

Virtually PKY – How One Single-School District Transitioned to Emergency Remote Instruction

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P. K. Yonge Development Research School (PKY) is a single-school, K-12, public school district and *Virtually PKY* is the name of our efforts during emergency remote teaching necessitated by COVID-19. Our ability to plan and execute *Virtually PKY* was predicated on years of district-wide leadership and professional learning focused on blended learning and related concepts such as interactions and on efforts to transition to a 1:1 environment. This article shares how we transitioned to *Virtually PKY* and provides examples of how teachers are prioritizing connections and interactions during emergency remote teaching. In particular, we share examples of student-to-student, student-to-teacher, student-to-content and district-family interactions in elementary, middle and high school grades. We conclude with three implications of our work for inservice and preservice teacher educators working to improve virtual efforts now and in the future related to: (1) blended learning, (2) interactions, and (3) teacher inquiry.

CONTEXT AND SUPPORTING LITERATURE

P. K. Yonge Development Research School (PKY) is a single-school, K-12, public school district in Gainesville, FL. PKY is part of the University of Florida's College of Education (COE) and students are selected via

lottery to ensure the demographics of its 1150 students mirror the state of Florida: 48% White; 26% Black/African American; 24% Latinx/Hispanic; 7% multiracial; 17% with learning differences; 38% economically disadvantaged.

Schools in Florida were closed due to COVID-19 on March 16, 2020 for an extended two-week Spring Break with the mandate to begin emergency remote teaching on March 30 should schools need to remain closed. PKY faculty started planning for remote learning a few days before the extended Spring Break was announced and we found many of our ongoing research-based initiatives were vital to our ability to plan and, eventually execute, what we have termed *Virtually PKY*. For example, much of the teacher professional learning at our school is situated within research and experimentation through cycles of teacher inquiry. Teacher inquiry involves iterative cycles in which teachers or groups of teachers identify problems of practice and related inquiry questions, consult related literature, develop data collection and analysis plans to answer their questions, adjust their practice based on their findings, disseminate their results to colleagues and then begin the cycle again based on new questions arising from their work (Dana & Yendol-Hoppey, 2020). This stance toward inquiry and experimentation has been particularly important as we have all been thrust into an unexpected and unprecedented situation.

Nearly eight years ago our school undertook a blended learning initiative (Wayer, Crippen & Dawson, 2015) that involved a partnership with faculty in the COE where teachers applied to participate in a blended professional development experience, received summer funding to blend their courses through tools such as Moodle (then Canvas) and Google Classroom, conducted a teacher inquiry study of how blended learning influenced their classroom and presented the results of their work to an interdisciplinary audience of PKY and COE faculty. Blended learning was selected as a focal point for our professional learning because it can be flexibly applied across content areas and can personalize instruction, support interactions and facilitate learning designs to meet the needs so all learners (Horn and Staker, 2015). This blended learning initiative led to groups of teachers who collaboratively studied and shared related educational developments such as personalized learning (Walkington & Bernacki, 2014), mastery learning (Schaeff, 2016) and universal design for learning (Meyer, Rose & Gordon, 2014).

Having teaching faculty with this knowledge has made the conceptualization of and transition to *Virtually PKY* a challenging but attainable goal. About five years ago, our school used Digital Classroom Funds (a newly designated state funding line for Florida school districts) to move to a 1:1

environment for all students. Middle and high school students were assigned 24/7 Chromebooks and elementary students used devices such as iPads and Chromebooks on campus daily. We hired IT faculty who understand both networks/wires and curriculum and focused how this technology could strengthen interactions in our community. In particular, we focused on how our new 1:1 environment could facilitate interactions recommended in the Community of Inquiry (CoI) framework (Garrison, 2016; Moore, 1989). These include interactions between students and their teachers, content, and peers. We also considered interactions between the district and families (Edwards, 2016). We also developed systems for accountability for devices as well as strategies for funding and managing device repair. This meant that when we were forced to move to emergency remote instruction, our students were already familiar with the devices, teachers were experienced users of a variety of digital platforms, and we already had systems in place for supporting their use.

PROCESS

Even with these initiatives under our belt, planning and implementing *Virtually PKY* has been a monumental task. Our IT team rolled into action during the extended Spring Break and started preparing devices for elementary students while the elementary teachers and lead teachers started working together to develop plans and prepare appropriate print materials to send home with students. Our “specials” teachers (i.e. art, music and physical education) and counselors also worked to prepare for virtual instruction and support during this time. We distributed devices and other materials to our K-5 students in a drive-through lane over two days during the week before Spring Break.

Realizing that all students do not enjoy the same access to Internet services, we also sent out a survey to all families about the type and quality of their access. We acquired personal hotspot devices for our families who need them, adding to our small supply of Kajeets that students have been able to sign out in the past.

Although there will always be issues when 1150 students and their instructors and support staff are attempting to learn and connect virtually, *Virtually PKY* is running smoothly with each school level taking an age-appropriate approach while remaining mindful of the knowledge and experience from the aforementioned professional learning experiences. Table 1 provides a summary by grade level of some of the strategies used to facilitate the interactions recommended in the CoI framework.

