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Health and physical education (HPE): Implementation in primary schools



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ABSTRACT

This research investigates Australian Government Primary School Principal perceptions of how health and physical education (HPE) is implemented. Principals of primary schools in the state of Victoria (Australia) were deliberately chosen as participants as they are key school leaders who have a high degree of autonomy and power to improve the quality of teaching. The Victorian state Government Department of Education and Early Childhood Development (DEECD) first listed outcome for children 0–8 years is: 'children have the best start to life to achieve optimal health, development and wellbeing'. Hence, this research offers pertinent results and recommendations in achieving this outcome. The data were gathered using ex-post facto surveys completed by 138 principal participants from a cross section of schools. The key findings were that principals: (1) strongly desire to have specialist HPE teachers in their schools; and (2) want HPE specialist teachers who are interested in and want to be working with primary aged children. Furthermore, there was strong interest in HPE specialists who are able, willing and qualified to teach as generalist classroom teachers.

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1. Introduction

This research project investigates Primary School Principal perceptions of health and physical education (HPE) within Government schools in the state of Victoria, Australia. HPE is an essential key learning area that is compulsory within Australian school curriculum. In 1989 The Hobart Declaration on Schooling stated Goal Nine; "to provide for the physical development and personal health and fitness of students, and for the creative use of leisure time" (Australian Education Council (AEC), 1989). Again in 1999, HPE was identified as one of the eight key learning areas in The Adelaide Declaration on National Goals for Schooling in the Twenty-first Century, and more recently in The Melbourne Declaration on Educational Goals for Young Australians, held in December 2008.

Research suggests that the optimum time for children to learn and refine their motor skills and to be introduced to positive HPE experiences is during preschool and early primary school years (Australian Curriculum, Assessment and Reporting Authority (ACARA), 2012; Branta, Haubenstricker, & Seefeldt, 1984; Commonwealth of Australia, 1992; Espenschade & Eckert, 1980; Kirk, 2005). However, as a key learning area HPE has had to overcome a number of barriers throughout history that have impeded implementation and curriculum developments (Brooker & Penney, 2009; Lynch,

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2014a, 2014b; Stolz, 2009). The most prominent time was the late 1980s and early 1990s, when the PE curriculum within Australian schools was considered to be in crisis (Tinning, Kirk, Evans, & Glover, 1994). The crisis was at first identified among physical educators [now health and physical education] at conferences and in journals: National Workshop on Australian Physical Education [now HPE] in Crisis (Deakin University, 1991) and the National Conference on Junior Sport (Australian Sports Commission, 1991). 'In-house' discussions of crisis led to a Senate Inquiry into the state of PE [HPE] and sport within Australian Education systems. This review was considered as the most significant in the history of physical education [now HPE] (Kirk, 1998). The findings of the Senate Inquiry (Commonwealth of Australia, 1992) supported the in-house discussions of crisis among physical education [now HPE] professionals.

Fifteen years later research was conducted with the purpose of determining whether the problems identified by the 1992 Senate Inquiry into Physical [now HPE] and Sport Education were of concern within three Brisbane Catholic Education (BCE) primary schools, as well as to investigate how 'health' was implemented (Lynch, 2007a). The interpretivist study adopted an 'evaluative' and 'multiple' case study (Merriam, 1998) and is the only identified follow up study to the 1992 Senate Inquiry, specifically of HPE implemented in practice. Findings suggested that the three case study schools "appeared to be vulnerable to many of the factors that led to the decline in HPE as revealed in the report by the Senate Standing Committee on Environment, Recreation and the Arts" (Lynch, 2007a, p. 22). Also, that "not enough had changed since the 1992 Senate Inquiry into Physical [now HPE] and Sport Education" (2007, p. 22). However, it was acknowledged that this study was only a small scale sample and that the data was limited by nature. It was "recommended that a large scale research project be conducted to ascertain verisimilitude of findings" (2007, p. 22). A large scale research project has been a gap in research and is the purpose of this study.

2. Literature review

The Australian Curriculum Assessment and Reporting Authority (ACARA) draft shape paper for HPE, espouses quality experiences for children and the importance of having these from the very beginnings of schooling. What is being accentuated within this shape paper is one particular aspect of quality HPE; that it is 'developmentally appropriate'. The priority for health and physical education is:

to provide ongoing, developmentally appropriate opportunities for students to practise and apply the knowledge, understanding and skills necessary to maintain and enhance their own and others' health and wellbeing. (ACARA, 2012, p. 4).

Quality HPE "should be a developmentally appropriate educational experience designed to provide immediate and lifelong benefits" (Graham, Holt-Hale, & Parker, 1998, p. 4). Australia's first 'Active Healthy Kids' Report Card on physical activity for children and young people released in May this year (2014) urged that the quality (intensity of activity) and quantity of activity is 'age appropriate'. To enable a deeper understanding surrounding implementation of 'developmentally appropriate' HPE in primary schools, the literature reviewed has been organised around three elements:

- History of crisis: 1992 Senate Inquiry;
- Indicators of concern in schools today; and
- Significance of the state of Victoria (Australia)

3. History of crisis: 1992 Senate Inquiry

Developmentally appropriate curriculum opportunities relate directly to quality HPE. This was a major problem in the late 1980s and early 1990s, when the HPE school curriculum within Australian schools was considered to have been in crisis (Tinning et al., 1994; Dinan-Thompson, 2009). This concern led to a Senate Inquiry (Commonwealth of Australia, 1992) into the state of PE [now HPE] and sport within Australian Education systems. The Inquiry began on the May 7th, 1992 through an established committee whose job it was to assess, investigate and report on the state of PE [now HPE] (Commonwealth of Australia, 1992). The committee heard evidence from fifty-one individuals and groups, and received 219 submissions from a variety of interested parties. One inspection tour was conducted and the Report was published in December 1992 (Swabey, Carlson, & Kirk, 1998). The findings of the Senate Inquiry (Commonwealth of Australia, 1992) supported the in-house discussions of crisis among health and physical education professionals.

