understandings of the research topic for each group. Such understandings were expected to lead to the refinement of the research topics, questions, and possible cross-partnership/regional studies and projects for the agenda.

The refinement phase of the project began during the March convening with planned activities for Working Seminar II. Participants of the meeting were asked to join or rejoin their affinity group/topics of interest that were established during February's Knowledge Café. The Working Seminar II in March was devoted to three major activities:

- Refining research topics—making statements (or questions) of what the group is most interested in and/or clarifying the topic, or creating sub-topics.
- Formulating two to three initial or general researchable questions derived from the research topic.
- Identifying and commenting on seven cross-cutting national needs/issues for the agenda.

Participants of the meeting returned to their affinity group or joined a group to work on the first two activities. For the third activity, all participants came together to comment on the 7 crosscutting national needs/issues for the research agenda.

It is important to note that the data and information that were drawn from each of the three virtual convenings were reviewed and analyzed in relation to the objectives of the project. The data were also used to design subsequent convenings. The planning committee anticipates that use of a theory of action method coupled with an iterative approach will ultimately lead to the achievement of the overall objectives of the project.

The data and information gathered from the March and May meetings are being reviewed and analyzed during the summer and early fall of 2022. At the time of writing this article data collection was planned for meetings held virtually

A series of four dynamic virtual research convenings were organized, providing a forum for rich discussion.

in August and a hybrid meeting held during September. It is our hope that this innovative series of conferences will foster greater multi-site collaboration and coordination, while ultimately leading to improved and groundbreaking research in and on PDS-SUPs. ◈

References

Abdal-Hagg, I. (1998). Professional development schools: Weighing the evidence. Thousand Corwin Press.

Breault, R, & Breault, D.A. (2012). Professional development schools: Researching lessons from the field. Rowman & Littlefield Publishers.

Catelli, L.A. (2021). Change and improvement in school-university partnership settings: Emerging research and opportunities. IGI Global.

Darling-Hammond, L. (Ed.). (2005). Professional development schools: Schools for developing a profession (2nd ed.). Teachers College Press.

Kochanek, J. R., Lacierno-Paquet, N., & Carey, R. (2014). Developing a coherent research agenda: Lessons from the REL Northeast & Island research agenda workshops (REL 2014-014). Washington, DC: U.S. Department of Education, IES, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast and Islands.

National Association for Professional Development Schools. (2021). What it means to be a Professional Development School: The Nine Essentials (2nd ed.). (Policy statement). Author.

Neapolitan, J., & Berkeley, T. (2006). Where do we go from here? Peter Lang.

Neapolitan, J. (2011). Taking stock of professional development schools: What's needed now, National Society for the Study of Education – NSSE Yearbook, 110(2). Teachers College, Columbia University.

Regional Educational Laboratory Midwest (2018). Research agenda setting workshop: Facilitator's guide. REL Midwest at American Institutes for Research, 10 South Riverside Plaza, Suite 600, Chicago, IL 60606 (RELMidwest@air.org).

Rutter, A. (2011). Purpose and vision of professional development schools. In J. Neapolitan (Ed.) Taking stock of professional development schools: What's needed now (289-304). Teachers College, Columbia University Press.

Snow, D., Flynn, S., Whisenand, K., & Mohr, E. (2016). Evidence-sensitive synthesis of profession development school outcomes, School-University Partnerships [Special Issue – What is a PDS?], 9(3), 11-34.

Zenkov, C., Shively, J., & Clark, E. (2016). Why must we answer the question "What is a professional development school?" School-University Partnerships [Special Issue – What is a PDS?], 9(3), 1-10.

Preparing Pre-service Teachers for edTPA Using PDS Support and Video Annotation

Emily K Reeves, Midwestern State University
Christina Janise Wickard, Midwestern State University

Integrating PDS, Video Annotation Software, and edTPA

The use of video in teacher education programs is not new and has long been used for examining one's teaching practices (Grossman, 2005), and more recently, the use of annotation tools has allowed for the documentation of teacher self-analysis (NAPDS Essential 4), both collaboratively and with peers (Rich & Hannafin, 2009). These tools make the documentation and support of teacher self-analysis and reflection evidentiary

through specific instances in the video (Heafner et. al., 2019).

