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Introduction

This research book offers insight into enacting "physical education" (PE) to optimise children's wellbeing. The educational question is no longer whether or not physical activity enhances children's wellbeing, this is axiomatic, rather it is "how" regular quality PE classes can act as a platform for wellbeing in all schools, for all children. PE is defined as "education through movement" (Pangrazi, 2001, p. 5), and as the book's title suggests, global and holistic approaches relating to the physical dimension in education are investigated. Hence, "education through movement" is adopted as a lens to explore a holistic approach towards child health and wellbeing.

PE has been advocated for many years within schools as an essential curriculum area, as have the holistic benefits of learning through the physical dimension. However, the education problem that continues to exist, the gap in practice that modern research illustrates, is that PE implementation is not progressing (unlike educational policies). Cale and Harris (2019) recognise gaps in children's knowledge and understanding of health and the physical dimension in the UK. Also, literature implies to some degree that the holistic HPE ideal has failed in practice (Lynch, 2017; Tinning,

T. Lynch, *Physical Education and Wellbeing*,
https://doi.org/10.1007/978-3-030-22266-6_1

2009). However, we are reminded by Kirk the necessity to continue on the journey of improvement (2014).

The book uses research gathered from around the world and adopts "didactical questions" borrowed from France, Germany and Scandinavian countries—specifically, Swedish didactics of PE research. Didactical in this context refers "to an interest in the relations between teaching, learning and socialisation" (Quennerstedt & Larsson, 2015, p. 1) and "in many European countries, the concept stands for a research tradition with an interest in theories and practices of teaching and learning" (p. 2). Hence, the term's meaning is different to that of the English language.

> Sometimes research in didactics ask slightly different questions regarding educational practice, where didactical questions traditionally are addressed by the questions what, how, and why, in terms of what and how teachers teach, what and how students learn and why this content or teaching is taught or learned. Questions such as who is teaching, who is learning, when and with whom are also relevant. (Quennerstedt & Larsson, 2015, p. 3)

Subsequently, this book's purpose is: to identify the "what" of "physically educating" children; "how" literature and research suggest this should be done; to identify "why" this is not happening as effectively as it should be; and to offer global direction for our journey of improvement. Through research, problems with implementing the PE curriculum in primary/elementary schools are identified and recommendations are made for advancing the physical dimension in children's learning, enabling subsequent lifelong wellbeing benefits.

Purpose of the Book

Physical education provides a platform for wellbeing. Specifically, quality physical education (QPE) enhances children's lifelong wellbeing and holistic health (Lynch, 2016; UNESCO, 2015). This is a simple statement, given within the realm of education and validated by quantitative research relating to the benefits of physical activities (detailed in Chapters 11, 12, 13, and 14). However, understanding the implementation of QPE to

enable holistic health is complex (Kirk, 2014; MacDonald, 2012). The concept of QPE implementation is multidimensional, containing many layers which contribute to this book's global significance and timeliness, as it investigates how educators, schools and community leaders can optimise children's wellbeing through the enhancement of PE.

The global definition of PE offered by United Nations Educational, Scientific Cultural Organisation (UNESCO) illustrates the holistic benefits of PE:

> the planned, progressive, inclusive learning experience that forms part of the curriculum in early years, primary and secondary education. In this respect, QPE acts as the foundation for a lifelong engagement in physical activity and sport. The learning experience offered to children and young people through physical education lessons should be developmentally appropriate to help them acquire the psychomotor skills, cognitive understanding, and social and emotional skills they need to lead a physically active life. (2015, p. 9)

While many books advocate wellbeing through the physical dimension, this book uses evidence-based research to authenticate the power of QPE and subsequently offers direction in developing whole child wellbeing. The book sits within what Greenfield refers to as "deep thinking", "content" or "meaning" derived from research (2012), also referred to as "ideas, thinking, and constructing" (Hattie, 2009, p. 26). That is, the book is a culmination of years of evidence-based research, practical experience and internal insight, carefully constructed to make meaning. Therefore, different aspects of research have been embedded "into a whole nested hierarchy of associations that have accumulated" (Greenfield, 2012) in building knowledge.