The Senate Inquiry found that there was in fact a decline in the opportunities for quality HPE in Australian schools although paradoxically there was unanimous support for the learning area. The problems were mainly with resources and the time allocation to the key learning area which resulted in a drastic decline in children's skill levels and physical fitness (Tinning et al., 1994). Another major problem was that "suitably qualified physical education [health and physical education] teachers are [were] not being employed to teach physical education [health and physical education] and school sport to all children" (, p.xiv). There was also no required accreditation or formal training in physical or sport education [health and physical education] as a condition of employment for graduating primary school teachers (Moore, 1994).

Several Australian studies have described the lack of qualifications of classroom teachers to deliver HPE programs, largely as a result of inadequate HPE teacher training, thus failing to develop teacher confidence (Morgan & Bourke, 2005, p. 7).

For example, in New South Wales primary schools, Webster (2001) found that the teacher of HPE is most likely to be a generalist teacher with no specialist training. This raises similar concerns for other states. Many schools leave the HPE programs to classroom teachers who are often "not adequately prepared for the job" (Treanor & Housner, 1998, p. 26). HPE "must be taught by teachers with appropriate physical education skills" (Commonwealth of Australia, 1992, p.xiv), because HPE is "a dynamic area with moving bodies, objects, and striking implements, and teachers with inadequate preparation can place children at risk of injury and then liability becomes a very real concern" (Treanor & Housner, 1998, p. 26). Implementing HPE by employing a specialist teacher guarantees regular HPE lessons, however, "it does not assure the implementation of a quality HPE program" (Lynch, 2007b, p. 6). Furthermore, when teachers are unable to provide a meaningful HPE program, the community questions the necessity of HPE in the curriculum (Hickey, 1992). In April 1992 the crisis was made public during a Four Corners program on the Australian Broadcasting Corporation (ABC) and was also reinforced later that year with the release of the Senate Inquiry report (Kirk & Penney, 1996).

In elaborating on the support for crisis in the key learning area, Swabey et al. (1998) listed the following reasons for the decline, drawing on evidence presented during the Inquiry:

- a squeeze on subjects such as health and physical education due to the crowded curriculum;
- incorporating physical education into health education;
- no coherent HPE policy and a lack of agreed outcomes for HPE;
- devolving decision-making to school councils;
- a reduction in the number of HPE specialist teachers;
- a lack of Education Department support for teachers supervising HPE; and
- confusion between HPE and other sporting programs such as Aussie Sport (p. 4).

More so, in primary schools there were specific issues outlined pertaining to facilities and resources. Health and physical education is a necessary part of the primary curriculum (Australian Government, 2014; Commonwealth of Australia, 1992), however, HPE was being squeezed in the crowded primary school curriculum by other key learning areas resulting in fewer HPE resources being allocated (Swabey et al., 1998). "Skills are developed at pre and primary school" (Commonwealth of Australia, 1992, p. 58), hence the Committee recommended that more resources should be allocated to primary school HPE programs (Commonwealth of Australia, 1992).

Another problem within this key learning area is the degree of importance it is afforded by classroom teachers. In many cases teachers perceive HPE as a release from classroom activities rather than an integral aspect of children's education (Clarke, 2000; Medland and Taggart, 1993). "Teaching ideologies are often affected by teachers' perceptions of their prior experiences in sport and physical activity" (Morgan, Bourke, & Thompson, 2001, p. 2). For many non-specialist teachers, prior experiences may often have been negative which they then replicate (Downey, 1979). Hickey argues that "physical education [HPE] in the primary school curriculum has been increasingly devalued over the past decade" (1992, p. 18). This situation, he suggests has resulted from the inability of generalists to provide a meaningful HPE program, and consequently the community questions the necessity for HPE in the curriculum. Furthermore, the dominant culture places priority on the literacy and numeracy learning areas as promoted and supported by the Commonwealth, leaving HPE with less value (Australian Government, 2014; Dinan-Thompson, 1998; Thompson & Gitlin, 1995). This has recently been intensified by ACARA and the construction of the 'My School' website, which provides schools and their communities with comparisons of their students' performances in literacy and numeracy (Lynch, 2014a, 2014b, p. 5).

The Senate Inquiry recommended that as a matter of priority, detailed written curriculum policies be constructed (Commonwealth of Australia, 1992). The Senate Inquiry coincided with the development of eight Key Learning Area National Statements and Profiles. These documents resulted in PE curriculum being represented by the 'health and physical education' broad area of learning. The National Statements and Profiles (Australian Education Council, 1994a, 1994b) were written to promote cohesion in the curriculum through national collaboration, to enable equitable sharing of resources across systems and to remove unnecessary differences that were in existence between the systems, in a nationally consistent curriculum (Marsh, 1994). The HPE National Statement and Profile provided a foundation for the construction of a HPE syllabus within states (Dinan, 2000; Glover, 2001) and was favourably received by educators as it offered hope for this troubled key learning area.