Video capture can be a very useful tool in helping PSTs recognize both strengths and weaknesses in their teaching, and much research supports the use of video in helping PSTs develop critical reflective practices (Heafner et. al., 2019) during their PDS experience (NAPDS Essential 4) while working on edTPA. Initially, video capture is introduced in PDS Block classes the semesters before clinical teaching and then fully implemented during clinical teaching allowing for gradual release of responsibility. In addition, the uncertainty of the availability of quality field placements, increased

accreditation and accountability requirements, and the scarcity of resources such as highly qualified university supervisors makes innovative video observations and analysis of PSTs teaching a vital tool in developing critical reflective practices about pedagogical and management decisions (GoReact, 2019).

Video has the potential to help PSTs reflect (NAPDS Essential 4) upon and notice the impact of their actions in the PDS classroom. Video allows PSTs to focus on specific components of their teaching such as the impact of pedagogical decisions and their choice of management strategies. From watching themselves teach at

22

different points in their learning process and discussing the video with their PDS mentors, they have the opportunity to develop critical reflective practices that help them move beyond shallow reflections based on recollections of what happened during a lesson in the past, to recognizing and developing their abilities as teachers. This begins early in their involvement with the PDS during methods courses and continues throughout their program through to clinical teaching. Not only is video a literal reflection of what they do in the PDS classroom, it is a tool that has the capacity to help students make concrete connections to their actions and specific outcomes which is an important component of edTPA (NAPDS Essentials 2 and 4).

Specifically, in the case of pre-service PDS teachers, reflection (NAPDS Essential 4) is extremely important in helping them develop into thoughtful practitioners during their field experiences before entering their own classrooms (Friedman & Schoen, 2009; Seban, 2009). However, reflective practices that are useful in informing teacher decision-making require time and guidance to practice and develop. This is where the PDS setting offers a critical opportunity. In the book chapter titled "Using Video Capture and Annotation Technology to Strengthen Reflective Practices and Feedback in Educator Preparation," Heafner and colleagues (2019) make the case that just because a teacher reflects and makes a decision based on that reflection doesn't necessarily make it an effective reflection or a worthy, subsequent decision. Therefore, it is vital that PSTs gain the support and guidance during their PDS time in developing critical reflective skills that allow them to recognize the instances in their teaching that were successful, focus on specific instances in their teaching that require action, understand why, and ultimately make appropriate changes (NAPDS Essential 2). Mentors in the PDS are uniquely equipped in assisting with this as they are also immersed in the setting with the PST; they can provide important feedback that goes more in-depth and meaningful with the help of the video as evidentiary support.

Video annotation software holds the key to students making specific connections in their teaching to the observation evaluation feedback provided by their university supervisor and cooperating mentor (NAPDS Essential 2). The visual connection of their teaching action paired with time-stamped feedback strengthens their ability to make significant changes in their classroom practice, leading to more significant improvement gains during the field experience which ultimately facilitates their success during the edTPA process.

edTPA Portfolio Overview During Clinical Teaching at PDS
The purpose of the portfolio is for the pre-service teacher to plan, instruct, and assess student learning in the field. The PST must work with a group of 4 or more students at the PDS. As well,

the PST must earn an 80% of the portfolio as a whole to pass Action Research, which is the course that will encompass the edPTA process. Video annotation will be used to watch, reflect, and learn from teaching experiences. The university supervisor will provide feedback on each of the 3 tasks before the PST submits a final portfolio to be graded using the Action Research Portfolio Rubric. The PDS cooperating teacher will have many opportunities to provide feedback and support reflection throughout the process (NAPDS Essential 2). The portfolio outline can be found here: https://bit.ly/3nn67zs .

Video Annotation to support PST in PDS
Video annotation software such a GoReact allows for the documentation of critical features at specific and relevant points in the video which are documented and time-stamped thus allowing for an evidence-based reflection that is richer, more thorough, and thus more meaningful and useful in improving practice. This type of innovative scaffolding is integral in the development of PSTs into successful practitioners (NAPDS Essential 4). The use of video annotation software will benefit pre-service teachers in myriad of ways and thusly aligns with the College of Education's Mission to prepare successful, reflective professionals through the use of best practice. Students need two things to develop skills: 1) Awareness – research shows that video of oneself is the best way to build awareness, and 2) Input – Authentic formative assessment from an expert increases the speed of student skill development. GoReact provides an easy to use platform in which recording and evaluation is incredibly simple and immensely powerful. GoReact specifically provides some useful features.

