What we know, what we do and what we could do: Creating an understanding of the delivery of health education in lower secondary government schools in Western Australia

Donna Michelle Barwood
*Edith Cowan University*

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What We Know, What We Do and What We Could Do: Creating an Understanding of the Delivery of Health Education in Lower Secondary Government Schools in Western Australia

Donna Michelle Barwood
DipTeach BEd PGradSt Med ECU

This thesis is presented in fulfilment of the requirements for the degree of Doctor of Philosophy

Faculty of Education and Arts
Edith Cowan University
2014

Supervisors:
Doctor Christine Cunningham
Associate Professor Tony Fetherston
Abstract

Australian health data indicates that childhood is a significant time for young Australians to develop health and well-being issues. Concurrently, health advocates herald in-school delivery of skills-based participatory health education as making significant contributions to developing behaviour change and supporting health-enhancing dispositions in children and young people. In Western Australia (WA), skills-based participatory health education is characterised by linking knowledge and understandings of what it means to be safer, healthier and more physically active to skills that action these states. Skills-based is a preferred approach to teaching and learning in the Health and Physical Education Learning Area (HPE LA), and at the time of this research was supported through education legislated in The Curriculum Framework (Western Australia Curriculum Council, 1998).

The focus of this research was to investigate the representation and delivery of health education as a separately timetabled, discipline-based subject belonging to the HPE LA, specifically in lower secondary government schools in WA. The literature identified quantity and quality as criteria for health education to develop healthy living; therefore, this research sought to identify the factors that affect the delivery of skills-based, participatory health education in these schools. The aim of this research was to identify whether the current delivery of health education in lower secondary government schools supports the capacity of the HPE LA to promote healthy citizenry in young Western Australians.

A mixed methods methodology was selected. Quantitative data was collected from 75 teachers who participated in an online and paper survey, and qualitative data from nine teachers who participated in semi-structured interviews. Analysis of quantitative data aimed to determine the extent to which government schools in WA were timetabling lower secondary health education as a separate subject. Additionally, this analysis aimed to identify the qualifications and main learning area of the teachers delivering health education. Analysis of the qualitative data aimed to determine the opinions of the teachers regarding delivery. Representation and delivery were determined by the amount of HPE LA curriculum time allocated to health education, the qualifications and training of the teachers delivering the subject and the preferred pedagogical approach used to deliver health education content. This research found that curriculum time attributed to health education in the government schools studied has decreased since 1995. Significantly, curriculum time
allowed for health education varied across schools. However, for most schools, health education was delivered for approximately one hour per timetable cycle. This represented only one third of the HPE LA curriculum time. Additionally, half of the teachers who participated in this research and were timetabled to deliver health education were untrained in health education pedagogy. Significantly, one in three of the qualified HPE LA teachers who participated in this research and who delivered health education were untrained in health education pedagogy, although this learning area was mandated in 1998.

The qualitative data demonstrated that participating teachers considered untrained teachers delivering health education as concerning. Specifically, participants were most concerned about teachers whose main learning area was not the HPE LA delivering health education, and teachers who were HPE LA teachers but also untrained. The participants were concerned that these teachers were not delivering health education using the preferred pedagogical approach, so consequently overlooked skills development as a critical component of health citizenry.

This research developed four suggestions for lower secondary government schools, with the aim of supporting the capacity of the curriculum space of the HPE LA in WA to effect safer, healthier and more active citizenry. This research developed two considerations for the universities in WA that prepare pre-service teachers. These considerations aim to prepare pre-service teachers with understandings of skills-based participatory health education and the significance of its contributions to developing health citizenry in WA. This research is significant, as it found the current representation and delivery of the HPE LA in lower secondary government schools does not support the curriculum’s capacity to promote healthy citizenry in young Western Australians.
Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

(i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;

(ii) contain any material previously published or written by another person except where due reference is made in the text; or

(iii) contain any defamatory material.
Acknowledgements

Many thanks to my two supervisors, Dr Christine Cunningham and Associate Professor Tony Fetherston. I wish to thank them first for their patience, understanding and care, and second, for their educational acumen, professional application to detail and amazing knowledge of all things PhD. I am truly indebted to these two wonderful people and I thank them dearly.

Thank you to Dr Ken Alexander and Professor Dawn Penney, who generously gave me their time and wisdom in the later part of my candidature. Their willingness to share HPE knowledge was invaluable, and their personal offerings of support were greatly appreciated.

Thank you to Dr Jo McFarlane, whose careful and conscientious eye diligently perused this thesis for all its flaws, and whose kind and considered coaching turned a draft into a thesis.

Thank you to my wonderful colleagues and friends for their participation in my life and this research process. Your support and encouragement was felt at every step of the way.

Thank you to the interview participants whose generous insight, knowledge and general sharing of the WA context provided the voices to the research findings. Thank you also to the survey participants who quantified what were originally just beliefs, ideas and thoughts. Thank you also to the Department of Education in Western Australia for providing access to the schools and teachers involved.

Importantly, I wish to thank all of the Richards family for their belief in me. I am the first, but will not be the last, to complete a PhD. Thank you Mum and Dad, this has been a long time coming but it has been well worth the journey. You are my inspiration.

Thank you to my beautiful children, Sidonia and Tyson. You are my world and Mumma is really coming home (figuratively of course).

Finally, the most thanks are extended to my amazing, devoted husband, Simon Barwood. Your support and love have made this journey even more tolerable. Your patience, dedication and domestication have made this journey possible. Your proof-reading and editing have made the journey shorter. You truly are a wonderful man, father and husband. Thus, it is to you that I honour this fantastic gift, my PhD.

This thesis was edited by Elite Editing, and editorial intervention was restricted to Standards D and E of the Australian Standards for Editing Practice.
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<td>AC: HPE</td>
<td>Australian Curriculum for Health and Physical Education</td>
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<td>ACARA</td>
<td>Australian Curriculum, Assessment and Reporting Authority</td>
</tr>
<tr>
<td>ACHPER</td>
<td>Australian Council for Health Physical Education and Recreation</td>
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<tr>
<td>AHPSA</td>
<td>Australian Health Promoting Schools Association</td>
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<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<tr>
<td>AITSL</td>
<td>Australian Institute for Teaching and School Leadership</td>
</tr>
<tr>
<td>CAR Policy</td>
<td>Curriculum and Assessment Reporting Policy</td>
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<tr>
<td>DET</td>
<td>Department of Education and Training</td>
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<tr>
<td>DOE</td>
<td>Department of Education</td>
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<tr>
<td>ECU</td>
<td>Edith Cowan University</td>
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<td>Ed Dept</td>
<td>Education Department</td>
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<tr>
<td>EDWA</td>
<td>Education Department of Western Australia</td>
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<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome</td>
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<tr>
<td>HOD</td>
<td>Head of Department</td>
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<tr>
<td>HOLA</td>
<td>Head of Learning Area</td>
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<td>HPE</td>
<td>Health and Physical Education</td>
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<td>HPE KLA</td>
<td>Health and Physical Education Key Learning Area</td>
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<tr>
<td>HPE LA</td>
<td>Health and Physical Education Learning Area</td>
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<td>HPS</td>
<td>Health Promoting School</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>KLA</td>
<td>Key Learning Area</td>
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<td>LOTE</td>
<td>Languages other than English</td>
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<td>MESS</td>
<td>Maths, English, Science and Society and Environment</td>
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<td>NPDP</td>
<td>National Professional Development Program</td>
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<td>OBE</td>
<td>Outcomes-Based Education</td>
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<td>PCK</td>
<td>Pedagogical Content Knowledge</td>
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<td>PDHPE</td>
<td>Personal Development, Health and Physical Education</td>
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<td>SCHWA</td>
<td>School Health Coalition of Western Australia</td>
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<td>SCSA</td>
<td>School Curriculum and Standards Authority</td>
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<tr>
<td>SD</td>
<td>Standard Deviation</td>
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<td>SDERA</td>
<td>School Drug Education and Road Awareness</td>
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<td>Acronym</td>
<td>Description</td>
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<td>SDHE</td>
<td>School Development Health Education</td>
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<td>Secondary Education Authority</td>
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<td>SPSS 21</td>
<td>Statistical Package for the Social Sciences version 21.0</td>
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<td>STI</td>
<td>Sexually Transmitted Infection</td>
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<td>TIC</td>
<td>Teacher in Charge</td>
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<td>US</td>
<td>United States</td>
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<td>UWA</td>
<td>University of Western Australia</td>
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<tr>
<td>WA DET</td>
<td>Western Australia Department of Education and Training</td>
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<tr>
<td>WA DOE</td>
<td>Western Australia Department of Education</td>
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<td>WA MOE</td>
<td>Western Australia Ministry of Education</td>
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<td>WA</td>
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<td>WAHPSA</td>
<td>Western Australia Health Promoting Schools Association</td>
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<td>WASH</td>
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<td>WHO</td>
<td>World Health Organization</td>
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List and Explanation of Terms Used

