

What are physical education teachers being told about how to teach sport? An exploratory analysis of sport teaching in physical education

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Keywords: sport, teaching, physical education, pedagogy, models

Abstract

This literature review investigated current and emerging pedagogical directions indicated to physical education (PE) teachers in the research literature. The search strategy used the Google Scholar database to initiate the scan, and then extended into other databases as well as the reference lists of published papers to locate relevant studies. Criteria for inclusion of papers for this review included: 1. Published in English between 2000 to December 2015; 2. Original research published in either peer reviewed journals or text books; 3. Addresses the delivery of sport and PE within both Australian and international school aged children and young people; 4. Papers or book chapters that addressed theoretical underpinnings and concepts of delivering sport and PE. The search identified 57 papers or chapters for inclusion. The major findings of the analysis were: 1. Game Based approaches (such as Game Sense (Australia), TGfU (United Kingdom) and Tactical Games (North America) to learning in PE technical and tactical dimensions of skilled performance in game play are promoted; 2. The Sport Education curriculum and instruction model is well researched and validated as a design to provide authentic, educationally rich sport experiences for students in the context of school PE; and 3. Personal and social development is an often-cited outcome of quality PE teaching in schools. Researchers have supported the use of a “tool kit” of instructional strategies to achieve student learning outcomes in PE (Pill, 2011).

Introduction

We acknowledge the place of sport in physical education (PE) is contested, and it is not universally agreed that sport in PE is good for, or engages, all children. However, sport has also been described as ‘pivotal’ (Green, 2000) and integral (Bailey & Kirk, 2009) to PE. Laker (2002) argues that in broad terms “sport, in the educational guises of PE and school sport, has a major role to play in the education of young people” (p. 6), legitimating the existence of PE in schools (Laker, 2003). Kirk (2006) also makes a strong case for the inclusion of sport in school PE as play, games and sports at their best are conceived as intrinsically good things, among the most important and serious of human activities and hence they are an important part of the school curriculum. Internationally, games and sport are recognised as one of the most important elements of the PE curriculum, representing the “prime source of content and key contexts for teaching and learning” (Lopez, Jordan, Penney & Chandler, 2009, p. 47). Recently, Drummond & Pill (2011) argued for a curriculum vision for sport in PE that moves

class participation beyond narrow technical and elite perspectives of sport participation to one which is more inclusive and understanding of broader sociological issues. They view sport in Australia as a significant cultural practice which demands a place within the PE curriculum. The authors agree with Brooker and MacDonald (1993) that sport within PE should assist PE as an educational process in order to promote, engage and facilitate sport participation within school, and beyond.

Remaining true to Arnold's (1979) definition of learning in PE and the Arnoldian conceptualisation of PE influencing Australian (Australian Council for Health, Physical Education and Recreation, 2008) and international (Brown & Penney, 2012; Kirk, 1988) theorising and developments relating to the form and content of PE curricula, Drummond and Pill (2011) suggest that sport teaching and learning in PE is considered a context for:

- Learning in sport – this includes sport skill acquisition;
- Learning about sport – recognising that sport is structured in certain ways to bring about particular outcomes; and
- Learning through sport – understanding the embodied experience of sport to learn about a range of matters.

Pill (2008) frames these three dimensions as sport literacy. He suggests that sport literacy is potentially both a praxis and curriculum scaffold for sport curriculum design and enactment. He makes this claim because it expands the construction of 'ability' in PE typically viewed in PE as a singular capacity centred on technical constructions of motor development. It does this by framing sport using the three types of movement learning that Arnold (1979) indicated as forming the distinctiveness of PE.

Confronting the norms of the traditional PE method that still remains the status quo in many school PE settings will play a pivotal role in educating through sport in areas of personal and social skill development, physical activity and participation, and the health of individuals and communities (Pill, 2015). We agree with Gimenez, Valenzuela and Casey (2010) that if teachers are being asked to change their practices then this should be informed by research evidence of comparative studies so that they can diversify their practice with understanding.