The "meaning" clarified relates to QPE and how it can be best achieved within the school community. Cook and Odom (2013) define "evidence-based" practice in connection with "meaning"; "practices and programmes shown by high quality research to have meaningful effects on student outcome" (p. 136). The meaningful objective evidence in this research book has been gathered from: qualitative in-depth data from case study primary schools involving teacher and student participants; qualitative in-

depth data from a recognised model initial teacher education (ITE) physical education case study programme; interviews with secondary trained PE teacher participants who are responsible for teaching primary school children; a questionnaire carried out by educators across nine US states; and qualitative and quantitative data gathered from a large empirical ex-post facto survey involving nearly 400 government primary school principals/head teachers. Zach, Shoval, and Lidor (2017) identify that qualitative research in this area for PE is lacking, describing it as a void which should be filled. Once again the didactical research thread interweaves; "In didactical research, education and educational practices are explored and scrutinised in terms of their institutional and political prerequisites and their consequences for the processes of educational practice. Teaching is thus regarded as a political and moral act" (Quennerstedt & Larsson, 2015, p. 2). Hence, this building of knowledge fills a current gap, contributing clarity with regard to "how" the physical dimension can be best implemented to enhance students' wellbeing—a moral act.

Research suggests that the optimum time for children to learn and refine their motor skills and to be introduced to QPE experiences is during preschool and early primary school years (Branta, Haubenstricker, & Seefeldt, 1984; Cale & Harris, 2019; Commonwealth of Australia 1992; Espenschade & Eckert, 1980; Kirk, 2005; Lynch, 2016). Hence, it is ideal to begin the physical learning journey as early as possible and to reach all children, which only the schooling system enables (Lynch, 2016). A glance at the education efforts in Australia evidences such priorities. Australia is a significant nation throughout this book as it is argued that Australia has been a leader of holistic health, wellbeing and physical education (H, W & PE) curriculum reform (Lynch, 2016). In Australia, since 1901 each of the eight Australian states and territories has been formally responsible for education (Braithwaite, 1994; Lynch, 2014). However, in more recent times two national curriculum reforms have transpired in efforts towards a national curriculum: 1994 and 2013.

In 1994, the nomenclature of the key learning area was officially changed from "Physical Education" to "Health and Physical Education" and a holistic socio-cultural approach was adopted—the inclusive socio-cultural approach is discussed in detail in Chapter 9. "The task of a socio-cultural approach is to explicate the relationship between human action,

on the one hand, and the cultural, institutional and historical contexts in which action occurs on the other" (Wertsch, 1998, p. 24). Supplementing health to the physical education nomenclature was momentous for the discipline, acknowledging strong wellbeing connections across the physical dimension. This is supported by neuroscience; while the "physical" body slows down and deteriorates as one gets older, our brain connections known as plasticity actually get better as one ages (Greenfield, 2012). Hence, holistic physical education (health and wellbeing) throughout the entirety of one's life was acknowledged in policy, giving PE as a subject/learning area, increased significance throughout one's lifespan—"lifelong education".

Problem

The problem that this research book builds upon and contributes towards is "how" PE can be successfully implemented in primary/elementary schools around the world. Cale and Harris (2019) argue the importance "to reflect critically on how best to promote active lifestyles for all children and young people" (p. 4). Quantitative research has examined the benefits of physical activities and literature has advocated QPE and the notion of lifelong physical activity in schools since the 1940s (Kirk, 2014). However, while it can be argued this has been achieved in various schools, sadly research suggests this has been far too few in number, including developed nations (Lynch & Soukup, 2017). Literature and research have indicated this flaw for many years, and despite more recent focused efforts, enacting policies continues to be a major barrier to children's health and wellbeing (UNESCO, 2014).

Global research has found that PE in primary schools is often:

- taught by inadequately trained teachers;
- has insufficient curriculum time allocation;
- has a perceived inferior subject status;
- has inadequate provision of facilities and equipment and teaching materials, frequently associated with under-funding;
- has large class sizes and funding cuts; and

- in some countries, limited awareness of pathway links to wider community programmes and facilities outside of schools. (Hardman, 2008a, p. 5)

Much has been written about classroom teacher's lack of confidence and competence, and subsequent absence of interest and preparation to teach physical education in England. Many teachers are not confident in providing physical education and have had minimal training—therefore, they have little understanding and knowledge (Cale & Duncombe, 2008; Cale & Harris, 2019). Griggs (2012) states that as a result primary PE is delivered "ineffectively". Subsequently, this negatively affects pupil's experiences in this vital stage of their learning (Ofsted, 2000, 2004, 2009; Physical Education Association, 1998; cited in Keay & Spence, 2012). Griggs (2012) supplements that as little as nine hours is often donated to PE preparation on a one-year postgraduate certificate of education (PGCE) course and just five hours for those involved with school-centred initial teacher training (SCITT).

Prospective ITE students with a key interest in PE and children in England are often faced with a systemic choice; follow their physical passion and become a secondary physical education specialist, or follow their passion for working with children in the 5- to 11-year age group and become a classroom teacher in the primary school. Courses that qualify teachers to specialise in PE and become a classroom teacher (specifically for primary education) are rare, with only approximately three identified (Lynch, 2015). This is not only the situation in England but throughout the world as primary school generalist classroom teachers are most often responsible for teaching PE, whereas "In secondary schools, specialists are predominantly responsible for teaching physical education classes" (UNESCO, 2014, p. 8).