4. Indicators of concern in schools today

These issues, according to the Australian Council for Health, Physical Education and Recreation (ACHPER, 2011) still exist today. "It is true that some schools struggle to provide quality HPE and sport, in particular in primary schools". Furthermore, some graduate teachers are to this day completing teaching degrees without studying any units in health and physical education and are then responsible for implementing this learning area in schools (Lynch, 2005, 2013). This implies that subsequent curriculum change as a result of the 1992 Senate Inquiry recommendations may have only been surface level if at

all. Health and physical education primary specialist teachers are only employed sporadically within primary schools across Australia with, questions often raised about "who is teaching HPE, and who is deemed competent to teach HPE in schools" (Dinan-Thompson, 2009, p. 48). Hence, the recommendations of a Senate Inquiry made 23 years ago appear to not have found their way into all schools.

A study released in March, 2013, 'The wellbeing of young Australians', conducted by Australian Research Alliance for Children & Youth (ARACY) involved over 3700 people. This study evidenced that Australian children and youth are not doing as well as they should. Australia ranked in the top third of Organisation for Economic Co-operation and Development (OECD) countries for approximately one-quarter of the indicators (12 out of 46). Areas of concern where Australia was ranked in the bottom third included "jobless families, infant mortality, incidence of diabetes and asthma, young people in education, 3–5 year olds in preschool, and carbon dioxide emissions" (ARACY, 2013, p. 4). Despite the rhetoric about children wellbeing and social justice, this report indicates that there has been no improvement in the majority of areas from the previous report in 2008. This raises further questions about the implementation of health and physical education within schools.

More recently, the Active Healthy Kids Australia Physical Activity Report Card for Children and Young people was developed by a team consisting of 26 researchers and representing 12 universities and research groups. The Report Card was "developed using synthesised data from a number of national and state-based surveys" (Active Healthy Kids Australia (AHKA), 2014, p. 6). The surveys were all conducted since 2008 and involved more than 33 000 participants (boys and girls) between the ages of 2 and 17 years. The 2014 AHKA Report Card assigns letter grades across 12 different indicators (Table 1): Indicators and grades directly relating to the implementation of HPE in Australian primary schools include:

- Overall physical activity levels (D–)
- School—infrastructure, policies and programming (B–)
- Physical education and physical activity participation in schools (INC)

(PE and physical activity participation in schools was graded 'incomplete', due to a lack of data relating to PE and physical activity participation within Australian primary schools, which directly relates to HPE implementation). It is axiomatic that primary schools' play a key role in children's health and wellbeing. Therefore, the fact that there were no data relating directly to HPE 'physical activity' participation in Australian primary schools available is alarming.

In Australia, HPE teachers (specialist or generalist classroom) need to be able to deliver quality health and physical education lessons across all strands, this includes physical activity, health and personal/social development. "Indeed, Australia is one of only a few countries that combines the strands of health and physical education into one curriculum" (Australian Government, 2014, p. 203). In other countries, such as the United Kingdom, Physical Education (PE) courses specifically tailoring to children in the 3–11 age range, where teachers are qualified generalist classroom teachers with a specialism in PE are offered. "Many countries require the study of physical education over all of the school years but generally speaking there is greater focus on physical activity than health and wellbeing" (Australian Government, 2014, p. 203). What has traditionally been offered in Australia are quasi HPE courses where pre-service primary teachers may be able to choose electives in general sport often relating to industry or secondary physical education (Lynch, 2013). It is argued that "while these offer opportunities for enthusiasts to study areas of interest, ideal candidates for primary HPE specialists, unfortunately they lack the 'developmentally appropriate' key aspect" (Lynch, 2013, p. 11) that the draft paper and literature accentuate.

Australia has a new national curriculum for HPE which is awaiting final endorsement by the Australian Government, "however is being implemented by various schools around the country" (Lynch, 2014a, 2014b, p. 1). A recent review of the curriculum suggests there is general satisfaction with the curriculum and indicated strong support for the inclusion of health and physical education (HPE) in the Australian curriculum (Australian Government, 2014). Within Australia, "It is argued that physical education has long been the 'foundation stone' for children's participation in sport and that HPE enables improved 'holistic' development." (Lynch, 2014a, 2014b, p. 9). The new Australian curriculum for HPE promotes 'health literacy' which in a broad sense "address[es] the capacity of individuals to understand and act on messages not only in health-related settings, but also in the social communities in which they live" (Macdonald, 2013, p. 101). Health literacy relates to 'Lifelong health promoting behaviours' endorsed by previous state and territory syllabai and frameworks derived from the 1994 National Statement and Profile.

