About Michigan Virtual Learning Research Institute

In 2012, the Governor and Michigan Legislature passed legislation requiring Michigan Virtual™, formally Michigan Virtual University®, to establish a research center for online learning and innovation. Known as Michigan Virtual Learning Research Institute® (MVLRI®), this center is a natural extension of the work of Michigan Virtual. Established in 1998, Michigan Virtual’s mission is to advance K-12 digital learning and teaching through research, practice, and partnerships. Toward that end, the core strategies of MVLRI are:

- Research – Expand the K-12 online and blended learning knowledge base through high quality, high impact research;
- Policy – Inform local, state, and national public education policy strategies that reinforce and support online and blended learning opportunities for the K-12 community;
- Innovation – Experiment with new technologies and online learning models to foster expanded learning opportunities for K-12 students; and
- Networks – Develop human and web-based applications and infrastructures for sharing information and implementing K-12 online and blended learning best practices.

Michigan Virtual dedicates a small number of staff members to MVLRI projects as well as augments its capacity through a fellows program drawing from state and national experts in K-12 online learning from K-12 schooling, higher education, and private industry. These experts work alongside Michigan Virtual staff to provide research, evaluation, and development expertise and support.

Introduction
The vast majority of new teachers entering the profession each year begin without the skills needed to be successful in online learning environments, although many of these educators may find themselves teaching in a blended or online setting at some point during their careers (Kennedy & Archambault, 2012; NEA, 2006, p. 3). Teacher education programs and school district professional development offerings often provide online options for educators but fail to provide the preparation necessary for high quality online instruction in the K-12 classroom (Learn NC, 2008; Ray, 2009). In 2016, Archambault et al. found that only 3.5% of teacher education programs nationwide were providing virtual field experiences to prepare teacher candidates for online teaching. Not surprisingly, a lack of preparation and professional development can lead online teachers to report negative feelings about teaching online (Allen & Seaman, 2009; Shattuck, Dubins, & Zilberman, 2011).

To ensure quality online instruction, virtual schools have taken it upon themselves to prepare and support online teachers (Ferdig et al., 2009). This preparation and support can include such elements as online orientations, virtual practica, and online learning communities (Archambault et al., 2016; Linton, 2015; Linton & Journell, 2014). Although there exists a large body of research literature related to preparation and support for the traditional teacher, very few studies have examined ways that K-12 online teachers are prepared and supported (Barbour, Siko, Gross, & Waddell, 2013). This case study investigated the types of professional development (PD) and support K-12 online teachers receive in virtual schools and public school districts.

Methods
This six-month case study explored ways that online teachers in state virtual schools and public school districts were prepared and supported. Ten online teachers were selected to participate, representing a variety of K-12 online settings, including state virtual high schools and public school districts. Two participants failed to complete the study and were not included in this report.

Online teaching experience for participants ranged from three to 10 years, while total teaching experience ranged from eight to 20 years. Four of the eight participants taught online full-time, while the other four worked part-time as online instructors, supplementing their work as full-time teachers in traditional schools. Seven of the eight participants taught for public state virtual schools during the time of the study, with one participant teaching online for a rural school district. Participants’ content areas for online teaching included English Language Arts, World Languages, Music, and Career and Technical Education. Pseudonyms are used to protect the identities of participants.

Over the course of six months in the spring and summer of 2017, data were gathered via surveys, online interviews, journal entries, and document collection. One survey was distributed to all participants, administered as a pre- and post-survey (see Appendices A and B), at the beginning and end of the six-month research study. Multiple-choice survey items asked participants to identify the formats, topics, and frequency of PD opportunities, while open-ended items asked for brief descriptions of the types of support received. The purpose of a pre- and post-survey was to explore changes in preparation and support from the beginning to the end of the study. One virtual interview was conducted, audio recorded, and transcribed with each participant. An interview protocol (see Appendix A), focusing on PD opportunities and support structures, allowed participants to elaborate
on their survey responses. Transcribed interviews were shared with participants via email to ensure accuracy. In addition, each participant wrote a monthly journal entry (see Appendix C) related to preparation and support for quality online teaching. A prompt was provided for the monthly journal entries to facilitate data collection related to the study’s research question: In what ways are K-12 online teachers prepared and supported? In addition, artifacts collected during the multiple case studies included handouts and other resources from professional development along with emails and other communication related to preparation and support.

With a small group of participants sharing similar characteristics, an “accurate but limited understanding” was used to collect data on the ways in which online teachers are prepared and supported (Stake, 1995, p. 134). While capturing every intricacy of the experiences of participants poses a challenge, using case study methods allowed for exploration into the many facets of online teacher preparation and support through multiple realities. Through an inductive coding process, all data were analyzed using NVivo qualitative research software, which enabled data disaggregation, exploration of relationships, and identification of trends. The primary goal of data analysis in a case study is to gain a better understanding of the particular case, specifically in relation to the study’s research questions (Stake, 1995).

