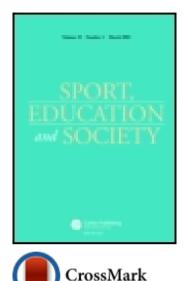
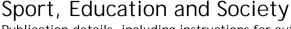
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Towards a more equitable and inclusive learning environment in Sport Education: results of an action research-based intervention

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Towards a more equitable and inclusive learning environment in Sport Education: results of an action research-based intervention

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This study was designed to examine and intervene into student behaviours to promote a democratic, inclusive and participatory focus within Sport Education. To achieve an increased understanding of and changes within student behaviours, a collaborative participatory action research methodology was applied to provide voice to students as agents of change. The research progressed throughout an entire school year and was cast in two stages. The first was a season of Basketball that provided some baseline with respect to issues of equity and inclusion. This was followed by an intervention stage (seasons of Handball, Soccer and Volleyball) in which the identified issues were acted upon. Based upon issues unearthed during the action research cycles the intervention focused on legitimating different levels of participation through (1) a reconfiguration of the learning content, peer teaching activities and competition formats, (2) the discussion of inequity, exclusion, gender stereotyping and discrimination emerging from group dynamics within focus groups interviews and (3) the promotion of positive leadership behaviours of the student coaches through leadership seminars conducted outside the gym. By the end of the year, there was significant evidence of inclusive membership accompanied by the development of mutual trust among students and shared contributions towards a common and inclusive goal. A close interrelatedness was found between game competence development, trajectories of participation and sense of membership, the restructuring of power relations and the sharing of knowledge and investment of dominant and higher-skilled students towards more inclusive team goals. The Sport Education curriculum alone was insufficient to dismantle the deeply rooted negative cultural influences of community-based sports that influenced equity and inclusion. However, by planning and implementing a specific intervention that used the educational resources of Sport Education proactively it was possible to promote a more inclusive and equitable learning environment.

Keywords: Inclusion; Equity; Communities of practice; Legitimate peripheral participation; Student leadership; Transformative action

Introduction

While the status of physical education (PE) in schools and curriculum time allocation may vary throughout the world (Hardman & Marshall, 2008), with respect to

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instruction there is consensus that regardless of gender, skill level or social status, all students must be granted the opportunity to enjoy and value social interaction and to have equal opportunities to participate within classes. Nonetheless, Ennis and colleagues (1997; Ennis, 1999) have suggested that the curriculum-embedded characteristics of the dominant form of instruction (that being multi-activity curricula dominated by direct teacher instruction within short units) has contributed to the reproduction in PE of gender stereotypes and unbalanced power relations and student participation (Pope & O'Sullivan, 2003).

In contrast to a more traditional skills-drills-game format of sport instruction, learning in Sport Education is perceived as a cognitively and socially active construction by students within a complex and culturally situated interplay of relationships (Kirk & Macdonald, 1998; Siedentop, 1994). By recasting lessons as matches and training sessions Sport Education intends to convey a sense of authentic and meaningful participation to students. On one hand, the cooperative work, shared decision-making, face-to-face interaction and student-led team practice session's features reproduce authentic aspects of contemporary community-based sports. On the other, Sport Education curriculum has a strong inclusive focus. Students have opportunities to 'engage in the community of practice of sport as legitimate peripheral participants in a variety of roles' such as player, coach or sports director (Kirk & Macdonald, 1998, p. 383). The learners' trajectories to full participation in the life of their teams are facilitated through featuring developmentally appropriate practice and format of competitions (Penney, Clarke, & Kinchin, 2002) with handover by the teacher to the students of increasingly responsibility for the conduct of the units (Dyson, Griffin, & Hastie, 2004). The trend within research on Sport Education has highlighted its potential to be a highly inclusive pedagogical model (Hastie, Martinez, & Calderón 2011; Wallhead & O'Sullivan, 2005). Higher-skilled students are reported by their peers as being more supportive (Kinchin, 2001), and girls and less-skilful students feel they belong and that they can make valuable contributions to their teams (Harvey, Kirk, & O'Donovan, 2014; Hastie, 1998).

However, despite the majority of research indicating positive outcomes, contradictory accounts have also been reported. For example, Brock, Rovegno, and Oliver (2009) contended that gender and status influenced students' social interactions in favour of dominant boys and higher-skilled students. More recently, Parker and Curtner-Smith (2012) reported the prevalence of a male dominance within a Sport Education season where masculine bias and sexism were sustained and reinforced, seemingly both by instituted gender stereotypes and the teachers' conservative and a culturally influenced interpretation of sporting culture. In this study, the males in leadership roles, together with the more aggressive boys, controlled game play and decision-making which served to undermine girls and less gifted boys.

