

# **Few and Far Between: Describing K-12 Online Teachers' Online Professional Development Opportunities for Students with Disabilities**

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## **Abstract**

Online teacher professional development (oTPD) researchers have been concerned with design features, teacher change in practice, and student learning, as well as establishing guidelines for directing funding support. Even so, previous work suggests that high-quality instructional support for all students with disabilities is still on the horizon. As a response to the need for better instruction, professional development for SWD has emerged in all settings, including teachers who are not just receiving oTPD, but who are online teachers themselves. The purpose of this study was to use online teachers' descriptions of their oTPD for SWD to learn about the professional learning opportunities available to teachers around serving SWD and their families. Teachers and administrators from various online/virtual learning schools around the country participated in this study. Even though teachers had SWD in their courses and were directly responsible for SWD, most teachers and administrators described few professional development opportunities for learning to teach SWD in the online learning environment beyond giving and receiving information about legal compliance. Findings also raise concerns about the tensions between macro- and micro-development opportunities available to teachers and whether they are positioned to take advantage of these to build strong professional networks.

*Keywords:* Online teacher professional development, K-12 online teaching, online administration, professional development for students with disabilities

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## **Few and Far Between: Describing K-12 Online Teachers' Online Professional Development Opportunities for Students with Disabilities**

Political pressures to provide high-quality education for all students, including those with disabilities, have strengthened in the wake of federal intervention in curriculum and the ever-intensifying criticism of teachers and the ways in which they are prepared (Berliner, 2000; Cochran-Smith & Dudley-Marling, 2009; Cochran-Smith & Zeichner, 2009). Most recently, the United States Supreme Court ruled that minimal compliance was insufficient to ensure that

students with disabilities would receive the education that IDEA guarantees to them (U.S.C. §§ 2017, 580, 15-827). While researchers have worked to uncover effective educational innovations for students with disabilities, including innovations that rely heavily on technology and the characteristics of effective teachers, these improvements have yet to yield achievement gains for students with disabilities (Feng & Sass, 2013). At the same time, increasingly passionate debates take place about the enormous and perplexing problem of finding personnel and monetary resources necessary for the effective transformation of teaching and learning for all students (Brownell, Sindelar, Kiely, & Danielson, 2010).

One potential option for offering better teaching with fewer resources has been to increase access to online learning, where instructional delivery takes place primarily using Internet technologies. While online learning is more than 30 years old, it was part of the distance education models that helped institutions of higher education provide coursework to students who were place-bound or who, for other reasons, could not attend traditional classes (Brown, 2012). However, online learning in K-12 education emerged much more recently and expanded rapidly, with all 50 states and the District of Columbia offering online learning at the beginning of the current decade (Watson, Murin, Vashaw, Gemin, & Rapp, 2011). Students receiving special education services are part of this expansion; an estimated 10% of online learners have disabilities (Molnar, Miron, Huerta, King-Rice, Cuban, Horvitz, & Rankin-Shafer, 2013). However, students with disabilities are particularly vulnerable to attrition (Freidoff, 2015) and they underperform in many online programs (Deshler, Rice, & Greer, 2014).

To support the achievement and persistence of students with disabilities in finishing courses, online learning for teachers may be part of the solution, where K-12 online teachers themselves learn online as part of their professional development (oTPD). While such learning is in keeping with the online learning mode of education, oTPD is also practical since an online school could employ certified teachers living anywhere in the world. To learn about oTPD for teachers working with students with disabilities, data were collected from special education administrators and teachers about their oTPD experiences, along with their perceptions of the goals and purpose of professional development. The purpose of this study was to use both online administrators' descriptions and teachers' accounts of the oTPD in their schools relevant to students with disabilities to discover how oTPD for students with disabilities occurred in online/virtual school contexts. Two research questions governed this study.

1. What professional opportunities do online educators of students with disabilities participate in at their virtual schools?
2. What are the topics of this professional development for students with disabilities?

The findings of this study have implications for the continuing efforts of online schools as they plan professional development for their teachers about working with students with disabilities, for research on oTPD to meet the needs of students with disabilities, and for the standards around professional development recommended by various entities for quality online programs and courses.

