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Twenty years of the TGfU-SE Hybrid pedagogical model for teaching physical education

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Abstract

The hybrid Teaching Games for Understanding (TGfU) and Sports Education (SE) (TGfU-SE) pedagogical teaching models share similar connecting features. Both models are grounded in situational learning and they both aim to place the participants at the centre of the games-based activities. The TGfU emphasises tactical awareness, decision making, and higher order thinking skills and the SE model provides a complete season of activities during a longer physical education (PE) sequence of lessons. Therefore, it is necessary to explore the integration of TGfU with SE (TGfU-SE) model in the teaching and learning of PE and whether the hybrid TGfU-SE model can achieve better learning effects for students than either the TGfU or SE models separately. The aim of this critical review is to explore the limited amount of research which has been undertaken in regard to this hybrid approach and to assess whether it can be effectively delivered practically by teachers in PE lessons or is it an academic 'White Elephant'. The critical review highlights that PE teachers can effectively implement the TGfU-SE model, but there is more research needed to determine whether the teachers need more further training to effectively use the model with special populations such as girls or students with disabilities.

Keywords: Athletic injury, psychological effects, rehabilitation, sports psychologist, an interdisciplinary

Introduction

There are two pedagogical models (PM's) associated with teaching physical education (PE) which seem to complement each other, and these are the Teaching Games for Understanding (TGfU) model and the Sport Education (SE) model (Dyson *et al.*, 2004) ^[13]. This is because one of the major common features for both models is the purposeful shift of responsibility and decision making away from the teacher to the students and this is not an easy thing to do according to Casey & Dyson (2009) ^[5]. This is because using a TGfU or SE model pushes teachers to move 'outside the comfort zone of direct instruction' and give students 'some responsibility for their learning' (Kirk, 2005) ^[22]. In both TGfU and SE models, the student is considered an active learner whose needs are considered when teachers' design learning tasks Dyson *et al.* (2004) ^[13] and therefore consequently, the student is placed firmly at the centre of the teaching-learning process Light & Tan (2006) ^[25]. By combining two PM's this is often regarded as a hybridization of two teaching models to enhance the learning benefits when they are employed with students. According to González-Víllora *et al.* (2019) ^[19] there are several benefits to using this hybrid TGfU-SE models-based approach and the is now widely used, however it does not appear to be widely used by PE teachers and more often referenced in academic writing about PM's. The aim of this critical review is to assess the benefits and the drawbacks of using this hybrid models approach to teaching PE and to determine whether the TGfU-SE model is actually widely utilised.

Origins

The first piece of research which can be traced back to the origins of the design and implementation of the hybrid SE-TGfU model was first described by Curtner-Smith (2004) ^[7]. He developed the hybrid SE-TGfU teaching unit of learning in PE through which secondary aged students learned to play basic striking and fielding games using the hybrid model, with the SE part of the model acting as the foundation of the unit and TGfU principles used as the guiding principles the students followed to make better tactical decisions. This original piece of research has therefore brought about several other research studies in the last 20 years, and it is the intention of this paper to highlight these research studies and shared a balanced view of the SE-TGfU hybrid model. Curtner-Smith (2004) ^[7] went on to conclude that by combining

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SE and TGfU placed more emphasis on the teacher to drive and give momentum to the proceedings and, therefore, teaching was more labour-intensive. In particular, he concluded that to be successful when delivering a hybrid SE-TGfU unit, a teacher would have to possess superior content and pedagogical content knowledge.