Focus areas that sit within the HPE curriculum include: mental health promotion, sexuality and reproductive health, food and nutrition, safety, drug use, respectful relationships, personal identity and sense of self, physical activity and fitness,

Table 1Letter grade categories.	
A	Australia is succeeding with a majority of children and young people (81–100%)
В	Australia is succeeding with well over half of children and young people (61–80%)
С	Australia is succeeding with about half of children and young people (41–60%)
D	Australia is succeeding with some but less than half of children and young people (21–40%)
F	Australia is succeeding with very few children and young people $(0-20\%)$
Incomplete (INC)	Not enough available evidence to assign a grade to the indicator

games and sports, and aquatics and water-based activities (ACARA, 2012, p. 22). Professor Chris Hickey of Deakin University commented that the new HPE curriculum within Australia, "does not represent a radical reform of what teachers know and do, but it does have the potential to challenge and refurbish some of the long-held underpinnings of the field" (Australian Government, 2014, p. 205). Similar sentiments have been conveyed regarding the Australian movement towards health promotion, "It appears that curriculum change in the HPE learning area has been nationally inconsistent, with some states implementation of the last 1994 curriculum being more gradual than others" (Lynch, 2014a, 2014b, p. 11).

5. Significance of the state of Victoria

The Victorian Department of Education and Early Childhood Development (DEECD) key responsibilities inform outcomes that the Department strives to achieve within its birth-to-adulthood learning and development agenda (2014). The first listed outcome for Children 0–8 years is: "Children have the best start to life to achieve optimal health, development and wellbeing" (http://www.education.vic.gov.au/about/department/Pages/default.aspx). This outcome sits within, and directly relates to, the health and physical education learning area for both the early years and primary school curriculum documents:

In Health and Physical Education students develop the knowledge, understanding and skills to support them to be resilient, to develop a strong sense of self, to build and maintain satisfying relationships, to make health-enhancing decisions in relation to their health and physical activity participation, and to develop health literacy competencies in order to enhance their own and others' health and wellbeing. (ACARA, 2012, p. 2).

Principals' experiences and insights matter. "We know that school leadership must be at the centre of our reform effort. In our decentralised system where principals have a high degree of autonomy it is they who have the power to improve the quality of teaching." (, p. 3). School Principals "play a major role in the success of the implementation of the HPE program as they are directly responsible for supporting the development, implementation and monitoring of the curriculum" (Lynch, 2007b, p. 6). Furthermore, principal feedback would assist universities in preparation of teachers for the school environment (DEECD, 2012). A survey conducted by McKenzie, Rowley, Weldon, and Murphy (2011) found that less than 30% of principals felt that graduate teachers had acquired important skills for effective teaching and learning. Many Victorian primary school HPE teachers "find themselves in this role with little or no formal training or experience specific to this learning area" (ACHPER Victorian branch, 2013, p. 9). Principals are responsible for employing teachers and specifically HPE specialist teachers. They "decide whether or not to employ a HPE specialist teacher and ultimately who that person will be? This is an extremely important decision to be made and one that requires a great deal of thought and effort, carefully considering teachers' qualifications and experiences" (Lynch, 2007b, p. 7). Hence, it is pertinent that principals are considered and their opinions are valued.

Another reason why the state of Victoria data is significant is because it does appear that HPE policy and curriculum change has made slow progress. The slow change in HPE nationally since the Senate Inquiry and development of eight Key Learning Area National Statements and Profiles (AEC, 1994a) is best described as curriculum change 'gradualism', which represents a 'gradual rather than immediate change in policy' (Macdonald, 2012). For example, it is argued that the Victorian Institute of Teaching (VIT) specialist area guidelines policy for pre-service teacher preparation (2012) has no evidence of the socio-cultural perspective underpinning the 1994 National Statement and Profile (Lynch, 2014a, 2014b). Furthermore, the key learning area is titled 'Physical Education' which Dinan-Thompson (2009) shares is the name referred to the key learning area pre 1994 National Statement and Profile. More so, the specialist area guidelines have ''no presence of socio cultural health or personal development'' (Lynch, 2014a, 2014b, p. 6). Conversely, many of the 1994 Statement and Profile sentiments are echoed in the new AUSVELS online curriculum, in the initial stages of implementation in most Victorian schools. Hence, primary school principals within the state of Victoria are presently of particular interest.

This research investigates contemporary principals' perceptions of HPE teachers and specifically the implementation of HPE in primary schools. A 1993 study investigating preparation of Victorian HPE primary pre-service school teachers was described as 'disturbing' and inadequate. The study concluded that it "should not be surprising that Victorian school children are being severely disadvantaged in the learning area" (Walkley, 1993, p. 4). This research is a present gap within literature that is in desperate need of revisiting; the last time school HPE implementation data was collected was during the Senate Inquiry 23 years ago and although new curriculum developments offer some promise, there is still much to be learned.

6. Methodology

6.1. Research design

This study sits within an interpretivist paradigm, as educational leadership and the role of the school principal is socially complex and constructed: "Social realities are constructed by the participants in their social settings" (Glesne, 1999, p. 5). The participants share their experiences and perspectives, which are never wrong, hence, their voices can be heard. This

Employing the interpretive perspective assumes that there is change, as this perspective portrays an ever-changing world (Glesne, 1999), where emphasis is placed on the change and development of individuals, groups and societies (Sarantakos, 1998). It is envisaged that investigation of the changes will reveal both positive and negative outcomes in the HPE implementation process. This assumption is based on personal experiences of the researcher, who in "qualitative research is often the primary instrument for data collection and analysis" (Merriam, 1998, p. 7). The method most appropriate for this population of study is a questionnaire (Kumar, 2005) due to expense and time, as the geographical distribution of the study population are "scattered over a wide geographical area" (Kumar, 2005, p. 127). Furthermore, this method of gathering data was most suitable as school principals are articulate in written expression, as well as being extremely busy. The survey questionnaire was mailed with a prepaid, self-addressed envelope and was accompanied by a covering letter (Berg & Latin, 2004). Surveys are abundant in society and often used in Health, Physical Education and Recreation.