### **Conceptual Framework for Defining Professional Development Online**

Soine and Lumpe (2014) broadly defined *teacher professional development* as opportunities to learn from and about classroom practice, regardless of the format. Research in oTPD has sought to identify the best design features for inclusion in development opportunities,

support teachers in exchanging less effective practices for better ones, and establish guidelines for directing funding support (Dede, Ketelhut, Whitehouse, Breit, & McCloskey, 2009). Each of these goals has implications for what administrators, who determine what online schools offer for professional development, can do to optimize oTPD, how these opportunities enhance teacher effectiveness, and whether funding for future professional development endeavors should be available based on their perceptions of what was successful.

Teacher professional development can be completed online using multiple modes of digital information, including photographs, videos, and interactive tools (Mayer, 2002). Further, online learning creates accessible opportunities since it utilizes platforms that deliver information irrespective of time, place, and situational barriers (Kanuka & Nocente, 2003). Studies of online learning opportunities for teachers have identified positive effects and even changes in teachers' pedagogical and content knowledge, classroom practice, and student outcomes (Weschke & Barclay, 2011). In fact, even teachers in traditional settings seem to prefer the Internet for their professional learning (Charalambousa & Ioannou, 2011; Kao, Wu, & Tsai, 2011). In addition, teachers can use various protocols on professional development websites to take charge of their own learning (Beach & Willows, 2017).

While administrators have a primary concern with improved student learning as an outcome of professional development, teacher professional development literature has also considered increased teacher knowledge and mindful self-regulation of work responsibilities as important intermittent outcomes (Butler, Lauscher, Jarvis-Selinger & Beckingham, 2004; Darling-Hammond, 1998; Roeser, Skinner, Beers, & Jennings, 2012). These conceptions of professional development and how they might translate to online learning informed this study.

### **Review of Related Literature**

The Individuals with Disabilities in Education Act (IDEA) granted access to personnel with special training and other services necessary to support learning to individuals who need them (Giangreco, Edelman, Broer, & Doyle, 2001). However, high-quality instructional support for students with disabilities has not always occurred in brick-and-mortar settings (Giangreco, Carter, Doyle, & Suter, 2010; Zigmond, 2003). For teachers of students with disabilities who complete coursework in online educational environments, the need for teachers to demonstrate competency in these fully online settings is particularly acute. Even so, teacher preparation in this regard has been minimal, especially around issues of accommodation and instruction (Smith, Basham, Rice, & Carter, 2016). That leaves professional development as the primary mechanism by which teachers might learn to teach students with disabilities online.

Further, the legal aspects of including students with disabilities in school settings have meaning, not just for teachers, but also for administrators. Administrators, functioning as representatives of Local Educational Authorities (LEAs) guarantee funding for the services promised in the IEP. In terms of the administrator's role in providing professional development for teachers of students with disabilities, Pazez and Cole (2013) suggested that administrators need to know about (1) social justice, (2) legalities, (3) support models, (4) referral, and (5) evaluation to effectively serve as an LEA.

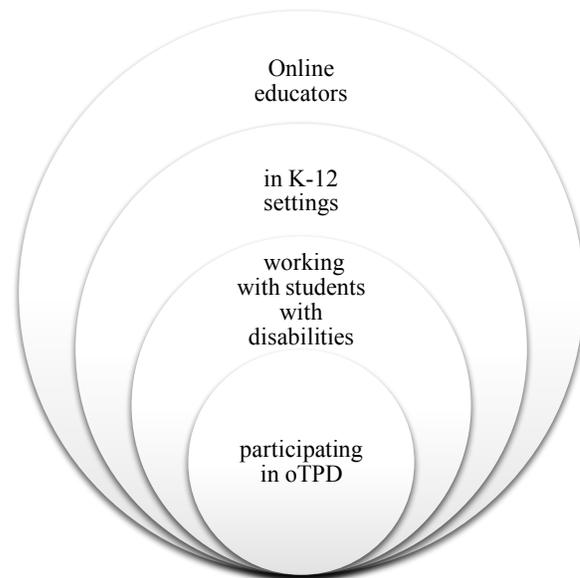
In the online setting, students with disabilities are at risk for equally dismal learning outcomes. Sometimes, students with disabilities cannot enroll in courses in the first place. When

they are unsuccessful in the course, sometimes online educators suggest lower course loads, easier classes, or that students leave the school entirely (Rice & Carter, 2015). In addition, parents report spending more than three hours per day working directly with their children, even though they have not been prepared to provide the kinds of special education services mandated under an IEP (Burdette & Greer, 2014).

