

ADAPTED PHYSICAL EDUCATION

Adapted Physical Education Service Delivery and COVID-19: Examination of Teacher Practices and Suggestions for Teacher Preparation Programs

Brock McMullen and Timothy Swenson

Abstract

The purpose of this study was to connect with adapted physical education (APE) teachers in PK–12 programs to explore service delivery practices and the impact COVID-19 had on those practices and gather teacher suggestions for APE teacher preparation programs. Seventeen teachers with comprehensive APE experiences were interviewed. Questions included a combination of general service delivery questions, how COVID-19 impacted the education environment, and suggestions to improve teacher preparation programs. Three interrelated themes emerged: (1) collaboration and communication, (2) special education process and legal knowledge, and (3) remote instruction and assessment. Participants provided a range of suggestions for teacher preparation programs to include as learning outcomes for preservice teachers. Findings suggest APE teacher preparation programs need to prepare students to work in an interdisciplinary school setting and be adaptable in an ever-changing environment.

In the United States, the Individuals With Disabilities Education Improvement Act (IDEA, 2004) states that public schools are re-

Brock McMullen, Department of Exercise and Sport Science, University of Wisconsin-La Crosse. Timothy Swenson, Health and Human Performance Department, University of Wisconsin-Platteville. Please send author correspondence to bmcmullen@uwlax.edu

quired to provide students with disabilities (SWD), ages 3–21, a free appropriate public education in the least restrictive environment (LRE). The law also requires SWD have access to physical education (PE), and, if the individualized education plan (IEP) team determines it is appropriate, the PE services be specially designed on the basis of the student's unique needs. Adapted physical education (APE) teachers ensure that SWD receive proper motor evaluations and specially designed instruction in the LRE through direct instruction, team teaching, and/or collaboration with general physical educators to meet content-specific IEP goals (Bateman, 2012; Lytle et al., 2010). This collaboration is imperative in special education, especially regarding developing IEP goals, differentiating instruction, assessing student progress, and meeting student academic learning standards (Friend & Cook, 2017; Richardson, 2011).

One challenge future APE teachers will encounter is the need to work collaboratively with other professionals to provide services to SWD. PE teacher preparation programs adapt to the needs of the profession by focusing on a blend of discipline-specific content and practicum work (Hodge et al., 2002; Piletic & Davis, 2010). Recently, Piletic and Davis (2019) recommend a shift in how institutions of higher education (IHE) prepare APE teachers so that practicum experiences take place with other preprofessionals who may also be special education service providers (e.g., physical or occupational therapists, speech and language pathologists, special education classroom teachers, and/or school psychologists). Interdisciplinary collaboration is a major component of the special education profession, and exposing students during the preservice stage to these experiences may better prepare them to effectively collaborate on the job (Friend & Cook, 2017; Ronfeldt, 2021).

Due to the emphasis on hands-on collaboration for effective service delivery, an additional challenge for teachers recently is the shift to an online format due to COVID-19, during which APE teachers meet virtually with students and staff to deliver instruction and hold meetings (McNamara, Lieberman, et al., 2021). Compounding the challenges of a virtual environment, physical educators also share that minimal training is a barrier to integrating technology within their classes effectively (Gibbone et al., 2010). Due to the increased popularity of online K–12 instruction (Schwirzke et al., 2018) and

COVID-19 moving schools online over multiple years, the research devoted to virtual PE, particularly to students with disabilities, is limited (Killian et al., 2019; Webster et al., 2021). Because APE teachers have various responsibilities in regard to service delivery, including referrals, assessment, teaching, and IEP meetings, it is important to determine how these duties can work in a different modality (Marshall et al., 2020). One method by which IHEs can reduce these barriers and enhance teacher preparation is by following the conceptual framework of school district–university partnerships of Siedentop and Locke (1997), which consists of (a) quality PE in the schools, (b) effective PE teacher education programs, and (c) a working relationship between the two. Siedentop and Locke suggest the success of PE is dependent on continuing partnerships between school-based practitioners and teacher preparation programs. Such partnerships can enact positive changes in school-based PE curriculum and its delivery. An additional justification for having strong school district–university partnerships and obtaining practicing teacher feedback comes from Prusak et al. (2010), wherein a complaint of new teachers is that they learned things that did not apply in a real school setting.