Through this interpretivist paradigm meaning that already exists was explored (inductive research) therefore the surveys were ex-post facto design (Cohen, Manion, & Morrison, 2007), adopting a mixed methods approach. The questionnaire formulates open-ended questions (qualitative) where the respondent "writes down the answers in his/her words" (Kumar, 2005, p. 132), providing principals with the opportunity to "express themselves freely, resulting in a greater variety of information" (Kumar, 2005, p. 135) and closed-ended (quantitative) questions where "the respondent ticks the category that best describes their answer" (Kumar, 2005, p. 132).

The open-ended and closed-ended questions on the ex-post facto designed survey represented identified Senate Inquiry problems relating specifically to resources, time and teacher qualifications/training:

- 1. Which teachers are responsible for HPE in your school (e.g. classroom, specialist HPE, outsourced)? (*teacher qualifications/training*);
- 2. If HPE is outsourced, please give details of what is outsourced and background/qualifications of the people who take the classes? (*teacher qualifications/training and resources*);
- 3. Do you prefer to have specialist HPE teachers in your school? Yes/no;
- 4. If so, why? (teacher qualifications/training and resources);
- 5. If your school does have a HPE specialist teacher, do they have specific HPE qualifications? Yes/no (*teacher qualifications/ training*);
- 6. On average how much time of PE (lesson) engagement do students in your school receive weekly? None/half an hour/1 h/ 2 h/3 h or more (*time*);
- 7. When employing staff, do you look at the university certificate/testamur of potential staff? Yes/no (*teacher qualifications/ training*);
- 8. When employing teachers do you peruse university transcripts of results? Yes/no (teacher qualifications/training);
- 9. As a principal, would a course that qualifies teachers to be generalist classroom teachers and HPE specialists be of value? No/maybe/probably/yes (*teacher qualifications/training*);
- 10. Would a testamur/certificate that read "Bachelor of Primary Education (health and physical education)" assist you with the employment of staff? No/maybe/probably/yes (*teacher qualifications/training*);
- 11. What are the key attributes of a good HPE teacher? (resources, time and teacher qualifications/training); and
- 12. Are there any other details you would like to add on the issue of quality HPE experiences for children in schools? (resources, time and teacher qualifications/training).

6.2. Verification and ethical issues

There were two ethical clearances that were granted before this survey was conducted. They were an ethical clearance from Monash University Human Research Ethics Committee (MUHREC) and from the Victoria State Government Department of Education and Early Childhood Development (DEECD). Separate approval was granted by each of the 138 primary school principals. It was clearly stated in the 'Explanatory Letter' that completing the questionnaire was voluntary and principals were under no obligation to consent to participation. Also, that by completing and posting back the questionnaire in the self-addressed, postage paid return envelope granted consent to be a participant.

A conscious effort was made by the researcher to be fair in the generation of data, in the interpretation of data, in the formulation of theories and in the presentation of data. Fairness was achieved through constant peer debriefing where experienced researchers (academic colleagues) critically reflected on the process of data generation and analysis. This took place in the form of discussions and proof reading of detailed research reports.

7. Analysis of data

Answers to open-ended questions (1, 2, 3, 10 and 11) and close-ended questions (3, 4, 5, 6, 7, 8 and 9) were grouped according to their Victorian region (West, Inner West, North Central, Inner North, Melbourne, Inner East and East), and then

by their size of school enrolment (small—less than 100, medium—100 to 300, large—300 to 600 and very large—more than 600). Open-ended questions were then analysed using Wellington's (2000) simplified version of the 'Constant Comparative Method for Analysing Qualitative Data' (Fig. 1). Cross analysis for each region was presented at the end of the analysis of each school size category. Repeating the same analysis process, Wellington's stages (Fig. 1) were used to analyse the data according to size across the whole state of Victoria and then an overall analysis for the state was described.

Units of meaning were formed, coded, and categorised with other similar units. Table 3 illustrates a copy of coded openended question data.

The surveys were completed by 138 government primary school principals from a cross-section of primary schools. Principals surveyed represented schools from all seven Victorian regions and schools of various enrolment sizes (Table 2, cf. p. 16).

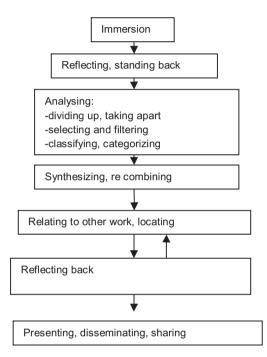


Fig. 1. General stages in making sense of qualitative data (Wellington, 2000, p. 141).

Table 2

Victorian regions represented by school principals surveyed.

Victorian region	Size of school enrolment						
	Small schools (less 100)	Medium (100-300)	Large (300-600)	Very large (more 600)	Total		
West	7	4	0	0	11		
Inner West	0	8	3	1	12		
North Central	6	3	0	1	10		
Inner North	3	3	2	0	8		
Melbourne	1	25	33	6	65		
Inner East	4	7	2	0	13		
East	6	11	2	0	19		
Total	27	61	42	8	138		

Table 3

Coding of open-ended question data (Question 1, 2, 3, 10 and 11).