This literature review investigated current and emerging pedagogical directions indicated to PE teachers in the research literature. For many years, literature has supported the use of a "tool kit" of instructional strategies to achieve student learning outcomes in PE (Pill, 2011). For example, Mosston's Spectrum of Teaching Approaches (Mosston, 1966; Mosston & Ashworth, 2008) is an example of one of these enduring ideas. More recently, however, scholarly and research literature has been promoting models based practice (MBP), particularly as a means for implementing student-centred approaches to learning (Casey, 2014; Hastie & Casey, 2014). Metzler (2011) describes pedagogical models as blueprints for PE teaching, learning and assessment where each model has distinctive teaching and learning objectives. Casey (2014) suggested that while MBP has begun to help PE teachers to change and develop their pedagogies and curriculum we still do not fully understand the impact of changing to a MBP. Furthermore, advocates of MBP practice need to explore the pedagogical and curricular ramifications on teachers of the long-term adoption of a MBP. However, not all scholars are in agreement with the concept and associated calls for fidelity to models by MBP advocates, with some arguing PE teachers are pragmatic interpreters of theory. Therefore, calls for model fidelity are inherently flawed (Stolz & Pill, 2014).

As this report is detailing the current and emerging effective pedagogical practices that PE teachers and student teachers are learning and practicing it is useful to define the scope of the term 'pedagogy'. Tinning (2008) notes that the term, 'pedagogy' has widespread use in

the fields of PE and sports coaching and is now established as an academic sub-discipline. While the term pedagogy has seen increased use in the English-speaking world the increased usage has not led to a coherent or shared understanding of what the term means. Tinning (2008) therefore argues for a notion of pedagogy that is generative in enabling teachers to think about the process of knowledge (re)production across the many sub-disciplines of kinesiology, including, but not limited to, sport pedagogy. It is this broader view of pedagogy that this literature review will use.

Method

Adopting similar methodology to Wallhead and O'Sullivan (2005) and Stolz and Pill (2014) to search the electronic database a combination of 'keywords' and 'search terms' were used. The initial search began using Google Scholar. These 'key words' and 'search terms' had been formulated by the authors of this literature review as we considered they directly addressed the topic under consideration – sport teaching in PE. The 'keywords' and 'search terms' used are summarised in Table 1.

Table 1. Search terms for the literature review

Sport pedagogy in physical education
Sport teaching in physical education
Skill acquisition in physical education
Game performance assessment
Authentic assessment sport
Authentic assessment sport in physical education
Skill teaching in physical education
Motor learning and physical education
Fundamental sport skills and physical education
Physical education pedagogy
Contemporary developments in game teaching and
Cooperative learning model in physical education

The criteria for inclusion of papers for this review were:

- Contemporary: Published in English between 2000 to 2015;
- Original: Research published in either peer reviewed journals or edited text books; and
- Research addresses the pedagogical delivery of sport and PE.

The exclusion criteria consisted of; 1. Research on sport programs rather than the pedagogy or curriculum approach of delivery; 2. Papers that compare pedagogical approaches across countries, and 3. Papers essentially repeating the findings already published. Where possible, existing research summaries and systematic reviews were used in order to manage most effectively the large body of literature pertaining to sport teaching in PE. The literature used in the following comparative analysis is summarised in Tables 2-4.

Results and discussion

The exploratory analysis of the literature presented in Tables 2-4 revealed three categories of publication. The first category of publication consisted of game-based models for sport and sport related games teaching (Table 2) focussed on the intent to teach game competency. The publications explored the tenets of the model or compared a game-based model to a more 'traditional' PE Method (Metzler, 2011), which Kirk (2010) has described as sport taught as sport techniques. Game based models use a classification system of games composing four categories based on common tactical elements called principles of play (Hopper & Bell, 2001). This is why Metzler (2011) called game-based models 'tactical' models in his MBP framework. Since 2010 the following pedagogical approaches have been identified with game centred or game based approaches: Teaching Games for Understanding (TGfU), Play Practice, Game Sense, Tactical Games approach, Games Concept approach, Tactical Games Model, Tactical Decision Learning model, Ball Schulle and Invasion Games Competence model. (Teaching Games for Understanding (TGfU) Special Interest Group, 2016). This category of publications also considered assessment of sport in PE. The literature is suggesting game performance assessment procedures for 'authentic' assessment of ability or competency. Richard, Godbout & Grèhaigne (2000), Pill (2008), Roberts and Fairclough (2012) and Mitchell, Oslin and Griffin (2013) have explained that valid tools are available for the assessment of students' participation in sport related games. Literature suggests students from Grade 5 are capable of using game observation tools with a moderate to good level of precision and inter-observer reliability, and that as the grade level increases their assessments become more accurate and reliable (Richard et al, 2000).