Table 1
Examples of interactions during *Virtually PKY*

	Elementary Grades	Middle Grades	High School Grades
Student-teacher interactions	<p>Teachers conduct Read Alouds via Zoom; for small groups, texts are put into Google Slides so teachers can share screen or so the students practice reading along.</p> <p>Teachers conduct morning meetings via Zoom.</p>	<p>Teachers give feedback on assignments via Google Docs comments.</p> <p>Teachers provide optional Zoom meeting for students who need extra support.</p>	<p>Chemistry and Algebra teachers use the Zoom whiteboard features so students and teachers can collaboratively problem solve</p> <p>Wednesday breakfast break with counselors during the break between classes. Students meet with Counselors in their Zoom Rooms.</p> <p>Teachers send messages about assignments and scheduling via Canvas.</p>
Student-content interactions	<p>Students access writing materials via the Center for the Collaborative Classroom Hub (https://www.collaborativeclassroom.org/) which supports reading, writing and thinking while focusing on social and emotional wellness. During the pandemic, this Hub has helped facilitate teacher access to the materials needed for both students and families. For example, there are PDFs of student-facing materials so teachers can deliver materials to the Chromebooks seamlessly and use them with PDF readers and markup tools for virtual use.</p> <p>Elementary students use Reflex Math (https://www.reflexmath.com/), an adaptive learning system that tracks student progress as they practice math fluency</p> <p>Elementary students use Headsprout (http://headsprout.com), a program that personalizes and differentiates as students develop reading fundamentals and comprehension skills</p>	<p>Teachers identify relevant YouTube videos and develop Google Forms or Docs where students are scaffolded to pause and answer questions</p> <p>Teachers create Google Slides and display via Zoom Shared Screen to deliver content.</p> <p>Students access Woot Math (http://woomath.com), an adaptive mathematics curriculum that provides real-time feedback to them.</p> <p>Students use IQWST (http://activatelearning.com/iqwst/), a multimedia science curriculum developed with funds from the National Science Foundation to engage in interactive science.</p> <p>Students use Google Read and Write (https://www.texthelp.com/en-us/products/read-write/read-write-for-google/) to personalize online reading and writing experiences</p>	<p>Students complete Khan Academy (https://www.khanacademy.org/) videos and practice problems related to curricular goals. For example, students in Algebra 2 are completing videos related to compound interest, exponential growth, logarithms, and natural logs.</p> <p>Student use free public resource repositories. For example, history student use repositories of WWII oral histories to consider the war from multiple perspectives (e.g. World War II: The African-American Experience created by the University of Kansas – (https://www.lib.ku.edu/))</p> <p>Teachers use ShowMe, an interactive whiteboard app (https://www.showme.com/) to capture their thinking as they solve problems via screencasting so students can review mathematical processes when completing homework.</p>

Student-student interactions	Elementary Grades	Middle Grades	High School Grades
<p>Teacher-Family Interactions</p>	<p>Teachers open their Zoom rooms early so that students can have informal conversations before school begins.</p> <p>Student complete a bucket filling activity via Nearpod (http://nearpod.com) that connects student to each other through positive comments from peers.</p> <p>Parents receive a weekly checklist via email with all the links to instructional content embedded. Students click on the links depending on what they need.</p> <p>Regular feedback surveys are being sent to families so plans can be adjusted as needed for the rest of the year.</p>	<p>Zoom Chats – Students send messages to each other in the Zoom Chat feature. Teachers configure their settings so that the entire class sees student chats.</p> <p>Zoom Breakout Rooms—Students are assigned to breakout rooms to collaboratively problem solve and are then brought back together to share with the whole group. The teacher visits different “rooms” during the collaboration.</p> <p>Families receive weekly newsletters via email; The PDFs created via Adobe Acrobat are also available on the school website.</p>	<p>Zoom Chats – Students send messages to each other in the Zoom Chat feature. Some teachers configure their settings so that the entire class, not individuals, sees student chats.</p> <p>Zoom Breakout Rooms— Students are assigned to a breakout room to discuss questions and then return to the large group for whole-group conversation. The teacher visits different “rooms” during the conversations.</p> <p>Several special social media sites for Seniors have been set up on platforms such as Instagram and Twitter.</p> <p>Most courses and different groups of students (i.e. Seniors) sign up for and receive Remind notifications (http://remind.com) that include reminders about assignments, deadlines, opportunities, etc.</p> <p>Families receive Skylert messages (phone and email) through Skyward</p> <p>PKY has various Twitter accounts to communicate with everyone but high school students and their families tend to use these the most (i.e. @KeepCalmPKY for School Counseling).</p>

EARLY RESULTS

We are not a virtual school and we believe most K-12 students need and desire face-to-face interactions with teachers, peers and content. From the outset, the goal has been to continue to connect with each other daily, and the expectation is that we will continue to stay connected to school, not just through the work but also through the people. In an interesting reversal, it has been delightful to see students begin to bring their homes into the school community. We have had high attendance rates, with students “showing up” in their teachers’ Zoom rooms daily and on time, and we believe our connectedness is the drive behind the response we have had thus far. Of course, we have also had challenges such as power outages due to storms and bandwidth due to students and parents simultaneously working and learning from home.