Given these findings, but also given that the examination of the power relations and group dynamics embedded in the student-led conduct of the activities is clearly under-researched in Sport Education, the aim of this study was to examine, mediate and intervene into student behaviours in order to promote a democratic, inclusive and participatory focus.

Methods

Design

This study adopted a participatory action research framework conducted with and for students to promote equity, inclusivity and a more democratic educational setting (Carr & Kemmis, 2003). This was a collaborative process in which the teacher acted as facilitator contributing 'with particular knowledge and expertise that can be of help to the group' (Kemmis & McTaggart, 2005, p. 594). As team leaders, the student coaches were engaged as prime agents of change. Through learning of concepts related to positive leadership they were recruited to mediate the process of changing power structures in the classroom that reproduced hegemonic conceptions derived from negative features of community-based sport. Although in an initial stage the issues in debate were raised by the teacher, knowledge was expanded by listening to students' voices and involving them as 'collaborators, decision-makers and interpreters' (Fisette & Walton, 2014, p. 135). As the process evolved, the terms of discussion were progressively expressed and identified by the students themselves.

The research programme progressed throughout an entire school year (from October to May) and involved four iterative action research circles of planning, acting and monitoring, reflecting and fact-finding (Kemmis & McTaggart, 1988). Each cycle incorporated a Sport Education season of a team sport as dictated by the school programme and was demarcated on the basis of the school term interruptions. The first stage examined a season of Sport Education involving Basketball and was designed to provide a form of reconnaissance (or baseline) with respect to issues relating to equity and inclusion. This diagnostic stage was followed by an intervention stage in which the identified issues were acted upon. The intervention stage consisted of three action research cycles coincident with three Sport Education seasons of Handball, Soccer and Volleyball. After each cycle, the time gap between the beginning and start of classes served to deepen reflection on the completed cycle and the (re)planning of the next cycle of action as determined by the new issues emerging or unsolved in the prior cycle.

Participants

The first author was a qualified PE specialist with 10 years of experience, and by holding the dual role of practitioner and researcher was able to bring an 'insider's' view to the research. The students in the project were 10 girls and 16 boys (aged between 12 and 14 years old) from a school in Northern Portugal who participated in PE lessons two times per week. One of these lessons lasted 45 minutes, while the other was double this time at 90 minutes. Now in the seventh grade, most of these students had been in this same cohort since the fifth grade. Many of the students had particularly rich sporting backgrounds. Prior to this project, none of the students had participated in seasons of Sport Education. All the names mentioned in the study are pseudonyms.

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The seasons

In the period preceding the implementation of the action research, students were enrolled in a nine-lesson Athletics unit (data not discussed in this study) framed in a 'traditional' teacher-directed format. In each lesson, different students were assigned as leaders in low complexity tasks. Through audio and videotape observations of lessons the teacher examined the relationship dynamics between students and their response to different leadership styles. Students were also considered based on one or more distinguishing features (low/high skilled, popular/unpopular, girl/boy and sporting status; Brock et al., 2009). The study reported here encompassed four consecutive seasons of Sport Education. As determined by the school programme, the sports approached were Basketball (18 lessons) in the first term, Handball (12 lessons) and Soccer (16 lessons) in the second term and Volleyball (23 lessons) in the last term. Immediately before the commencement of the first Sport Education season, students watched a video regarding the model's features and were briefed by the teacher over the importance, responsibility, expectations and the profile a student coach should exhibit (knowledgeable, consensual, considerate, patient, responsible, etc.). In lesson one of Basketball three student coaches (Rose, Peter and Christopher) and co-coaches (Carol, Will and Hugh) were chosen as team captains by individual vote. The six students formed a committee and under the teacher's supervision allocated all students to three even teams which took the names of 'The Wild Eagles' (WE), 'The Fighting Koalas' (FK) and 'The Kangaroos' (K). At the end of the first season, students were consulted and it was decided that the teams should be maintained throughout the year. Unlike other seasons of Sport Education where in initial lessons the teacher provides direct instruction over tactics and techniques to the entire class, here the teacher opted to use scaffolding strategies (e.g. guided practice) and deliver the responsibility to the student coaches for the conduct of the activities from the very first lesson. Derived from the findings of the various action research cycles, different competition formats were employed. That is, competition took place at the end of the season in Basketball and Handball; interspersed competition was employed throughout the seasons of Soccer and Volleyball; and competition by skill level was the format used in Soccer.