While the literature is unclear to the technical skill acquisition advantages of game-based compared to a more traditional directive practice style the evidence suggests young people enjoy sport taught using a game-based model. Students are reported to be more highly likely to participate and remain participating in sport and physical activity across the life span when these approaches are used.

Table 2. Game-based models for sport and sport related games teaching

Publication	Title	Findings
Richard, J. F., Godbout, P., & Grèhaigne, J. F. (2000). <i>Research Quarterly for Exercise and Sport</i> , 71(1), 85-91.	Students' precision and interobserver reliability of performance assessment in team sports	Demonstrated that students at the Grade 5-8 levels are capable of using the Team Sport Assessment Procedure (TSAP) with a moderate to good level of precision and interobserver reliability, this being more so as the grade level increases.
Mandigo, J. L., & Holt, N.L. (2000). <i>Physical and Health Education Journal</i> , 66(3), 14-19.	The inclusion of optimal challenge in teaching games for understanding	The construct of optimal challenge is introduced utilising the TGFU framework.
Hopper, T., & Bell, R. (2001). <i>CAHPERD</i> , 66(4), 14-19.	Games classification system: Teaching strategic understanding and tactical awareness	The Tactical Awareness Components to Increase Cognition (T.A.C.T.I.C.) framework with the principles of play for games offers a systematic way to teach the tactical complexity of games in the net/wall, territory, target and batting/fielding game categories.

Publication	Title	Findings
Austin, B., Haynes, J., & Miller, J. (2004). Paper Presented at the Australian Association for Research in Education Conference Melbourne, Victoria. December, 2004.	Using a game sense approach for improving fundamental movement skills	<p>Post-test results showed overall improvements in the level of mastery performance of the kick.</p> <p>Implications of this research include the teaching strategies employed to increase fundamental motor skill proficiency.</p> <p>High levels of motivation and interest in the PE lessons were noted.</p> <p>The authors also noted that “although the techniques approach to skill development may be more focused (and familiar) in terms of students knowing what the teacher wants – the sustained interest and cognitive stimulation of the problem solving/Games sense approach to learning has been highlighted in this project.</p>
Kirk, D. (2006) <i>Quest</i> , 58(2), 255-264,	Sport Education, Critical Pedagogy, and Learning Theory: Toward an Intrinsic Justification for PE and Youth Sport	School PE is well placed to take up the challenge of sustaining sport as a moral practice and that the pedagogical tools already exist to do this in the form of a critical pedagogy.
Chow, J. Y., Davids, K., Button, C., Shuttleworth, R., Renshaw, I. & Araújo, D. (2007). <i>Review of Educational Research</i> . 77(3), 251–278	The Role of Nonlinear Pedagogy in Physical Education	Proposed using key conceptual components from a dynamical systems perspective to lay the foundations for the development of a conceptual model for nonlinear pedagogy, providing a theoretical framework to further examine motor learning issues in pedagogy and PE.
Pill, S. (2008). Paper presented at the Flinders University ‘Play to Educate’ - Sport in Education Conference, January 21 st 2008.	Involving students in the assessment of game performance in physical education.	Authentic game and sport play assessment in PE is viewed as the process of collecting data, interpreting data, and using data to create knowledge and further develop learning. Procedures, such as the TSAP and Game Performance Assessment Instrument (GPAI), when embedded in the teaching-learning process, do more than provide evidence for summative assessment. The procedures provide for both valid and reliable assessments that continuously inform teaching and learning. The GPAI and TSAP are examples of authentic PE game assessment as they facilitate learning as well as provide for the collection of evidence of learning having occurred.
Farrow, D. & Reid, M. (2010). <i>Journal of Sports Sciences</i> , 28(7), 723-732	The effect of equipment scaling on the skill acquisition of beginning tennis players	The modified ball/scaled court intervention group rated their experience significantly happier than the standardised adult group. There is a stronger learning effect generated by court scaling relative to the influence of ball type.