The following terms are used throughout this thesis in the following ways:

- **Health education** refers to the school-based subject of health education. The term is not capitalised because health education is not a proper title but a discipline-based subject belonging to the Health and Physical Education Learning Area (HPE LA). Throughout this thesis, health education is not shortened to the acronym “HE” to signify its importance; however, it is sometimes shortened to “health” when the voice of a particular research participant is presented.

- **Physical education** refers to the school-based subject of physical education. The term is not capitalised because physical education is also not a proper title but a discipline-based subject belonging to the HPE LA. Throughout this thesis, physical education is not shortened to the acronym “PE”; however, this acronym is sometimes used when participants in the research referred to it as such.

- **Skills-based participatory pedagogies** is a term developed by the author to refer to teaching and learning in health education that develops knowledge and understandings of particular educational contexts, skills appropriate and relevant to the context, and attitudes and values to support safer, healthier and more physically active living. Within this thesis, this approach utilises learning activities, strategies and/or tasks, which focus on student-student dialogic interactions with the teacher acting as the facilitator and/or mediator of these interactions.

- **The learning area of HPE** refers to the teaching and learning associated with HPE, and is also not a proper title.

- **HPE LA** acknowledges the correct title for the learning area of HPE (Western Australia Curriculum Council, 1998).

- **Lower secondary government schools** is written in full throughout this thesis to differentiate between government and private schools and primary, lower secondary and upper secondary schooling.

- **What we know, what we do and what we could do** is written in italics throughout this thesis for emphasis. All other italicised forms of text are used to identify titles of documents and/or reports.
Additionally, within the literature review, and at the point of discussion pertaining to and entitled ‘Curriculum’, health education is referred to as school-based health education. This reference signifies and distinguishes between health education as a community-based strategy and health education as a subject based within schools. From the point of ‘Curriculum’ onwards, health education is referred to as health education and signifies that the review is referring to health education within schools.
Chapter 1: Introduction

From the outset, it is necessary to position the content of this thesis within a worldview and relative to research regarding the HPE LA in Australian schools, although initially, this thesis commences from a personal perspective. Accordingly, I would like to share some insights about who I am as an educational researcher and the research context, before progressing further, as these insights frame the chosen methodology and research design that is to follow. I believe it is important to be open and forthcoming, and that doing so helps to explain my 2012 perspective of the delivery of health education as a timetabled subject in WA schools. This delivery has been the focus of this research.

I am a Health and Physical Education (HPE) teacher based in WA. Since 2000 I have been intermittently employed in the development and implementation of HPE curriculum in WA schools, and in the preparation and professional development of HPE teachers in WA schools. I have also been employed to develop an Australian Curriculum for HPE, and although my professional qualifications are centred on HPE, I recognise that my focus on health education as a separate, discipline-based subject is a response to the WA context and in this context, a strength. This awareness is also based on an understanding of the HPE LA in Australia and via ongoing commitments to excellence in education, with academic studies centred on the HPE LA. Further, it is based on voluntary contributions as Vice President of the Australian Council for Health, Physical Education and Recreation (ACHPER) WA Branch, and past contribution as the ACHPER WA Health Education Officer.

My perspective on the subject of health education in the WA context is that it is an integral part of an essential learning area and the possibility that not all students in WA were receiving the health education component of the HPE LA educational outcomes was concerning. Specifically, it was possible that health educational was not universal in government schools and was inconsistent in its implementation. Additionally, the quantity of health education that some students in WA schools received was below what is recommended for curricula to promote healthy living (Centers for Disease Control and Prevention, 2013; Kirby et al., 1994; Nation et al., 2003; Ryan, Rossi, lisahunter, Macdonald & McCuaig, 2012; Shilton, McBride, Cameron & Hall, 1995). Equally important was the possibility that health education in WA—when taught as a part of the HPE LA—may have been taught without pedagogies and learning opportunities to develop and explore the skills and choices available to
promote and strengthen safer, healthier and more physically active living. More specifically, that in some classrooms health education may have become highly prescribed, with learning centring on the dissemination of facts and/or health messages that portrayed a certain type of health.

In preparing for this research, I held preliminary discussions with both primary and lower secondary health education teaching colleagues, with a view to assessing their perceptions of the timetabled delivery of health education in schools. Such discussions suggested that the delivery of health education in one school was not of the same quality as in the next, and that the pedagogical approaches to health education in one classroom might not have been replicated—or even have been similar—within the same school. At this point in this thesis, it is important to clarify that quality health education in the context of this research has been allied to teaching and learning that is aimed to develop “the essential knowledge and understandings, attitudes, values and skills which promote health” (Western Australia. Curriculum Council, 1998, p. 114). Further, quality health education is not about trying to make students healthy or responsible for their health but allowing students to explore what it means to be healthy through variations in pedagogy and opportunities that enable them to critically engage with health knowledge.

My preliminary discussions also suggested that some schools timetabled little health education, whilst others timetabled diverse and interesting programmes addressing local health needs. In reflecting upon these discussions, I accepted that contextual differences between schools might have contributed to the perceived variances in pedagogy and provision of content, and that teachers ultimately choose how and what to enact in their pedagogic work (Tinning, 2014). I accepted that this variance and diversity could allow multi-dimensional understandings of health to develop, which enabled students to make sense of themselves as healthy (Burrows & McCormack, 2012; Harris & Leggett, 2013), however, I was still concerned. These discussions suggested a great variation between schools, with an overwhelming negative perception of the quality and quantity of health education in WA schools. As quantity and quality were identified as criteria for health education to develop healthy living, it was concerning that health education in WA schools may have been falling short of what is recommended (Centers for Disease Control and Prevention, 2013; Kirby et al., 1994; Nation et al., 2003; Ryan et al., 2012; Shilton et al., 1995).