Data sources

Two digital camcorders were located in the gymnasium (one at ground level, one elevated above the gym) with the purpose of providing a video record of class events. Second, each of the three student coaches wore an armband containing an audio recording device. This allowed the capture of the verbal interactions between students. Third, informal interviews consisting of spontaneous questioning of individual students were made by the teacher during lessons. Finally, a field notebook was kept by the teacher in which he recorded his reflections about critical incidences immediately after each lesson.

The teacher then set up a studio in which he could watch the two lesson videos on adjacent computer monitors while also listening to the captains' voice recordings. Along with his field notebook he then made several annotations, comments and adjustments to his preliminary post-lesson reflections, while also filling in gaps in his field notes. This allowed for the development of a written reflective diary (RD) that contained a word matrix with the annotations making a chronological log of events.

This diary served three purposes. The first was to generate stimulus questions that were used in focus group (FG) interviews with each of the three teams. The second was to create a series of issues for the student coaches to consider and add their perspective during their leadership training sessions. The third purpose was to generate themes and categories derived from these data.

The FG interviews took place twice during each season and had two goals. One of these was to gather the students' perspective about the issues raised by the teacher and/or to address topics suggested by the students. A second goal was to introduce and involve students in discussion about some of the key concepts of successful communities of practice as identified by Wenger, McDermott, and Snyder (2002). With the exception of Basketball (interviews at mid-season and post-season), interviews were conducted with each team during the first week of the season, and then during the final week of the season. These took place outside of class time and consisted of all players within a team. The interviews lasted approximately 90 minutes and included the frequent examination of video records of specific events during classes which had been preselected by the teacher. These were representative of critical interactions between students which reflected cases of exclusion or lack of equity in participation, discriminatory attitudes and negative power relations. A sample of typical issues that drove the FG interviews raised by the teacher includes 'do you feel everybody participated evenly?' or 'who's responsible for the loss of ball possession in this situation?' 'why did you blame X?' A sample of typical topics raised by students includes 'the team has no identity', 'the captain yells at us' or 'girls can't play Soccer'.

In conjunction with the FG interviews, the teacher initiated a series of 'leadership seminars' (LS) with the three student coaches and three co-coaches following the Basketball season. One goal of these meetings was to address and discuss issues related to their leadership styles as well as issues of discrimination, gender stereotyping and inappropriate use of power in the teams. Like the FG interviews, specific topics were generated from both the teacher's RD and from concerns raised by students. A sample of typical questions raised by the teacher include 'what concerns did you have for promoting inclusion?', 'how do you use authority to lead colleagues to do what you want?', 'was there a different way do address this situation?' A sample of typical issues raised by the students include 'they don't respect me', 'how can we develop harmony in the team?' or 'how can I motivate girls?' Another goal was to teach the students specific positive leadership strategies for providing momentum to the teams' practice within an inclusive environment. The LS were held more frequently than the FG interviews, ranging from three during Handball and Soccer to eight during Volleyball. The average time for these sessions was 45 minutes.

Data analysis

The analysis of the data focused on critical events regarding inclusion, equity in participation and the specific elements in the dynamics of relationships generative of these events. A process of open and axial coding progressed throughout the research project. Open coding involved inductive line-by-line or incident-by-incident coding of data to expose the thoughts, ideas and meanings contained therein as suggested by Corbin and Strauss (2014). This allowed the formation of preliminary categories (event, happenings, actions/interactions) and subcategories (answering questions about the phenomenon-when, where, why, how, etc.). Constant comparison of the data from different sources allowed for the differentiation and establishing properties and dimensions of the categories related to explicate relationships, contextual conditions, action/interactions and consequences to form a comprehension of the events. This informed the planning and acting according with the ongoing nature of action research and the teaching-learning process. If something needed further examination or a change, time was allocated for critical reflection.

Following the diagnosis stage, theoretical comparisons were used as a means to examine, clarify and think about data in a more sensitive way as suggested by Corbin and Strauss (2014). Connections were established between the problems debated and various theoretical concepts related to 'situated learning' (see Lave & Wenger, 1991; Wenger, 1998; Wenger et al., 2002 for key principles). In addition, as recommended by Silverman (2003), a process of working back and forth between data and theory was employed to facilitate analysis and consider how theory might be useful to expose the complexities, conflicts and contradictions in the evolving of the problematic. Data were not categorized to fit the theory but rather to search for patterns and understand how it might support or opposed current conceptualizations. A final level of analysis sought the refining of ideas and specific relationships between categories through peer debriefing between the first author and his co-authors, both at the time of the research and during the writing of this paper.