Publication	Title	Findings
Pill, S. (2011) PHENex Journal, 3(1)	Seizing the moment: Can <i>game sense</i> further inform sport teaching in Australian physical education	The National Curriculum is an opportunity to shape sporting experiences as educative through quality curriculum and teaching as provided through a Game Sense approach. The author notes that teachers across Australia strive for deep learning through high quality teaching-learning processes in all areas of the curriculum. The case is made that <i>Game Sense</i> can be the model to deliver this for the sport component of the Australian Curriculum for Health and PE.
Roberts, S. & Fairclough, S. (2012). European Physical Education Review, 18(1) 97–113.	A five-stage process for the development and validation of a systematic observation instrument: The system for observing the teaching of games in physical education (SOTG-PE)	The SOTG-PE is a valid observation system for recording activity, lesson context and teacher interactions during various PE games lessons from the invasion, net/wall and the striking and fielding categories.
Harvey, S., & Jarrett, K. (2013). Physical Education and Sport Pedagogy, 19:3, 278-300.	A review of the game-centred approaches to teaching and coaching literature since 2006	GCA pedagogies are of significant importance as they have the potential to promote change within current adult-centric cultures of youth sport and encourage engagement in physical activity over the life course. The authors recommend that GCA research undergo continued expansion.
Light, R. (2013) Game Sense: pedagogy for performance, participation and enjoyment. Routledge.	Ch2- The development of Game sense Ch5 - Game Sense Pedagogy	Game based approaches to sports coaching and PE teaching have included: <ul style="list-style-type: none"> • Teaching games for Understanding • Game Sense (a less structured approach compared with TGfU) To adopt this approach to teaching requires a significant change in pedagogy and the role of the teacher.
Light, R., Curry, C., & Mooney, A. (2014). Game Sense as a model for delivering quality teaching in physical education. Asia-Pacific Journal of Health, Sport and Physical Education, 5(1), 67-81.	Game Sense as a model for delivering quality teaching in physical education	PE teachers using the Game Sense approach will be able to provide high-quality learning experiences for students and make a start toward making PE a valuable educational experience in schools.
Stolz, S. & Pill S. (2014). European Physical Education Review. 20(1), 36–71.	Teaching games and sport for understanding: Exploring and reconsidering its relevance in physical education	If TGfU is to have improved relevance for teachers of PE more of an emphasis needs to be placed on the creation of standard characteristics of pedagogy that drive this practice within curricula.

Publication	Title	Findings
Drummond, M. & Pill, S. (2011). Ch 11 In Georgakis, S. & Russell, K. (Eds.), Youth sport in Australia, p165-178. Sydney University Press	The role of physical education in promoting sport participation in school and beyond	Argues for a curriculum vision for sport in PE that moves class participation beyond narrow technical and elite perspectives of sport participation to one which is more inclusive and understanding of broader sociological issues. Proposes sport literacy for education in, through and about sport.
Light, R. (2014). Ch 2 p.29-39. In Contemporary developments in game teaching. Routledge.	Positive pedagogy for physical education and sport: Game Sense as an example	The positive nature of games based approaches can support learning and make it flourish. Through this approach, learning to learn along with social learning make it more likely that students will transfer their understanding into other aspects of life.
Light, R. L. & Harvey, S. (2015). Sport, Education and Society, Published online 04 Mar 2015	Positive Pedagogy for sport coaching	Using game-based models, like Teaching Games for Understanding, Game Sense, Play Practice and the Tactical-Decision Learning Model makes it more likely to transfer dialogue, reflection and purposeful social interaction into life off the court or sports field than models narrowly focussed on improving sport technique and fitness.