It was necessary to ascertain the facts, as the fundamental view prevailing from these discussions was the negative impact of inconsistency in the quality and quantity of
health education in WA schools. This perception was supported by a now-dated St Leger (2001) investigation of health literacy in schools across Australia. My discussions also raised questions about unqualified and untrained teachers delivering health education in the classroom, a perception unchanged but unsubstantiated by the data in an earlier study (Shilton et al., 1995). However, this was a perception I felt I could reinforce from my experiences as a teacher, a Health Education Coordinator and as a HPE Head of Department (HOD). I had been required to mentor teachers—on numerous occasions and in a number of schools—who had been timetabled to deliver health education and who were identified as unqualified or untrained in the delivery of the subject.

More specifically, most of the teachers I had mentored had been delivering health education without a qualification to support the educational outcomes of the HPE LA. However, some of the teachers I mentored had gained a qualification in HPE but had not gained specific training in content knowledge or pedagogies of health education as part of that qualification. I was aware, from discussions that predated this research and spanned my career, with both teachers and administrative personnel—within and outside of the schools in which I had been employed—that the timetabling of both types of these teachers to the health education classroom was common practice in WA. However, on commencing this research, I was unsure as to the extent to which this practice occurred.

Further, I was aware that unqualified and untrained teachers were sometimes timetabled to deliver educational content in other learning areas in WA schools. However, I was unsure if the extent to which unqualified and untrained teachers delivering health education was similar or different to other learning areas. During my career as a teacher I had been timetabled on two occasions to deliver educational content in a learning area to which I believed I was not qualified. I had been timetabled to deliver English and career education with neither a qualification nor the specific pedagogical training to do so. Essentially, what all of these health education discussions revealed was that the facts were unknown, especially the scale and extent of the problem.

At the beginning of this research, I believed that the delivery of health education—as a discipline-based subject belonging to the HPE LA—in WA schools varied, and I suspected that this resulted in variance in the effects of health education upon WA students. However, as I had ceased to work directly in the health education classroom, I was not in an appropriate position to comment. There appeared from my
preliminary discussions sufficient rationale for an investigation into the WA context, but as Daube (2011) had also noted, because “nobody knows exactly what is going on, what is being taught, how much, how well or with how much training of teachers” (p. 18). Spurred by these words and by the ad-hoc conversations with my peers, I decided it was time that the quantity and quality of health education in lower secondary government schools in WA was investigated, to discover at the classroom level what was really occurring with regard to timetabling, representation and/or delivery of health education in these schools.

**Understanding the WA Context**

In commencing this research, the education that was legislated for HPE in WA schools was *The Curriculum Framework* (Western Australia Curriculum Council, 1998). This was “neither a curriculum nor a syllabus”, but a framework that set out “what all students should know, understand, value and be able to do as a result of the programs they undertake in Western Australia from kindergarten through to year 12” (p. 6). The framework legislated HPE as one of eight key learning areas (KLAs), a move that corresponded to the development of learning areas across Australia and conformed to the *Curriculum Council Act* (Western Australia Curriculum Council, 1997). The learning areas were:

- the Arts;
- English;
- HPE;
- Languages other than English (LOTE);
- Mathematics;
- Science;
- Society and Environment; and
- Technology and Enterprise.

In effect, these learning areas were “the mandatory element of the Curriculum Framework” (Western Australia Curriculum Council, 1998, p. 9), as the outcomes of each of the eight learning areas were the components that “all schools in Western Australia must either implement or obtain an exemption from doing […] from the Minister for Education” (p. 9). The framework stated:

> Teachers and schools design and develop learning and teaching programs to suit the needs of their students, they must ensure that these programs include learning opportunities and enriching experiences for their students aimed at achieving the outcomes set out in the framework. (p. 9)
This legislation was critical, as it offered flexibility to WA schools to implement curricula that could influence the teaching of health education across the state.

In January 2014, the Minister for Education in WA, Honorary Peter Collier, wrote to all WA School Principals updating “the progress of the development of the Australian Curriculum” (Western Australian Minister for Education, 2014, p. 1). His letter detailed how WA was:

Already implementing Phase 1, K-10 subjects of the Australian Curriculum but the State Government agrees that all Phase 2 and 3 subjects developed so far need review to ensure that the knowledge, skills and understanding across all disciplines can be managed by teachers and students. (p. 1)

The Australian Curriculum is a national curriculum that has been developed for Australian students in the school years from foundation to year 10 (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2014b). It has been developed by ACARA in three phases, with Phase 1 Curriculum (English, Mathematics, Science and History) endorsed by all education ministers in December 2010, and the Geography curriculum endorsed in May 2013 (ACARA, 2014b, para. 6). Presently, the ministers have not endorsed Phases 2 or 3 of the Curriculum, but curricula for the Arts, Technologies and HPE have been made available for use in Australian schools.

Essentially, the WA Minister for Education’s directive in January meant that WA schools could deliver a blend of the Australian Curriculum and The Curriculum Framework in 2014. The School Curriculum and Standards Authority (SCSA) stated:

The Western Australian Curriculum for schools currently encompasses the Australian Curriculum English, mathematics, science and history. Given the phased development of the Australian Curriculum, schools will be teaching some learning areas from The Australian Curriculum [English, Mathematics, Science and History] supplemented by learning areas [HPE, the Arts, Technologies and Enterprise and Languages Other than English] described in the former Western Australian Curriculum Framework. As the Australian Curriculum is developed, it will gradually replace the Curriculum Framework. (School Curriculum and Standards Authority Western Australia [SCSA WA], 2014b, para. 1)

Fundamentally, in this transformative period, WA’s HPE LA remains part of the WA Curriculum (SCSA WA, 2014b) via the delivery of the HPE LA outcomes documented in The Curriculum Framework (Western Australia Curriculum Council, 1998).

Since 1998, health education has been taught within the HPE LA in WA schools (Western Australia Curriculum Council, 1998). Although the traditionally named subjects of health education, physical education and outdoor education were designed to be united and integrated as the HPE LA, when taught in WA schools they are
commonly presented as independent or separate, discipline-based subjects within the HPE LA. For example, at the 11 schools in which I was positioned as a teacher of HPE, physical education and health education constituted the compulsory elements of these schools’ perspective of the HPE LA, with outdoor education delivered as an optional subject, or elective. Health education was typically a classroom-based subject, while physical education and outdoor education were presented through a range of physical learning contexts, such as in a gymnasium, tennis court or playing fields. Although WA schools may differ in their perspective of the HPE LA, The Curriculum Framework states that “the outcomes in the Health and Physical Education learning area are interrelated and all contribute to the development of healthy, active lifestyles for students” (Western Australia Curriculum Council, 1998, p. 117).

The grouping of the subjects under the HPE LA was done to enable the development of a holistic understanding of health (Western Australia Curriculum Council, 1998). This concept “recognises the physical, mental, emotional, social and spiritual dimensions of the health of the individual” (p. 114). Given this laudable claim, it is interesting that in WA neither health education nor physical education, nor any of the subjects that may represent the HPE LA in schools are mandated at primary or secondary levels.