Principal's open-ended answer 11. Are there any other details you would like to add on the issue of quality HPE experiences for children in schools? More specialised training for lower primary motor skill development More specialised training for lower primary motor skill development Pre-service teachers Early years Fundamental movement skills

8. Presentation of findings

8.1. Which teachers are responsible for HPE in your school (e.g. classroom, specialist HPE, outsourced)?

Specialist HPE teacher	52	(37.7%)
Classroom and HPE specialist	42	(30.4%)
Classroom teacher	29	(21%)
Classroom and HPE specialist and outsourced	5	(3.6%)
Classroom teacher and outsourced	2	(1.4%)
A generalist classroom in HPE role	2	(1.4%)
Principal	2	(1.4%)
Assistant principal	2	(1.4%)
Chaplain	1	(0.7%)
HPE teacher and outsourced	1	(0.7%)

8.2. If HPE is outsourced please give details of what is outsourced and background/qualifications of the people who take the classes?

No details/not applicable	121	(87.7%)
Gymnastics program—coaches	7	(5.0%)
Swimming program—qualified instructors	5	(3.6%)
Sporting organisations e.g. Kanga cricket	5	(3.6%)
Bluearth program	4	(2.9%)
Active After Schools Community (AASC)	4	(2.9%)
Coach Approach	1	(0.7%)
SEDA groups (basketball, hockey, rugby, soccer)	1	(0.7%)
Tennis	1	(0.7%)
Dance	1	(0.7%)

8.3. Do you prefer to have specialist HPE teachers in your school?

Yes	120	(88.2%)
No	16	(11.8%)
No details/not applicable	2	

8.4. Summary of comments explaining why

Within small schools (less than 100 children) many principals stated that it was not possible or financially viable to have HPE specialists due to their rural, regional or remote location. Therefore there was a much higher percentage of principals in small schools who answered 'no' to this question.

The comments supporting HPE specialists in primary schools were many and suggested that quality was provided through expertise, knowledge of the subject, priority of the learning area, skill development, motivation, community relations, sport coordination and to enable a developmentally appropriate and consistent program. Also, it was mentioned that some classroom teachers are not able to take HPE classes and that it provided release time for classroom teachers.

8.5. If	^r vour school	does l	have a HPE s	specialist teacher	do thev	have specific	HPE aualifications

Yes	62	(59.0%)
No	43	(41.0%)
No details/not applicable	33	

8.6. On average how much time of PE (lesson) engagement do students in your school receive weekly?

None	0	
Half an hour	3	(2.2%)
1 h	70	(50.7%)
2 h	57	(41.3%)
3 h or more	8	(5.8%)

8.7. When employing staff, do you look at the university certificate/testamur of potential staff?

Yes	98	(72.1%)
No	38	(27.9%)
No details/not applicable	2	

8.8. When employing teachers do you peruse university transcripts of results?

Yes	64	(46.4%)
No	74	(53.6%)

8.9. As a principal, would a course that qualifies teachers to be generalist classroom teachers and HPE specialists be of value?

No	2	(1.4%)
Maybe	22	(15.9%)
Probably	30	(21.7%)
Yes	84	(60.9%)

8.10. Would a testamur/certificate that read "Bachelor of Primary Education (health and physical education)" assist you with the employment of staff?

No	13	(9.4%)
Maybe	39	(28.3%)
Probably	37	(26.8%)
Yes	49	(35.5%)

8.11. What are the key attributes of a good HPE teacher?

HPE curriculum knowledge and developmentally appropriate pedagogy	54 (mentions)
Planning/assessment and flexibility (organised)	49
Passion/interest/enthusiasm (children)	35
Rapport/communication and management skills	32
Cater for all learning needs (empathy and support)	20
Engage students and fun	12
Commitment to school life	9
Introduce a variety of physical activities/skills	8
Good teacher/classroom	7
Athletic/fitness/stamina/active	6
Relationship building	6
Role model for healthy living	6
Liaises well with other staff, schools and parents (network)	6
Hard worker/drive	4
Team player/team work/collaboration	3
Advocate of and teaches healthy behaviours	2
Innovative/initiative	2
Involved in sports and high skill level	2
Inspirational	2
Expertise (specialist training in HPE)	2
Access to a range of resources	1
Experience in teaching HPE	1
First Aid qualifications	1
Willingness to learn	1
Fun person	1
Calm	1
Positive	1
Attention to detail/particular	1
Teaches social skills	1
Student success	1
Willing to do extra curricula activities	1
Personality	1
Safety awareness	1
Coaching qualifications in various sports	1
Leadership	1

8.12. Are there any other details you would like to add on the issue of quality HPE experiences for children in schools?

Within small schools (less than 100 children) many principals stated that HPE was an extremely important learning area and felt that it was undervalued. They believed more could be done through funding and Professional Development and some stated that they are disadvantaged in this learning area. Principals' suggested that HPE specialist teachers who were good classroom teachers would be beneficial. Having a HPE specialist enables for a regular and sequential program to be implemented and physical education (physical activities) is an area that some teachers struggle with implementing. Many of these schools are located in rural, regional or remote locations. Principals of medium sized schools (100–300 children) believed that all schools should have a HPE specialist with knowledge of correct pedagogy for maximising participation, enjoyment and being developmentally appropriate. It was important that the program was inclusive and catered for various interests and needs. Qualifications and ability to teach in the primary classroom and have a developmentally appropriate understanding was again accentuated. One principal wrote "We need people with classroom and pedagogical skills not just jocks!". They expressed difficulties in smaller schools to employ a HPE specialist and that money was again a problem. HPE as a learning area was viewed as important if not more important than other learning areas within the primary school, although such importance was often lacking.

