

ORIGINAL SCIENTIFIC PAPER

Employing the teaching games for understanding model to improve social responsibility in a Physical Education class with children who have special needs: A qualitative study approach

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Abstract

The purpose of the study was to explore whether children with special needs taking part in physical education (PE) could improve their levels of social responsibility using the Teaching Games for Understanding (TGfU) model over a fourteen-lesson period. The study used a qualitative semi-structured interviews approach in which the design consisted of an assessment after lesson 7 and then again after lesson 14. A TGfU dodgeball intervention was carried out during the study and the participants ($n = 14$) were in their second and third years of secondary education within a special needs school specifically established for children who have social, emotional, and mental health concerns (SEMH). According to the background and ability levels of the students the teacher-researcher decided to implement the full use of the original TGfU model using its features to act as a strategy for intervention. The teacher-researcher was an experienced teacher of PE who undertook a dual role throughout the study including assessing the data and undertaking the semi-structured interviews. Qualitatively, data was open and coded line-by-line and incident-to-incident, categorised into themes and then analysed further into sub-themes. The qualitative information supported that the pedagogical strategies within the original TGfU model could have a clear impact on the levels of democracy, empowerment and reflections of children with special educational needs. In conclusion, the TGfU model should be considered as an approach and positive intervention to improve the social responsibility levels of children with special needs.

Keywords: *Teaching games, Special needs, Children, Physical education*

Introduction

The Teaching Games for Understanding (TGfU) model is a pedagogical teaching approach where the focus is on the game and the players involved in the game (Bunker & Thorpe 1983). The emphasis of the TGfU model is placed on player decisions, strategies, tactics and not just the techniques and skills needed to perform movements in isolation. Instead of game play being viewed as an opportunity for individual players to perform discrete skills, it is experienced as a dynamic opportunity of engagement where there is learning with others (Butler, 2017). The teacher is the fa-

cilitator of this learning, and the students are constantly involved in social interactions with one another as the game evolves. The games can be modified by the teacher to allow them to become more or less challenging and differentiated depending on the ability levels of the students, therefore placing the emphasis of the TGfU model on inclusion rather than elitism (Light, 2002). Kirk (2013) defined these interactions as communities of practice and the students are continually engaged within these communities of practice as the teacher facilitates the use TGfU model with the students during their physical education (PE) lessons.

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Social responsibility in PE was defined by Butler (2013) as an individual's interest and interactions within a lesson and the collective group dynamics as the game within the lesson develops. These interactions or values can be broadly defined as the characteristics which allow successful game play to develop, including decision making, democracy and playing fairly within the rules of the game. Goodlad (2004) undertook research into situated ethics within PE and he argued that having effective social skills was the most important factor for successful social learning within PE lessons. The values above is not meant to be exhaustive, as there have been other studies by Varela, (1999) and Hellison, (2003) which have also looked at other areas of social responsibility such as an individual's character, social justice, and levels of communication. The aim of this study was to determine whether the TGfU model could positively impact the social responsibility a group of students individually and collectively with special needs during their PE games unit over a fourteen-week period.

In a study by Memmert et al, (2015) authors created ten-questions which have remained largely under-researched, and the final question of the study was whether social development can be fostered using the TGfU model to influence PE. The study drew upon the work of other studies such as Harvey et al (2010) who discovered that student athletes' (with a focus on soccer) cognitive ability levels could be improved to enhance the outcomes of their games. However, one limitation of this study was that it was conducted in a coaching environment with students who wanted to become better soccer players and they all had a passion for playing the game and none of the participants had any form of special educational needs. In another study by Mandigo and Corlett (2010) they reported evidence that the TGfU model can promote better social skills such as fairness, democratic behaviours, and levels of social responsibility. However, they did note that their study could have further researched inclusive behaviour and the integration of disabled people within a wider review. Memmert et al (2010) concluded his study by recommending more integration across other scientific fields and that any future research into the TGfU model should focus on the cultural development of the learner. Bell (2016) stated that social responsibility was both a goal and a process to be followed and that a single definition of the concept is complex and challenging to define. Therefore, it's the objective of the study to take the areas of democracy, empowerment, and critical reflections within the overarching area of social responsibility to determine whether they could have a positive impact on the learning of PE with students who have special needs using the TGfU model.

The TGfU model was first developed by Bunker and Thorpe (1983) as an alternative approach to games teaching that prior to this research focussed heavily on the development of skills and techniques. They stated that the teaching of games was often focussed on the development and acquisition of skills and techniques, within highly structured lessons that made little connection between technical proficiency and effective game play. They proposed that for students to play games well, they needed to know not only how to perform skills, but also when, where, why and how these skills could be applied into a range of game situations. The TGfU model is an instructional approach to learning the skills and tactics of games within the context of a game. It highlights the cognitive elements of learning such as decision making, tactical understanding and teamwork, which is where the cross over between social responsibility and the TGfU model is found. The model recognises the relationships between the students and provides them with an opportunity to express themselves by communicating with one another and allows the teacher to observe these interactions without having to be too involved in leading the lesson. The teacher can take on the role of a facilitator

by encouraging the students to think about a range of problems and situations by asking them questions based on their ability levels and tactical scenarios.