There is relative disjunction between the legislated curriculum and the context of WA schools, which has presented challenges for the HPE LA by precariously positioning physical education, health education and outdoor education as possible sites of contestation. Essentially, in mandating the outcomes of the HPE LA—which is akin to mandating a product rather than a process—schools are free to choose and implement their own processes of delivery. This flexibility is liberating and yet, ambiguous, as it has created contradictions and implications for practice that are complex, far reaching, and remain unresolved. For example, the disjunction could mean that the outcomes of the HPE LA may be addressed through subjects other than those common to most schools such as physical education and health education.

In 2011, it was reported that the HPE LA outcomes at a particular WA school were delivered through the discipline-based subject, outdoor education (A. Turner, personal communication, August 20, 2011). This may not be a typical school in WA, as physical education has a well-established place in the WA school curriculum. However, this example highlights the extent to which schools can tailor the implementation of HPE LA educational outcomes to suit local needs and interests. In this example, the construction and/or representation of the HPE LA may have been an appropriate and
suitable means of representation for the school, and it may even have been cause to celebrate this construction as highlighting the diverse educational needs of the WA schooling context. However, the unresolved flexibility of the legislation brings into question how, and in what form, the learning area outcomes are achieved, and how they are delivered in WA schools as legislated by The Curriculum Framework (Western Australia Curriculum Council, 1998). The challenge in WA is not to condemn such diversity as lacking curriculum authenticity but to remain critically conscious and to question how and if, such curriculum constructions appropriate all of the legislated HPE LA educational outcomes.

**Purpose of the Research**

The broad purpose of this research was to investigate the capacity of lower secondary government schools in WA, through the delivery of health education, to respond and critically engage with the concerns of health advocates, and to support the health of young people in WA. Further, the aim was to investigate the processes and practices within WA lower secondary government schools affecting the capacity of timetabled delivery, and to question whether timetabled delivery is an appropriate means of developing knowledge, understandings and skills, as promoted in the literature and mandated through The Curriculum Framework (Western Australia Curriculum Council, 1998).

The specific purpose of this research was to investigate the representation of health education as a separate, timetabled discipline-based subject delivered in lower secondary government schools in WA. Further, specific aims were to investigate how often health education was taught in schools and how the subject’s content was delivered in the classroom, and to investigate the teachers delivering the subject, to reveal why they were asked to teach it, their qualifications and perspectives.

**Research Questions**

The following research questions were conceptualised to investigate the research context:

1. How was health education timetabled at a lower secondary government school in WA?
2. Who was delivering health education at a lower secondary government school in WA?
3. Which pedagogical approach was preferred in the delivery of health education content?
These link to the conceptual framework. As I discuss this in greater detail in Chapter Three, in this chapter the following figure is presented to place the research questions in the perspective of the research.

Figure 1.1 Conceptual framework.
Rationale

This research was grounded in the argument that health education as a timetabled subject in WA schools aims to prepare students with knowledge, understandings and skills to promote safer, healthier and more physically active living. Specifically, the rationale argues that health education as an essential part of the HPE LA in WA has the potential to support and strengthen the health of WA students. More specifically, the HPE LA curriculum in WA, when delivered with the inclusion of skills-based participatory pedagogies, creates opportunities for students to critically engage with health information as a means to enhancing the health of themselves and others. This is in keeping with the educational goals for young Australians to “have the knowledge, skills, understandings and values to establish and maintain healthy, satisfying lives” (Ministerial Council for Education, 2008, p. 9). Health advocates in WA—whose recent calls for action in education have heightened interest in school-based health education—support this argument (Daube, 2011; Dimitrijevich, 2011; O’Leary, 2011a, 2011b).

Such calls have arisen from research stating that “trends in Australian children predict that their life expectancy will fall two years by the time they are 20 years old, setting them back to levels for males in 2001 and for females 1997(6)” (National Preventative Health Taskforce, 2008, p. x), and from research suggesting that today’s young people are significantly more at risk of developing mental health and well-being issues than those of the past, and that many mental health problems and disorders originate in childhood (Australian Institute of Health and Welfare [AIHW], 2003). One third of 12–24 year olds in Australia are overweight or obese (AIHW, 2011); one in five WA high school students are classified as overweight or obese (Collier, 2010). The incidence of type 2 diabetes is increasing in younger Australians (AIHW, 2010), although over half of all cases in Australia are preventable (Diabetes Australia, 2013). The incidence of preventable sexually transmitted infections (STIs) in children under the age of 16 in WA has increased by a third (Cann, 2011), and the Australia-wide incidence of Chlamydia has tripled over the past decade, with 22 per cent of all cases being in 15–19 year olds (Commonwealth of Australia, 2011). Further, one third of all deaths and disease in Australia are blamed on “bad living” (Tillett, 2010, p. 14).

The rationale for this research also lies in the argument that childhood is a critical time in both the cognitive and social development of health behaviour, as many health issues originate in childhood (AIHW, 2011; Bandura, 1981; Eckersley, 2010; World Health Organization [WHO], 1999). Moreover, engaging children and young
people in curriculum and learning experiences that specifically focus on health in the early years is considered to be playing “a critical role” that is “equipping children with the knowledge, attitudes, and skills they need to protect their health” (WHO, 2003, p. v).

Children and young people in Australia, like New Zealand, are compulsorily schooled from kindergarten to year 12, so there is an opportunity for schools to support and advocate healthy, physically active living and act as a health-strengthening resource (Burrows & Wright, 2004). The teaching and learning of a mandated HPE LA enables students in WA to learn skills to prevent disease and injury, promote healthy relationships, prevent or inhibit risk-taking and reduce the possibilities of premature death (WHO, 2003). This, however, is dependent on the capacity of the HPE LA to build the competencies and skills (practicing, negotiating, decision-making, problem solving, communicating and advocating for health) (WHO, 2003), through the delivery of pedagogy that offers learning opportunities to support and strengthen health (Western Australia Curriculum Council, 1998).


Mike Daube, of the McCusker Centre for Action on Alcohol and Youth, specifically called for compulsory alcohol and drug education in schools (O’Leary, 2011b). His Australia-wide reputation and robust vocalisation of his support for health education in WA emphasises the powerful positioning of schools as a means of supporting and strengthening health. Daube argued “schools have a critical role in equipping young Australians with the necessary knowledge, attitudes and skills to lead healthy lives and develop behaviours that will keep them healthy well beyond their school years” (2011, p. 18).
Other notable WA health advocates agree, and in their individual calls focus on particular areas of health concern. Donna Cross (Western Australian of the Year 2012) targeted policy-makers and practitioners as she called for schools to be properly recognised as a potential avenue through which to reduce student bullying (Cross et al., 2012, p. 405). Fiona Stanley (Australian of the Year 2003, Director of the Telethon Institute for Child Health Research in WA, Chair of the Australian Research Alliance for Children and Youth) argued that “schools, health, mental health, child protection and justice are in crisis in Australia”, and demanded a retreat from what she calls “band-aid solutions” (2003, p. 6). Fiona Bull (at the University of Western Australia’s School of Population Health) suggested that more efforts were required to tackle childhood obesity (O’Leary, 2010), and Paul Skeritt (WA psychiatry spokesman from the Australian Medical Association) called for greater awareness of teenage self-harm, as he believed that teenagers were “struggling with increasingly complex pressures” (O’Leary, 2012b).