During close reading of all data sources, initial codes, or categories, were created to label and organize data. This coding scheme was applied to all pieces of data and continually revised in order to better represent the data. Through multiple readings of data, new codes were added, similar codes were combined, and unnecessary codes were removed. Finally, broader themes were identified to group codes together. The use of an emergent coding system served to ensure that findings were descriptive of the actual data gathered related to preparation and support for online teachers. The results of this study, as presented below, were shared with participants for member-checking. Results for each case are discussed below, organized by the following categories: roles and expectations of online teachers, challenges facing online teachers, professional development for online teachers, and support for online teachers. First, results are presented case by case to describe each participant’s experiences, followed by a discussion of the overall themes and patterns that were revealed across the cases.
Results

Kim
Grade(s): 9th-12th
Subject area(s): Spanish
Total number of years teaching: 10
Number of years teaching online: three
Position: Full-time teacher for state virtual school

Roles and Expectations for Teaching Online
In her interview and monthly reflections, Kim frequently referred to her role in developing and revising online courses. In fact, Kim described her main goal for this year as "enhancing the design" of her course. During leadership team meetings, the virtual school administrative team communicated expectations and information related to course development. Kim’s virtual school provided further support for course design via a design coach and her collaborative Spanish I team, which met regularly throughout the study to discuss decisions about lessons, videos, assessments, and other design-related issues. Kim served as the point of contact for this team. In addition, regular course development progress meetings were used to provide individual guidance and feedback to online instructors.

Challenges of Online Teaching
Early in the semester, Kim felt that her greatest challenge was helping students adjust to a new learning environment. By the end of the six-month study, Kim perceived her biggest challenge to be transitioning courses to a new proficiency-based model. Specifically, Kim believed that helping her team members transition to the new approach could be a difficult task. Other challenges Kim faced included learning new technologies and losing autonomy as a teacher.

Professional Development
The type of PD Kim most commonly referenced was her professional learning community (PLC). During this study, the PLC discussed topics including curriculum alignment, parental involvement, grade reporting, assignments, best practices for synchronous sessions, and various technology tools. As the point of contact, Kim designed the agenda for PLC meetings and helped facilitate conversations within her team. Not surprisingly, Kim described her peers as the main source of PD. For example, in PLC meetings and entire campus meetings, peers often shared their own effective strategies and tools. Kim also described PD opportunities for new online teachers, who receive 18 hours of training related to the learning management system (LMS) and other technologies. New online teacher training also provided teachers with a look at a “day in the life” of an online teacher. Kim most frequently mentioned technology and operations as the PD topics addressed through her organization, although she occasionally referenced PD related to curriculum, instruction, and course design. In addition to PD provided by her virtual school, Kim sought out conferences and workshops specifically designed for world language teachers.

Support
On both the pre- and post-surveys, Kim reported feeling very supported as an online instructor. Main sources of support provided by Kim’s virtual school included mentors, coaches, and administrators.
The mentor program matched new teachers with veteran teachers to provide support and someone to “talk to them, whatever they need.” Mentors and novice teachers met monthly, and mentors were available for questions as needed. Kim also described a buddy teacher program that provided more informal support to online teachers who are new to the organization but not new to the teaching profession. A course design coach was also available to guide teachers through the design process and answer design- or technology-related questions.

**Terry**
Grade(s): 9th-12th  
Subject area(s): English Language Arts  
Total number of years teaching: eight  
Number of years teaching online: six  
Position: Full-time teacher for state virtual school

**Roles and Expectations for Teaching Online**
Terry viewed her role as an online teacher as one focused on communication, grading and feedback, and course development. She frequently mentioned communication as playing a major part of her day-to-day work. According to Terry, she may “over-communicate with students and with facilitators” who are available on-site to support online learners, particularly when students get behind in their coursework. (These on-site facilitators are also often referred to as elearning advisors). She commented, “For lack of a better way of saying it, there’s a lot of chasing that goes on in online teaching.” As an online English teacher, Terry spent a lot of time grading and providing feedback on student work. She worked hard to manage her time well in order to balance her online teaching load with family time.

**Challenges of Online Teaching**
Communicating with and motivating students were cited by Terry as the largest challenges facing online teachers. While Terry worked hard to maintain regular communication with students and online learning facilitators, she felt that her administrative team could improve the communication process for the organization. She saw a particular need for administration to communicate the “why” behind decisions and procedures within the organization. Terry described motivating struggling students as “the hardest thing I’ve had to deal with lately.” She used grading and feedback along with phone calls to parents to motivate students who failed to complete their work.

**Professional Development**
PD opportunities Terry discussed most frequently focused on technology, instructional strategies for online teachers, and meeting individual student needs. Recent PD topics included strategies for making online courses accessible, effective feedback strategies, and synchronous facilitation tips. Peers provided the majority of PD by sharing effective practices and tools from their own courses. Terry shared that in one PD session, “several teachers presented on what they do to engage students in their face-to-face sessions.”

**Support**
Terry reported feeling very supported as an online instructor on the pre-survey and feeling somewhat supported on the post-survey, citing her desire for more communication within her virtual school.
Support for effective online teaching through Terry’s virtual school was most often provided via a mentoring program. New online teachers were paired with a mentor teacher who provided guidance and answered questions that arose. Terry felt that she learned a lot about technologies for online teaching from her mentor, and she even met her mentor in person occasionally to talk face-to-face.

**Denise**
Grade(s): 9th-12th  
Subject area(s): Mandarin Chinese  
Total number of years teaching: 13  
Number of years teaching online: eight  
Position: Part-time teacher for state virtual school

**Roles and Expectations for Teaching Online**
As described by Denise, the primary roles expected by her virtual school included celebrating students and communicating with students. Interestingly, celebrating student learning was the role most frequently cited by Denise, but no other study participants mentioned celebration. She shared that the school requires “all instructors to celebrate individual students every single day.” These celebrations were posted in the announcements section of online courses. During two different department meetings, teachers shared ideas for celebrating students and sharing student success stories.