Trustworthiness

In insider action research there is a need to balance the closeness the researcher has with the setting and creating the necessary distance to think critically and enable change to happen (Coghlan, 2007). To provide a more objective account of the study's findings the first author tried to deal with the consequences of his presence through honesty and transparency about the goals of his actions, a process recommended by Bradbury and Reason (2006). He endeavoured to build a context of trust, caring and nurturing relationships by showing impartiality during conflict mediation. Also, listening to students' voices and including them as collaborators, decision-makers and interpreters in the process highlighted the underlying genuine intention of developing a more just and meaningful learning experience to students.

With regard to the teacher's interpretation of the events there was an effort to relinquish the idea of the researcher being the sole knower and interpreter of students' experiences. Consistent with the strategy listed by Strauss and Corbin (1990), students were continually asked to verify the accuracy of the interpretations of the meanings implicit in their actions and verbal interventions. When asking pupils to define the terms of discussion there was a concern of 'letting students' explanations of their experiences shape the researcher's interpretative frames' (Cook-Sather, 2007, p. 866). Ongoing peer debriefing between the first author and his co-authors provided an external voice about the findings through the juxtaposition of the pupils' and the teacher's accounts (see Glesne, 1998).

Findings and discussion

The diagnosis

Basketball: Cultural and relational limitations to equitable participation and students' access to learning resources. During the Basketball season, some negative aspects of the community-based sporting culture pervasive among students were barriers to full participation and equitable possibilities for learning of students of lower skill and sports status. Reflections on ongoing data collection suggested that the level of participation in the activities was mediated by students' status, gender and the power relations generated within teams. Status was determined in many cases by students' ability level, affiliation in community-based sports or 'popularity'. In lesson seven, for example, during practice of a 3 vs. 1 tactical task 'boys took over the on-the-ball movements "pushing" the girls frequently to the side-lines to off-the-ball participation' (RD, 23 November). Another example occurred in lesson eight where it was noticed that certain high-status students 'do not pass the ball to certain less-status teammates or students who are not inner their "circle of friends" during game-play' (RD, 28 November). However, a main barrier to a more active involvement of lessskilled players in the game was also the poor quality of their game play and the pervasive perceptions over their competence level:

Edward (high-skilled): 'We use a 'sportier' language [...] they (low-skilled) don't get it (understand) [...] I tell him (JR, low-skilled boy) to move to the centre but he stays put (poor off-the-ball movements) [...] Marianne (low-skilled) is doing it, well, kind of. (FG-K, 14 December)

Throughout the Basketball season, the allocation of students in persistent teams was not by itself generative of a reconfiguration of the strong social structures prevailing in the class, as suggested by prior investigations (MacPhail, Kirk, & Kinchin, 2004; O'Donovan, 2003). Indeed, with the handover of managerial and instructional autonomy to students, the regulative rules suggested by the teacher (substitutes rotate every two minutes; compulsory in-field presence of at least a girl) were sometimes bypassed. Clarke and Quill (2003, p. 259) noted that the introduction of

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the kind of student empowerment pedagogies embedded in Sport Education often taps 'into an already existing and pervasive culture' among students. Parker and Curtner-Smith (2012) found there was reinforcement of hegemonic masculinity (i.e. cultural support to dominant forms of masculinity) within a Sport Education class derived from the ways through which students had been socialized into communitybased team sports. The prevailing conceptions about team sport in the class were established by the dominant students (particularly the high-skilled boys with experience in community-based sports). Thus, the teams' goals tended towards competition interests and immediate success rather than to mastery and equitable participation. This had an impact also on the structure of relationships within teams in terms of power relations. It removed decision-making power to lower-skilled students when they tried to level the odds:

Irene (low-skilled/unpopular): I suggested a switch exchanging Anna (low-skilled) for Paul (average-skilled/high status), but they (leaders in team one) didn't want to. (FG-WE, 13 December)