Therefore, the purpose of this study is twofold: explore the impact of COVID-19 on APE teachers' service delivery practices and on the basis of those experiences gather authentic teacher suggestions for preparing APE candidates in teacher preparation programs.

Method

Paradigm and Research Design

As higher education faculty in PE teacher preparation programs, we intend to strengthen teacher preparation programs and develop a working relationship between IHEs and PK–12 schools by following the framework of Siedentop and Locke (1997). To study this relationship, this study used a qualitative descriptive approach to investigate adapted physical educators' experiences during the COVID-19 pandemic as well as to garner recommendations for enhancing APE teacher education programs. This approach allowed us to summarize the participants' experiences while not exaggerating or altering their statements, which allowed for an accurate view into their experiences as teachers (Sandelowski, 2000, 2010).

Participants

After obtaining university institutional review board approval at the University of Wisconsin-La Crosse, participant recruitment began. A convenience sampling method was used and a list formed of 25 APE teachers we knew through various professional organizations in the United States. To be included, teachers needed to serve primarily as an APE teacher (i.e., at least 50% of their time) in their school district and have at least 2 years of teaching experience. Each invited teacher was emailed an introductory letter, consent form, and short demographic survey containing questions related to years of experience, highest degree, race, and gender. Teachers that agreed to be interviewed were emailed the questionnaire.

Seventeen teachers consented to participate, all of whom have state-approved teacher licenses; two had bachelor's degrees and 15 had a master's degree or above (13 of which were specifically in APE). The teachers were from nine states and had an average of 9.5 years of experience (Table 1). The average caseload size for each teacher was 46 students with a range of 19 to 95 students receiving services in a variety of settings (one-on-one, small group, and general PE). Additionally, five participants have received national APE teaching awards from SHAPE America.

Data Collection

We created the interview questions and these were reviewed by an external content expert who has over 35 years of experience as an APE teacher and university professor, to identify questions that may pose a problem because of the content or the context the question was referencing and also to avoid any redundancy or repetitiveness. This review resulted in the final seven questions. All participants responded to the same list of seven open-ended questions, which were developed from items thought to contribute to successful APE teacher service delivery, particularly with the COVID-19 pandemic in mind, as well as Siedentop and Locke's (1997) recommendations for district–university partnerships. Interview questions such as “How did COVID-19 impact your APE service delivery and what do you do differently for APE services, including assessments, IEP meetings, collaboration?” addressed the first purpose statement about the impact of COVID-19 on service delivery practices. Questions

Table 1
Participants' Demographic Data

Pseudonym	Race	Gender	Highest degree	Years of experience	Current state teaching
Dan	White	Male	Bachelor's	11	WI
Hayley	White	Female	Master's ^a	7	WI
Zach	White	Male	Master's ^a	2	IL
Chris	White	Male	Master's ^a	4	WI
Anthony	White	Male	Master's ^a	17	MD
Rob	Hispanic	Male	Master's ^a	26	GA
Carol	White	Female	Master's ^a	7	MN
Michael	White	Male	Master's ^a	4	AK
Samantha	White	Female	Master's ^a	3	MN
Lori	White	Female	Master's ^a	4	UT
Sally	White	Female	Doctorate ^a	16	TX
Terri	White	Female	Master's	18	WI
John	White	Male	Master's ^a	2	WI
Jennifer	White	Female	Bachelor's	6	WI
Bill	White	Male	Master's ^a	10	VA
Brian	White	Male	Master's	18	WI
Pete	White	Male	Master's ^a	7	IL

^a Master's degree in adapted physical education.

such as “What suggestions, for your COVID-19 experience, do you have for APE teacher preparation programs to prepare future APE teachers?” addressed the second purpose statement about gathering teacher suggestions for preparing APE teacher candidates.

Throughout the process of the study, all participant rights and protections were shared and enforced. All interview data were stored on a password-protected computer for safekeeping. Each participant received the seven-item questionnaire via email and voluntarily completed the questions with a written response and emailed it back. Afterward, participants were invited to a 45 min, one-on-one video conference during which they were invited to expound on their

responses and verify the accuracy of their written data. When the video conference was complete, each participant validated the accuracy and authenticity of their responses.