**Challenges of Online Teaching**
Denise admitted that learning new technologies as an online teacher was her biggest challenge. She explained that “being an online teacher you not only have to teach the course content, you also have to know about a lot of web tools.” She felt that the most difficult part of online teaching was solving technical issues and learning about new tools for her courses.

**Professional Development**
As a new online teacher at her virtual school, Denise participated in a semester-long PD experience designed for new online teachers, consisting of a nine-week orientation and a nine-week practicum. In addition to PD provided by her virtual school, Denise regularly sought out PD opportunities provided by vendors and universities. Some of the vendor- and university-led PD opportunities described by Denise were targeted at online teachers, while others focused on face-to-face instruction. During this study, she most frequently participated in PD focused on instructional strategies and technology. For example, Denise learned new strategies for providing feedback and making her feedback more objective. She also described having learned a new technology she plans to use to introduce new vocabulary to her students.

**Support**
Denise reported feeling not very supported as an online instructor on the pre-survey and feeling somewhat supported on the post-survey, describing that she received support for technical issues and support to carry out assigned responsibilities and duties. A mentor program was used in Denise’s virtual school to support new online teachers. In addition to having benefited from the mentor program years ago as a new online teacher, Denise has served as a mentor as well. She helped her mentee understand expectations and duties of online teachers in her organization and
served as a model for how to implement those expectations in an online course. Mentors monitored the work of new online teachers and provided feedback related to student interaction, communication, and grading and feedback.

Anna
Grade(s): 9th-12th
Subject area(s): Math
Total number of years teaching: 15
Number of years teaching online: four
Position: Full-time teacher for state virtual school

Roles and Expectations for Teaching Online
Demonstrating that online teachers have multiple roles, Anna most frequently referenced her role in developing and maintaining relationships and communicating with her colleagues. In addition to working as a full-time virtual teacher, Anna served as the facilitator of her PLC, facilitating the community and ensuring that teachers spent time during each meeting “checking in with each other.” In PLC meetings, teammates “solve each other’s problems,” which, according to Anna, was how most online teacher support takes place. She went on to say that the members of her PLC “definitely do life with each other.” Anna also referenced course development as one of her online teacher roles, which she does part-time in addition to her online teaching role.

Challenges of Online Teaching
Although Anna did not feel isolated, she expressed that isolation is a challenge facing many online teachers. From her experience, the most challenging aspect of her role was “making sure they [new online teachers] don’t feel like they’re alone and isolated.” She described joining other virtual schools for PD as a possible solution. Not surprisingly, Anna expressed that online teachers need “more intentional time spent on relationships.” In-person meetings or more synchronous virtual meetings were proposed as strategies for relationship-building. Anna also discussed the challenge of providing modifications and meeting every student’s needs in the online environment.

Professional Development
Most PD in which Anna participated was facilitated by her peers through the PLC model where team members frequently shared effective strategies and technologies for online teaching. According to Anna, members of her PLC spent most of their time “sharing best practices and learning from each other.” Topics for PLC meetings were sometimes selected by administration based on a current need, while other times topics were selected by Anna or her PLC members. In addition to PLCs, Anna described how new teacher PD has changed over the past few years. When the virtual school first began four years ago, the teachers and administrators were “kind of making it up,” developing new protocols and expectations for online teachers. Now, a PD day for new online teachers focuses on procedures and expectations. New teachers were also paired with a mentor who was available to answer questions and help “when they’re stuck.” Anna also described the benefits of meeting other online teachers in person, which takes place for one day during the three-day new teacher PD.
Support
On both the pre- and post-surveys, Anna reported feeling very supported as an online instructor. She described the evaluation process used by her virtual school as a support system for teachers, citing specific PD opportunities that were aligned with outcomes of the teacher evaluation system used by her school. She described this as helpful in understanding expectations. Anna also referenced receiving course development support and ongoing support from her PLC and administrators and referred to her PLC as providing “the support that helps both in the online environment and the friendship that encourages you outside of our jobs.” As PLC facilitator, Anna received support from administrators regarding how best to support her teammates. During this study, Anna participated in a book study for PLC leaders focused on leadership and facilitation.

Lorraine
Grade(s): 8th-12th
Subject area(s): Spanish
Total number of years teaching: 14
Number of years teaching online: seven
Position: Part-time online teacher and full-time instructional technology facilitator for public school district

Roles and Expectations for Teaching Online
As an online teacher for a public school district, Lorraine most frequently cited her role communicating with students and parents. She also discussed expectations for grading and feedback. Lorraine shared that she provided regular progress updates to students and parents and communicated often regarding assignment deadlines and resources. Serving as both a face-to-face and online instructor for a public school district, Lorraine viewed her online role as requiring more time communicating about student progress. Lorraine also communicated often with online learning facilitators at other schools regarding student progress.

Challenges of Online Teaching
Lorraine described the challenges of time management and balancing her responsibilities. She described feeling “like part of the struggle is there is not really any limit to contact as well as work hours.” She went on to say that “students can reach out to us almost at any point, and we have certain expectations that we have to respond within a certain time.” This constant contact with students led Lorraine to feel that “online teaching steps into your personal world a little bit more.” This challenge seemed particularly daunting since Lorraine was also working full-time in a local school district in addition to her work as an online teacher.