Implications

We realize our district has many advantages during this time including a relatively small student population and adequate technology resources, however, we also recognize district leadership has implemented key practices that support teacher technology integration efforts such as prioritizing both collaborative and individualized professional learning opportunities and addressing issues of technical access and support (Dexter & Richardson, 2020). Although these strategies were certainly not implemented with a global pandemic in mind, they have enabled our district to continue teaching and learning during COVID-19. We offer the following implications based on our experiences for inservice and preservice teacher educators working to improve virtual efforts now and improve teaching and learning once life returns to normal.

Implication 1: Professional development related to blended learning can result in benefits during times of traditional instruction and during a pandemic.

Blended learning, or the combination of online and face-to-face instruction, offers teachers a framework for taking the best of both environments to support students (Watson, Murin, Vashaw, Gemin & Rapp, 2012). Different blended models or configurations (Staker & Horn, 2012) enable teachers to consider what makes sense in relation to their teaching context (i.e. grade

level, subject area, type of student, type of technology, etc.). Blended learning also helps teachers maintain a focus on learning-first, technology second (Kolb, 2017) and helps them learn technology skills in context. Finally, blended learning offers logical pathways to other professional learning opportunities such as personalized learning (Walkington & Bernacki, 2014), mastery learning (Schaefer, 2016) and universal design for learning (Meyer, Rose & Gordon, 2014) which also have value in traditional and pandemic instruction. *We recommend teacher educators address blended learning as part of teacher professional learning.*

Implication #2: CoI is a valuable framework for considering interactions during traditional instruction and during a pandemic.

The biggest takeaway for us during this pandemic is the importance of maintaining the connections and interactions previously established in our district. The CoI framework recommends considering student-student, student-teacher and student-content interactions (Garrison, 2016; Moore, 1989). We also added the importance of interactions between the district and families (Edwards, 2016). The examples we provide in Table 1 share strategies teachers have implemented to address these different interactions although interactions are not always mutually exclusive (i.e. collaborative problem solving with the Zoom whiteboard supports interactions among teachers, students and content). These strategies use many different technology tools that were carefully selected because they align with curriculum objectives but other tools would also suffice. The examples are replicable and adaptable and teacher educators can share them with teachers. However, they are certainly neither exhaustive nor prescriptive. *We recommend teacher educators provide inservice or preservice teachers time to brainstorm how they might facilitate these different interactions and, if possible, provide opportunities to test some of the strategies.*

Implication #3: Establishing a stance toward inquiry serves teachers well during traditional instruction and during a pandemic.

The ability to invest in our teachers, as well as our teachers' stance toward research and experimentation, helped during this crisis situation. Our teachers conduct an annual cycle of individual or collaborative teacher inquiry that was initially coached by COE colleagues and is now led by teach-

er leaders who have developed coaching expertise. Our teachers also present in local, state, national and international conferences. A stance toward inquiry and experimentation has been shown to lead to improved student outcomes and a strong sense of professional competence (Dana & Yendol-Hoppey, 2020) which serves teachers well at all times but particularly in trying times such as emergency remote teaching. *We recommend teacher educators instill a sense of professionalism in teachers by scaffolding and supporting cycles of inquiry that allow them to study pressing problems they experience in their practice.*

FUTURE RESEARCH

A team of teaching faculty, educational researchers and administrators is currently collecting data and developing a longitudinal research plan to study how *Virtually PKY* has evolved, what we can learn about improving our practices and how we can disseminate our work to others. Although the research plan is still evolving, areas ripe for our team and others to study include:

1. The facilitators and constraints of transitioning blended learning to fully online learning and the associated influence on student, teacher and parent satisfaction and on student learning. Researchers may look to articles by Harrell and Wendt (2019) and Blaine (2019) for related guidance.
2. The nuances of blended and online teaching within different disciplines and grade levels and across pedagogical approaches. Researchers may look to a recent book by Niess (2019) and a seminal article by Mishra and Koehler (2006) for related guidance.
3. Student, teacher and parent perceptions of the CoI-recommended interactions and whether additional considerations are important in K-12 blended and online environments. Researchers may look to a recent article by Borup, Graham, West, Archambault, & Spring (2020) for related guidance.
4. The influences of teacher inquiry iterations focused on blended or online learning on teacher factors such as motivation, satisfaction and feelings of professionalism, instructional factors such as changes in the teaching and learning process and student factors such as satisfaction, engagement and learning outcomes. Researchers may look to a recent book by Dana and Yendol-Hoppey (2020) for guidance.

CONCLUSION

We envision that when life returns to normal our instructional practices will be stronger, our faculty, staff and students will have even more ways to connect and our school community and learning environments will be even closer because of our current adverse circumstances. We only hope it is soon because we miss our campus and our students.

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