Accompanying these voices is the concern of researchers who have predicted a generation of diabetes sufferers (Baker IDI Heart & Diabetes Institute, 2012). The impact of diabetes alone on the present generation of young people has been predicted to be catastrophic. Some researchers even propose that the burden of diabetes over the next decade or two could cause health care, as we know it today, to collapse. This would be very concerning if it were to eventuate, as four per cent of all Australians are currently living with diabetes, collectively spending $7.2 million on diabetes medication annually (AIHW, 2013b). It is predicted that by 2031, 3.3 million Australians will have type 2 diabetes (Diabetes Australia, 2013). The chance of suffering from the disease, however, can be significantly reduced through healthy eating, regular physical activity and all virtues of the HPE LA educational outcomes (Diabetes Australia, 2013).

These concerns resonated with school-based health education advocate, Sue Dimitrijevich (Director of WA Health Education Services) whose straight-talking approach captured my attention. In speaking about the delivery of health education in WA schools, she asserted that “every student is entitled to effective health education” and that schools should “guarantee comprehensive health education for all our young people” (p. 22). Dimitrijevich’s view supports an investigation of the problem identified in this research.

Schools are widely recognised as key sites for health action (Allensworth, 1993; Austin & Hickey, 2007; Dollman & Lewis, 2007; Jourdan, Samdal, Diagne & Carvalho, 2008; Macdonald, 2013; Shannon, 2007; St Leger, 2000, 2004; Tinning & Glasby,
Globally, health advocates turn to schooling as an opportunity to ameliorate health problems (Burrows & Wright, 2004). As Austin (2007) noted, when speaking of schooling, “there is arguably no greater contribution for educators to make than to social, political and general civic sustainability” (p. 8). This is an argument developed from the knowledge that schools can assist health behaviour formation and change (Bandura, 1981; Mayer, Smith & McDermott, 2011; Meeks, Heit & Page, 2007; Paakkari, Tynjala & Kannas, 2010; Rubinson & Alles, 1984; Shannon, 2007; Sinkinson & Burrows, 2011; St Leger, 2001; Usher, 2012; Willey Spalt, 1995; WHO, 2003).

Austin (2007) based his argument on the perspective that “the whole purpose of education processes, from a sociological perspective, is to effect significant change in individuals” (p. 9), and health advocates who look to schools as key sites to effect change agree. This perspective recognises that “schools are the one institution in our society regularly attended by most young people” (Kirby, 2002, p. 27).

There is great potential for schools to promote health, irrespective of a singular reason (philosophical, ethical, ideological, political, social, economic) why health advocates call upon health education in schools. Gard and Leahy (2009) relate this potential as “educational common sense” (p. 183), but caution that contradictions occur when public health agendas and policies are appropriated in and through schools. In musing over the use of schools as key sites to propagate “governmental assemblages” of health, they advised that the pedagogic work of health education has the propensity to become “much ‘messier’ than we sometimes might think” (Gard and Leahy, 2009, p. 184). They implicate, along with other critical health scholars (Fitzpatrick & Tinning, 2013) that the delineation between health education as a discipline of study and health education as a means for behavioural control has become blurred.

None-the-less, scholars recognise that schooling, schools and school-based health education offers a means of supporting behavioural responsibility within individuals, to positively influence their health (Daly, 2007; Daube, 2011; Dimitrijevich, 2011; Governali, Hodges & Videto, 2005; Rubinson & Alles, 1984; St Leger, 2001; Tones & Tilford, 1994). The difficulty in WA, however, is not in acknowledging the change that 12 years of schooling could achieve, but in asking:

- What could be achieved within the health education classroom as a means to support health?
- What could the HPE LA curriculum do to respond to and critically engage with the calls of these health advocates?
What could schools realistically expect to contribute to improving the health of young people? These reflect reasonable considerations about how effective WA schools could be.

This research commenced from the problem that not all children in WA are guaranteed access to quality, timetabled health education that specifically focusses on providing children with the skills to take preventative action. This research asks whether this is reasonable: is it reasonable that health education in lower secondary government schools in WA is dependent on a system of education that allows schools flexibility over the interpretation, timetabling, shape and delivery of the educational outcomes of the HPE LA? Is it economically viable, from social justice and ideological perspectives, that this flexibility exists when the leading causes of premature death and illness within Australia are largely attributed to behaviour? Finally, is the delivery of health education in these schools following best practice, when the integrated learning of the educational outcomes of the HPE LA are designed to support and promote safer, healthier and more physically active living?

There is global recognition that a school-based programme of health education “lays the foundation for a child’s healthy development through adolescence and across the entire life span” (WHO, 1997, p. 2). This should be the basis for health education as one of the subjects through which the HPE LA is commonly represented in WA schools to be mandated, so that this contextual representation, through school-based programmes, can support the health of all children and young people. In WA, the perception exists that schools often fail to satisfy expectations and their responsibility to educate about health and for health, and this view is supported by research across Australia (Marks, 2010; Ridge et al., 2002; Ryan et al., 2012). This research specifically examines the delivery of health education as a timetabled discipline-based subject in WA lower secondary government schools, because at these schools, the delivery of health education is ambiguous and open to scrutiny (Daube, 2011). The motivation for this research is the ambiguity of this context, and the lack of substantiated data on the qualifications of teachers timetabled to deliver health education content.

Significance

This research is significant to the teaching and learning of HPE in Australia, as it offers contextual data on the representation of the learning area, and the teachers’ who deliver one of its subjects—health education—in lower secondary government schools in WA. It explores the decisions made at the administrative level that affect the enacted
delivery of the HPE LA educational outcomes in the health education classroom, and offers the following insights:

- Health education is at a turning point in Australia, with the proposed endorsement of an Australian Curriculum: HPE from 2014.
- There is a need to investigate the delivery of the subject at classroom level, which could identify whether a one-way relationship between school-based curriculum administrative decisions affects the subject’s delivery in the classroom.

In understanding the policies and practices in place in lower secondary government schools in WA, this research could show how these policies and practices affect the representation of educational outcomes in the classroom. More specifically, what teachers enact in the name of HPE as translations of curriculum text. This exploration could help produce suggestions for future directions aimed to improve the deployment of teachers to HPE classes and perhaps, the enacted delivery of health education in the classroom.

This research has much to offer health advocates who have positioned health education as a health solution in WA. By offering a contemporary representation, this research illuminates the policies and practices operating within lower secondary government schools that have affected the delivery of the subject of health education. It is significant as a means to promote that all young people in WA schools receive learning opportunities with the potential to support and strengthen health.

**Structure of the Thesis**

Each of the seven chapters of this thesis contributes to the development of the representation of health education in lower secondary government schools in WA. This first chapter has introduced the research topic and provided a brief explanation of the research journey, grounded in a conceptual framework. It has discussed the research context (WA), the rationale for the research, its purpose and significance and the research questions that framed the study.

Chapter Two explores the elements that help reveal the representation of health education in lower secondary government schools in WA. The elements define the important concepts that have affected the research. They trace the history, changing context and underpinnings of health education in Australia and WA. The elements outline the teaching and learning of health education, and explore the significance of the teacher in delivering the subject.
Chapter Three outlines the approach of this research, and describes the theoretical perspective and conceptual framework. It examines my career history and the effect of my academic journey on the construction of my own theory, and reveals that I consider myself a postpositivist, outlining how this paradigm has shaped this research. This chapter also outlines the mixed methods methodology of this research. It reports that utilising two research methods was the best way of capturing research data. The first method was a questionnaire, designed to answer the first two research questions and collect quantitative data; the second method comprised nine semi-structured interviews, designed to answer the third research question and collect qualitative data.