Taking on teacher professional development in a way that engages them in their own learning requires careful planning when teachers learn online and then return to teach in traditional classrooms with colleagues in shared time and physical space. However, another layer of complexity emerges when teachers both learn and teach online. Their lack of face-to-face interaction presents a unique challenge to achieve ongoing benefits from professional development in such areas as continued involvement with colleagues, on-going relationships with facilitators or staff developers, or opportunities to discuss shared students with colleagues (Butler, 2007; Sicilliano, 2016; Wilhelm, Chen, Smith, & Frank, 2016).

To improve instruction in traditional settings for students with disabilities, Cook and Odom (2013) noted a dire need for professional development around the creation and implementation of support plans. However, little research has suggested what professional development might look like in an online format to improve teaching, learning, and the implementation of disability service plans such as an IEP developed under the Individuals with Disabilities Rehabilitation Act (IDEA, 2004). However, it seems logical that if online teachers had more access to information and support about how to serve students with disabilities, then more students with disabilities might enroll and fewer would have to leave the school without experiencing success.

Therefore, numerous layers of topical complexity are at work in this study. These layers appear in Figure 1.



*Figure 1.* Narrowing the Topical Complexity of this Study

Due to the layers of topical complexity in this study, these layers are grouped into two pieces: (1) professional development of special education teachers and (2) oTPD for K-12 teachers. Where possible, studies of oTPD featuring special education teachers who also teach in online contexts are referenced, but unfortunately, the research base for both these topics is highly limited.

To locate this literature, I conducted a search of major educational databases, including Education Resources Information Center (ERIC) and Education Full Text. I chose both ERIC and Education Full Text because of their breadth in educational research. The major topical keywords and the related subtopic keywords appear in Table 1.

Major topics	Related subtopics
Special education/educators	K-12 teachers, disability/disabilities, exceptional children
Professional development	in-service preparation, teacher learning, reflection
Online	technologically mediated, Internet, distance education

*Table 1.* Major topical keywords and related subtopics

The articles that emerged from the search focused on (1) identifying a research agenda for oTPD and (2) learning what teachers desired in oTPD.

### **Identifying an Initial Research Agenda**

Early work on oTPD by Dede, Ketelhut, Whitehouse, Breit, & McCloskey (2008) set a research agenda for oTPD. The highlights of their agenda focused on the following:

- Identifying design features that enabled oTPD
- Supporting improved teacher practices through oTPD
- Documenting student-learning outcomes because of oTPD
- Justifying funding decisions

However, several factors have made this agenda difficult to implement for students with disabilities. First, online learning assumes many forms, from fully online to supplemental versions. Researchers are only now beginning to understand what constitutes high quality practice from teachers and administrators on behalf of students with disabilities in online settings (Greer, Rice, & Dykman, 2014; Rice & Dykman, in press). In addition, funding decisions that would determine professional development opportunities are not straightforward since monies for students with disabilities are allocated in a multitude of ways, all dependent on the constellation of state policies and priorities for online education, charter school funding, and IDEA funding disbursement (Ortiz, Rice, Deschaine, Lancaster, & Mellard, 2017). Even so, the core tenets of this agenda around design, teacher improvement, student improvement, and funding have resonated in research.

### **Teachers' Desired oTPD**

Another critical research topic on oTPD has been to identify topics that teachers care about. One survey of teachers (McConnell, Parker, Eberhardt, Koehler, & Lundenberg, 2012) found that teachers desired oTPD around four major topics: (1) collaboration, (2) discussion, (3) learning, and (4) sharing. Each of these has a social or relational component that overlaps to some extent with work in teacher presence (Garrison, 2007). Researchers have also found that teachers who

participated in oTPD expected to form communities of inquiry that are mutually supportive and that sustain teachers in learning over time (Sugar & van Tryon, 2014). For the most part, however, these communities failed to actualize. In fact, a recent study of oTPD specifically found that teachers felt motivated to participate in oTPD not merely for professional community formation, but also to meet administrative expectations (Vu, Cao, Vu, & Capero, 2014). This lack of community might be exacerbated when it comes to online teachers who work with students with disabilities because teachers in traditional settings who do so experience high levels of frustration and burn out (Brunsting, Sreckovic, & Lane, 2014). Thus, while the online environment may have the *potential* to lessen alienation and frustration for teachers, there is no guarantee that it will necessarily do so.