Nonetheless, there seemed to be a complex interplay between students' perceptions of their place as members in the teams, their level of commitment to cope with certain team dynamics and the negative influence of particular organizations of content development which affected the inclusion of some students from a fuller participation in the activities and decision-making power. For example, Joanna (low-skilled) by feeling excluded sensed that the team had no identity: 'It feels as if there were two different teams not just one. We (team 2) had little guidance on what we were supposed to do' (FG-WE, 13 December). This caused a chain of circumstances detrimental to inclusiveness. On one hand, some excluded students occasionally disrupted the organization of some activities. Conversely, due to perceptions over their low commitment, the dominant students may have reciprocated and were not willing to invest in inclusion behaviours. As an additional negative point, the early introduction of a large number of informal competition games against other teams withdrew space for students training as a team. This limited the opportunities for head-to-head interaction and peer teaching activities:

Peter (coach): Since we were always in game play, I couldn't explain them basic things, such as shooting at the basket or passing as I did in team 1. (FG-WE, 13 December)

The intervention

Handball: Activating 'compulsory' participation and the emergence of a common domain of interests in teams. Five features were introduced during the Handball season aimed at addressing the issues that were uncovered during Basketball. The first of these was the attempt to provide more developmentally appropriate tasks. This took place through modification of the court size and game demands to match the less-skilled student's skill levels, as well as the inclusion of game rules aimed at facilitating equity (such as more points when all players touched the ball before goal). The second

feature was directed towards legitimating different levels of participation. In this case, during the LS, the teacher had the coaches watch videotape of students' interactions to subsequently discuss issues of discriminatory relationships within teams. He also encouraged the coaches to provide more public recognition of the effort and ability of lower-skilled/status students. The third strategy included changes in the season format to increase time allocated to team practice and less to competition schedule. Fourth, the teacher provided short opportunities for students to engage in head-to-head debate between task transitions. Finally, FG and LS served to introduce to students some of the key concepts of successful communities of practice as identified by Wenger et al. (2002). These included (1) finding mutual problems/ interests, (2) learning to identify opportunities to prove individual value and (3) positive leadership.

During the previous season of Basketball, the features of Sport Education curriculum alone could not guarantee equitable participation and development of responsible membership inclusive of the interests of all. However, during Handball, the intervention strategies acted upon the pedagogical resources of Sport Education proactively to 'put structures in place' (shared engagement in discussion, developmentally appropriate game play, positive leadership) and capitalize the opportunities for inclusion embedded in the curriculum (Ennis, 1999, p. 37). A number of key strategies were used to force participation and facilitate access of less-skilled/status students to their team's human and material resources. The changes operated to the game (3 vs. 3) had a marked impact in balancing on-the-ball participation. Specifically, establishing 'safety zones' where students could pass the ball safely before shooting at the goal together with the changes on the scoring system encouraged the sharing of ball possession between teammates: 'Now we need to pass the ball to everyone [...] if we want to cross over the middle field [...] and score triply' (Rose-coach, FG-K, 15 February).

Together with increased participation in the games, two other aspects added to the sense of growing contribution of girls and less-skilled students. The video-based reflection exercises conducted with the coaches and co-coaches stimulated the acknowledgement of biased judgements based on gender stereotypes (e.g. girls being wrongly blamed for bad game play moves). Further, the public highlighting of students' efforts placed an emphasis on different kinds of valuable contributions such as effort, persistence and personal improvement, a finding consistent with Perlman and Goc Karp (2010). In this matter, the coaches played a critical role in building connections among teammates. They cultivated a nurturing environment by talking with teammates about their needs and connecting them with others. In lesson five, for example, Peter 'stopped practice and called everyone: Hey, everybody, listen to this question brought up by Anne (low-skilled)' (RD, 18 January). As students began to realize each member contributed in personally meaningful ways, different levels of participation were legitimate. The structure of social relationships within teams changed as did their sense of identity in relation to other team members. This encouraged a further investment in cooperative practices and caring behaviours translated by responsible role performance (Lave & Wenger, 1991):

Anne (low-skilled): I feel I've improved, and I was proud to receive the diploma 'Team member who progressed the most' [...] because I love being on my team, I feel integrated. If I'm not feeling well I can talk to Peter and he says 'no worries'. Irene (low-skilled/unpopular): I was completing a game observation sheet, but it was like Chinese. I was a dummy [...] but David (high-skilled) helped me with the statistics. (FG-WE, 15 February).