Chapter Four presents the results of the research questionnaire, and Chapter Five presents the results of the semi-structured interviews. Both chapters address the research questions.

Chapter Six discusses the research findings in relation to previous research, and presents the idea that there is a mismatch in WA between what we know, what we do and what we could do, regarding the delivery of health education. This is presented through discussion of the key insights responding to the three research questions.

Chapter Seven concludes the thesis by reflecting upon my postpositivist worldview, and acknowledges its effect on the research findings. The chapter specifically reflects on the complexities and contradictions within the research context and the limitations of the research design and methodology. It presents for contemplation some considerations for future research, which aim to investigate further the idiosyncrasies of the HPE LA in WA, and areas of investigation that could enhance the delivery of the learning area’s educational outcomes in all schools. This final chapter also presents some suggestions to respond to the mismatch between what we know, what we do and what we could do regarding the delivery of health education in lower secondary schools in WA.
Chapter 2: Literature Review

This chapter develops a nexus between the representation of health education in lower secondary government schools in WA and the timetabling of the HPE LA in WA schools as two separate, discipline-based subjects (physical education and health education) that are not mandated. It explores the key literature and concepts affecting this research as it develops a conceptual frame to understand, visualise and appreciate the representation later developed from the research findings. This chapter connects the knowledge garnered from the literature review to the purpose of this research: the investigation of the representation of health education in lower secondary government schools in WA. More specifically, the investigation of:

- the timetabling of health education;
- the delivery of health education;
- the qualifications and perspectives of the teachers delivering health education;
- health education pedagogies; and
- the capacity of HPE to respond to and critically engage with the calls of health advocates, and to support the health of young people.

This comprehensive literature review clarifies the research context and develops an understanding as to how the research findings can contribute to the field of knowledge production in HPE (Kamler & Thomson, 2006). It presents contextual insight on how health education was represented in lower secondary government schools in WA in 2012, and how this representation could affect the enacted delivery of health education content in the classroom.

This chapter explores five key areas of interest related to this research, visually represented in Figure 2.1: health, health education and health promotion, health and health education in Australian schools, the HPE LA curriculum and health education pedagogies, and the preparation of teachers who deliver health education in the classroom.
With the aim of establishing a sound base for understanding the significance of this research, the first key area commences from a broad perspective, to briefly investigate worldviews of health. This key area examines the philosophy underpinning the HPE LA curriculum in WA, and in doing so, connects this philosophy to worldviews of health.

The second key area investigates health education and health promotion as agents for behaviour change. This investigation helps locate the HPE LA curriculum within the greater concept of health education as a health-enhancing and promoting phenomenon. This investigation explores how health education was formed, has transcended the traditional views of health education, been affected by contemporary views of health and was surpassed in the 1980s by health promotion, to encompass a more dynamic view of health.

The second key area of investigation leads directly into the third to provide the means to historically position health education within Australian schools and critically evaluate the connections between health, health care, health instruction, school-based health education and school-based health promotion activities.

The fourth key area examines the HPE LA curriculum as a discursive tool to support the education of children and young peoples’ health in and through schools, and explores the literature and research that theorise and problematise the HPE LA in Australia. It discusses how governments use the accessibility of schools to develop behavioural responsibility within citizens, as a means to positively influence their own
health and the health of others. This discussion is important as it develops an understanding of the motivations of health advocates who look to schools to ameliorate health issues. This key area also examines the critical discourses in HPE that have contributed to developments in health education as it questions the local nuance of such discourse in WA. It questions whether appropriate attention has been paid to pedagogical practices that enhance the timetabling and delivery of health education in the classroom, and proposes that, in the WA context, there has been insufficient pedagogical gain for the practice of health education in WA government schools from the development of the HPE LA.

By investigating the HPE LA curriculum in the fourth key area, the review specifically examines the social, theoretical and critical processes by which HPE is bound to developing ‘healthy citizenry’. Healthy citizenry is a term prominent in the critical discourse of scholars of HPE and interchangeable with the terms ‘health citizenry’, ‘healthy citizen’ and/or ‘health citizenship’. For example, Tinning and Glasby (2002) use the term to summarise the perceived function or assigned work of the HPE LA to construct self-regulating citizens who are critically capable to take responsibility to lead healthy and productive lifestyles. McCuaig and Hay (2012) report healthy citizenry as a legitimate concept and deliberate how HPE endeavours to produce a certain type of citizen—empowered and healthy—who is not an economic burden to society. Leahy (2013) postulates that healthy citizenry is a conduit for governmentality in schools and considers the ways in which the teaching and learning in HPE attempts to shape the health of young people. The exploration of healthy citizenry is important to this research as it reveals the effect of the final key area of focus: the teachers.

The focus of the fifth key area is the teachers who are timetabled to deliver health education in WA schools and the complexities for teaching and learning when some of these teachers are timetabled to deliver the subject when they have not gained qualifications or training in the HPE LA. McConney and Price (2009) refer to these teachers as “out-of-field” teachers (p. 86). This key area examines the identity of the health education teacher and the pedagogical content knowledge (PCK) (Shulman, 1986) required to deliver a holistic understanding of health via sociocultural perspectives. Shulman identified three categories of teacher knowledge (subject-matter content knowledge, PCK and curricular content knowledge), and stated that PCK is what assists teachers to convey the subject’s content so that it is comprehensible to the students. By exploring the effects of health knowledge delivered as uncontested and prescribed knowledge, this key area prompts the questions: what is the purpose of
health education in WA schools? Is it to educate about health or to enhance the health of children and young people?

Finally, this key area focusses on the development of skills-based participatory teaching and learning as a means to enabling young people in WA to make healthier choices. In doing so, it examines the impact of deploying out-of-field teachers to health education classrooms in WA schools (McConney & Price, 2009). In concluding the review of literature, this key area also considers the role of universities in preparing pre-service teachers for placement in WA government schools, and the implications for teachers who deliver health education in the lower secondary settings of WA government schools.

Health

Views of health

Defining ‘health’ is challenging, and capturing a singular meaning ambitious. What one-person understands by health or ‘healthy’ may not be the same as others. Quennerstedt (2008) suggests that difficulties with defining the term occur because health is “a concept with different meanings in different contexts” (p. 269). Despite the differing interpretations, health is intuitively recognised by most people. It is ubiquitous, a function of the living and a “construct that most people value, particularly when health deteriorates” (Cottrell, Girvan & McKenzie, 2006, p. 79).

The most-used definition of health is outlined in the constitution of the WHO (1946), which defines it as “the state of complete physical, mental and social well-being not merely the absence of disease or infirmity” (p. 1). This definition has been heralded as well as debated, with disapproval focussing on the word “complete” (p. 1). The consensus was that the definition did not recognise the operational nature of health, to accomplish longer and more meaningful life (Anspaugh & Ezell, 2013; AIHW, 2012). Subsequently, in 1986, the WHO formally updated the definition: now, health is “a resource for everyday life, not the object of living” (1986, Health Promotion, para. 1). This definition reflects the understanding that health moves and evolves, and in so doing, resolved the criticism that the earlier definition upheld health as a complete, static state.