Finally, Beach and Willows (2014) found that teachers were willing to engage in higher order cognitive processes when using professional development websites if they perceived that the information was of high quality, useful to their practice, and easy to navigate. Later, Beach and Willows (2017) conducted further research into the cognitive processes of professional development for elementary teachers wherein they sought to identify think aloud protocols as research tools that gave the most information about teacher thinking about instruction. They found that asking teachers to engage with the materials and then think aloud while revising them produced the most elaborate descriptions of their thinking. In addition to mapping a research strategy, Beach and Willows also suggest that teachers' opportunity to revisit and re-engage with materials may also be a useful practice for helping teachers optimize oTPD. Having online teachers engage in this type of complex exercise might provide potential models for oTPD, especially for diverse and underserved student populations like those with disabilities. However, there is no guidance at present for the practical application of the theoretical model as it relates to online teachers.

### **Conclusions from Literature**

A review of the literature around what oTPD should look like structurally and what should be included as content raises a question as to whether online schools can provide opportunities to learn about working with students with disabilities. To answer this question, the perspective of teachers engaged in the oTPD as well as the administrators who should provide access to it required consideration. Further, it was important to learn how educators experienced the online format of professional development as additional preparation and support to work with this population.

### **Methods**

This study drew on phenomenological strategies in educational contexts for describing what happens in specific educational settings (van Manen, 1990). Phenomenology carries with it the understanding that ontological knowing—the knowing embedded in contexts—emerges as shared ideas and stories in social contexts (Jakubik, 2007). Such sharing in an ontological frame contributes to learning in action (Orr, 1990). When seeking ontological knowing, phenomenology is often helpful because of the hermeneutic (meaning-making) goals. Willis (2001) communicated this as well in his explanation of the relationship between cognition and other ways of interpreting ontological experiences:

Before human activities and events can be subjected to analytical abstracting knowledge, they are received as experiences. [Reality] is presented as an

‘experienced’ thing in which what is placed before the mind for naming is, as it were, a result of a mixture of sensory experiences, emotional responses, memories, prejudices and the like (p. 2).

Phenomenology was an appropriate methodology for this study because of its historic use as a methodology to describe newly emerging phenomena. Further, Halling (2008) suggested that phenomenologists look ideographically at individuals to identify, not essences, but general structures within a phenomenon among the individual participants. These general structures are not essences in the same way as are conclusions based on direct thematic treatment. Achieving this understanding of the phenomenon requires researchers to move back and forth between individual experience and abstraction. In so doing, a researcher carefully balances description with interpretation in accounts of research.

### **Participants**

The participants in this study were administrators and teachers from various states working in diverse types of online learning programs. Eighteen administrators from 15 states representing 25 schools participated in this study (some administrators had responsibilities at more than one school). Each had functioned as an administrator for a least one year prior to participation in the study. The most experienced had more than 20 years of involvement in administration (including experience in brick-and-mortar schools) and 8 years of experience in fully online and/or supplemental online programs. Administrators in the study were nominated by curriculum vendors who supplied instructional materials to the schools, the charter network operations managers in the upper echelons of management, or the state online school superintendents. This resulted in 25 nominations. Of those nominated, 22 accepted the invitation to participate, but four left the study early because of administrative turnover. Some left online education and others went to other programs and schools and did not want to participate during their transition.