Professional Development
During this study, Lorraine often participated in and designed online PD courses focused on technology and engaged in professional learning with her PLC. These courses focused on multiple topics including Chromebooks, Discovery Education, and the district’s LMS. Online teachers in her district made up their own PLC, which met monthly. Some teachers joined PLC meetings in person, while others joined virtually. During PLC sessions, teachers discussed testing requirements, celebrations, and technology tools. Lorraine expressed wanting to spend more time in person with her online teaching colleagues. She described “wanting to meet them in person because they seem
like such amazing educators." New online teachers received ongoing PD and met regularly throughout this study with a new teacher support coach.

**Support**
On both the pre- and post-surveys, Lorraine reported feeling very supported as an online instructor. For support, Lorraine described that online teachers often used online resources and mentors. The technology department in her school district provided online PD modules for teachers, which many online teachers took advantage of. Lorraine also described an online course within the LMS that included opportunities for teachers to interact and discuss ideas. New online teachers in her district had access to a mentor who could “help the teacher get acquainted with our learning management system as well as certain procedures that we have.” According to Lorraine, mentors participated in a two-day training program and served as advocates for their mentees.

**Stacey**
Grade(s): 9th–12th
Subject area(s): Music
Total number of years teaching: 20
Number of years teaching online: five
Position: Part-time teacher for state virtual school

**Roles and Expectations for Teaching Online**
Stacey’s virtual school provided a teacher expectations document and PD every summer to help teachers understand and implement the expectations. The online teacher expectations Stacey frequently referred to included communication, grading and feedback, and course development. She described grading and communication as two online teacher roles that work together to help students online. In addition to being active in her online courses during the time of this study, Stacey collaborated with a curriculum coordinator to revise course- and unit-level objectives.

**Challenges of Online Teaching**
Stacey admitted that motivating inactive online learners is her biggest challenge. She struggled to find “ways to help students who fall behind or aren’t working at all,” and she saw this as an ongoing challenge for online teachers.

**Professional Development**
As a new online teacher, Stacey participated in a semester-long new online teaching training program. The PLC model provided the main source of PD for Stacey during this study. Active participation in the PLC process is an expectation of online teachers in Stacey’s virtual school. Topics addressed in recent PLC meetings included technology, instructional strategies, and procedural items such as summer school grade extensions, automating messages in the LMS, and program updates. Stacey described that the virtual school used to bring all online teachers together in person for workshops every summer, but for the past two summers this PD has been provided online. She felt that the in-person PD was worthwhile and served to help online teachers feel less “isolated from all your colleagues.”
Support
On both the pre- and post-surveys, Stacey reported feeling very supported as an online instructor, citing open communication and readily available administrative support. Stacey felt supported by others serving in coach and mentor roles and by online resources made available by her virtual school. The PLC facilitator served as a mentor and a “go-between between the administration” and the teachers. Her coach used phone calls to maintain communication and discuss progress toward professional learning targets. Stacey’s coach also provided feedback on her monthly course observation snapshot. Online resources provided by the virtual school included recordings of PLC meetings and other PD opportunities and online PD courses for teachers.

Rita
Grade(s): 9th-11th
Subject area(s): English Language Arts
Total number of years teaching: 18
Number of years teaching online: four
Position: Full-time teacher for state virtual school

Roles and Expectations for Teaching Online
Rita’s primary roles as an online teacher included communication, grading and feedback, and building teacher relationships. Regarding grading and feedback, Rita admitted, “I don’t even know what the requirement is because I’m grading all the time.” She also described spending “a great deal of time on the phone, texting, or emailing students” and spending additional time logging those contacts.

Challenges of Online Teaching
Rita faced challenges with student pacing and balancing her time as an online teacher. She described that one of the most difficult aspects of online teaching was learning to “balance actually doing the teaching versus the chase, you know trying to get kids to stay involved in the class.” During this study, her challenge with student pacing was primarily related to adjusting deadlines for the shorter summer term. Regarding how she spent her time, Rita expressed feeling that she focused a lot of attention on students who are struggling — “primarily those failing the course at any given moment.” She described “chasing down students via email, student messages, and/or phone calls.” She also admitted that she spent less time “chasing down the students who were doing well— calling them, sending them positive emails.” Maintaining a log of all of her contacts also posed a challenge, as it could “sometimes take hours out of a week — time that would be better spent instructing or planning.” Rita described her need for PD focused on “this time-consuming aspect of online instructing.”

Professional Development
Technology and instructional strategies were the most common PD topics for Rita during this study. She learned how to use features of the LMS better, particularly the synchronous session tool. Rita has also participated in PD related to providing appropriate feedback and personalizing instruction for students. New online teachers were required to complete a series of online PD courses through the virtual school, focused on quality online instruction and using technology tools. Although Rita’s virtual school offered “several PD opportunities each month,” she expressed a need for more
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Rita shared that she has learned a lot and improved her courses because of her peers, leading her to “look at my own course with new eyes after hearing what my colleagues are doing.” Through ongoing PD, Rita invested time communicating and developing relationships with other online teachers. She shared that she maintained regular contact with her colleagues and felt “so connected with the group” that she “couldn’t be happier with the way things are.”