Data Analysis

Interview responses were analyzed thematically on the basis of a multistep process (Braun & Clarke, 2006; Miles et al., 2014). First, we read through the participants' responses multiple times and took notes to organize the data into initial themes. This step allowed us to familiarize ourselves with the content and extract relevant meaning units from the transcripts. Meaning units represented sentences or phrases containing conceptually relevant information (Tesch, 1990). Second, we identified key features of the meaning units to organize the data and generate themes. Third, we sorted meaning units into themes and subthemes (i.e., groups of conceptually similar meaning units). Fourth, we met on four occasions to review the meaning units and theme organization to ensure the data best displayed the participants' responses. If one of us felt a meaning unit was misplaced, a discussion took place and meaning units remained or were placed in a different theme and/or subtheme when a consensus was reached. Last, themes and subthemes were refined and we ensured the labels and meaning units were accurate to allow for themes within the data to be linked to existing research.

Establishing Trustworthiness

Trustworthiness procedures of data saturation (Guest et al., 2006) and member checking (Merriam & Tisdell, 2016) were implemented in this study. These measures helped us to offer a fair and ethical interpretation of participants' viewpoints and experiences (Merriam & Tisdell, 2016). We did not have a benchmark of the number of participants; interviews were conducted until there was data saturation and minimal new details were being shared (Guest et al., 2006). Additionally, verbatim quotes were used; this ensured that participants' voices were visible and themes were accurate and not duplicated. Last, member checking took place via a video conference call on which we invited all participants to take part in a one-on-one discussion to clarify or correct anything from their written responses (Merriam & Tisdell, 2016).

Results and Discussion

Three themes emerged from the analysis along with recommendations for teacher preparation programs. First, the theme of collaboration and communication highlighted the need for APE teachers and other school professionals to have regular and open communication, especially as a result of the COVID-19 pandemic. With participant responses indicating multiple personnel involved in the collaborative process with APE teachers, this theme was broken into three subthemes: general physical educators, physical therapists/occupational therapists, and paraprofessionals. The second theme was related to knowledge about the special education process and legal knowledge, describing a need for APE teachers to understand special education law and IEP procedures. The third theme dealt with how COVID-19 required remote instruction and assessment and how APE teachers had to adjust practices to meet the needs of students. Last, the participants provided suggestions for university faculty to include in their teacher preparation programs. The subsequent sections both describe and discuss these themes, as well as the impact of COVID-19, and suggestions for how teacher preparation programs can meet current educational demands.

Collaboration and Communication

Collaboration With General Physical Educators

One requisite role of the APE teacher is collaborating with the general physical education (GPE) teacher (Kelly, 2019). This relationship, as Friend and Cook (2017) point out, consists of one professional assisting the other with a problem that concerns a third party, typically a student. For teachers to truly collaborate, they need to work collectively, valuing the expertise and input of all team members (Lytle, 1999). The need for collaboration and communication within the PE setting, particularly during the COVID-19 pandemic, was a sentiment study participants expressed repeatedly. For instance, Terri stated, “All GPE classes are taught through Zoom . . . I attend the Zoom PE classes to support my students just like I would in face-to-face school. I am watching my student, giving cues, and praising them during the GPE zoom classes.”

Citing frequent collaboration with GPE teachers, John stated,

My interactions with the general physical education teachers could be described as frequent and in-depth. We discuss specific students on a daily basis and I am constantly informed about my students who are involved in the inclusionary model of our service delivery plan.

Concerning effective communication, Jennifer shared, “It is so important to make sure [GPE and APE teachers] are all on the same page doing the best for every student.” Regardless of the frequency of collaboration between APE and GPE teachers, all participants noted the necessity of working with GPE teachers for the provision of the best learning opportunities for SWD, especially during the COVID-19 pandemic during which multiple modes of instruction were used (e.g., online, in-person, hybrid).