Teacher

According to Kirk (2005) [22] there are some less experienced teachers do not have the knowledge they need to teach indirectly, they will not be comfortable using this style, whether it be SE or TGfU or a hybrid version of the model. These views have been echoed by a number of other researchers (Casey and Dyson, 2009; Hastie & Curtner-Smith, 2006) [5, 27] and as they have so aptly warned, the complexity of implementing a hybrid curriculum into any PE department can be a challenge and there must be a period of learning and preparation before any teaching using a hybrid SE-TGfU approach could be implemented (Alexander & Penney, 2005) [1]. Implementing a new model takes time and patience, particularly if neither the teacher (s) nor the students have experience with student-centered pedagogical models (Casey & Dyson, 2009) [5]. Dyson *et al.* (2004) [13] also suggested that the learning within these two models is underpinned by *constructivist theories of learning* and therefore they can be implemented together within the right setting and with the willingness of the teacher. Metzler (2011) [37] summarised the hybrid SE-TGfU model by saying the teacher is the leader of the teaching and learning process and is ultimately responsible for the decisions on the proposed contents, objectives, lesson management and students' responsibilities. Also, the model is characterised by the teachers' 'utilisation of blocks of repetitive practice, in which, students must continuously reproduce movements prescribed by the teacher'. Gil-Arias (2021) [17] also reported that in his research study he undertook the research using the hybrid SE-TGfU approach with a newly qualified PE teacher and the implementation of the hybrid TGfU/SE teaching unit was assessed. This produced successful outcomes and the students within the study improved their social learning and interactions within the group. Therefore, this will contradict the original work of Curtner-Smith who suggested this hybrid approach to teaching could only be fully implemented by an experienced teacher of PE. Therefore, this is an interesting development and something which could mean that it is not the experience of the teacher, which is the most important factor, but how receptive the learning of the students are to a new MB teaching approach.

Design

According to Metzler (2011) [37], PE teachers design student-centered learning situations based on students' needs, which are arguably more holistic because they integrate multiple learning domains (i.e. psychomotor, cognitive, and affective). The TGfU and SE pedagogical models already share several common objectives and pedagogical processes. Consequently, the hybridization of these models can help PE teachers to use a multi-model approach to fit current educational frameworks (Casey and MacPhail, 2018) [11]. The SE-TGfU hybrid offers valuable elements of both models to form an approach to teaching that affords the potential for attaining the goals of SE and TGfU in a positive physical education environment (Alexander and Penney, 2005) [1]. It is by design that in both pedagogical models' students participate in small-sided games with modified rules (Bunker and Thorpe, 1982; Siedentop *et al.*, 2004) [3, 44] applying a

range of skills and tactics in small-sided games situations. Naturally, several researchers have combined both approaches to teaching into a hybrid SE-TGfU pedagogical model (Alexander and Penney, 2005; Curtner-Smith, 2004; Hastie and Curtner-Smith, 2006) [1, 7, 27]. By combining these models, the authors have been able to test whether the hybrid approach to improving students outcomes was successful or not and what other factors contributed to this such as the settings these studies took place or the gender of the participants.

Alexander & Penney (2005) [1], in a model dubbed 'Clinic-Game Day', have similarly used SE-TGfU model as an organisational framework within which a SE-TGfU pedagogy was 'productively utilized'. Within this hybrid, the SE structure was used (pre-season, season, post-season games; consistent teams; students taking on different roles such as board member, coach or warm-up leader; awards and culminating activity) but rather than simply allowing the students to play traditional small sided games, the teachers would insert different tactical problems, such as on and off the ball movements and defending space to encourage a deeper understanding of the game as well as greater learning and improvement. At the end, the hybrid SE-TGfU model not only gave a greater responsibility to the students, but it also expanded the concept of 'understanding' that led the students to a greater appreciation of sport in general, and the tactics and strategies necessary for successful play (Curtner-Smith, 2004) [7]. This is a significant finding because it is important to note that both the tactical and levels of student understanding increased, and this was also discovered in a study by González-Víllora *et al.* (2019) [19]. Therefore, this is significant because the two TGfU-SE studies which took place in different settings 15 years apart came to a similar conclusion.

Strengths & Weaknesses

Hastie & Curtner-Smith (2006) [27] emphasised that combining the two models does not weaken most of the structural advantages of SE. Although challenging, teaching tactics within SE seem beneficial to students (Siedentop *et al.*, 2004) [44]. Previous and earlier research has demonstrated that students who participate in SE seasons are able to significantly improve their tactical competencies (Hastie, 1998) [26] and have deeper understanding of sports (Sinelnikov and Hastie, 2010) [47]. In most cases of hybrid model implementation into PE teaching, researchers were the ones themselves delivering the instructions and this was not coming through a practitioner approach and many previous studies have been led by research academics and not from the opposite view and from the PE Teachers who work in school settings daily. (Hastie & Curtner-Smith, 2006) [27]. There are currently no research studies which have been produced by practising teachers of PE and this is worrying because it will be down to the teachers of PE to try and implement some of the research findings from the work committed by Gil-Arias *et al.* (2021) [27] for example and try to use the TGfU-SE hybrid model in a setting such as Special School for students with SEND. Casey & MacPhail, (2018) [11] went further with these views and stated that very few research studies have sought to meaningfully and purposefully connect different models in a school's curriculum and this is something which still needs addressing 20 years after the original research. According to Pan *et al.* (2023) [40] if the TGfU approach is combined with SE in a hybrid model there could be several benefits. Firstly, the SE model can provide a good platform for the students to learn various tactical strategies and motor