Support

On both the pre- and post-surveys, Rita reported feeling very supported as an online instructor, citing support for technical issues and student services support. Rita’s virtual school provided online resources for teachers and opportunities for collaboration and interaction. She described how teachers in her virtual school used Skype groups to maintain regular communication, with one group used by the entire English Language Arts department and separate groups for individual courses, such as English III. Online teachers used these Skype groups to ask questions, solve problems, and share successful strategies. Rita shared that the Skype groups are very useful, stating that “my Skype is on 24 hours a day. There’s never five minutes that somebody’s not Skyping someone in one of the groups.” She described it as their “primary form of communication with each other.” She shared, “I have never been as happy in a job as I am with this one, ever. We have such incredible support.”

Megan

Grade(s): 8th-12th
Subject area(s): Career and Technical Education
Total number of years teaching: 10
Number of years teaching online: 10
Position: Part-time teacher for state virtual school

Roles and Expectations for Teaching Online

Throughout this study, Megan regularly mentioned her work with communication, grading, and feedback. She used tools available to her as an online teacher to remain up-to-date with student progress and grading trends. Technologies also enabled Megan to “determine students who are at risk of failing and view student progress details such as login history, content modules visited, and discussion posting details.” Those resources helped her provide feedback to students and adjust assignments for them. Her virtual school expectations required Megan to communicate with students often regarding their standing in the course.

Challenges of Online Teaching

Student pacing and balancing work and her personal life posed challenges for Megan. Managing four different student start dates each semester was challenging “because by the time they [students] get acclimated to the first group, another group begins.” Megan explained that “it’s almost like starting a new course because teachers are required to conduct welcome sessions for each new group while conducting weekly required synchronous sessions.” Due to the amount of time Megan spent on her communication and grading tasks, she struggled to maintain balance in her life. She admitted that she had a tendency to “work on some weekends instead of using that time for personal duties and rest.”
Professional Development
Megan participated in a variety of PD opportunities during this study, including topics related to technology, operations, instructional strategies, and instructional design. Megan felt that her school provided “an abundance of PD.” Much of that PD focused on procedures and expectations related to grading and feedback, which Megan perceived to be helpful. The majority of this PD was provided by the school and Megan’s peers, but Megan also attended conferences on her own. Throughout this study, Megan learned about strategies for using several different technology tools for course development and facilitation. She also facilitated PD for teachers on time management and quizzes. New teachers in Megan’s virtual school completed a semester-long new teacher training, followed by “Just in Time” training that continues throughout the teacher’s first semester. This training involved weekly synchronous sessions that addressed topics such as “time management, communication strategies, home page creation, and special education.”

Support
On both the pre- and post-surveys, Megan reported feeling very supported as an online instructor, citing support through teacher evaluation feedback and online instructional resources. Additional sources of support for Megan included a mentoring program and coaching. Megan’s virtual school used a social networking tool to provide a space for teachers to communicate and collaborate. She felt that the network “has been very beneficial, not only this month but continuously, as teachers post inquiries, share best practices, and provide feedback on professional learning sessions.” This social network for teachers proved to be a helpful support for Megan. She described the network as useful when she “encountered challenges or wanted to share information.” New teachers received additional support from a mentor and were enrolled “in the mentor’s course and as a teacher in a practice course.” This allowed new teachers to observe instructor facilitation, grading, and feedback. After a period of observation, new teachers were given an opportunity to teach a module within the mentor’s course. Megan described that mentors provided detailed feedback on new teacher progress throughout this experience. Beyond the new teacher mentoring program and the online networking platform, Megan felt supported by contact with “instructional lead teachers, assistant supervisors of instruction, and a supervisor of instruction,” in addition to a digital “teacher toolbox website that provides tutorials, best practice resources, and links to previous PD sessions.”

Discussion
Roles and Expectations for Teaching Online
Communication
All eight participants frequently described the role communication plays in their work as K-12 online teachers. With more references than any other code in this category, it is clear that maintaining communication with students, parents, colleagues, site facilitators, and others is a critical component of online teaching. According to participants, some virtual schools set specific guidelines for when and how often teachers should communicate with students. Multiple participants also explained that they were expected to maintain a log of their communication with students and parents so that coaches, instructional leaders, and/or administrators could ensure that ongoing communication was taking place. Researchers have found lack of communication to result in poor student participation, low levels of learning, and learner dissatisfaction (Journell, 2008; Mayes, Luebeck, Ku, Akarasriworn, & Korkmaz, 2011). Interestingly, while all participants perceived
communication to be one of the primary expectations for their work, many of them viewed communication as an area of improvement for their respective institutions. Occasionally, a lack of communication or miscommunication from administrators posed challenges for participants.

**Course development**

The second most frequently described role of the online teacher was course development. Seven of the eight participants were involved with course development or revision while also serving as online teachers. Course development tasks in which participants were involved included revising assignments, updating content, re-aligning course and unit objectives, creating new videos, modifying test item banks, and adapting assignments to accommodate for students’ IEP modifications. Course development and revision were often described as collaborative processes, with teams of teachers working to continuously improve the quality of their courses.