Supporting Teacher Certification

First, it supports student certification including edTPA and Texas state specific certifying bodies, as well as collecting data for college accreditation. GoReact aligns well with the standards to help provide evidence in both accreditation and certification. When students become aware of their practice through self-evaluation, peer evaluation, and instructor coaching skills improve faster than traditional methods. Students can record, review and receive feedback as much as they'd like and when it comes time for certification, they have a healthy bank of video in their portfolios.

According to Dr. Fales, noteworthy improvements in self-reflection also better prepare students for meeting edTPA standards: "Students have to take edTPA for licensure—that's a program requirement—and the reflection piece is huge. The whole assessment is teaching and then reflecting on what they did. The assessment requires in-depth reflection on teaching practices and student learning. When teacher candidates develop those skills early in the program, they are able to apply them to their edTPA assessment." (GoReact, 2019)

Providing Support from Supervisors and Coaches without Travel
GoReact allows supervisors and coaches provide additional support without additional cost of travel. Instead of meeting the required observations for each student, students can take the learning into their own hands and record as many sessions as they'd like. Supervisors are then free to give coaching on as many of those sessions as needed to ensure each student receives the support that they need. According to the College of Education Case Study of the University of West Alabama, use of GoReact saved $30,000 one year in the travel budget (GoReact, 2018)

Additional GoReact Features
GoReact provides some other additional features, which we have found useful in supporting our teacher candidates. The comment-only assignment allows instructors to share prompts with your students and for your students to analyze and discuss that prompt through text, video or audio comments, as well as rubrics and forms.

• Multi-camera recording: Allows for groups of students to virtually meet together and discuss or present a topic and be reviewed and/or assessed by their instructor(s) and peers.
• Closed peer feedback: For any in-class or virtual presentations, closed peer feedback allows a student presenter to receive feedback from their peers directly (only the presenter can see feedback from the class, peers can't see each other's comments).
• Open peer feedback: For any in-class or virtual presentations, open peer feedback allows a student's presentation to be opened up for discussion from their peers, allowing peers to see and interact with each other's comments).
• Screen Capture: In video responses, students and instructors have the option to capture their screen, allowing them to share resources, documents, slides, videos, etc directly with their peers/instructors.

How PDS Partnerships are Part of the Process
An integral component of the success of the PST is the involvement of the PDS and the mentor teachers. In guiding PSTs through the edTPA process, PDS partners can provide much needed support and assistance to help PSTs grow as effective educators. Not only can they provide support through sharing resources, modeling, and co-teaching, but mentors also provide valuable feedback to help PSTs improve their instruction and classroom management. Having a video annotation tool such as GoReact is an effective way to assist mentor teachers at the PDS in providing meaningful feedback to help PSTs be more successful. Catching important instances in the moment is difficult as teachers are multi-tasking and moving quickly to keep up a fast pace for student engagement. Video allows both the mentor and PST to review a lesson together and discuss important aspects. This is even more significant as it can be done synchronously or

asynchronously with both the PST and mentor teacher making comments at specific points. To be most impactful, this scaffolding process begins during methods courses. The type of dialogue between the mentor and PST that revolves around real-time video of a lesson allows for reflection, correction, and growth that can help PSTs be successful when navigating the edTPA process later during the clinical teaching placement.

Suggestions for Implementation

While video annotation tools can be extremely helpful, they only work when people use them fully. GoReact is user friendly, but it takes a little time to become familiar with the program. To assist with this, students are given an assignment early on that helps them get used to the video and commenting capabilities. They are asked to video a 10–15-minute mini-lesson in class and then this is shared and everyone is encouraged to make comments. These comments are based on a scaffolded set of feedback questions students are given in class prior that not only help them make relevant comments on GoReact for their peers, but also provides insight into what they need to focus on themselves. Once they receive the feedback, they must submit a reflection that addresses points that were commented on and what action, if any, they would take.

Once students are in the field, this process is repeated with the mentor teacher included as well. This is typically a short lesson or one in which the PST is teaching a portion of a lesson that is not observed by the university supervisor. The PST then shares their reflection with both the university supervisor as well as the mentor.

Having students go through the process a couple of times and having the mentor teacher involved, helps them feel comfortable before they record their formal lessons.