skills they need in a formal game-based competition and be able to apply these new abilities in authentic TGfU game situations. The SE model has a formal competition season in which students can apply these tactics and motor skills in a real sport context and students who are taught. However, the TGfU model alone can help some students only learn some tactics and motor skills in PE lessons but lack authentic games to provide a platform for them to practice these learned competencies. This kind of learning experience is a disjointed and incomplete learning process that lacks goal-oriented and structured content for students' learning in PE lessons. Therefore, if the TGfU is integrated into SE courses, the hybrid TGfU-SE model will achieve better effects for students (Pan *et al.*, 2023) [40]. Some of these better effects according to Fernandez-Rio *et al.* (2022) [15] seems to have been a more positive effect on four domains of learning which are the psychomotor, cognitive, social and affective domains and each of these impact on a student's level of engagement in high quality PE.

Each model separately has its own differences and some authors have suggested there are limitations with each model when they are used separately (Hastie & Curtner-Smith, 2006 & Casey 2014) [27, 10]. For example, the SE approach focuses on forging an authentic and developmentally appropriate sport experience where students take on roles other than that of player and the TGfU model focuses on the development on the relational aspects of techniques and tactics through appropriate learning task design. However, Casey (2014) [10] also went on to advocate a hybrid TGfU-SE model may result in higher quality student outcomes. Furthermore, according to Hastie & Curtner-Smith, (2006) [27] it seemed impossible to attribute specific findings to either SE or TGfU in a hybrid SE-TGfU model, but they argued that such a hybrid model has also been shown to achieve positive results in students' abilities to understand, appreciate, and execute skills and sophisticated tactics and strategies. These results supported the research findings by Hastie, (1998) [26] who also discovered that by using a models-based approach can improve the tactical awareness of students. There is very little evidence to support that using a hybrid PM such as the TGfU-SE model can impact the technical learning of the students and therefore this should be an area of further study and development and one which could lead to a better triangulation of results.

Hybridization

Hastie *et al.* (2016) stated that there are positive and benefits to the hybridization of the TGfU and SE models. For example, the hybridization of both models could enhance their characteristics of social learning, as well as the depth and quality of the learning. Also, the SE could provide a greater depth of learning for the duration of the seasons and lead to improvements in motivation. Furthermore, both TGfU and SE provide meaningful tasks with defined objectives, supporting students' involvement and this combination would make it possible to create learning environments that favour the development of all students, regardless of gender, through their experience (Fernandez-Rio & Iglesias, 2022) [15].

In a study by Guijarro *et al.* (2018) [21] he highlighted that for students who experience this type of hybrid PM have shown that they can improve their autonomy by undertaking responsibilities and decision making and performing and being involved in real game situations and this type of hybridization can promote positive emotions, social interactions, and commitments to the group. This study also

went on to detail that these results were independent of the gender of the pupils although in a study by Pritchard *et al.* (2014) he indicated that the hybridization of PM's may not be suitable for the education of girls in the context of co-education and that both models have shown inconsistent evidence concerning the different components of game performance in regard to the learning by female students. Also, in a study by Farias *et al.* (2019) [14] there are contradictory results concerning the physical and cognitive domains of learning after the application of the TGfU-SE hybrid model, and this may be influenced by gender or skill level of the students. This research went on to explain that the TGfU-SE model has shown that the social domain is more strongly influenced by the experiences of students than those of peers and in some cases, studies have shown that gender and initial skill level differences can influence subsequent learning and lead to inequalities, especially at the tactical level.

SE

In a study by Sinelnikov *et al.*, (2007) [48] the structure of season rooted in SE seemed to help motivate students and this applies to one of the hybrid's teaching attractions, the meaningful engagement and use of roles during the season, is also in line with previous research that indicates that students who participate in SE report having a deeper understanding of sports (Sinelnikov and Hastie, 2010) [47]. Teachers who use the SE model aim to produce competent, literate, and enthusiastic students (Siedentop *et al.*, 2011) [45]. SE is a well-established and evidence-based pedagogical model where teachers focus on fostering student autonomy, problem-solving and decision-making (Metzler, 2011) [37] through a cooperative and constructivist student-centered pedagogy (Kirk, 2013) [23]. The authentic learning environment of SE has been shown to assist teachers in enhancing students' intrinsic motivation through generating an autonomy supportive social context where students have opportunities to make their own autonomous decisions and perform different responsibilities within the teaching-learning process (Knowles *et al.*, 2018 and Perlman, 2012) [24, 42].