According to participants, it is important to prepare APE preservice teachers to be team players with a common goal of providing quality services to SWD because teachers without formal training often avoid collaborative interactions (Bradley, 1994; Gersten et al., 1990). Therefore, instituting opportunities within APE teacher preparation programs that provide teacher candidates opportunities to interact with others when teaching SWD could enhance partnership opportunities leading to preservice teachers feeling more prepared (Mader, 2017; Piletic & Davis, 2019). Fortunately, such collaborative approaches are already in existence at some IHEs and may serve as a model. One example is the Adapted Physical Activity motor program at Western Illinois University, which provides an opportunity for preprofessionals, including APE, GPE, and other direct and related services to collaborate and teach physical activity to SWD (Piletic & Davis, 2019). A potential outcome of this intentional collaborative approach is for future APE teachers to develop the confidence and essential communication skills to provide purposeful programming to SWD before they graduate, especially in atypical teaching situations (Ronfeldt, 2021).

Collaboration With the Physical Therapist and/or Occupational Therapist

The collaborative efforts of the APE teacher, occupational therapist, and physical therapist are all geared toward various areas of motor skill development for SWD. These professionals will hereby be

referred to as the Motor Team. A majority of participants expressed the importance of working regularly and closely in the Motor Team. For example, Terri referred to the fact that sharing an office contributed to increased interactions,

Communication between [me and] the OTs and PTs happens daily . . . I am fortunate to share an office with the OT and PT at one school. We are constantly collaborating [regarding] the students we work with. This is so helpful when you have a student with many needs.

Further, Brian shared, “I collaborate with our school district physical therapist to get ideas for functional movement activities or exercises that I can incorporate into my students’ physical education programs.” These interactions align with the APE National Standards 11-Consultation and Staff Development and 15-Communication in that the APE teacher needs to understand a team approach to establishing a working relationship with the Motor Team by knowing how those other professionals can serve SWD (Kelly, 2019).

Forming a collaborative team is usually not required by the school district; however, a team approach between service providers is especially important during events such as the COVID-19 pandemic. This approach ensures the Motor Team is working towards students’ IEP goals, respective to their discipline when they cannot collaborate in person (Friend & Cook, 2017; Maguire, 1994). For instance, Michael stated that during the pandemic, “physical therapists and one occupational therapist have been joining my APE Zoom sessions.” Further elaborating on working and teaching together in a virtual setting, Hayley shared, “I co-teach with PT for some sessions.”

To keep responsibilities from blurring, when co-teaching and working together, especially in a virtual environment, the key players in a Motor Team need to have a full understanding of each other’s roles (Kelly, 2019). Emerging from the interviews, interactions between Motor Team members are regular and frequent; however, professionals generally develop these skills of coordinated service delivery after they are employed (Mader, 2017). The recommendations of Hayley, Anthony, Bill, and Rob were congruent with that of Piletic and Davis (2019) for preprofessional programs in that interaction among APE teachers and other special education pre-

professional service providers can benefit as they all need to know the roles of each provider in the education of an SWD. Despite these recommendations, more research needs to identify how learning about collaboration with the Motor Team at the preservice level can positively impact teacher development.

Collaboration With Paraprofessionals

Paraprofessionals play a valuable part in assisting both teachers and SWD in the PE setting. The use of paraprofessionals in PE has increased dramatically in the last 10 years due to issues such as federal legislation favoring inclusion (i.e., IDEA) as well as teacher shortages (Swenson, 2020). With the increased need to utilize paraprofessionals in the PE setting, APE teachers recognized the importance of knowing how to collaborate and communicate effectively with this specific service provider. Paraprofessionals typically spend the most time with students who have the highest educational needs, so forming collaborative relationships to support students in APE is a recommended practice (Downing et al., 2000). APE teachers repeatedly cited that working alongside paraprofessionals is a needed skill. For example, during online classes during the COVID-19 pandemic, Michael stated he had his paraprofessional assist him with keeping track of assessment data regarding student progress.

Results also indicate that collaboration between APE teachers and paraprofessionals needs to be regular to be effective. Pete stated, “I share an office with paraprofessionals and . . . I’ve found that demonstrating things for them and just giving them ideas of small adjustments can make a huge difference for students.” Additionally, Samantha mentioned, “I meet with special education support staff [paras] at the beginning of the school year to do an APE training.” Extant research indicates that paraprofessionals’ lack of engagement within PE settings is due to specific factors such as lack of training in the PE environment (Davis et al., 2007; Haegele et al., 2019; Lieberman & Conroy, 2013).