Christopher (coach): I am concerned if someone is not getting the ball [...] if they feel happy in the team, if there is respect. (LS, 16 January)

Nonetheless, what most energized the students to coalesce into a community of learners was the recasting of lessons as matches and training sessions. The competition and game-practice-game format of the activities and the built-in accountability (scoring for the team) assigned authenticity, cultural relevance and sense of purpose to the structure of the content learned (Clarke & Quill, 2003). The increments in the amount of team practice sessions and the specific schedule for face-to-face interaction helped students develop knowledge on each other's personal features and game skills. From the passion for the same topic emerged a shared domain of interest among team members that helped students feel connected (Wenger et al., 2002). However, although 'opportunities for game involvement were equitable during the trainings and first matches of the championship, the finals brought unbalanced levels in on-the-ball participation' (RD, 30 January). Apparently, the definition of membership negotiated within teams rendered submersion of some individuals' interests for the sake of a collective aim (Kirk & Kinchin, 2003). Being connected to the team demanded that some less-qualified students had to give up a fuller participation in the finals:

Michael (popular/average-skilled): We talked about how the game was running (during halftime break) and on what we needed to do to win more points. Teacher: I noticed that Michael played the all-time, was it your strategy? Joanna (low-skilled): Yes (joyfully), so that we wouldn't allow any goals. (FG-WE, 15 February)

This limiting of access to fuller participation stemmed from perceptions of different ability levels among students. Indeed, much of the game involvement by less-skilled students was the result of compulsory rules and changes to the game conditions which presented lower game demands to these students. This was a break with a general idea of aggressive play focused on performance and winning associated with the highly competitive community-based sport which disturbed a core group of students (Parker & Curtner-Smith, 2012). Wenger and colleagues (2002, p. 98) located such tensions in communities that are at an early maturation process where there are tensions 'between welcoming new members and focusing on their own interest in cutting-edge topics and expert interactions'. In this case, endorsing higher levels of participation to students of lower ability implied some disruption with prior domination and higher patterns of involvement of more skilled students during game play (Hastie, 1998).

Soccer: Sustaining proactive participation and reshaping of team goals to be inclusive of the interests of all. Three intervention features were introduced during the Soccer season

aimed at addressing the unsolved or uncovered issues during Handball. The first of these was the attempt to improve the quality of game play in all students. This included the introduction of tactical- and skill-based tasks, specific player match-up during competition events ('Division I' and 'Division II'), and modifications of the game to place more demanding challenges to the higher-skilled students. The second feature was directed towards legitimating different levels of participation. During the LS and FG, the teacher had students watch videotape of students' game play. The focus was not only on developing perceptions on students' effort but mostly on the meaningful contribution by less-skilled students in the teams' game performance. Third, the FG and LS served to introduce to students some promising key features of successful communities of practice as identified by Wenger et al. (2002). These included (1) benefits of working together towards a common and inclusive goal, (2) benefits of students offering their 'expertise' to the team and (3) leadership strategies (identify the common interest among team members, cultivating a nurturing environment).

The Soccer season saw a growing interrelatedness between students' trajectories of participation associated with increased game play competence, shaping of team membership and mutual trust and the construction among students of a shared but more inclusive domain of interests. One important way of facilitating access of students to more full participation in the activities was the focus placed on performance development through the critical changes posed to the goals, content and structure of the instructional tasks (i.e. rules, space, numbers of players and degree of defensive pressure). This enabled the suggestions of Griffin, Mitchell, and Oslin (1997) and Mitchell, Oslin, and Griffin (2013) who advise for adjustment of game demands to individual needs regardless of the ability level of students. Specifically, the introduction of tactical-based tasks as building blocks for participation in following higher complexity games helped the lower-skilled students improve their game performance and have a more active construction of their participation in game play. According to Claudia (low-skilled) 'it helped simplifying things, thus we learn faster' given that during the game 'we kicked at the goal at a very similar spot to that where we practiced (during team practice sessions)' (FG-FK, 15 March). The introduction of different sites of practice according with students' skill level and the inclusion of some girls in 'Division I' teams were also two critical changes. On one hand, there was a growing recognition of the competence of girls in Soccer. This caused an impact in the cultural context of this study as it was a sport highly associated to males. On the other hand, the higher-skilled students felt they were being challenged in meaningful ways and felt compelled to reinforce their sense of commitment to the team dynamics:

Thiago (higher-skilled/status): Now it's more to our level (competition) [...] we had to start paying more attention to the ball and quickly see the position of the defence to make a fast pass. (FG-K, 13 March)

Will (co-coach): The girls helped a lot, Joanna occupied a lane in defence and scared the opponents and on the attack she was always at the right spot where she should be.