Furthermore because of the authentic learning environment of the SE approach, it can assist teachers in enhancing student motivation because students have opportunities to socialize, make decisions and enjoy themselves in competitive situations where levels of effort are strongly valued. According to Lemus *et al.* (2023) the SE model can also provide a greater depth of learning for the duration of the seasons and greater improvements in motivation in terms of group identity and this derives from the adaptation of the institutionalized characteristics of the sport (Seasons, affiliations, formal competitions, final events, registrations, and celebrations), in which the students assume different roles. In this way, the SE model favours an improvement in decision making, an increased level of responsibility and autonomy, and developments in students' physical and social domains.

These views would concur with those previously highlighted by Metzler, (2011) [37] who also discovered in a previous study that the problem-solving levels of students increased by using a hybrid TGfU-SE PM. This is another important feature to be aware of and something else which this critical review has been able to highlight from different studies in different decades of research. In a further study by Siedentop *et al.* (2000) [43] he went on to state that the SE approach can produce well rounded students in a range of different areas of learning and execute strategies that are appropriate to the

complexity of the game, but this requires a higher level of student competence, knowledge, and social skills, and the greater structuring and systematization of tasks if these results are going to be maintained over a period of time such as several seasons and not just become a short-term intervention as stated by Farias *et al.* (2019) [14].

TGfU

According to Gil-Arias *et al.* (2020) [18] in the TGfU model, students learn the interaction between the technical and tactical dimensions of the game by playing small-sided and / or modified / conditioned versions of the game that are designed using the pedagogical principles of modification representation, modification exaggeration and tactical complexity. PE teachers' employment of these pedagogical principles help make games developmentally appropriate to the learner and promote skilful and intelligent performance (Harvey & Jarrett, 2014) [31]. Furthermore, in TGfU the teacher is re-positioned to a role of facilitator. Within this re-positioning, not only are students afforded the opportunity to make decisions independently of the teacher in the small-sided and/or modified/conditioned games, the teachers' use of questioning and debates of ideas promote a learning environment where the teacher guides, facilitates, and scaffolds the students' problem-solving capacities. Research findings indicate that a teacher's use of TGfU can increase students' sense of unity and perceived autonomy support (Morgan *et al.*, 2005) [38], intrinsic motivation and enjoyment (Mandigo *et al.*, 2008) [33], and perceived competence (Tan *et al.*, 2012) [50].

The TGfU model also prioritises tactical understanding and actual practice over technical mastery according to Lemur *et al.* (2023). Additionally, it gives prominence to the students, thus allowing them to become aware of the skills required at different phases of the game, as well as its general structure Bunker & Thorpe (1982) [3]. By applying the pedagogical principles of simplification, representation, exaggeration, and tactical complexity-addressed through sports modifications at different levels (regulatory, technical, and tactical) and small sided games-TGfU can cultivate an understanding of the game and action in less skilled players Mandigo *et al.* (2018) [33] and this seems to promote supportive learning and encourage knowledge and competence in sports through play, thus increasing intrinsic motivation and perceived enjoyment. These research findings by a range of authors show the importance of the TGfU aspect of the model and this is something which is important to acknowledge because no hybrid model can be successful without equal weighting to both parts of the model. In this situation the two elements of the hybrid PM complement each other because of their dovetailing characteristics and also because the way in which both models are equally seen to have their own benefits as stand-alone entities even before they come together in a hybrid PM.

Student Outcomes

There has been some limited qualitative research undertaken based upon how PE teachers perceived greater student participation in, and preference for, a hybrid TGfU/SE model, and additionally reported improvements in students' academic learning in the physical, cognitive, and affective domains. Additionally, in a series of studies, Portuguese researchers found that students who were taught by a teacher using a hybrid model of SE and the invasion games competence model (Which shares a similar conceptual structure to TGfU) significantly improved their decision-making and technical execution compared to students who

were taught by a teacher using a direct instruction model (Mesquita *et al.*, 2012) [36]. Similarly, a further study conducted by Araujo *et al.* (2017) demonstrated that implementing a three hybrid SE/step game approach (which shares a similar conceptual structure to TGfU) in volleyball seasons over three years improved students' technical-tactical performance.