Hence, literature and research indicate in primary schools there is an absence of PE specialist teachers in England and some Australian states (Griggs, 2012; Lynch & Soukup, 2017). This also seems to be duplicated throughout many parts of the world. Within Australia, for example teacher, PE preparation has been described in the past as general physical activity courses rather than developmentally appropriate preparation for delivering PE (Lynch, 2013). Hence, recommendations throughout his-

tory for tertiary qualified PE specialist teachers in primary schools have been ignored (AHKA, 2018; Commonwealth of Australia, 1992; Lynch, 2005).

Within Europe, PE delivery is mixed—some countries are considered as being stable to good and others are identified as only being in the initial stages of PE development. Hardman describes a "widespread perceived decline or marginalisation of physical education in schools" (2008b, p. 5). Problems identified specifically with primary school PE in Europe include:

- insufficient curriculum time
- limited quality mainly due to inadequate training of teachers
- an undervaluing of motor development and motor learning. (Hardman, 2008b)

Scandinavian countries are considered to be better than many other countries around the world. "In Sweden, for example, the climate vis-à-vis PE is now much more positive, and the subject has regained status and resources. The situation for PE in Finland and Norway also looks positive, if not quite as good as in Sweden. PE in Denmark, however, still waits for a breakthrough" (Annerstedt, 2008, p. 303).

The subject of PE is marginalised; "Globally, and for the most part regionally, in actual practice physical education is considered to have lower status than other subjects" (UNESCO, 2014, p. 7). Furthermore, specifically "in primary schools, there is an admixture of generalist and specialist teachers for physical education classes" (UNESCO, 2014, p. 8; Lynch & Soukup, 2017). A summary encapsulates support for previous concerns about PE quality:

> Evidence points to deficiencies in teacher supply, particularly of physical education specialists, inadequate preparation of physical education teachers, especially, but not exclusively so, in primary/elementary schools and to negative attitudes and low levels of motivation of some teachers responsible for physical education delivery. Concerns about the quality of physical education teacher training, teaching and teaching resources, inadequate supervision of practice, lack of professionalism and appropriate ethics and impacts on the quality of school pupil experience are also globally evident. (UNESCO, 2014, p. 9)

Within Asian nations supplementing the global concerns, there is:

- Limited space and equipment for PE and sports co-curriculum.
- Overcrowded classes of forty or more students in each PE class.
- Not a strong sports culture.
- Important decisions on PE and sports are often made by government officials, with no academic or professional qualifications in the discipline.
- PE and sports are commonly considered as "play" rather than subjects that develop the "thinking" capacity (UNESCO, 2008).

Furthermore, a study indicated that over 60% of elementary school teachers did not have any PE training in the Canadian province of Ontario (Faulkner et al., 2008). Hence, the historical structure of teacher preparation appears to not be meeting the needs of today's society. It is suggested by UNESCO (2014) that globally the subject of PE is marginalised and it does appear to begin with teacher education. Yet, PE is described "as the only curriculum subject whose focus combines the body and physical competence with values-based learning and communication, [which] provides a learning gateway to grow the skills required for success in the 21st Century" (UNESCO, 2015, p. 6) (cf. p. 25). Thus, it appears that educators and society more generally are not capitalising on the physical dimension and subsequent wellbeing benefits.

A study released in 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 were not doing as well as they should despite being regarded as global curriculum leaders. The data for this study were compared with other countries within the Organisation for Economic Cooperation and Development (OECD), which includes most of Europe, North America, and advanced Asian, Latin American and Oceanic economies.

Australia ranked in the top third of OECD countries for around 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). The

2018 "Report Card: The wellbeing of young Australians" indicated that Australia was in the bottom third of OECD countries for:

- bullying in Year 4 (ranked 40 out of 49);
- child obesity (ranked 28 out of 39);
- pre-primary enrolment rate (3–5 yrs) (ranked 35 out of 40);
- participation in organised learning one year prior to primary school (ranked 36 out of 37);
- feeling of belonging in school (ranked 26 out of 34);
- school pressure (ranked 24 out of 26);
- youth numeracy skills (ranked 15 out of 22);
- teenage pregnancy (ranked 30 out of 41) (ARACY, 2018, p. 7).

Despite the rhetoric about children's wellbeing, social justice and a holistic H, W & PE curriculum reform, this report indicates that there has been no improvement in the majority of areas from the previous reports dating back to 2008. This is of concern as while Australia has addressed wellbeing in policy, it appears that this is yet to influence practice.