**Grading and feedback**

Participants often associated their expectations for communication with grading and feedback. Again, all eight participants discussed grading and feedback as central elements of their work. In the online environment, regular communication about grades along with descriptive feedback has been shown to help students and their families understand student progress and enables teachers to intervene when necessary. Bailie (2011) and Boling et al. (2012) found providing feedback to be the primary strategy employed by online teachers. Similar to communication, virtual schools have established specific expectations regarding the timeliness of grading student work and the quality of teacher feedback. One participant described that her virtual school regularly updates the teacher expectations document to increase the quality of feedback and grading and then provides yearly PD to help teachers meet those expectations.

**Challenges of Online Teaching**

**Student pacing**

Seven of the eight participants identified student pacing as an obstacle. In most cases, transfer students and different student start dates posed the greatest challenges in the online environment. In one particular virtual school, there were four different student start dates due to differences in school district calendars. Different spring break schedules, field trips, and testing dates also posed challenges. Additionally, in credit recovery courses or in courses with transfer students, participants struggled to meet each student’s content needs based on vast differences in prior learning.

**Student motivation**

While only four participants mentioned motivation as a challenge, this was the second most frequently cited challenge facing online teachers. Findings from Hartnett (2012) suggest that perceived flexibility in the online environment leads students to determine their own level of engagement. Participants referred to students who were “inactive,” “students who are not self-starters,” “students who fall behind,” and “students who don’t engage regularly with the course.” Some participants felt that these students were more difficult to motivate online than in traditional courses, leading online teachers to spend a lot of time “chasing” them via phone calls, texts, and emails.
Time
Not surprisingly, five participants struggled with the amount of time they spent in their work as online teachers. One participant described her frustration with “virtual paperwork.” In addition to the time it takes to meet expectations regarding communication, grading, and feedback, many virtual schools required teachers to maintain a log of communication and feedback, increasing the time teachers spent on these tasks. It has been long-established that the asynchronous communication that is a necessary component of online learning is more time-consuming than communication in traditional classroom settings (Charalambos, Michalinos, & Chamberlain, 2004). Compounding this issue of time, participants described the challenge of being online and available all the time. The need to respond quickly to students and the lack of boundaries in the online environment caused participants to struggle with balancing their work and personal lives.

Professional development
Professional learning communities
Findings from this six-month case study revealed that online teachers desired and appreciated professional learning in order to help them meet their students’ needs. To overcome the many challenges facing online teachers and successfully fill the multiple roles required of K-12 online teachers, quality PD is needed. The PD model most often discussed by participants was the PLC model, whereby teams of teachers, typically organized by content area or course, collaborate on issues related to curriculum, instruction, and assessment. The PLC model was structured by a set of protocols and expectations, addressing items such as the frequency of meetings, the topics to be discussed, and the products to be created. Participants frequently described the strength of the relationships they built with members of their PLCs, serving to eliminate or lessen the sense of isolation many online teachers feel. According to participants, PLCs were typically led by a facilitator who worked closely with the school’s administrative team to serve as a go-between and maintain regular communication on school-related topics. One participant described her PLC as “one of the best supports,” and another explained that she felt “very fortunate to work on a team of collaborators.”

Members of a PLC share a common purpose: to develop teacher capacity and impact learning for all students (Wells, 2008). In essence, teacher learning is the cornerstone of PLCs and has a direct impact on how that teacher learning translates to student learning (Parr & Ward, 2006; Wells, 2008). The goal of teachers working as a PLC is to take collective responsibility for the learning of all students (Doolittle, Sudeck, & Rattigan, 2008; Hord, 2009; Parr & Ward, 2006; Wells, 2008). Theoretically, a focus on data and results helps PLC teams stay centered on student learning and prevents unfruitful collaboration (Hord, 2009; Wells, 2008). Hord (2009) suggested six research-based components of PLCs: shared beliefs, values, and vision; shared and supportive leadership; supportive structural conditions; supportive relational conditions; collective learning; and shared personal practice.

The majority of research studies on preparing online instructors refer to the importance of establishing communities of support (De Gagne & Walters, 2010; Eliason & Holmes, 2010; Hawkins et al., 2012; Marek, 2009; Redmond, 2011). Online instructors in K-12 settings who are left to fend for themselves lack confidence in their teaching and admit to feeling isolated and failing to take advantage of professional learning opportunities (Hawkins et al., 2012). In particular, instructors who
transition from traditional to online teaching undergo a paradigm shift in the way they approach course design and delivery, interaction with students, assessment of learning, and many other aspects of teaching (Hawkins et al., 2012). Participation in a learning community can facilitate this transition and offer technological, pedagogical, and emotional support. Virtual schools and school districts that employ online instructors must invest in developing and maintaining PLCs to provide much-needed support for online instructors who are likely to feel disconnected from colleagues, students, and parents (Charalambos et al., 2004).

**New online teachers**
The majority of participants described in detail the PD provided for new online teachers, which matched new teachers with mentors for observation, practice, and feedback. Topics for new teacher PD included procedural issues specific to the virtual school, expectations for online teachers, technology tools for the online environment, and effective instructional strategies. New teacher PD provided by participants’ schools ranged from 18 hours to a semester-long experience, sometimes taking place in person but most often being facilitated online. For two of the virtual schools, new teacher PD was embedded in the interview process.