David (higher-skilled/status): For seeing (consciousness) the improvements in the team, the way we behaved changed, we are more responsible now, we are evolving more [...] as the team improves, so must we, if we are to get to another level and keep up. (FG-WE, 15 March)

Offering an optimum level of challenge to all participants and the perception that cooperative and inclusive efforts were 'paying off' (students were improving performance) attenuated some of the tensions 'between focus and growth'. According to Wenger et al.'s (2002, p. 17) situated learning theory 'if it is not clear how members benefit directly from participation, the community will not thrive, because the members will not invest themselves in it'. Thus, providing authentic participation also to higher-skilled students prevented a potential feeling of being instrumentalized for the benefit of less-skilled students alone which seemingly fostered their engagement in nurturing and cooperative practices. This was a key point to boost team development considering that in Sport Education the learning activities live mostly from the momentum given by the 'more knowledgeable students' (Siedentop, 1994; Vygotsky, 1978).

As students strived to 'preserve relationships' within teams they developed a 'deeper sense of identity and greater confidence' in the value of sustaining more inclusive team goals. Ian (averaged-skilled/popular) illustrated the shift in the meaning of winning within the team as follows:

Having this common goal improves it (bonding) [...] there's more affinity, we are friends and during the matches we have more trust in people. Although most of them already knew each other for a long time, they didn't trust each other [...] trust now, is to know we can count on them to do their best. (FG-K, 15 March)

This led to a restructuring of team goals and dynamics towards a practice comprehensive of all students' interests, a feature also noted by Perlman and Goc Karp (2010). Both the Fighting Koalas and the Kangaroos changed their perspective dramatically and embraced a commitment of promoting learning and harmony in alternative to 'winning at all costs'. A point in case was Marianne, a lower-skilled girl previously disregarded. Despite the large amount of goals taken during the Soccer matches, Carol (co-coach) 'tried to send her more often to the goal to overcome this fear (phobia to getting hit by the ball caused by prior traumatic experiences)' (FG-K, 15 February).

During the Soccer season, however, the instructional responsibility overly centred on the coaches and co-coaches was a potential barrier to a higher access to resources by less-skilled teammates. Somehow it restrained opportunities for the other knowledgeable teammates to provide immediate feedback or sharing their knowledge with other members:

Thiago (higher-skilled/status): What was lacking in the team 2 was a common strategy with us. We all knew how one should play, and what to do after substitutions [...] team 2 didn't.

JP (average-skilled): That's what failed; we forgot to teach them this strategy. (FG-K, 15 March)

Volleyball: Augmenting access to learning resources through self-monitoring of learning, development of individual responsibility and shared repertoire of knowledge. Two strategies were introduced during the Volleyball season aimed at addressing the key issues that either emerged or endured during the Soccer season. The first feature was the organization of group work within teams in smaller, lasting groups (pairs). The second involved the teaching of leadership strategies to the coaches during lessons and the LS. These included strategies to spread managerial and instructional responsibility across teammates, strategies to increase individual's responsibility for the learning process ('teaching by invitation'; Metzler, 2011, p. 72) and leadership strategies (connecting teammates).

The changes on the content development format of the activities along with the reconfiguration of the organization of group work were key aspects to empowering students in the construction of their own learning and the sharing of knowledge between teammates. Teaching the coaches how to implement 'teaching by invitation strategies' encouraged teammates to 'pick their own level of difficulty and challenge among those offered' (Metzler, 2011, p. 72), as explained by Edward (high-skilled):

Those who had more arm power served from outside the field the others from inside until they felt they could do it from outside as well. (FG-K, 24 May)

According to students, it held them accountable and more proactively connected with the learning content while it relieved the coaches' responsibility in the management and instructional conduct of the activities:

Christopher (coach): This was good because it took a bit of weight off our shoulders and now they also have more confidence. Also requires that they have better knowledge of the game (to keep pace with the next progression). (LS, 17 May) Claudia (low-skilled): It compels us to think more about ourselves, in our abilities, in our evolution and on how much we progressed. (FG-K, 31 May)

The organization of peer teaching tasks within teams into smaller, lasting groups (work in pairs) was a decisive strategy. Whereas it decentralized power from the coaches, it also stimulated a sense of mutual responsibility in students towards a common goal (proficiency in the 2 vs. 2 game) and the bonding of teammates previously less connected. The most important outcome was an increased awareness on the importance of sharing knowledge and commitment to peer teaching responsibilities:

Rose (coach): Before (previous years) he (Ian) didn't get along with Agnes, actually, no one did [...] but with the work next to her he began to realize that maybe (emphasis in the maybe) she ... (wasn't that bad? was kind of cool?) Ian (averaged-skilled/popular): I started to work with her. Now we are a team (Volleyball double). (FG-K, 25 May)