Furthermore, if we look at a country whose PE has an explicit focus on the physical dimension only rather than a holistic approach, "the UK ranked last for children's wellbeing among 21 of the world's richest countries in 2007, 16th among 29 in 2013 and 20th out of 35 of the richest countries in 2016" (United Nations Children's Fund, 2007, 2013, 2016; cited in Cale & Harris, 2019).

Primary schools play a key role in children's health and wellbeing and according to education policy and guidelines around the world, should be prioritised. Kirk (2005) argues that early learning experiences are crucial to continuing involvement in physical activity and that currently only particular sections of the population are in a position to access quality experiences in schools and sport clubs. Furthermore, "the contribution of PE specialists in secondary schools may come too late to impact a majority of children in relation to their competence, perceptions and motivation" (Kirk, 2005, p. 240). It is argued that early years of education and primary school physical education have been neglected in education infrastructures around the world (Hardman, 2008a, 2008b; Lynch, 2015; Lynch & Soukup 2017; UNESCO, 2014) which is a major problem. Hence,

this research book investigates QPE implementation in primary schools around the globe, offering realistic direction to universally enhance children's health and wellbeing.

When exploring how educators can optimise children's wellbeing through QPE, there are a number of key themes and interwoven elements that need to be considered. The elements are borrowed and extended from the Health Promoting Schools (HPS) model but differ in that they have a "movement" priority. Beginning at the top of Fig. 1.1 is the first element: the curriculum, teaching and learning focus. Evidence-based research asserts that the movement focus in the PE curriculum also enhances the cognitive dimension (cf. Chapter 14)—this element explicitly states the value of movement in PE. The next key theme on Fig. 1.1 (moving clockwise) is holistic wellbeing. The wellbeing dimensions to consider in the whole child are split into two: "social, emotional and spiritual wellbeing"; and "health and physical wellbeing". At the bottom of Fig. 1.1, it is important to contemplate the "school context" and how PE is inclusively implemented. That is, how it is best organised and managed given the unique environment and facilities available. This illustrates why this book is pertinent—it supplements quantitative research with qualitative, contextual evidence-based research (Chapters 11–15). Hence, this element is the inclusive "socio-cultural" approach and "whole school" approach, which literature suggests require strong leadership and communication (IUHPE, 2009; Lynch, 2017). Continuing to move clockwise, the last key theme to be considered is community partnerships. These four elements offer a framework, helping to paint a "big picture" of the relevant research to be explored in relation to how educators and schools can optimise children's wellbeing through the physical dimension.

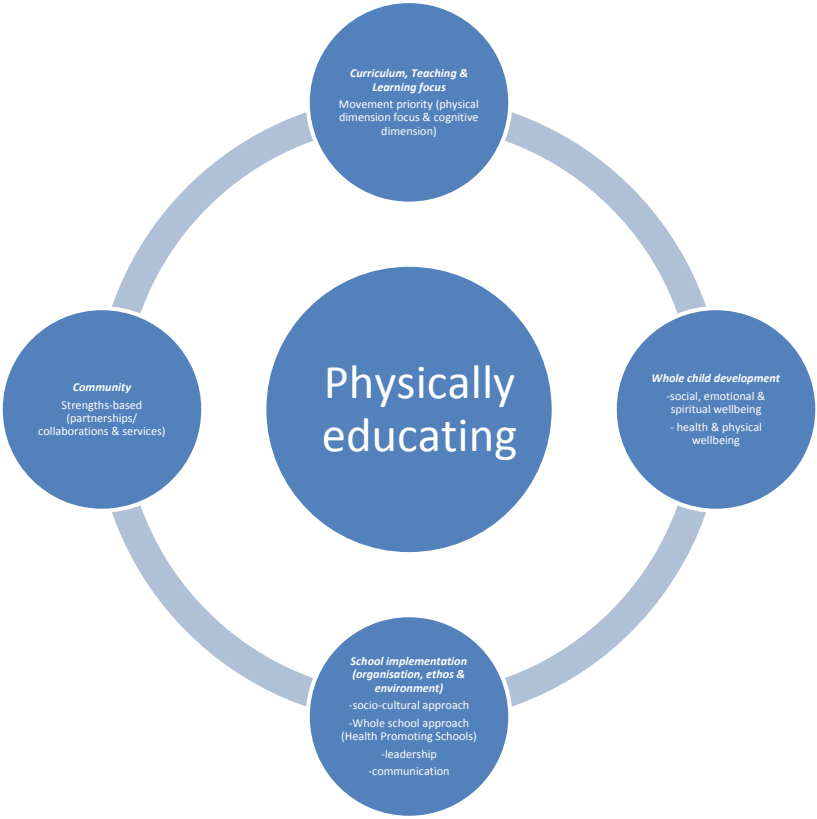

Fig. 1.1 Elements of quality physical education

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