The second category of publication dealt with the Sport Education (SE) model (Table 3). In Australia, SE originated in 1995 from a trial by Edith Cowan University's Sport and Physical Activity Research Centre (SPARC) and the Western Australian Ministries of Education, Sport and Recreation that was commissioned by the Australian Sports Commission's then AUSSIE SPORT National Unit. SE is a curriculum and instruction model designed to provide authentic, educationally rich sport experiences for students in the context of school PE (Siedentop, Hastie & van der Mars, 2011). It has six basic features:

1. Seasons of sport;
2. Affiliation to a team;
3. Formal competition within the season;
4. Culminating events to conclude the season;
5. Record keeping to track achievement and enable recognition of team and individual accomplishments; and
6. Festivity to celebrate team and individual achievement.

Kirk (2004) noted that internationally public discussions about PE are often framed through approaches to elite sport or talent identification. He suggests that SE is one model that is a better alternative to the elite sport model 'talent identification'. He sees that SE enables the retention of sport in PE in a way that emphasises desirable ethical and educational outcomes. The model has been successfully applied beyond team games to athletics (Hastie, Calderon, Rolim & Guarino, 2013).

Literature in this group also considered hybrids of SE with other models to enhance the micro-pedagogy of the SE model. For example, Alexander and Penney (2005) develop SE features within a game-based model to amplify the focus on game competency development. This led

to a new relationship between SE and TGfU they called the 'Clinic-Game Day' model. Ennis (1999) described the Sport for Peace approach entwined with the SE model structures that included additional foci of:

- Conflict negotiation
- Self and social responsibility; and
- Care and concern for others

Similarly, Hastie and Buchanan (2000) described the development of a hybrid model- Empowering Sport, which combined some distinguished features of SE (e.g. formal competition and the persisting team) together with facilitating personal responsibility from Teaching Personal and Social; Responsibility through Physical Activity (TPSR) to present a model of game play which demonstrated a particularly constructivist learning style. They found that some of the features of TPSR strengthened the foundation of SE, but a hybrid model (Empowering Sport) needed to be developed. This hybrid model presented a powerful triangle of goals: sport skill competence, social responsibility, and personal empowerment. Despite the positive results stemming from hybrid models such as Empowering Sport, follow-up studies specifically using these developments have not occurred and the original SE model continues to occupy the majority of scholarly and research literature informing PE teachers intentions to educate in, through and about sport.

Table 3. *Sport education in PE model*

Publication	Title	Findings
Hastie, P. A. & Buchanan, A. M. (2000). <i>Research Quarterly for Exercise and Sport</i> , 71(1), 25-35	Teaching Responsibility through sport education: Prospects of a coalition	Some of the features of TPSR strengthened the foundation of SE, but due to the need to introduce new tasks and problems for students, a hybrid model (Empowering Sport) was developed. This hybrid, with a predominately ecological integration perspective, presents a curriculum model that allows for achievement within a powerful triangle of goals-sport skill competence, social responsibility, and personal empowerment.
Browne, T., Carlson, T., & Hastie, A. (2004). <i>European Physical Education Review</i> , 10(2), 199-214.	A comparison of rugby seasons presented in traditional and sport education formats	Students reported that they enjoyed the unit, regardless of the teaching approach adopted and they believed that they experienced improvement in skills, especially those in SE. Furthermore, no student expressed the belief that the 'season' or unit was too long. The students in SE reported that they enjoyed the greater autonomy and organisation duties within the SE model, but the students in the Traditional Group felt that their group was not capable of the autonomy given to SE.
Kirk, D. (2004). <i>Physical Education and Sport Pedagogy</i> , 9(2), 185-195.	Framing quality physical education: the elite sport model or sport education?	SE is one model that is a better alternative to the elite sport model. SE enables the retention of sport in PE in a way that emphasises desirable ethical and educational outcomes.