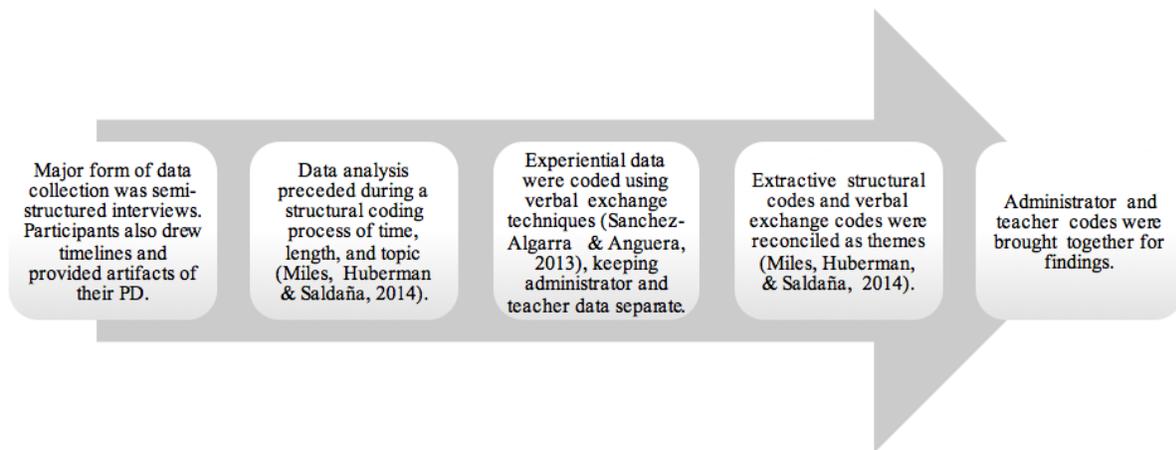
Fourteen teachers from seven states also participated. Each of these teachers had at least two years of experience teaching online. The most experienced teacher had taught online for 10 years (15 years total, including brick-and-mortar experiences). Recommendations for participation came from administrators with responsibilities for special education teachers, although administrators were reluctant to make nominations out of concern for the burden that study participation would place on teachers already overtaxed with teaching responsibilities. Many online teachers begin grading at 6 or 7 A.M., and are then “on call” or teaching virtual classes until the afternoon. During the evening, many teachers grade or contact students. Ultimately, 20 teacher nominations were received and 16 agreed to participate. During the study, 2 teachers were laid off because of budget cuts and did not wish to continue their participation. At their request, their data were removed from the corpus.

### **Data Collection**

The major form of data collection in this study was semi-structured interviews. The semi-structured interview is designed to obtain objective responses from participants about their perceptions and/or experiences with phenomena (Marshall & Rossman, 2014). Teachers and administrators participated between one and eight times, depending on their consent and availability. These interviews lasted between 15 to 45 minutes. Administrators and teachers were asked to identify (1) types of professional development provided at their schools in the last year, (2) duration and frequency of these events, and the (3) topics covered. Thereafter, they were invited to tell stories, provide artifacts, or list specific things they learned.

## Data Analysis

After the interviews, participants evaluated their transcripts and were invited to make clarifications and/or corrections, at which time they shared additional stories or artifacts. Administrators made a few clarifications about content and frequency of their events which were reflected in the final report of the findings. Teachers told additional stories. The trajectory of data analysis appears in Figure 2.



*Figure 2.* Data analysis process

Data analysis occurred by extracting the structural information (type and length of time) and content in the structural coding process (Miles, Huberman & Saldaña, 2014). The findings were captured for both administrators and teachers as tables. Then the interview data were coded using verbal exchange techniques (Sanchez-Algarra & Anguera, 2013), keeping administrator and teacher data about professional development separate. In this technique, coders sought and isolated information and exposition of data. Finally, the extractive structural codes and the verbal exchange codes were reconciled into themes (Miles, Huberman, & Saldaña, 2014). In this final step, administrator and teacher codes were merged.

## Results

The findings of this study regarding the types of oTPD offered to teachers and the content in the oTPD as perceived by administrators and teachers are presented in this section. First, general findings are presented as to time configurations and types. Second, a table is presented of data from the administrator participants. Third, a table is presented of data from teacher participants. The fourth section presents the merged themes from administrator and teacher codes.

## General Findings

Figure 3 represents the increments of time described for the oTPD activities.