**Peer-to-peer PD**
Due to PLCs serving as the main avenue for professional learning, participants described that the majority of PD was provided by peers. Through sharing of effective practices, modeling of tools, and collaboration on assignments and course design, online teachers learned new techniques from one another often. Through virtual PLCs, online instructors share and reflect on their practice, gather constructive feedback from peers, reflect on readings, and examine best practices (Dabner et al., 2012). Even outside of the PLC model, peers often provided PD by sharing effective practices during faculty meetings and other gatherings. One participant described that a school-wide PD opportunity was structured as “a series of peer presentations where demonstrations of each presenter’s practices were shared.” This tended to be the norm for participants. Online networking spaces also allowed participants to continue sharing and learning from one another on an ongoing basis.

**Technology PD**
Not surprisingly, technology was the PD topic most often cited by participants. From new teacher PD to PLCs to vendor PD and conferences, participants spent a lot of time learning effective practices for using technology tools. Sometimes, these PD opportunities introduced new tools. More often, technology-focused PD helped online teachers learn new features or more effective ways to use features of technology tools they were already using, including LMSs and tools for synchronous sessions. Almost always, participants’ references to these opportunities revealed that technology-focused PD did not focus solely on technical aspects of the tools but on effective practices for using those tools to improve course design, facilitation, and communication or to enhance productivity and time management. Kennedy and Archambault (2012) argued that technology-focused PD for online teachers should focus on effective online pedagogy and be situated within meaningful contexts.
Support

Mentoring programs
Providing a support network for online instructors is essential to professional learning and can improve the quality of instruction and increase student learning (Vescio, Ross, & Adams, 2008). Participants identified mentoring programs as the main source of non-PD support for online teachers. All eight participants described a mentoring program, each with a specific set of expectations for the mentor role. Primarily, mentors served as a point of contact for new online teachers, ready to answer questions and provide guidance and feedback as needed. In some cases, mentors were also required to monitor new teacher progress by reviewing their announcements and feedback, for example. Kopcha (2010) described a systems-based mentoring model to support teachers with technology integration, culminating with the creation of a teacher-led community that provides a culture of support and assistance to help teachers improve their practice. His work suggests that the combination of a mentoring program and PLC model can complement one another to support teachers transitioning to a virtual environment.

Support positions
Other support roles, such as coaches and instructional facilitators, were also identified as providing support for online teachers. In most cases, the role of coach was described as someone who provided specific types of support, such as course development or content-specific coaching, whereas the mentor was seen as more of a general, relational support. One participant explained that “the mentor serves as a mediator during the training phase, and the instructional lead teacher is available if the mentor has questions that he/she cannot address.” She went on to say that “both roles are there for support, but the mentor is the new teacher’s first point of contact.”

Online resources
Online teachers frequently accessed online resources provided by their virtual schools or school districts for ongoing support. These digital resources included recordings of synchronous PD sessions or meetings, PD courses or tutorials, and handouts related to effective teaching practices and technologies. Additionally, three participants described an online communication or networking space as a support for online teachers, providing a means to quickly find answers to questions and collaborate with colleagues. Through these systems, online teachers are able to “collaborate and share concerns, questions, and successes.” Active participation is a hallmark of effective teacher PD, and PD for online teachers is no exception. Duncan-Howell (2010) argued that online PD should provide multiple opportunities for teachers to be active, observe one another, and learn from each other’s practice.

Evaluation process
Participants often described how formal and informal evaluation processes supported them as online teachers. References to the evaluation process were often made when describing the coaching role, with coaches using systems of evaluation to provide feedback and suggestions for improvement. For example, one participant commented, “My learning coach sent me my monthly course observation snapshot, which focuses on how well teachers are meeting their performance targets in their courses.” She further described that her “instructional coach will just call us and touch base and go over our targets and how we’re doing reaching our targets, and just check in with us and see if we have any concerns.”
Conclusion

Teachers serving K-12 students in online environments face unique challenges and often are expected to fill multiple roles. To meet students’ learning needs and satisfy the expectations of their virtual schools and districts, these teachers spend a great deal of time designing and facilitating learning experiences; reaching out to students, parents, and school-based personnel; providing feedback on student work; and logging the details of their day-to-day teaching activity. As described by the participants of this study, the work can lead to a sense of isolation and make balancing work and personal life a struggle.

To help online teachers succeed in these conditions, virtual schools and districts are providing multiple forms of professional development and support. These supports – including new online teacher PD, ongoing mentoring and coaching, just-in-time online courses and tutorials, and even face-to-face gatherings – address the multitude of skills and responsibilities of the online teacher. Perhaps most beneficial is the PLC model that connects online teachers regularly and facilitates relationship-building. Participants admitted to having developed strong relationships with their colleagues, from whom they are often separated by time and distance, through the collaborative opportunities provided through their virtual schools.

Although this was a small-scale case study focused primarily on virtual school teachers, implications can be made for virtual schools and public school districts that prepare and support online teachers. First, examine existing communication practices to identify areas for improvement. Work to establish procedures by which information is communicated regularly with teachers, and maintain open lines of communication through multiple points of support, including coaches, mentors, and administrators. Second, establish a PD approach that centers on a systematic PLC process to provide opportunities for peer sharing, relationship-building, and collaboration around effective practices. The PLC model can be complemented by a mentoring program that provides just-in-time specialized support for new online teachers. New teacher PD, focusing on effective teaching practices, school-specific procedures and expectations, and technology tools, should be followed by frequent and varied PD opportunities. Since communication, grading, and feedback are critical components of the online teacher’s role, provide new teacher and ongoing PD focusing on effective practices in those areas. Third, invest time in creating or using a platform for the sharing of instructional resources and ideas. This space should allow teachers to upload and access resources for their courses, ask questions, and connect quickly with other teachers and people in leadership positions within the school or organization.