Providing opportunities to preservice APE teachers to collaborate with paraprofessionals in field-based settings is an encouraging recommendation of the study participants to enrich the learning environment. Bryan et al. (2013) indicates that physical educators have very little training in how to best utilize paraprofessionals, which leads to paraprofessionals feeling uncertain of role expectations. A

strategy for how preservice APE teachers could benefit from interacting with paraprofessionals during field experiences was shared when Chris stated, “I want them to explain to . . . the paraprofessionals what the lessons consist of and why we are focusing on. Showing the paras the modifications and how to increase or decrease the difficulty of the activity.” The importance the paraprofessional assumes in assisting SWD in APE settings cannot be overstated, yet research indicates very little provision of training specific to the APE setting (Bryan et al., 2013; Davis et al., 2007; Lieberman & Conroy, 2013). Certainly, this trend needs to be addressed within APE teacher education programs.

Special Education Process and Legal Knowledge

According to Lytle et al. (2010), a highly qualified APE teacher needs to have a comprehensive knowledge of the law and the special education process and how these apply to teaching SWD. Additionally, APE teachers are required to follow the same guidelines and regulations as special educators per the students’ IEP (Lieberman et al., 2021). This notion is also supported in the recent update of the APE National Standards, in which it states that teachers must have “knowledge of public laws that affect physical education . . . for individuals with disabilities” (Kelly, 2019, p. 67). Zach shared this view, stating that teachers need to be “familiar with special education law and the IEP process.” Having an understanding of current legislation (i.e., the Individuals With Disabilities Education Improvement Act of 2004) and its requirements for qualifying disabilities, referrals, assessments, guidelines for IEP meetings, and annual reviews is essential for those working with SWD, parents, and other special education professionals (Kelly, 2019).

Moreover, the APE teacher and other professionals must understand that APE is a direct and not a related service because specially designed PE (i.e., APE) is a mandated component of federal special education law (IDEA § 300.39). Carol appeared to have some issues with individuals in her district understanding this concept, saying, “No one knows that [APE] is a direct service; they will always refer to it as a related service and treat it as such.” This issue of not classifying APE as a direct service can result in SWD not receiving the appropriate services, which is why APE teachers must advocate and have these services specified in the IEP (McMullen & Felix, 2022).

To protect the school district from unwanted due process procedures, APE teachers must have an understanding of the law. This sentiment holds true during events such as the COVID-19 pandemic when instruction is primarily virtual. For example, Sally stated that regardless of where instruction took place (online or in person), she needed to meet the required number of minutes of APE services for her students. Additionally, Lori suggested that within teacher preparation programs, “students gain a better understanding of the IEP process and other tasks around special education documents. Also making a requirement that students attend IEP meetings during their preparation program.” These recommendations for preparation programs are in concert with the APE National Standards where it requires that teachers know the IEP process and understand federal mandates involving PE programs for SWD (Kelly, 2019).

Many parents and school professionals are not aware of the PE requirements in the law and SWD are unfortunately excluded from receiving proper services (Bittner et al., 2020; Coates & Vickerman, 2010; McNamara, Dillon, et al., 2022; McNamara et al., 2021; McNamara, Trujillo-Jenks, et al., 2022). These studies indicate the need for APE teachers to be advocates for SWD to parents, administrators, and the community. Additionally, APE teachers need to stay current regarding legislative updates and reauthorizations while working to promote a school environment of inclusion and respect for SWD (Kelly, 2019; Lytle et al., 2010). Teachers with a foundational knowledge surrounding the legal basis for PE for SWD can help inform parents and others regarding the services of a free and appropriate public education.

