted easily, so I knew I did not want them in my group.” This pre-service teacher was not the only one who talked about choosing “good” students to be included in the videos.

It should be said that the pre-service students' ideas about what the edTPA evaluators would be looking for might not be correct. In reality the edTPA evaluators may be more thoughtful and insightful than the pre-service teachers anticipate, but it is their imagination about edTPA rather than the reality of edTPA that begins distorting their practice already even a year away from being assessed. Although many teachers expressed that the video assignment for the teaching methods class was really helpful for developing their professional skills, the pressure of the looming edTPA assessment may push them even a year out to focus too much on getting good test scores, which can be a distraction from improving their teaching skills.

### ***Different Responses to Using Videos***

The pre-service teachers and the instructors and supervisors who worked with them tended to notice and emphasize different points in the videos. For example, in the group interview, one supervisor expressed her concern about what pre-service teachers fail to see in their videos:

They just focus on their voice or face or volume of their voice or tone of voice or eye engagement, but except that part, they were not intentionally paying attention to their body strategy. I mean, on intention or unconscious body strategy, as they had not been aware of that.

As this supervisor suggested, sometimes pre-service teachers appeared to miss the importance of key points about what worked better and less well in their lessons.

For pre-service teachers to get the most benefit from the video-taping assignment their instructors must scaffold their learning. As do high-level athletes and dancers, teachers—both pre-service and in-service—can use video as a tool not just for reflection but also for video-cued practice. For example, the pre-service teacher and her instructor could watch videos of her teaching together, identify examples of effective and ineffective use of bodily techniques, and then practice the effective techniques.

The videotaping assignment was a useful tool for facilitating communication between pre-service teachers and their instructors. Supervisors and pre-service teachers might ordinarily miss some of the details that can be captured on video, but when a lesson is recorded, they can sit down together to review the video and discuss some issues about the lesson. Also the preservice teachers can explain the context and share their thoughts about the lesson and their students with their supervisors, which can facilitate the process of rethinking the meaning of their lesson.

### ***Implications***

There is a growing body of anecdotal evidence and research to suggest that edTPA is problematic in many ways. However whatever edTPA's shortcomings may be, an implication of this study is that video can play a vital role in teacher preparation programs. Video should be incorporated throughout the programs, and not just introduced during student teaching as a graduation and certification requirement. Earlier in their program, as in their second semester in our program, pre-service teachers have more time and less pressure to reflect on their embodied practice than they do as they near their student teaching semester. As one of my informants said in a focus-group interview conducted in the middle of her third semester in the program,

Now, in our classes we're so focused on getting ready for milestones, and like, it's just, right, this is a crazy semester, and being there two days a week in the class every day, every week, is just like a huge responsibility, and now we don't have time, I feel like, to worry about our embodied practices. That's not something we're like, super-prioritizing right now, so, I'm glad we did that last semester, because it is something to keep in mind.

I suggest that the video component should be incorporated into the pre-service teacher's development as early as possible, and at least by the second semester of the program. In this way, pre-service teachers can become familiar with the technology, comfortable in front of the camera, and more accustomed to viewing and reflecting on their own and classmates' videos.

This study shows that the videotaping assignment was a useful tool for facilitating communication between pre-service teachers and their instructors, which is a part of the process of rethinking the meaning of their lessons. Instructors need to scaffold pre-service teachers' learning from their videos. The lead instructor in the class I

studied shared his feedback and comments on their videos in written reflections that he gave to the students on their midterm and final portfolios. In another cohort, the instructor and the field supervisor sat down with students one-by-one to watch and discuss their videos.

The pre-service teachers in this study did some role-playing of their lessons before videotaping their midterm and final lessons, and several of them discussed the value of roleplaying for revising their lesson plans and practicing their embodied teaching techniques. The suggestions coming from peers during role-play practice scenarios and from reviewing the videos together were very beneficial to pre-service teachers. More experience and more research is needed to help determine the most effective way for instructors to help students draw out the greatest benefit from the use of video.