One thing is clear: the virtual schools mentioned in this study are modeling effective online teaching practices through the PD and support they provide to online teachers. Just as online teachers are expected to communicate often, celebrate student success, and provide timely feedback to students, participants described being part of PD opportunities that modeled these very expectations. This study serves as a reminder for those who design and facilitate PD for online teachers to be careful to model effective instructional design and online facilitation practices.
References


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Appendix A

Interview Protocol

1. Is there a new teacher training for online instructors? What does that new teacher training entail? Do all teachers receive the same new teacher training? If so, how long is it? How is it delivered, and what does each course/section entail? How has it changed over time? Why were those changes made?
   a. What topics are covered in new online teacher training?
   b. Who provides the new online teacher training?
   c. Is there a mentoring program for new online teachers? Please explain.
   d. What are the biggest hurdles for new candidates?
   e. What are some common issues that new teachers bring up?
   f. In your opinion, how long does it take a new online teacher to get up to speed?

2. Are there professional development/training opportunities available to online teachers beyond the new teacher training?
   a. If so, what do those include?
   b. Are those mandatory/voluntary/go toward CEUs?
   c. Who is responsible for providing the training?
   d. What topics are covered in the ongoing PD/training opportunities?

3. In what ways have these professional development opportunities impacted your teaching?

4. What professional development opportunities do you wish you had?

5. What teacher support structures do you currently use?
   a. Do you have a teacher mentoring program? If so, please describe how it works.
   b. Do you have communities of practice? If so, please describe how they work.

6. What support would you like to have that is not currently in place?

7. Is there anything else you would like to tell me about your preparation and support as an online teacher?
Appendix B

Participant Surveys

1. Pre Survey

- What is your current role in K-12 online instruction?
- How long have you been in that role?
- How many years in total have you worked in K-12 education?
  - 0-4
  - 5-9
  - 10-14
  - 15-19
  - 20+
- How many years have you worked in K-12 online education?
  - 0-4
  - 5-9
  - 10-14
  - 15-19
  - 20+
- Which of the following best describes your current role in K-12 education? (select all that apply)
  - Part-time online teacher for K-12 virtual public school
  - Full-time online teacher for K-12 virtual public school
  - Part-time online teacher for K-12 virtual charter school
  - Full-time online teacher for K-12 virtual charter school
  - Part-time online teacher for K-12 public school district
  - Full-time online teacher for K-12 public school district
  - Part-time face-to-face teacher for K-12 public school district
  - Full-time face-to-face teacher for K-12 public school district
  - Online course designer for K-12 virtual public school
  - Online course designer for K-12 virtual charter school
  - Online course designer for K-12 public school district
- Which grade level(s) do you teach? (select all that apply)
  - Kindergarten
  - 1st grade
  - 2nd grade
  - 3rd grade
  - 4th grade
  - 5th grade
  - 6th grade
  - 7th grade
  - 8th grade
  - 9th grade
  - 10th grade
  - 11th grade
  - 12th grade
• Which subject area(s) do you teach? (Select all that apply.)
  o English Language Arts
  o Mathematics
  o Science
  o Social Studies
  o Arts
  o World Languages
  o Career and Technical Education
  o Healthful Living
  o Occupational Course of Study
  o Credit Recovery
  o Other

• In which types of school- or district-led professional development have you participated within the last six months? (Select all that apply.)
  o Workshop
  o Course
  o Book study
  o Webinar
  o Coaching
  o Professional learning community
  o Other

• Which formats were used to deliver those professional development opportunities?
  o Face-to-face
  o Blended
  o Online

• Please describe all school- or district-led professional development in which you have participated within the last six months.

• Have you participated in any professional development outside of your school or district within the last six months? Please explain.

• How well do you feel your school or district supports you as an online instructor?
  o Not very supported
  o Somewhat supported
  o Very supported

• Please describe the types of support you have received as an online instructor.

• What would you say is your greatest strength as an online instructor?

• What would you say is your greatest challenge as an online instructor?
2. **Post Survey**
   - Please describe any changes in your role over the past six months.
   - In which types of school- or district-led professional development have you participated within the last six months? (select all that apply)
     - Workshop
     - Course
     - Book study
     - Webinar
     - Coaching
     - Professional learning community
     - Other
   - Which formats were used to deliver those professional development opportunities?
     - Face-to-face
     - Blended
     - Online
   - Please describe all school- or district-led professional development in which you have participated within the last six months.
   - Have you participated in any professional development outside of your school or district within the last six months? Please explain.
   - How well do you feel your school or district supports you as an online instructor?
     - Not very supported
     - Somewhat supported
     - Very supported
   - Please describe the types of support you have received as an online instructor.
   - What would you say is your greatest strength as an online instructor?
   - What would you say is your greatest challenge as an online instructor?
Appendix C

Prompt for Monthly Journal Reflection

In this monthly reflection, please describe any recent support you have received as an online teacher or any changes to your preparation and support. You may also use the monthly reflection to share your strengths, successes, challenges, and obstacles as an online teacher.