The holistic understanding of health

Fetro (2010) argues, “most professionally-prepared health educators agree that health is a dynamic process of achieving one’s potential in several inter-related dimensions” (p. 258). In doing so, she acknowledges that health is an active and complex construct to understand, which requires clarity through the provision and
conceptualisation of dimensionality. Traditionally, health care focussed on a physical interpretation of health, with most articulations referring to health as physical well-being (Anspaugh & Ezell, 2013). Today, more widely accepted approaches in health care support Fetro’s view, subscribing to a more holistic understanding of health, which recognises that health is a relationship between the individual and the social and/or lived environment, and that health issues can manifest through a range of dimensions. As acknowledged by Oberteufener (1953) (as cited in Cottrell et al., 2006) in adopting a holistic understanding of health, “the mind and body disappear as recognizable realities and in their stead comes the acknowledgement of a whole being” (p. 79).

A holistic understanding of health infers that caring for the whole engages caring for the parts, and Fetro (2010) referred to this sense of dimensionality. Most publications cited here include social, mental, emotional, spiritual and physical health (Greenberg, 2004). Some may add environmental health or other dimensions, but it is the interrelationship of dimensions that define holistic interpretations of health. Thus, the prevailing view is that the dimensionality of health aids the functionality of the health of the whole person by affording parameters and a means to which the health of the individual can be viewed, measured, managed and maintained.

A holistic understanding of health intersects with this research, as education in WA accepts this view as a rationale for the HPE LA (Western Australia Curriculum Council, 1998). The rationale articulates the importance of each dimension, as it states: “The Health and Physical Education learning area focusses on a holistic concept of health. It recognises the physical, mental, emotional, social and spiritual dimensions of the individual” (p. 114). This suggests that the intention is that through schooling in WA, young people are educated for the betterment of the health of the whole person, with the ability to increase their control over their own health and that of others.

**Health Education and Health Promotion**

Unlike health promotion—which is a relatively new health phenomenon—health education as a community-based health strategy has a long history of assimilation into broad-scale health care (Richmond, 2009). The WHO (2003) attributes this to the unambiguous relationship between health and education. Similarly, much of the literature in this review documents a strong relationship between health education and medicine, purporting that both professions seek ways of keeping people healthy and free of disease (Anspaugh & Ezell, 2013; Cottrell et al., 2006; Cottrell, Girvan & McKenzie, 2012; Jourdan, Mannix McNamara, Simar, Geary & Pommier, 2010; Meeks et al., 2007; Rubinson & Alles, 1984). While the prevalence of these relationships is
significant, their effect upon this research is indirect, as they partly explain the influence of medicine and science on the construct of traditional, community-based health education. Therefore, to conduct an extensive review that critically evaluates community-based health-focussed activity in our past offers little benefit to a greater understanding of the effects upon this research.

Instead, to make sense of the developments in health promotion and others that affect the forms of health education in Australian schools, this review concentrates on the contemporary view of community-based health education as it helps illuminate the ebb and flow of power relations operating within the health context (Lupton, 1995). Thus, the focus of this key area within the literature review is to demonstrate that community-based health education is connected to school-based health education, as the content within school curricula supports the goals of a ‘New Public Health’ (Tinning & Glasby, 2002).

Dinan Thompson (2009) explains that the term, a New Public Health, marked a shift in the focus of public health policy toward “healthy public policy” (p. 7), where measures to improve the health status of individuals incorporated contemporary applications, which used a broad range of health strategies. She notes, that these strategies, aimed to address the social, environmental and economic causes of poor health. Germov (2009), accounts for the shift as public recognition that health status is impacted by our surroundings and he believes, because people live socially and not in isolation, health is socially constructed, both positively and negatively.

The virtues of a New Public Health are unpacked in later parts of this literature review, however, within this key area, function to provide understandings of the complexities that surround health and health education. These understandings provide a basis for critically evaluating—in other key areas—the challenges faced by teachers delivering school-based health education that educates for health as opposed to educating about health. This understanding is significant, as Fitzpatrick and Tinning (2013), who are critically reflective scholars, believe it is a basis for understanding the contradictions underlying school-based health education currently delivered in Australia. They contend that there are implications for practice when school-based health education communicates “particular messages about health” (p. 132), of which teachers may or may not be aware.

**A synopsis of the history of health education**

The origins of community health can be traced throughout the world, and indicate that religion, war and unrest, medical and social movements and other world
events have affected the phenomenon (Cottrell et al., 2012). Accordingly, perspectives on health, health care and health education have swung from an individualised perspective—what some believe is akin to ‘victim blaming’ (Lupton, 1995)—to a more social and sociological perspective of health reform (Germov, 2009).

As noted by Dinan Thompson (2009), in the Western world the 1980s marked a significant shift in health, health care and health education. The traditional view of health education—a medical, reactive and passive model—was formally replaced by a broader social view of health promotion (Nutbeam, 2000). This contemporary view encompassed the ideals of holistic health, while incorporating new health-promoting visions centred on prevention (Eriksson & Lindstrom, 2005). This shift from a medical and science-oriented conception (Rubinson & Alles, 1984) was to engender individuals and communities with greater control via specific health promotion processes that concentrated on enabling, advocating and empowering the individual (Beckett, 1990; Eriksson & Lindstrom, 2005).

This shift was largely a consequence of the WHO’s (1986) development of the Ottawa Charter in 1986, as well as the result of global dissatisfaction with the biomedical model of health care and the deficit model used for health education purposes, which, at the time, was dominant in most Western countries (Eckersley, 2010). Thus, the stimulus for change in educating for health became the individual and the individual’s ability to effect behaviour change. Ability was perceived as enablement, engagement and empowerment.

The contemporary context of health education

Contemporary health education recognises the individual as an active participant, unlike previous conceptions in which the individual was regarded as a passive participant and recipient of information (Young, 2005a). The reward of active participation is that “the individual possesses the understanding, skills, and experiences needed to base and implement informed health decisions” (Rubinson & Alles, 1984, p. 42). As McCuaig (2006b) has noted, the traditional methods used in health education have had an unfortunate history of indoctrination focussed on fear, guilt, temperance, morality and conformity, unsuitable for contemporary times. Young (2005) expressed a similar view, pointing out that earlier conceptions of health education targeting schools were viewed by educationalists like Bloom (1981, 1956) as too narrow, as they “ignored the affective and action domains which were part of education’s frames of reference” (Young, 2005a, p. 112).
The contemporary view of health education remains very much a part of health promotion strategies today. However, unlike in the past, when it was considered the forefront of health care and the tool for effecting change, health education is now considered one of many community-based strategies, and is regarded as a means of achieving broader goals of health promotion. Young (2005b) states that health education now focuses on “skills development, values awareness, goal setting, positive self-concept, cognition, and willpower development among numerous other variables” (p. 112). He believes that the shift in the 1980s demonstrated a more dynamic framework for health care, in which individual responsibility and action became more central.

This shift in the health care paradigm is also evident throughout the WA HPE LA rationale, which states: “It is critical that all students develop proficient self-management skills for their own benefit, and for the benefit of the communities in which they live and work” (Western Australia Curriculum Council, 1998, p. 115). Although the aspiration to empower young people, which underlies this rationale is hard to criticise, Fitzpatrick and Tinning (2013) assess such intent as a form of “health fascism” (p. 132), designed to subjugate students into becoming productive, health conforming citizens. Other critically reflective scholars agree (Burrows & Wright, 2007; Evans, Davies, & Wright, 2004; Leahy & Harrison, 2004; Renwick, 2014; Wright, 2009), viewing such tenets in curriculum as nothing short of promoting moral panic.