Methods

The unit of learning in this study focussed on Dodgeball. Each lesson began with games which were modified to allow the students to immediately engage in the playing of the game with a specific focus on the tactical dimensions of the activity. Each lesson started with a dodgeball specific throwing and catching dynamic warm-up, and then moved seamlessly into a full game of 6 vs 6 dodgeball with a focus on a specific tactic or adaptation each lesson. The students were encouraged to develop a greater sense of game appreciation and tactical awareness by solving specific problems or modifications created by the teacher. The teacher was able to observe the students recognise some game specific options, make appropriate decisions, and perform appropriate game skills. Questioning periods between games allowed the students to reflect on their learning and it was during these periods that the teacher was able to discuss the main rules and tactics from the lesson by asking a range of questions that was able to draw out student knowledge to inform play in the next game activity. The skill demands were differentiated so that students were free to engage more in the cognitive dimensions of the games and encouraged to consider their social responsibility within the context of their team.

The research took place at an 11-16 social, emotional, or mental health (SEMH) special educational need school (SEN) in the Northeast of England in the UK and all of the students had an educational health care plan (EHCP) associated with their specific learning needs. The school was situated in a medium-sized city and was coeducational, part of an academy trust, urban and non-religious. The school had a small physical education department and in total there were approximately 150 students with special needs. None of the students had a physical disability, but all of the students had another condition such as ADHD or Autism. In total 14 students volunteered to take part in the study over a period of one-term lasting for 14 weeks. All of the students were White British and a high proportion of them were on Free School Meals (84%). Ten of the students were male and aged either 12 or 13 and the other four students were female and also aged the same as the boys. The students who took part in the study attended their normal timetabled PE lessons as the teacher-researcher did not want to alter the routine for the students as this can affect the mental health of the students and the validity of the results due to a change in their normal routines. Each lesson of dodgeball was timetabled for 45 minutes, and the unit consisted of fourteen lessons in total, taught once per week over the period of one autumn term. However, none of the students had any previous knowledge or practical experience with the TGfU approach during their PE lessons. This would be a new experience and expose to an instructional model for the students who took part in the study.

According to Morelas-Belando et al (2020) the experience levels of the teacher can have a significant impact on the findings of a study using the TGfU model. The teacher-researcher in the study was an experienced PE teacher (over 16 years' of teaching experience), teaching PE in several different schools. The teacher-researcher had also taught more than 8 units of work using the TGfU model (across multiple classes and age groups) and had undertaken several research studies on TGfU. Therefore, this has to be noted as a strength of this study in that the teacher at the heart of the study was experienced in teaching children with special needs and also in applying the TGfU model with student who have a specific learning disability.

Permission from Trust CEO was obtained to carry out the

study ensuring there was no students named in the research for safeguarding purposes. The next step in the process was to ensure that an informed consent form was collected from all of the participating students' parents. The informed consent form explained the study to the student's families and encouraged them to ask any questions prior to their son or daughter taking part. The teacher-researcher undertook the necessary reading about safeguarding and research with children from British Educational Research Association (BERA) and gained full consent from all participating students' parents about the study. He was also open with the students about his dual role as both a teacher and as a researcher and no distinction or discrimination was made between participants and non-participants in lessons. Data in the form of questionnaires and observations were only gathered from students who took an active part in the dodgeball lessons. The teacher-researcher ask for volunteers from a broad range of abilities from across the school community and this was to give a more accurate and reliable set of results.

The students were interviewed twice during the study, at the end of the lessons seven and fourteen (Table 1). The depth of

questions and the language differed depending on the ability levels of the students. The interviews lasted approximately ten minutes and data was collected using a digital audio-recorder. The interview questions targeted the students' perceptions of their improvements in their levels of social responsibility (democracy, empowerment, and critical reflections). The interviews began with pre-established questions about social variables using questions such as "What did you do to play fairly during the game; how did you show good teamwork?" The teacher-researcher led each interview using questions based on social responsibility to explore the meanings of the statements in greater depth. There were four group interviews in total encompassing all fourteen of the students during these interviews. The teacher-researcher specifically focussed on what students said about their experiences in the TGfU lessons after reading each of the transcriptions to get a sense of their scope and to detect recurring topics. Then to seek further clarity the teacher-researcher identified a range of emerging themes which were subsequently broken down into a set of final sub-themes to help with the validity and reliability of the data.

