

# Teaching Physical Education Teacher Education (PETE) Online: Challenges and Solutions



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## Abstract

The COVID–19 pandemic has presented unprecedented challenges for physical education teacher education (PETE), and PETE appears to suffer the most when transitioning from face-to-face to virtual (online) environments due to the characteristics of PE. There is no literature found to address the profound challenges and solutions for teaching PETE online that we so desperately need nowadays. The present study examined specific challenges and solutions for online PETE. Future research directions are provided.

*Keywords:* physical education teacher education (PETE), online, challenges, solutions

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The COVID-19 pandemic has presented unprecedented challenges for teacher education around the world. In particular, physical education teacher education (PETE) may well suffer the most in the transition from the well-established face-to-face (f2f) instruction and environments to virtual (online) ones. It could be said that few other areas of teacher education contain such a deep contradiction, because PE teaching and learning are rooted in physical movement and movement exploration—focal elements that are particularly difficult to replicate digitally. Although technology recently has been identified as a key concept in PETE, it has been suggested that PETE programs have been slow to respond to the emergent technology revolution (Konukman, 2015). There are only a few studies related to teaching PETE online (e.g., Emmanouilidou et al., 2012; Sato & Haegele, 2019; Sato et al., 2017), but none of them address the profound challenges or propose solutions to teaching PETE online that we so desperately need in this COVID-19 era. Thus, the present study discusses specific challenges and solutions for online PETE.

### **Challenges to Teaching PETE Online**

There are many challenges to teaching online, such as: complex technology; less content to cover; time consumption related to more open-ended schedules; difficult interactions and less direct contact with teacher candidates; juggling multiple things at the same time; difficulties in motivating teacher candidates; and overwhelming stress. In PETE planning and delivery, there exists an interwoven relationship between space (e.g., requirement for and use of large activity space), equipment (exploration and use of a variety of equipment), and student engagement in physical movement and movement explorations in groups—all of which serve to make PE teaching and learning more accessible and meaningful. Here, we address unexplored yet anticipated major challenges particular to online PETE in the COVID-19 era:

1. We anticipate PETE instructors may have difficulties helping teacher candidates pedagogically conceptualize, create, and practise movement concepts, skills, and strategies utilized across a variety of physical activities (e.g., games, alternative environment activities). Our concern is that the less connected f2f environment makes it more difficult for PETE instructors to help teacher candidates explore and deconstruct their own personal experiences in PE—ones often rooted in traditional and less accessible understandings of what PE teaching and learning should look and feel like.
2. It will be difficult to help PETE teacher candidates navigate the relationship between theory and practice in a largely two-dimensional learning environment. The f2f setting offers three-dimensional views and experiences—embodied experiences for teacher candidates to explore the use of space, movement, and equipment in PE teaching and learning. PETE teacher candidates who are not PE majors or minors (e.g., generalists) may be left to navigate the disconnect between theory and practice—a divide that would often be carefully

addressed in curated, embodied three-dimensional experiences (e.g., safely and purposefully utilizing space, equipment, peers, and relationships).

3. Even when teacher candidates understand PE curriculum and pedagogy, it will be difficult for instructors to explain and demonstrate (and difficult for teacher candidates to observe and operationalize) how to implement and adapt PE instructional models and strategies (e.g., TGfU, Easy-Play), and offer teacher candidates the opportunity to explore and practise teaching physical activities (e.g., peer-teaching) in the required space with planned equipment for targeted curricular expectations/objectives in online settings. Compounding this challenge, we anticipate online-only teaching may uncover access/equity concerns. In particular, access to technology (e.g., reliable internet, sharing of tech within home) and in-home access to physical activity equipment may be obstacles to consistent and meaningful online PETE course participation.

### **Solutions**

Below, we offer an array of suggested strategies that will help enable and empower PETE instructors to contend with teaching online:

1. Instructors may utilize curated videos (e.g., ATLAS, National Board for Professional Teaching Standards) to show PETE teacher candidates what purposeful teaching and learning looks like in school PE classes. Teacher candidates should be encouraged to learn how to use animations or video games to motivate school pupils to have a variety of fun physical activities.
2. Instructors are encouraged to consistently and frequently utilize technology to present visual aids (e.g., MS Teams whiteboard) in order for teacher candidates to identify, explore, understand, and deconstruct movement skills, sport tactics, and teaching strategies.
3. Instructors are also encouraged to use culturally relevant analogies, vivid language, and mental imagery in their PETE instruction of movement skills, concepts, and strategies (Barrett & Lu, 2010; Hall & Fishburne, 2010). These strategies may help make complex tasks and activities accessible and meaningful by helping teacher candidates construct knowledge and understanding (e.g., using personally and culturally relevant contextual connections/bridges between what would be considered familiar and what would be considered new) in mainly two-dimensional online PETE course offerings.
4. Instructors may work to build a supportive and collective online course community via the use of instructional methods such as group instruction, creation of online shared forums, and through efforts to connect PETE teacher candidates to practising PE teachers in the field beyond their institutions.

5. Due to the complex nature of technology, it is likely for anyone to offer help or tutorial in PETE online settings. Thus, teacher candidates should be encouraged and empowered to be a tutor or leader whenever possible in the process of exploration and experimentation with various technologies throughout the course.
6. PETE instructors should form a PETE-related professional learning community/network (e.g., at local, regional, provincial, national, or international levels) and take advantage of both synchronous and asynchronous technology opportunities to share expertise through the use of pre-recorded audio/video PPT/PDF on online platforms (e.g., Sakai, SharePoint). Moreover, PETE instructors can leverage expertise serving as guest lecturers, or invited PE experts as guests from other institutions, schools, or communities around the world to give online live presentations or workshops.
7. Instructors should support PETE teacher candidates' efforts to make sound decisions particularly around the sourcing and use of credible sources. It is important to teach all teacher candidates how and where to search for reliable PE resources. As a starting point, instructors may find helpful what we term the 4C aims for sourcing: (a) aim for clear *connections* to PE curriculum, (b) aim for *currency* (e.g., recent), (c) *comprehensiveness* (e.g., wider body of evidence), and (d) aim for resources where possible that are related to your *context* (e.g., local, regional, country specific).
8. Instructors should be mindful of the pressures and stresses associated with the unprecedented challenges in the PETE online environment. It is essential to emphasize self-care (e.g., mindfulness) and staying positive, which may help manage both mental health and productivity for the instructor and teacher candidates (Lu, 2012).

## Conclusion

The COVID-19 pandemic has surfaced unprecedented challenges for PETE. Nonetheless, PETE instructors will be best served by taking advantage of these extraordinary circumstances and focusing upon the advantages (vs. disadvantages) of technology, and use technology as an opportunity to enhance PETE. Furthermore, much of what is effectively taught in the online situation may be further leveraged and utilized in future blended teaching in the post COVID-19 PETE era—all of which may allow for timesaving in f2f situations and make PETE more productive. Future research may include explorations of: (a) guiding principles to teaching PETE online; (b) effective strategies when teaching PETE online; (c) the design of blended PETE programs; (d) how to videotape, store, and share school PE classes and workshops; and (e) development of online PETE professional learning communities/networks regionally, nationally, and internationally.

It is our hope that the present paper may provide scholars and professionals with an overview of major challenges online PETE programming faces in the COVID-19 era as well as a sampling of proposed solutions that may support the resultant online PETE teaching.

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