Publication	Title	Findings
Hastie, P. (2005). In <i>Critical Inquiry and Problem Solving in Physical Education</i> . Routledge.	Ch 5 Problem-solving in teaching sports	SE fits within a contemporary constructivist theory of learning. Learning in SE should increase student's interest and personal ownership of new knowledge and responsibilities. SE also promotes critical inquiry where they not only are required to solve problems but also examine the consequences of their decisions. SE is thus a student centred model.
Parker, M. B. & Matthew Curtner-Smith, M. (2005). <i>Physical Education and Sport Pedagogy</i> , 10(1), 1-18.	Health-related fitness in sport education and multi-activity teaching	Results indicated that pupils in the multi-activity (MA) unit spent slightly more than the recommended 50% of lesson time in moderate to vigorous physical activity (MVPA) while the pupils in the SE unit did not approach this level. The authentic and 'situated' nature of SE appears to lead to a trade-off situation.
Wallhead, T. & O'Sullivan, M. (2005). <i>Physical Education and Sport Pedagogy</i> , 10(2), 181-210.	Sport Education: physical education for the new millennium?	SE research indicates the model has the potential to promote more positive cultural dimensions of sport and offer a challenge to the exclusionary aspects of much of institutionalised sport.
Alexander, K. & Penney, K. (2005). <i>Physical Education and Sport Pedagogy</i> , 10(3), 287-301.	Teaching under the influence: Feeding games for understanding into the sport education development-refinement cycle.	A new relationship between SE and TGfU within what was called the 'Clinic-Game Day' (CGD) model.
Kirk, D. (2006). <i>Quest</i> , 58(2), 255-264.	Sport education, critical pedagogy, and learning theory: Toward an Intrinsic justification for physical education and youth sport	School PE is well placed to take up the challenge of sustaining sport as a moral practice and that the pedagogical tools already exist to do this in the form of a critical pedagogy.
Mohr, D. J., Townsend, J. S & Pritchard, T. (2006). <i>The Physical Educator</i> , 18-29.	Rethinking middle school physical education: Combining lifetime leisure activities and sport education to encourage physical activity	SE and Life-time Leisure Activity are proposed as solutions to address the pedagogical problem for middle school PE. Both require a shift in thinking about what is taught (content) and how content is taught (instructional methods).
Brock, S. J. & Hastie, P.A. (2007). <i>ACHPER Healthy Lifestyles Journal</i> , 54(1), 11-15.	Students' conceptions of fair play in sport education	If students only perceive success as winning, then teachers are simply perpetuating an elite sports model, rather than the goals of fair play and equitable participation as espoused for SE.

Publication	Title	Findings
Hastie, P., de Ojeda, D. M., Caldero'n Luquin, A. (2011). Physical Education and Sport Pedagogy, 6(2), 103-132.	The development of skill and knowledge during a sport education season of track and field athletics	SE classes outperformed the traditional classes in both technique and skill execution. Only the SE group made significant improvements in content knowledge.
Rui Araújo, R., Mesquita, I. & Hastie, P. A. (2014). Journal of Sports Science and Medicine, 13, 846-858.	Review of the status of learning in research on sport education: Future research and practice	Consideration should also be given to the use of hybrid SE in order to provide a more complete understanding of the teaching and learning process and its complexity.
Harvey, S., Kirk, D. & O'Donovan T. M. (2014). Sport, Education and Society, 19(1), 41-62.	Sport education as a pedagogical application for ethical development in physical education and youth sport	If sport is to provide young people with an education in ethical conduct, it must be designed explicitly and intentionally to do so. Pedagogical elements for ethical development are presented: (1) ethical contracts; (2) sports panels; (3) modified games; and (4) awards and rewards.

The third category of publication dealt with personal and social development in PE using sport as the context for this development. In this category there was some overlap with the SE literature. For example, Harvey, Kirk and O'Donovan (2014) explained that the SE model can be a context for character development if designed deliberately for this intention. They suggested that four pedagogical applications within SE be considered by PE teachers, youth sport practitioners and administrators to promote ethical development: 1. ethical contracts; 2. sports panels; 3. modified games; and 4. awards and rewards systems.

Personal and social development is an often-cited outcome of a quality PE program in schools (Kirk, 2010). With growing media attention on elite athletes and their behaviours and the media positioning childhood and youth in a polarised manner as being either dangerous or in danger (Prout & Hallett, 2003) then school (and sporting clubs) are often required to respond in ways that are practical and appropriate. Curricula response in Australian schools inevitably view the Health and PE Learning Area as the place where these values, skills and abilities are best learnt (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008). Other examples of sport-based programs for personal and social skill learning include the Sports United to Promote Education and Recreation program (Danish, 2002) and Hokowhitu Program (Heke, 2001).