## **References**

- Admiraal, W., Hoeksma, M., van de Kamp, M. T., & van Duin, G. (2011). Assessment of teacher competence using video portfolios: Reliability, construct validity, and consequential validity. *Teaching and Teacher Education, 27*(6), 1019–1028.
- Alger, C., & Kopcha, T. J. (2009). eSupervision: A technology framework for the 21st century field experience in teacher education. *Issues in Teacher Education, 18*(2), 31.
- Bakker, M. E., Roelofs, E. C., Beijaard, D., Sanders, P. F., Tigelaar, D. E., & Verloop, N. (2011). Video portfolios: The development and usefulness of a teacher assessment procedure. *Studies in Educational Evaluation, 37*(2), 123–133.
- Borko, H., Jacobs, J., Eiteljorg, E., & Pittman, M. E. (2008). Video as a tool for fostering productive discussions in mathematics professional development. *Teaching and teacher education, 24*(2), 417–436.
- Brouwer, C. N. (2011). Imaging teacher learning. A literature review on the use of digital video for preservice teacher education and professional development.
- Calandra, B., Brantley-Dias, L., & Dias, M. (2006). Using digital video for professional development in urban schools: A pre-service teacher's experience with reflection. *Journal of Computing in Teacher Education, 22*(4), 137–145.
- Calandra, B., Brantley-Dias, L., Lee, J. K., & Fox, D. L. (2009). Using Video Editing to Cultivate Novice Teachers' Practice. *Journal of Research on Technology in Education, 42*(1), 73–94.
- Chiu, S. (2013). edTPA: An assessment that reduces the quality of teacher education. *Teachers College, Columbia University Working Papers in TESOL & Applied Linguistics, 14*.
- Cochran-Smith, M., Piazza, P., & Power, C. (2013, January). The politics of accountability: Assessing teacher education in the United States. In *The Educational Forum* (Vol. 77, No. 1, pp. 6-27). Taylor & Francis Group.
- Darling-Hammond, L. (2006). Assessing Teacher Education: The Usefulness of Multiple Measures for Assessing Program Outcomes. *Journal of Teacher Education, 57*(2), 120–138.
- Darling-Hammond, L. (2010). Evaluating teacher effectiveness: How teacher performance assessments can measure and improve teaching. *Center for American Progress*.
- Downey, J. (2008). It's not as easy as it looks: Pre-service teachers' insights about teaching emerging from an innovative assignment in educational psychology. *Teaching Educational Psychology, 3*(1), 1–13.
- Dye, B. R. (2007). Reliability of pre-service teachers' coding of teaching videos using a videoanalysis tool. Unpublished Master's Thesis, Brigham Young University, Provo, UT.
- Fuller, F. F., & Manning, B. A. (1973). Self-confrontation reviewed: A conceptualization for video playback in teacher education. *Review of Educational Research, 43*(4), 469–528.
- Gale, E., & Trief, E., & Lengel, J. (2010). The use of video analysis in a personnel preparation program for teachers of students who are visually impaired. *Journal of Visual Impairment & Blindness, 104*(11), 700.
- Kopcha, T., & Alger, C. (2011). The impact of technology-enhanced student teacher supervision on student teacher knowledge, performance, and self-efficacy during the field experience. *Educational computing research, 45*(1), 49–73.
- Kopcha, T. J., & Alger, C. (2014). Student teacher communication and performance during a clinical experience supported by a technology-enhanced cognitive apprenticeship. *Computers & Education, 72*, 48–58.

- Madeloni, B., & Gorlewski, J. (2013). Wrong answer to the wrong question: Why we need critical teacher education, not standardization. *Rethinking Schools*, 16-21.
- McCurry, D. S. (2000). Technology for Critical Pedagogy: Beyond Self-Reflection with Video.
- Miletta, A. (2014, April 19). Alexandra Miletta: The edTPA: Good thing or bad thing? Retrieved from <http://alexandramiletta.blogspot.com/2014/04/the-edtpa-good-thing-or-badthing.html>
- Møhl, P. (2011). Mise en scène, knowledge and participation: considerations of a filming anthropologist. *Visual Anthropology*, 24(3), 227-245.
- Okhremtchouk, I., Newell, P., & Rosa, R. (2013). Assessing pre-service teachers prior to certification: Perspectives on the Performance Assessment for California Teachers (PACT). *Education Policy Analysis Archives*, 21, 56.
- Peck, C. A., Gallucci, C., & Sloan, T. (2010). Negotiating implementation of high-stakes performance assessment policies in teacher education: From compliance to inquiry. *Journal of Teacher Education*.
- Peck, C. A., & McDonald, M. (2013). Creating “cultures of evidence” in teacher education: Context, policy, and practice in three high-data-use programs. *The New Educator*, 9(1), 12-28.
- Shepherd, C. E., & Hannafin, M. J. (2008). Examining preservice teacher inquiry through videobased, formative assessment e-portfolios. *Journal of Computing in Teacher Education*, 25(1), 31–37
- Sherin, M. G. (2001). Developing a professional vision of classroom events. In T. Wood, B. S. Nelson, & J. Warfield (Eds.), *Beyond classical pedagogy: Teaching elementary school mathematics*, 75-93.
- Sherin, M. G., & Han, S. (2004). Teacher learning in the context of a video club. *Teaching and Teacher Education*, 20, 163-183.
- Sherin, M. G. (2007). The development of teachers’ professional vision in video clubs. *Video research in the learning sciences*, 383-395.
- Sherin, M. G., & Van Es, E. A. (2009). Effects of video club participation on teachers' professional vision. *Journal of Teacher Education*, 60(1), 20-37.
- Tobin, J., Wu, D., & Davidson, D. (1989). *Preschool in three cultures: Japan, China, and the United States*. New Haven, CT: Yale University Press.
- Van Es, E. A., & Sherin, M. G. (2008). Mathematics teachers “learning to notice” in the context of a video club. *Teaching and Teacher Education*, 24, 244-276.
- Wu, C. C., & Kao, H. C. (2008). Streaming Videos in Peer Assessment to Support Training Preservice Teachers. *Educational Technology & Society*, 11(1), 45-55.