Remote Instruction and Assessment

Instruction

Proper implementation of instructional practices (i.e., teaching) is a foundational aspect of working in the field of APE (Kelly, 2019). APE is a service, not a placement, and these services can occur in an inclusive setting, a self-contained classroom, or a combination of both, among other options (Columna et al., 2010); therefore, planning and teaching appropriate content while focusing on each students’ individual needs can present multiple challenges for the instructor in these settings. These challenges are present every day

in a standard teaching environment, however, in the spring of 2020, most school districts transitioned to a fully online learning environment due to the COVID-19 pandemic, and many remained online or utilized some form of hybrid instruction throughout the 2020–2021 and 2021–2022 academic school years (Lu et al., 2020; Varea & González-Calvo, 2020). This transition to online instruction presented numerous obstacles. Zach stated, “All of my lessons are virtual and are done through either Zoom or Microsoft Teams. Not having a gymnasium is a huge obstacle in teaching APE during the COVID era.” Aside from dealing with a new physical space, Pete shared the challenges that teachers faced:

I try to use videos and activities that will help the students be engaged in PE activities on the computer, but this can be very difficult and inconsistent . . . Some parents are able and willing to assist during live remote lessons and some are unable/unwilling to do so. This has made it difficult for students to continue to grow in their motor skills.

Expanding on this point of engagement, Michael said,

I think the main thing is just being creative with videos. For instance, I have made throwing videos at home where I go through all the steps and have the kids throw pairs of socks at a pillow or drawing a face on a piece of paper towel during Halloween week and having them catch the ghost in their house.

Despite the challenges of instructing in a virtual environment, Dan recommended that preservice teachers receive “training for virtual curriculum . . . [with an] increased attention to verbal communication skills . . . since hands-on physical demonstrations are not available, providing verbal instruction through alternative methods would be valuable.” Additionally, teacher preparation programs need to prepare students to use technologies for remote teaching and other roles (Gibbone et al., 2010). This remote instruction needs to be motivating, fun, and engaging according to participants. Some APE teachers were part of general PE Zoom classes with SWD and also had to do one-on-one Zoom classes to help these same SWD if they could not follow the general PE Zoom content. Last, we along

with other scholars suggest that preservice programs have college students locate and post remote instructional resources, and prepare preservice physical educators to teach in an online setting, because many are not prepared to teach virtually (Lu et al., 2020; Varea & González-Calvo, 2020).

Assessment

Assessment is critical in providing highly effective APE services. Roth et al. (2017) state that APE is the art and science of designing a PE program for learners with disabilities on the basis of the results of a comprehensive assessment. Understanding the importance of assessment in planning meaningful instruction for SWD, participants expressed the challenges associated with assessment in a virtual environment due to COVID-19 restrictions. One specific challenge participants indicated was their inability to meet with students face to face. Highlighting this challenge, John stated,

Virtual assessments have been very challenging. Oftentimes I rely on a helper [typically a parent] to assist with assessment and observation while I teach. All virtual teaching is live. I do not prerecord videos unless a student is absent or a parent requests it.

Adding to this, Rob mentioned, “Progress monitoring is done over live video or prerecorded from parents.” Last, Lori stated, “For online students, progress monitoring has mainly been achieved through Zoom conferences or parents sending video clips of their child doing the skill.”

Another challenge participants mentioned was the ability to assess their students accurately. Because of this concern, some mentioned that formal assessments either did not take place or procedures were altered due to the pandemic. In discussing the concerns of assessment restrictions, Carol explained that “initial evaluations are not being completed because the validity of the assessment instrument cannot be maintained virtually.” Adding onto this, Rob mentioned, “Collecting IEP data has presented some challenges or is often impossible for students receiving virtual instruction. For example, most goals are specific and unique to face-to-face environments.” Accuracy in assessment, specifically in terms of standardized assessments, becomes a concern when there are restrictions

on the environment in which a student is tested (Block et al., 1998; Horvat et al., 2019). Reliability and validity of assessment results can be uncertain and thus can affect programming decisions (i.e., eligibility, placement, IEP goals). As witnessed over the past year, many restrictions have created new challenges in assessment. For example, Samantha expressed, “We are not completing initial evaluations for adapted PE during the full distance learning model because the validity of the assessment cannot be maintained to the extent necessary to determine initial eligibility.”