Table 4. Sport as a tool for personal and social skill teaching and learning in PE

Publication	Title	Findings
Theodoulides, A. & Armour, K.M. (2001). European Physical Education Review, (1), 5-23.	Personal, social and moral development through team games: some critical questions.	Little empirical evidence exists to support team games being a vehicle for children's personal, social and moral development in PE. It is argued that clearer conceptual definitions and critical debate within the PE profession are needed in order to determine the role of team games in promoting pupils' personal, social and moral education.

Publication	Title	Findings
Danish, S., Forneris, T., Hodge, K., & Heke, I. (2004). <i>World Leisure Journal</i> , 46(3), 38-49.	Enhancing youth development through sport	Sport is more than physical activity. To realise these outcomes educators and coaches need to: 1. develop skills in instructional design and program development and evaluation; and 2. must reach more adolescents with these programs and encourage school-based and after-school based programs to adopt Sport-Based Life Skills Programs, such as - Teaching Personal & Social Responsibility through Physical Activity (Hellison 1995); Sports United to Promote Education and Recreation (Danish 2002) and the Hokowhitu Program (Heke, 2001).
Quay, J. & Peters, J. (2008). <i>Journal of Curriculum Studies</i> , 40(5), 601–626.	Skills, strategies, sport, and social responsibility: reconnecting physical education.	Bringing together the five models of Teaching Personal & Social Responsibility through Physical Activity, Creating and Developing Games, SE in PE Program, Teaching Games for Understanding and Fundamental Movement Skills this program suggests a connection can be made with children’s lives beyond the PE lesson.
Hellison, D. (2011). 3rd Edition, Human Kinetics.	Teaching personal and social responsibility through physical activity	Introduce and provide an array of materials to support the implementation of the Teaching Personal and Social; Responsibility through Physical Activity (TPSR) model as a proven effective in school-based PE program.

An emerging field of discussion revealed in the literature scan was that of Physical Literacy. Lundvall (2015) provided a synthesis of the literature in the field of Physical Literacy since 2000. The potential for Physical Literacy to positively re-brand and revitalise PE was suggested, however, in some jurisdictions the concept had been misrepresented as a synonym for fundamental movement skill teaching or sport skill teaching. It is recognised that the concept of Physical Literacy is contested with questions raised about multiple definitions and empirical support for the assertions associated with the concept. We suggest the current debate about Physical Literacy is an extension of the ongoing challenge for PE to move beyond what Dyson, Griffin & Hastie (2004) described as ‘superficial engagement’ with matters of pedagogy to move towards better informed practice that ‘powers up’ sport teaching in PE. Recently, Physical Literacy seems to have been re-imagined away from its origins as a philosophy (Whitehead, 2001) and a potential outcome of PE (Sprake and Walker, 2015) to a pedagogical proposition and model for PE in search of a supportive pedagogical argument and structure (Kirk, 2013).

Conclusion

The major findings of the comparative analysis were:

1. Game Based approaches (such as Game Sense (Australia)) to learning in PE technical and tactical dimensions of skilled performance in game play are promoted in preference to direct instruction or practice based models;
2. The SE curriculum and instruction model is well researched and validated as a design to provide authentic, educationally rich sport experiences for students in the context of school PE; and

3. Personal and social development is an often-cited outcome of quality PE teaching in schools and to be achieved needs to be a deliberate pedagogical focus of the PE teacher.

The relevance of contemporary pedagogies through MBP based approaches like the game-based model (such as the Australian Game Sense approach), SE and TPSR are encouraging innovation away from the more historically common directive practice style of the 'traditional' PE method. With respect to game-based models, the literature is challenging educators to use pedagogical approaches that have been shown to enhance learner engagement compared to a more traditional directive style framing sport as sport techniques when teaching for game competency. To fully deliver on the Arnoldian idea of PE as education in, through and about movement using sport as the educative vehicle, the SE model has been shown to be a curriculum model through which those three educative pillars can be enacted. Directly linking sport teaching and learning in PE through this Arnoldian concept, Sport Literacy (Drummond & Pill, 2011; Pill, 2015) has been specifically described as a curriculum concept for the valuing of learning in, through and about sport in PE. Sport literacy is potentially both a praxis and curriculum scaffold for sport curriculum design and enactment in PE.

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