Emily Reeves(Emily.reeves@msutexas.edu) is an Associate Professor at Midwestern State University with a PhD in Curriculum and Instruction, a MA in Education Administration, and 20 years experience.

Christina Janise Wickard is an Associate Professor and the graduate program coordinator for Curriculum and Instruction at Midwestern State University with a PhD in Instructional Leadership and Academic Curriculum and a Med in Counseling. ◈

References

Board of Trustees of the Leland Stanford Junior University. (2019). *Making good choices - edTPA*. Retrieved October 25, 2021, from https://www.edtpa.com/content/docs/edtpamgc.pdf.

Board of Trustees of the Leland Stanford Junior University. (2019). *edTPA Elementary Education: Literacy with Mathematics Task 4 Handbook*. Retrieved October 25, 2021, from http://www.edtpa.com

Friedman, A., & Schoen, L. (2009). Reflective practice interventions: Raising levels of reflective judgment. *Action in Teacher Education, 31*(2), 61-73.

GoReact. (2019). Retrieved from https://cdn2.hubspot.net/hubfs/2123109/aCustomer Facing

Docs/Case Studies/East Carolina University Case Study - Teacher Preparation.pdf

GoReact. (2018). Retrieved from https://cdn2.hubspot.net/hubfs/2123109/aCustomer%20Facing%20Docs/Case%20Studies/Western%20Alabama%20Case%20Study%20-%20Teacher%20Preparation.pdf

Grossman, P. (2005). Research on pedagogical approaches in teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), *Review of Research in Teacher Education*. Washington, D.C: American Educational Research Association.

Heafner, T. L., Hartshorne, R., & Thripp, R. (2019). *Handbook of research on emerging practices and methods for K-12 online and blended learning*. Hershey PA: Information Science Reference.

National Association of Professional Development Schools. (2021, May 10). *Nine essentials*. NAPDS. Retrieved May 20, 2022, from https://napds.org/nine-essentials/

Rich, P. J., & Hannafin, M. (2009). Video Annotation Tools: Technologies to Scaffold, Structure, and Transform Teacher Reflection. *Journal of Teacher Education, 60*(1), 52-67.

Seban, D. (2009). Researching reflective field practices of elementary pre-service teachers: Two dimensional analysis of teacher narratives. *Reflective Practice, 10*(5), 669-681.

Keeping a Partnership Going: Facing the challenges of scripted mathematics programs

Kerri Richardson, The University of North Carolina at Greensboro
Samuel D. Miller, The University of North Carolina at Greensboro

Planning for a Partnership

In this article, we reflect on how we would adapt the practices of a previous successful university-public school partnership with the ever-increasing adoption by districts of scripted programs for math instruction at the elementary grade levels. Our partnership with rural elementary schools focused on improving students' overall mathematics achievement and engagement through professional learning experiences with teachers. The goals align with Essential 3 of the Second Edition of the NAPDS Nine Essentials (NAPDS, 2021) which states, "A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry." Reflection on this successful effort uncovered critical factors, which we only considered implicitly during the partnership. As

we now realize, clarity regarding why a reform is successful may not become apparent until later when participants have had adequate opportunities to reflect on how the particulars of a context implicitly influenced their decisions. Insights from such reflections can then be used to develop future partnerships.

Prior to establishing a partnership, the district's assistant superintendent, along with fellow administrators and curriculum directors, drafted a set of concerns, which resulted in the following questions: Who should offer the professional development? How many sessions would be required to ensure the partnership's success? Who should attend? and How should its success be determined? The assistant superintendent and her colleagues drafted answers to the final question and sought advice from the university regarding the others. Briefly, district representatives wanted a partnership's success to be determined by students' engagement and learning in daily activities and achievement on mandated end-

of-grade mathematics assessments. Regarding teachers, consistent with national criteria for establishing professional learning communities (NAPDS, 2021), district officials believed the partnership would be successful if teachers demonstrated a commitment to professional learning by taking an active role in planning the structure and design of daily mathematics instruction as well as collaborating with peers and outside consultants on the collection and evaluation of formative assessment data.

The authors' institution was chosen due to its familiarity to the assistant superintendent and geographical proximity. The lead author (Richardson) and other colleagues in the school district met with university representatives to develop a plan. Because district officials wanted to test the waters before formally committing to any multi-year partnership, they asked the first author to offer a graduate course as the partnership's first step. This course was part of an existing master's program on elementary mathematics, the content