Despite the erratic nature in which assessment took place, a unifying recommendation was the necessity of assessment in APE programs. Carol mentioned, “Assessment remains key for APE teachers, including formal and informal [standardized tools, progress monitoring procedures].” One method of ensuring that assessment data is conducted appropriately, despite the environment, is to apply Universal Design for Learning (UDL) principles (Lieberman et al., 2021). To apply UDL assessment practices successfully, teachers need to be strategic in planning their activities and provide options for collecting assessment information. Having options and providing flexibility offers numerous ways for students to demonstrate their learning along with allowing teachers alternatives to collect information outside of traditional standardized assessment methods. One way to equip APE teachers with knowledge and skills inherent in UDL assessment techniques is to provide opportunities through lesson planning and practical teaching experiences. Different types of UDL assessment opportunities include designing rubrics that allow for student choice in how learning is demonstrated, providing a variety of equipment options for students to use, and practicing using alternative assessment methods such as note cards, technology (i.e., iPads), videos, or pictures to gather information on what students can perform or understand (Lieberman et al., 2021). As Sally mentioned, “Assessment drives all that we do, so new APE specialists need to be familiar with this aspect of the job.” Therefore, teachers gathering information from a variety of sources coupled with giving students varied means to express knowledge helps preservice and practicing teachers make critical decisions.

Conclusion

The nature of the teaching profession is that it consists of changing and uncertain situations. When working with students with disabilities, APE teachers will encounter a diverse range of learners, interact with colleagues and parents, and integrate new and changing knowledge from professional learning into their teaching practices (Collie & Martin, 2016). Additionally, the COVID-19 pandemic presented new and unforeseen challenges during the 2020–2021 and 2021–2022 school years for all participants, regardless of the number of years of experience, especially performing instruction and assessment in an online environment (Lu et al., 2020; McNamara et al., 2021; Varea & González-Calvo, 2020). The views, experiences, and suggestions of the participants in this study are congruent with research concerning the need for teacher adaptability and flexibility (e.g., Collie & Martin, 2016; McNamara et al., 2021). The teaching profession is ever changing and teacher preparation programs need to develop and/or continue strong school district partnerships to stay up to date on current practices in PK–12 schools.

While the suggestions from the participants are not universal, teacher preparation programs must increase hands-on experiences and allow for interaction and collaboration between preservice teachers and other preservice special education providers (Piletic & Davis, 2019). Furthermore, after graduation, teachers need to pay continual attention to the importance of collaboration. Two participants suggested regularly seeking new knowledge. Anthony stated, “Always seek to learn from colleagues, students, and parents. Keep learning no matter how long you’ve been in the field.” Additionally, Rob mentioned, “In my opinion the best quality is to have a growth mindset. Never stop being a student.” Highlighting the need for program advocacy to facilitate APE teachers’ collaborative efforts, Lori stated, “Never feel like your position is secure. Attend the special education meetings, attend the IEP meetings, fight to give students in need the service they deserve.” Although teacher preparation programs can provide the first of many collaborative interactions for teacher candidates, APE teachers will continually need to hone their skill of working with other professionals (Friend & Cook, 2017).

There are a few limitations from this study. First, although the one-on-one follow-up discussions in this study allow for elaboration

tion of and substantiate written data, there is an alternative for data collection. A phone or video interview after return of the typed responses may enhance the personal connection between participant and author. Additionally, this study contains the perspectives of APE teachers who are primarily Caucasian, making the group homogeneous. Due to this lack of diversity, more research is needed for a better understanding of the generalizability of these results to APE teachers of underrepresented populations. Perspectives from general physical educators and other related services providers on the nature of collaboration during the COVID-19 pandemic with APE teachers are not included in this study, again limiting the generalizability of the results to other school-based professionals. Also, this study does not consider the impact of these altered instructional practices implemented because of the pandemic; a new or different instructional practice may not have necessarily been effective even though it was shared as a part of this study. Future research is needed for a better understanding of the effectiveness of virtual instruction on student learning, particularly for SWD.

To broaden the scope of the impact of COVID-19 within APE, future research that includes related service personnel as well as general physical educators is recommended. Last, due to the immense impact of the COVID-19 pandemic on the general activities of all teachers and students, we suggest investigating the perspectives of students' voices and perspectives as means to compare the impact of learning in a virtual setting and the impact of learning in a face-to-face setting.

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