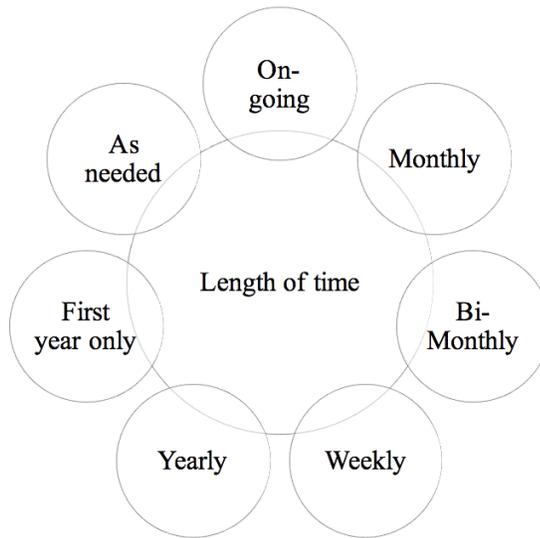


Figure 3. Time configurations for oTPD activities

Both teachers and administrators reported oTPD occurring in various length configurations. However, the most often reported time was “as needed,” which can be seen in Tables 2 and 3. Figure 4 summarizes the activities most often reported types of oTPD.

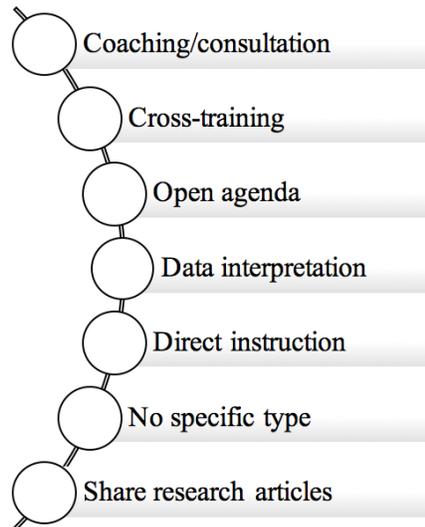


Figure 4. Summary of the types of oTPD reported

Discussions with participants clarified that the “as needed” oTPD typically assumed the form of consultation, which will be highlighted in the themes from both groups. In this scenario, teachers with immediate questions about working with students with disabilities contacted their administrator using digital technologies and their administrator provided an answer.

### Data from Administrators

Table 2 summarizes information obtained about professional development from administrators.

Aspects of oTPD		
oTPD Structure		
Type of development	Length of time	Content
Coaching/consultation (n=5)	On-going (n=1)	Performance accountability (n=1)
Cross-training (n=1)	Monthly (n=1)	Common core curriculum standards (n=1)
Open agenda (n=2)	Bi-monthly (n=1)	Curriculum materials modification (n=1)
Data disaggregation (n=1)	Weekly (n=1)	
Direct instruction (n=2)	Yearly (n=1)	Emotional support (n=2)
No specific type (n=2)	First-year teachers only (n=2)	IEP compliance (n=4)
Share research articles (n=1)	As needed (n=6)	School policy updates (n=2)
		State policy updates (n=1)
		Subject matter knowledge (e.g., English, math) (n=1)
		Team building (n=2)

*Table 2. Administrators’ Reported oTPD Structure and Content*

For administrators, the most common type of oTPD mentioned is consultation. This usually occurred via Skype or email. Further, this occurred on an as-needed basis. The most often mentioned topics were IEP compliance and policy updates from the school or state. Although some oTPD may be provided on an occasional basis around content knowledge and accommodations, this is not the norm according to the administrators that participated in this study.

## Data from Teachers

Table 3 depicts the information obtained about professional development from teachers.

Aspects of oTPD		
oTPD Structure		
Type of development	Length of time	Content
Coaching/consultation (n=5)	Monthly (n=1)	Common core curriculum standards (n=1)
Open agenda (n=2)	Weekly (n=3)	Curriculum materials modification (n=1)
Data disaggregation (n=1)	Yearly (n=1)	Emotional support (n=6)
Direct instruction (n=2)	First-year teachers only (n=3)	IEP compliance (n=10)
No specific type (n=2)	As needed (n=8)	School policy updates (n=6)
Share research articles (n=1)		State policy updates (n=1)
		Subject matter knowledge (e.g., English, math) (n=4)
		Team building (n=4)
		Technology (n=3)

Table 3. Teachers' Reported oTPD Structure and Content

Although fewer in number, teachers described more types of oTPD than did administrators. Teachers tended to discuss team building, school policies, and emotional support from administrators, although the numbers overall were not very large. Finally, teachers agreed that most of their professional development occurred on an *as needed* basis and that the most common type was *coaching and consultation*.