The outcomes in a study by Lemur (2023) show that there was a positive effect on the students who engaged in the PM hybrid approach to TGfU-SE, in terms of improved outcomes for performance, involvement levels, skill levels, perceived levels of competence, enjoyment and the intention to be physically active by all of the students. However, the authors did go on to stress that the results should be taken with caution because it is a preliminary study was with a relatively small sample size and a follow-up study would be beneficial. Therefore, it is clear from these findings also that using a hybrid PM can impact positively a range of different outcomes and they are not just limited to the areas above. For example, motivation levels and behaviour have also been shown to improve using a hybrid approach Gil-Arias (2017) [16]. In another study by Pan *et al.* (2023) [40] show similar findings and they suggest that the hybrid TGfU-SE PM can also have more positive learning effects on students' learning motivation, sport enjoyment, responsibility, and game performance than the TGfU model alone and they further go on to state that the TGfU-SE model had a 'stronger positive influence on students' learning effects in PE lessons than the TGfU model alone'.

Motivation

In another study by Gil-Arias *et al.*, (2017) [16] the purpose was to examine the effect of a hybrid TGfU/SE unit on students' perceptions of various aspects of their motivation to engage in PE in comparison to the direct instruction model. Gil-Arias and colleagues utilized a counter-balanced crossover research design and the results showed that regardless of the order of interventions, the two groups showed significantly higher mean scores on basic psychological needs, autonomous motivation, and their intentions to be physically active during the research project. Therefore, the SE-TGfU model was shown to be successful and the outcomes on improving motivation levels were significant. Gil-Arias *et al.* (2017) [16] presented that the hybrid TGfU-SE model did have a significant positive influence on the satisfaction of the autonomy and competence components. In the situated learning theoretical framework for teaching in PE, both the SE model and TGfU are game-centered approaches based on situated learning theory (Li *et al.*, 2018) [32].

Furthermore, in a study by Pan *et al.* (2023) [40] they concluded that when TGfU was integrated into the SE model, students' learning motivation was also enhanced in the learning process. Research findings on the SE model have suggested consistent results regarding students' enhanced enthusiasm and motivation (Wallhead and O'Sullivan, 2005; Hastie *et al.*, 2011) [51, 45]. Also, research grounded on motivational theories has shown positive changes when students participate in the SE model, which also provides unmotivated students with an increased opportunity to engage in higher levels of physical activity (Perlman, 2012) [42]. Therefore, integrating TGfU with the SE model can enhance students' learning motivation more than the TGfU model alone. This is an important consideration to make because if a student is more motivated to take part in a PE lesson, then they are more likely want to encourage their

peers to participate and feel a sense of enjoyment from the experience. This is also helpful to note as there are groups of pupils who often become disengaged in PE lessons for a number of reasons and using this combined hybrid-based PM approach to teaching PE and especially with some of the specific groups which often are harder to motivate such as teenage girls and students with medical issues then this is something positive to be aware of.

Behaviour

Two further studies have examined the impact of a hybrid TGfU/SE model on behavioural outcomes such as decision-making and skill execution Araújo *et al.* (2016)^[2] & Mesquita *et al.* (2012)^[36]. In these two investigations where units of volleyball and soccer were taught using a hybrid model of SE-Invasion Games Competence Model (ICGM; which shares a similar conceptual structure to TGfU) noted significant improvements in both the level of students' technical execution in decision-making skills. While these previous studies have reported the positive effects of a hybrid model on psychomotor and cognitive outcomes, there is still limited research into the impact of the SE-TGfU models impact on the components within a student's affective domain such as their motivation and behaviour levels. This lack of research could be a further area to develop, and one in which needs to be explored further. This has been widely explored in each individual model separately, for example in a study by Robertson (2016) he went on to conclude that the behaviour levels of students taught using the TGfU PM were far more engaged in their learning and fully behaved in the TGfU lessons than the same students had done in a traditional tactical learning PE environment.