Principals of large schools (300–600 children) and very large schools (larger than 600 children) emphasised how pertinent it was to have HPE specialists with developmentally appropriate and inclusive pedagogy. They stressed the need for all schools to have HPE specialists and the power of implementing quality HPE as part of children's early experiences. Again, the qualifications and ability of HPE specialists to be good primary classroom teachers was affirmed.

9. Discussion

The Senate Inquiry found that there was in fact a decline in the opportunities for quality HPE in Australian schools although paradoxically there was unanimous support for the learning area. The number of participants in this research project (138) evokes that unanimous support is still present. Data gathered suggests that the three major problems identified by the 1992 Senate Inquiry; resources, formal training of teachers and time allocation exist to varying degrees. These three areas will be discussed separately in relation to HPE implementation in primary schools.

9.1. Resources

There were two types of resources that were referred to in the data; human resources (teacher expertise) and HPE equipment. HPE equipment (and facilities) was not identified as a specific problem for implementing HPE lessons. Only one out of 138 principals mentioned resources (HPE equipment), and this was for question 10; key attributes of a good HPE teacher is that they have "access to a range of resources". Another indicator that resources (HPE equipment) have improved and is no longer a major problem is that only 12.3% of the schools surveyed outsourced PE. It could be assumed that one reason for outsourcing is to access the equipment as well as the teacher expertise. In Victoria's decentralised system, principals have a high degree of autonomy (DEECD, 2012) and decide the allocation of funds. This is possibly why HPE equipment may not be an issue, as it is a priority for the participants. This has improved from the Senate Inquiry in 1992 when the problems were mainly with resources and the time allocation (Tinning et al., 1994). In particular in primary schools there were specific issues outlined pertaining to facilities and resources (Commonwealth of Australia, 1992).

Human resources relating to HPE expertise were an identified problem within the data, especially within small schools. Schools with less than 100 children often shared that it was not possible or financially viable to have HPE specialists due to their rural, regional or remote location. Some principals stated that they were disadvantaged and that funding and professional development was needed to assist. Medium schools also stated that they had a lack of money for HPE implementation. Human resources are closely linked with formal training of teachers, which will be discussed in more detail.

9.2. Formal training of teachers

Data gathered indicates that qualifications of teachers who are responsible for teaching HPE remain a major problem. "Suitably qualified physical education [HPE] teachers are not being employed to teach physical education [now HPE] and school sport to all children" (Commonwealth of Australia, 1992, p. xiv) and there is no required accreditation or formal training in physical [HPE] or sport education as a condition of employment for graduating primary school teachers (Moore, 1994). Preference for a specialist HPE teacher was dominant with 88.2% (120 out of 138) of principals answering 'yes', they do prefer an HPE specialist in their school. Comments suggested that this would have been even higher but many principals in small schools answered 'no' because they didn't believe this to be an option.

While there were 102 schools (73.9%) where an HPE specialist teacher was responsible for part or all of the implementation of the learning area many were not qualified to be in that role, often filled by generalist teachers with no specialist training (Webster, 2001). Almost half of the principals who answered the question (41.0%) stated that their HPE specialist teacher was not a qualified specialist and a further 33 (32.0%) chose not to answer the question, implying that they did not know or preferred not to say. This was further supported by 38 participants who shared they did not look at teaching qualifications (27.9%) and only 64 principals (46.4%) perusing university transcripts. This is problematic as transcripts are needed to evidence HPE units successfully completed under the current Australian primary education courses. This is supported by Dinan-Thompson (2009, p. 48) who proposes that questions are often raised about "who is teaching HPE, and who is deemed competent to teach HPE in schools". Having generalist teachers teaching in the HPE role is a concern as some graduate generalist teachers are to this day completing teaching degrees without studying any units in health and physical education and are not adequately prepared for the job (ACHPER Victoria, 2013; Lynch, 2013, 2005; Morgan & Bourke, 2005; Treanor & Housner, 1998; Walkley, 1993). It is no surprise when schools struggle to provide quality HPE and sport, in particular in primary schools (ACHPER, 2011).

Developmentally appropriate and inclusive HPE practice was a key theme expressed by principals. A high majority of principals (82.6%) believed a course that qualifies teachers to be generalist classroom teachers and HPE specialists would be or would probably be valuable and 62.3% of principals believed a testamur/certificate that read "Bachelor of Primary Education (health and physical education)" would assist or probably assist them with the employment of staff. This would involve changes to many courses offered where pre-service primary teachers often choose electives in general sport relating to industry or secondary physical education (Lynch, 2013).