## Themes from Teachers and Administrator Data Combined

The themes that emerged from combining the data from both groups were (1) Compliance (2) Consultation, and (3) choice.

**Compliance.** Compliance took on several forms in the interviews. The first form was in terms of the legal compliance to special education law. The second involved school and, to a lesser degree, state, policies. The third was compliance to the curriculum created by outside vendors. Professional development also occurred around standards like the Common Core Curriculum Standards. Betty, an administrator illustrates this.

[We address] what is legal, what is compliant, what do we need to be doing for students with an IEP to support them in our environment, and in our program. And so, we're saying: "So this is why we do this!" or, you know, providing them with the why so that as they're developing ways to work within the GE environment to make sure that our school wide program is compliant with the law, and is as student-centered as possible. (Administrator)

Note that the goal of the oTPD in this case was to help general education teachers be mindful of students with disabilities, fulfill legal requirements, and understand why procedures were integral, even obligatory.

**Consultation.** The second theme was consultation. Not only was this the dominant method mentioned by the teachers, it was also preferred by administrators. It seemed that administrators preferred to answer questions about specific cases and teachers wanted to bring their questions to administrators at will. Ava, an administrator discussed the consultation services she provides the teachers she supervises.

We do data meetings where the teachers are with me for 15 to 30 minutes and we open test results and I look at the data from the caseload with teachers. And we talk about strengths and weakness. We also say, "What can we do to tailor this instruction for these students?" And then we also filter for small groups and see the effectiveness of educational practices. (Administrator)

In addition to this consultation around student learning, teachers and administrators provided emotional support as a form of consultation. Whether this consultation came from administrators or other teachers, teachers remembered and described incredible appreciation for it. This emotional support came in the form of "just in time" moments when teachers needed it, particularly after a negative experience with a student, but also occurred as jokes and memes from administrators.

**Choice.** The last theme was that of choice. At some schools, teachers were offered professional development in multiple areas and they were supposed to take classes that fit what their current needs. One teacher offered a description of the range of opportunities available to her.

There's probably a handful every week of other professional development opportunities. There's a whole calendar that you can seek out to fit whatever you might be working on. If you are an elementary teacher and you need to do the Dibels® assessment on your students to assess their reading ability, then you can take a class on that, or if you are at the high school level and you're preparing your kids for state tests or math – you know there's a lot of focus on math right now, there's a ton of math professional development always available. There's a lot on ELL and special ed., writing workshops – yeah there's a lot of stuff. (Teacher)

The range of choices described illustrates why teachers might report oTPD in regular intervals of some sort (week, month, or year) but almost all also said "as needed." Rather than a comprehensive program of professional development, when there are offerings they are considered *a la carte*. Teachers can decide what sorts of these micro-development opportunities might fit their situation. Further, it became apparent that the *needed* part of the term *as needed* does not always mean a crisis is occurring; it may just mean that a teacher wants to learn about a topic. The goal of a school in an *a la carte* orientation might be to ensure that topics are offered often and they reflect current areas of concern for teachers. Also noteworthy is the notion that although some schools were

offering multiple micro-development opportunities, there was consensus with the participating teachers and administrators that these were underutilized or they did not always answer the question at hand. In such cases, teachers sought consultation.

### Discussion

This study asked two questions: What are the opportunities for oTPD for online teachers of students with disabilities? and What topics dominate these opportunities? As to the first question, the findings suggest that, while some schools have formal oTPD courses, there is no consistency to opportunity and that most oTPD occurs via consultation with individual administrators and other teachers. The fact that teachers can seek help when they want it and take the courses they desire is positive *if* teachers can take advantage of these opportunities. However, it also seemed that the teachers did not have opportunities to engage in technologically supported professional development to direct their own learning. This is unfortunate since Beach and Willows (2014; 2017) have found that teachers benefit from engaging with online information on their own and *then* talking through it again. If this is true, then web-based content about working with students with disabilities would be helpful to improve teacher learning as well as free administrators from some of their current consultation responsibilities.