However according to the research by Pan *et al.* (2023)^[40] into responsible behaviour, when TGfU characteristics were integrated into the SE model, students can foster teamwork and perform responsible behaviour during the season in the SE context, which is in line with Sidentop *et al.*'s (2004) finding that the SE model can develop students' positive affective behaviours. Pan *et al.* (2023)^[40] also went on to state that the hybrid TGfU-SE model can significantly improve students' responsible behaviour. Through full seasons of SE, students' personal and social responsibility can be developed, including behaviours such as cooperation, self-direction, respect for others, effort, and helping others. The SE model can provide students with responsibility for various roles in their teams (Li *et al.*, 2018)^[32]. Therefore, integrating TGfU with the SE program can improve students' responsible behaviour. This is another important consideration to make as there are a number of pupils who have a range of behaviour issues such as those with a social emotional or mental health diagnosis (SEMH). These pupils are often taught in special schools and have a trauma-based background and through their behaviours are trying to communicate how they feel and show a range of behaviours through conditions such as ADHD or ODD. Therefore, using this hybrid PM approach could improve a range of behaviours for these students and allow them to feel more comfortable and engaged in their learning of PE.

Conclusion

There have been a number of limitations and future areas of research which have also been highlighted as a result of the TGfU-SE studies and for example Hastie *et al.* (2013) suggested that the number of physical education teachers within different school contexts would provide more power to detect significant differences between the two models and

also by utilising qualitative data taken from a student perspective would allow future research to be triangulated and therefore produce richer information. The process of triangulation is one which has been researched and is widely used by authors within this same field of research such as Patton (2002)^[41]. According to Patton (2002)^[41] it is important to triangulate the process of collecting data as it provides a more robust and accurate set of results which can be analysed to provide more reliable information.

Gil-Arias (2021)^[17] examined the effects of a hybrid TGfU/SE PE unit of Volleyball via a mixed-methods approach. This design, which combines quantitative and qualitative approaches and is regarded as a better approach (Capella-Peristo, 2019)^[4] obtaining greater and more in-depth information of the effects of this hybrid TGfU/SE unit on students' motivational outcomes. Moreover, the extent to which the teacher utilises autonomous and controlling behaviours could be examined, to provide a potentially richer contextual picture of why certain groups may not demonstrate similar changes in motivation or behaviour towards others taking part in a SE-TGfU approach (De Meyer *et al.*, 2014)^[12]. Therefore overall, it would be more appropriate to assess the reliability of these studies using a mixed methods approach and to date the research around this has been limited.

Overall, there a range of different factors and findings that show the hybrid TGfU-SE model can have a stronger learning effect on learning motivation, enjoyment, behaviour, responsibility levels, and game performance than the TGfU model alone. Therefore, PE teachers could integrate TGfU into the SE model to form a hybrid TGfU-SE model so that the TGfU model would involve formal competition over the SE season to promote better learning effects in PE lessons. Several of these hybrid studies share a number of common limitations and this also needs mentioning here. For example, in the studies by Pan (2023)^[40] and Gil-Arias 2021^[17] there are only a couple of PE teachers involved in the research and this does not represent the wider workforce. Therefore, this is a limiting factor and a generalisation of research findings and because of the small number of teachers involved a future study should represent a larger sample size, which would also apply to a range of different students and setting as well. For example, it has been previously mentioned about the impact of teaching girls or students with SEND conditions and how this PM would impact these types of less well researched PM groups.

Furthermore, some TGfU-SE hybrid studies were only conducted over a short period of time and comprising of a limited number of PE lessons, which means it could not promote more positive learning effects over such a short-term course. Therefore, it would be better for the research designs to extend the implementation and teaching times in order to examine the longer-term learning effects of these hybrid PM's. Furthermore, it would also be important to take into account the range of sporting activities undertaken in this research and ensure there is a broad range of activities which could be assessed at different student ages and ability levels. For example, a future study could look at an artistic series of lessons or something which would be outdoor education based.

Finally in a study by Lemus *et al.* (2023) they determined that the annual TGfU-SE seasonal program was not fully assessed, and in the same way, the influence of different schools' community agents was not considered and these are two further areas which could be explored in future studies and this correlates with the original research by Curtner-

Smith (2004) who noted in their earlier research that the hybrid TGfU-SE model needed to be explored by a range of different teaching professionals over the course of an academic year and a sporting season which is similar to the approach used in the SE aspect of the hybrid model. It is therefore important to consider whether the approach to using a hybrid PM is actually beneficial to the type of students and the setting in which the teaching approach could be used, and it is also important to consider whether the experience levels of the teaching staff can facilitate a complex hybrid teaching model.

Conflicts of Interest

None.

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