David (high-skilled): We must be concerned with that (not teaching teammates), if we want our team to do better. If those who know (tactics, skills) aren't teaching, those who don't know (less-skilled) are not to be blamed, but rather those who know but don't teach what they know. (FG-WE, 24 May)

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However, in this type of organization, the 'interpersonal skills' of coaches and deep knowledge they had on each team member's strengths and weaknesses was a critical mediating factor. Their ability to 'recognize the development needs of individuals' was a way to weave and strengthen 'relationships among members', both concepts listed by Wenger et al. (2002, p. 82):

Peter (coach): Now we cannot be with them all at the same time (since practice involves 2 vs. 2 groups spread in various courts), we try to have a stronger and a less strong element in each pair. We try that the one who knows more of Volleyball sees what the partner is doing wrong and explain. But the less strong one can also do it, correct the teammate and try to identify errors. (FG-WE, 25 May)

Although good leadership was critical to provide momentum to the teams, Wenger and colleagues (2002, p. 36) advocate that 'healthy communities do no depend entirely in one person'. Further, when 'leadership is distributed and is a characteristic of the whole community' it is a sign of more mature team dynamics. At the middle of the season students did feel

There is not so much the distinction between coach, co-coach and team members (making gesture of descending pyramid) [...] They allowed us to give opinions on drills and strategy [...] we all had jobs and were able to give, each of us, a bit of ourselves. (Agnes-high-skilled, FG-FK, 3 May)

Stimulating coaches to include all students in relevant team decision-making (e.g. tactics and strategy) was instrumental for developing a higher sense of purpose and new level of membership in the teams. A membership was created whereby, according to Wenger et al. (2002, p. 35) 'each member develops a unique individual identity in relation to the community'.

Conclusion

A key finding from this study was that participation in a single season of Sport Education curriculum is insufficient to dismantle the deeply rooted conceptions about sporting expectations based on gender stereotypes, pre-established status hierarchies and negative cultural influences of community-based sports that influenced equity and inclusion. However, by planning and implementing a specific intervention that used the educational resources of Sport Education proactively it becomes possible to promote a more inclusive and equitable learning environment. With respect to the research design, the adoption of action research was crucial as it allowed a close monitoring of the ongoing changes and to adjust procedures accordingly with the dynamic nature of the teaching-learning process and reshaping of social interactions between learners. It also afforded to students the opportunity to repeatedly revisit their ideas of inclusion and equity. Further, the immersion of the practitioner–researcher in the context itself allowed in-depth access and to keep pace with the complexity ingrained in the interplays between the various actors and to plan and act in conformity towards change.

In this study, the development of game competence, the trajectories of growing participation and by association the changes in the ways students were located within teams in terms of membership, the restructuring of power relations fostered by increasing trust and caring and the sharing of knowledge and investment of dominant and higher-skilled students towards more inclusive team goals, all progressed in close interrelatedness. These findings may hold critical implications to PE practice in general and curriculum development in Sport Education in particular if activities are to be designed in ways that foster cooperation and inclusive behaviours. Due to the managerial and instructional autonomy given to students, there are numerous ways by which the access of more shy and less influential pupils to the knowledge potentially embedded in cooperative learning practices can either be provided or restricted. Some aspects need to be safeguard. Developmentally appropriate practice that encompasses the learning needs of all students, both lower- and higher-skilled, and formal and explicit opportunities for head-to-head debate may foster the commitment of students to invest in more compressive team goals and thus, share their repertoire of knowledge and mutually engage in the learning process of lessskilled teammates. In this matter, action should be taken to explicitly legitimate different levels of valuable participation within teams. A focus should be placed on effort but also on competence improvements. If it is not clear to students how they can benefit directly from their participation they will not invest themselves in the fullest sense in cooperative work and hence, learning and well-being within teams may be jeopardized.

Given the critical role of student coaches in providing momentum to the development of activities in Sport Education, students must be taught explicitly about specific strategies of positive leadership. Developing the ability to connect the interests of various members and cultivate a nurturing climate may be a fundamental skill that needs explicit training. Strategies for decentralizing power and responsibility may also be paramount. This may be influential for enhancing a sense of individual responsibility, mutual accountability and commitment by students to team goals.

Finally, this study stresses the notion that stereotypes and role models from sporting background outside the school context brought by students into the gym may be hard-laborious to overcome. The neglect of such issues may have critical implications for the promotion of inclusiveness in any PE context.

Disclosure statement

No potential conflict of interest was reported by the authors.

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