9.3. Time allocation

Time allocated to the HPE key learning area was identified as a major problem in 1992 and subsequently a drastic decline in children's skill levels and physical fitness resulted (Tinning et al., 1994). However, 97.8% of principals shared that PE lesson time alone (not including health and personal/social development time) had at least an hour per week; 41.3% having 2 h and 5.8% having 3 h or more. Hence, time allocated to the HPE learning area for physical activities is not of concern.

Data gathered suggests that only one of the three major problems identified by the 1992 Senate Inquiry remains of concern today, that is the formal training/qualifications of HPE teachers and specifically preparation of pre-service teachers for developmentally appropriate, holistic and inclusive HPE practice. Another problem arising from the data that was not identified in the Senate Inquiry is the inequality of HPE implementation for schools in rural, regional and isolated areas. These schools often are small in size and do not have the opportunity to employ an HPE specialist teacher.

Data has been scrutinised through a critical lens to investigate the three major problems identified by the 1992 Senate Inquiry, however there have also been many positive outcomes. Data suggests two of the three major problems have improved significantly; resources and time allocation. Surveys completed and comments made suggest unanimous principal support for quality HPE in schools. The average time for the physical activity strand was pleasing (Question 5) with only 2.2% of schools having less than 1 h per week. Principals of medium sized (100–300 children), large schools (300–600 children) and very large schools (larger than 600 children) viewed HPE as important if not more important than other learning areas, they prioritised having HPE specialist teachers with developmentally appropriate and inclusive pedagogy and articulated the strength of implementing quality HPE as part of children's early experiences.

10. Conclusion

The purpose of this research study was to determine whether the problems identified by the 1992 Senate Inquiry into Physical [HPE] and Sport Education were of concern within the state of Victoria. This research is of major significance as it provides evidence for the AHKA Physical Activity Report Card for Children and Young people to assign a grade to the indicator 'Physical Education and Physical Activity Participation in Schools'. This study builds upon a small scale study (Lynch, 2007a) which found that "not enough had changed since the 1992 Senate Inquiry into Physical and Sport Education" (p. 22) and recommended that a large scale research project be conducted to ascertain verisimilitude of findings. Thus it provides new insights into quality HPE in schools and physical activities and sports that sit within the HPE umbrella.

This interpretive study adopted a mixed methods approach through gathering 138 ex-post facto surveys completed by principals from a cross-section of Victorian primary schools. These schools represented all regions of the state and schools of various enrolment sizes. Principals were deliberately chosen as participants as they are key school leaders who have a high degree of autonomy and power to improve the quality of teaching. More so, they "play a major role in the success of the implementation of the HPE program as they are directly responsible for supporting the development, implementation and monitoring of the curriculum" (2007b, p. 6).

This study found that out of the three key problems identified by the 1992 Senate Inquiry only one remains. Data indicates that resources and time allocation were no longer problems or major issues of concern, however formal training of teachers appears to have not significantly improved. HPE has had to overcome a number of barriers throughout history which have impeded implementation and curriculum developments (Brooker & Penney, 2009; Lynch, 2014a, 2014b; Stolz, 2009). The largest modern day barrier seems to be the qualifications and preparation of all teachers for HPE implementation.

The Victorian state Government Department of Education and Early Childhood Development (DEECD) first listed outcome for children 0–8 years (2014) is: 'Children have the best start to life to achieve optimal health, development and wellbeing'. If this goal is to be met and empirical studies such as 'The wellbeing of young Australians' (ARACY) and the AHKA Physical Activity Report Card for Children and Young people is to improve from a D – for Overall Physical Activity Levels (where Australia is succeeding with some but less than half of children and young people – 21–40%), then the quality of HPE implemented in schools underpinned by formal training and qualifications of teachers needs to be examined. With the release of the new Australian HPE curriculum, it is timely that this is addressed as soon as possible.

Health and physical education as a learning area was first introduced in 1994 and implementation has been a gradual movement towards health promotion. As Professor Chris Hickey commented, the new HPE curriculum within Australia, "does not represent a radical reform of what teachers know and do, but it does have the potential to challenge and refurbish some of the long-held underpinnings of the field" (Australian Government, 2014, p. 205). Hence, the new HPE curriculum can act as a stimulus for improvement in wellness across the whole school. Curriculum implementation and localisation is required for holistic lifelong health and wellbeing to be enacted consistently throughout all Victorian schools of various sizes and locations.

Quality HPE implementation is underpinned by developmentally appropriate practice. Principals in Victorian government primary schools strongly desire to have specialist HPE teachers in their schools who want to be working with primary aged children, also qualified to teach as generalist classroom teachers. Principals believe that quality HPE is provided through expertise, knowledge of the subject, priority of the learning area, skill development, motivation, community relations, sport coordination and most importantly knowledge to enable a developmentally appropriate and consistent program. Hence, it is pertinent that pre-service teachers, graduate teachers and existing teachers (specialist and generalist classroom) are prepared to succeed in these areas. This can be achieved through direction and support offered within courses and professional development.

Data raises the anomaly of schools in rural, regional and remote areas (which are often small in size) and the unique barriers they face in HPE implementation. It also highlights that in the state of Victoria, and in conjunction with the implementation of a new curriculum, that this might be an opportunistic time to generate any necessary change for improvement. This study raises issues of interest regarding regional areas throughout Australia and future considerations specific to Health implementation. In conclusion it is recommended that further investigation be conducted in Victorian schools and also in other Australian states/territories and education departments internationally.

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