Table 1. Student Questionnaire

Question Topics Improved levels of...	Positive Replies	Neither positive nor negative reply	Negative Replies	No replies
Q1 – Fairness	64.29%	14.29%	14.29%	7.14%
Q2 – Teamwork	50%	28.57%	14.29%	7.14%
Q3 – Attitude to learning	64.29%	28.57%	7.14%	0%
Q4 – Democracy Skills	42.86%	28.57%	14.29%	7.14%
Q5 – Listening Skills	64.29%	14.29%	14.29%	7.14%
Q6 – Communication	57.14%	21.43%	21.43%	0%
Q7 – Reflections	71.43%	28.57%	0%	0%
Q8 – Engagement	64.29%	21.43%	14.29%	7.14%
Q9 – Empowerment	42.86%	42.86%	14.29%	0%
Q10 – Decision Making	50%	21.43%	21.43%	7.14%

Qualitative analysis

The qualitative findings show that the students enjoyed using the TGfU approach during their PE lessons. For example, one student commented that "we feel that we are learning in a more logical order of lessons, making our lessons more interesting". Another student felt that they had improved their knowledge of the rules of dodgeball by commenting that "I feel I can remember more of the rules of dodgeball, and this helps me to play better". One further student also said that they had improved their teamworking skills by saying "I feel that I can play better with my teammates, and this helps us to win more games". A further students liked how the lessons were more games based and said, "I have enjoyed learning in this way because the lessons let us play more and there are some questions that make us think about how to improve". Another student also commented that they had liked the independence the lessons had given them by saying that "the lessons have allowed us to pick our own teams and feel like we can play in fair games with more confidence". These comments suggest that the students were able to become more independent and inclusive learners and that they were able to behave in a more democratic and empowered way. For example, as the teacher-researcher was able to facilitate more of the learning the students felt in more control of their lessons, and this appeared to help them to enjoy their dodgeball lessons more.

Also, another student mentioned how the teacher helped them to improve their social skills by asking them questions about

how to play better together to be more successful and said, "I feel like I have learned more during these lessons as I was able to play with my friends and to help them improve their skills". Finally, a further student also mentioned that they were given time to think about their learning by stating "we were given some time to reflect on our lessons because the teacher would stop the lesson at different times to ask us how we were doing". This shows that the students were thinking about how the lessons had been structured with the teacher-researcher giving them time to reflect on their learning and also how they were given key questions from the TGfU model to help them to improve their learning. Again, suggesting that through their dodgeball lessons the students enjoyed learning with others more than they had previously. Also they had been building better social relationships with their peers during the unit of dodgeball as well. These comments were reflected both during and after the unit of dodgeball and the sub-themes were easily identified as a result of the student interviews. For example, one theme and sub-theme which was highlighted often by the students is that their democratic behaviours had improved. They were able to select fair teams and play competitive dodgeball fairly using the correct rules.

Discussion

The purpose of this work was to explore whether children with special needs in their physical education lessons could improve their democratic, critical reflection and empowerment psy-

chosocial variable skills using the TGfU model to a greater extent after a unit of work focussed on playing dodgeball. The qualitative approach of the study indicates that there was a greater level of social responsibility shown by the students who took part in the study. The qualitative analysis show that the students individually and collectively came together to become more team cohesive members as a result of empowering them to select and manage their own teams during the dodgeball lessons. According to Jarrett and Light (2018), the teacher's role is especially relevant in using the TGfU approach to help students grow as learners, and this is especially prevalent if they are in groupings which make them feel comfortable. This was always the intention of the author to help encourage the students to become more positively democratic, to enable them to become better at collaborating with their peers and working together as a dodgeball team. This supporting of one another has also been positively reported in studies by both Koekoek and Knoppers (2013) and Bracco et al (2019), as having positive support of your peers was necessary to become more effective collaborators within a team. In the study by Koekoek and Knoppers (2013), they also reported that the social values learned from positive interactions between peers assisted each other to make better decisions as a group, and learn the social values of communication, teamwork and commitment when working towards a goal. The study also found that levels of empowerment and reflections were more positive as a result of using the TGfU model and that the students felt they had more ownership of their learning. As a consequence, this led to higher levels of enjoyment from the students.

Limitations

However, the results from the study should be interpreted with some caution because there was no control group, only a small number of participants, and a single-teacher-researcher. Furthermore, the teacher-researcher was an established member of teaching staff within the school and many of the students involved in the study had been taught by the teacher-researcher in previous years and across other PE units. Another limitation could be the length of the study (14 weeks) as it could be considered a short-term investigation in comparison to other studies in the same field with students who do not have special needs (Light, 2002). The study could have involved more than the 14 students involved also as this would have given the results more validity, but due to the small size nature of the classes within the school this was a broad spectrum of students with a range of SEMH issues such as depression. The teacher-researcher would focus on the analysis of data within a further study, and this could involve a Chi-Squared Test to determine whether there is a statistically significant difference between the expected frequencies and the observed frequencies in one or more categories of the questionnaire or in other words to see whether two variables are indepen-

dent of one another. This would allow future research to observe a range of students and determine whether the expected values were equal to the observed values and if not how much of a statistical difference there was.

Conflict of Interests

None

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