For the second question, the content of oTPD is generally driven by compliance to special education legalities or school policies. Teachers and administrators agreed that teachers had few formal professional development opportunities beyond receiving information about legal compliance. Even so, some teachers reported that they formed informal collaborative communities to learn about effective instructional practices for students with disabilities. The content knowledge offerings at some schools were vast, but discussions with participants about these offerings revealed that courses were not attuned to the needs of students with disabilities and the teachers who worked with them. Further, a surprising lack of emphasis on technological learning was identified. When participants were asked about this, they agreed that there was much technology to learn; some said they had received formal oTPD, but most said that they learned technology on their own or by the informal consultation method.

Unfortunately, there was no mention of the strong communities that teachers built in these settings to serve students with disabilities, and there was no mention whatsoever of social justice—both of which might be important for the professional development of teachers working with students with disabilities (Theoharis & Causton, 2014; Thomas, 2015). However, this is unsurprising since deconstructing disability has generally not been a priority for teacher preparation or development. Even so, it might be fitting to include such topics in oTPD since part of the promise of the digital age is to reevaluate deeply entrenched social beliefs about difference and to challenge power structures—to be *disruptive* (Horn & Staker, 2014).

This study was qualitative in nature and no generalizability is expressed or implied. However, the findings from teachers and administrators at multiple schools in the United States suggest that program evaluators ought to review the time configuration as well as the content of oTPD for teachers, and especially for diverse students such as those with disabilities. Such reviews should consider whether current oTPD opportunities reflect the school's values and commitment to sustain teachers and support their improvement through both formal and informal oTPD or other types of professional development.

## Recommendations for Future Research

The findings of this study suggest that the research agenda set for oTPD by Dede, Ketelhut, Whitehouse, Breit, and McCloskey (2009) has yet to be realized. Part of the reason may be that online teachers, for the most part, do not receive comprehensive, structured opportunities for professional development. Moreover, there may be fewer opportunities for forming teacher learning communities in schools where teachers become accustomed to calling the administrator to learn about working with students with disabilities. Indeed, one of the recruitment issues in this study was that heavy teaching obligations denied many teachers the time to participate in this research. Therefore, it may also be true that teachers are extremely limited in their time for oTPD and for leveraging that oTPD for learning to provide accommodations and instructional support to students with disabilities.

While the ethos of online learning focuses on learner control, it seemed from this data that teachers were comfortable with contacting their administrators to learn the answers to their questions rather than participate in structured professional development, including micro-development opportunities that might be available through oTPD. While teachers seemed satisfied with this, one cannot help but wonder whether that type of development meets the charge for administrators who truly desire inclusive schools (Billingsley, & McLeskey, 2014). A truly inclusive school would have teachers that worked alongside administrators, who formed strong networks among themselves, and who actively collaborated with parents and other community resources. Perhaps a worthy goal for the immediate future is to use research in oTPD to determine how to help teachers and administrators engage with additional types of resources (assuming these resources exist or they are not difficult to generate).

In addition, future research could focus on reviving or reinterpreting Dede and his colleagues' (2008) recommended priorities of (a) identifying design features, (b) supporting improved practice, (c) documenting learning outcomes, and (d) justifying funding decisions for oTPD. Research into oTPD that is truly *disruptive* (Horn & Staker, 2014)—meaning that it challenges the status quo policies and procedures that have hampered innovation in traditional schools might lead to some effective practices for oTPD that are malleable and can be scaled. However, other practices that are genuinely innovative may need to be tailored to certain contexts. Thus, there seems that there is an on-going need to learn about systematic macro-development opportunities for all teachers, particularly those who work with students with disabilities, as well as micro-development opportunities where teachers make choices, but still grow networks. These tensions may be especially acute in large virtual schools with many students and many teachers in states without firm policies around IEP implementation and service delivery.

## Conclusion

Federal statutes protect students with disabilities as a population who are supposed to be included in society to the greatest extent possible, a mandate that includes online learning. This study revealed the phenomenologically captured perceptions of oTPD opportunities that teachers of students with disabilities in online contexts must improve their practices. The findings also revealed that participating teachers and administrators had little opportunity to improve accommodation and instructional skill, but received some consultative assistance regarding the

laws at stake in serving these students. Further, even as these teachers learned about laws, they did not learn about how to truly ensure social justice or engage with the spirit of the laws that protect students with disabilities as a vulnerable population. Future research should document ways to include a more robust structure for professional development, while also experimenting with the choice in oTPD offerings for teachers of students with disabilities.

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