As previously mentioned Fitzpatrick and Tinning (2013) caution that there are contradictions when educating for health takes place in schools and to explain they cite that in neoliberal times, “the mantra is that the government cannot and should not do it all” (p. 133). They stress that tension occurs because the underlying purpose to up-skilling young people via school-based curricula is in effect a form of normative control, which is contrary to the purpose of education. Dinan Thompson (2009) agrees, stating that in winding back government interventions, neoliberal politics assume “that individuals are entrepreneurial autonomous rational actors who are capable of exercising regulated freedom” (p. 195). In looking further at the WA HPE LA rationale, there are references to the concerns of these scholars, such as the health promoting dogmas to “take action”, “reduce threats”, “contribute effectively” and “make personally-and socially-responsible decisions” (Western Australia Curriculum Council, 1998, p. 114), all of which, on face value, appear as benevolent health-enhancing propositions (Tinning, 2014). However, critiques of such curriculum—which articulate
the virtues of a New Public Health—caution against “naïve optimism” (Vander Schee & Gard, 2013, p. 211). They argue that such rhetoric operates to regulate behaviour rather than enable or empower behaviour as intended through the processes of health promotion.

In returning to the contemporary context of health education, Tones and Tilford (1994) proposed that the emergence of health promotion in the 1980s marginalised later developments of school-based health education. This point of contention is significant to this research as it draws attention to a specific time, or a turning point, in the history of school-based health education. It specifically identifies a period in which school-based health education pedagogy was perceived as demoted in both the health and education sectors (Tones & Tilford, 1994). This point further illuminates the significant issues pertaining to the traditional view of school-based health education, which mirrored the traditional methods of community-based health education by fostering passive participation in the didactic transmission of health information in the classroom.

Thus, in briefly exploring the origin of community-based health education and the contemporary context of health education, this review has aided cognition on how the HPE LA rationale in WA reflects world health promotion ideals. This exploration has also demonstrated that school-based health education in the late 1990s (Western Australia Curriculum Council, 1998) embraced the holistic understanding of health and promoted the student as an active participant in the learning process where, as Jensen (1997) stated, the development of skills became key.

To develop the connection between school-based health education in Australia and broad goals of health promotion further, this review specifically examines school-based health education in Australian schools and, in particular, WA schools.

**Health and health education in Australian schools**

Ridge et al. (2002), using three phases, summarised the representation of school-based health education in Australian schools. The phases are health instruction (1910 to mid-1950s), health education (mid-1950s to 1980s) and health promotion (early 1980s until 2002). These phases are useful in constructing meaning from world developments that affected Australian schooling. The following sections adapt the three phases, as suggested by Ridge et al. (2002), as a means of clarifying developments in Australian and WA school-based health education pedagogy.

**Health instruction (colonisation to mid-1950s)**

In WA, harsh and unfamiliar living conditions derailed many of the first attempts in the 1830s at schooling, as most of the Swan River Colonists were
preoccupied with survival (Ryder, 1971). Although colonisation in Australia brought English traditions and a form of education modelled on the English system (Daly, 2007; Neal, 1979), poor migration to the Swan River Colony, coupled with economic hardship, meant that for many years, education was not a high priority in WA (Ryder, 1971). Therefore, education in WA did not evolve as fast as on Australia’s eastern seaboard.

Early WA schools were characterised by the transmission of knowledge through drill, games and stories about sobriety and moral responsibility, as those who were charged with teaching often held religious positions within the community (Rankin, 1926). Representations of health instruction in classes focussed on treatments and cures, as well as the prevention of disease, with children indoctrinated in health topics such as hygiene and abstinence. Daly (2007) reported that this representation was common throughout Australia, as “it was through sermons that posed as health education that the notions of muscular Christianity and athleticism were passed onto the young” (p. 155). Subsequently, the process of social engineering through conformity continued in WA, Australian and international schools for many years. Gymnastic exercises were conducted outdoors, and indoor lessons contained instruction on moral, ethical and medical virtues (Ridge et al., 2002; St Leger, 2001; Stewart-Brown, 2006).

In 1936 in WA, the Education Department published *The Curriculum for Primary Schools*, which documented the representation of ‘Health Education’ as a significant part of primary school education (Western Australia Education Department, 1936). The significance of this was outlined in the aims of the curriculum, which stated: “The school that aims at preparing its pupils to meet the needs of life must take cognizance of experiences conducive to health because health is one of the most important of the basic values in human life” (p. 240).

Unfortunately, there is no such documentation of the secondary curriculum before the 1950s in WA, as secondary schooling was considered a preserve of the elite, only for the most fortunate (Mossenson, 1971). The most relevant documentation unsurprisingly reflects the ‘medical virtues’ cited in the literature review. However, it also reflected the specific environmental needs of early West Australians. In 1936, *The Curriculum for Primary Schools* records the focus of Health Education as physical activity, health content and safety, and included:

- food;
- the digestive system;
- the circulation of blood;
• the respiratory system;
• the framework of the body;
• the nervous system; and
• the body’s enemies.

The Safety First content included:
• the damaging effects of fire on property;
• a classification of the chief causes of traffic accidents and of the losses resulting from them;
• further consideration of accidents; and
• accidents due to careless use of firearms (Western Australia Education Department, 1936).

Certain aspects of this content resemble the current WA syllabus for HPE (Western Australia Department of Education and Training [WA DET], 2007a, 2007c, 2007d), and the content does not appear (in the written text at least) to be overly religious in tone. However, without experiencing the manner in which the content was actually delivered in the classroom, it is difficult to ascertain the impact and extent of religion, as reported in many historical accounts of health instruction of the period (Daly, 2007; McCuaig, 2006b; Rankin, 1926; Ridge et al., 2002; St Leger, 2001; Stewart-Brown, 2006).

Health education (mid-1950s to 1980s)

McCuaig (2006b) reported, “by the late 1940’s Australian health and education government departments were working collaboratively to develop more comprehensive classroom-based approaches to health instruction” (p. 58). Perhaps, encouraged by the post-World War II regeneration, the focus of the 1950s initiated a departure from the medical virtues that had previously penetrated Australian schools. The intent was to redirect the instruction of health content to encompass a more contemporary approach that concentrated on the delivery of health education.

In WA, Mossenson (1971) recorded that “the most noteworthy feature of the 1950s were the expansion and reorganization which occurred at the secondary level” (p. 155). He reported that the progress of comprehensive high schools in WA led to the development of a specialised workforce of teachers, teaching a range of specialised subjects in secondary schools. Edwards and Griffiths (1978) chronicled the Claremont Teachers College as the first training college in WA, noting that it opened in 1901. They commented that initially, the college prepared teachers “through the pupil/teacher method which was like an apprenticeship to teaching” (p. 4). However, others noted that
it was not until the late 1960s that the college was to fully develop a specialised teaching focus that could support the growth of secondary education in WA (Bolton & Byrne, 2001). Until then, the University of Western Australia (UWA) was the only university to deliver secondary teacher preparations. Hence, the expansion of five specialised teaching colleges, and a focus upon improving pre-service teacher training for secondary school teachers, contributed to secondary schools in WA deliberately acknowledging—through curricula—that education could promote health. This awareness had already permeated primary curricula in other Australian states and territories with Daly (2007) reporting that curricula began to espouse the belief that “individuals could greatly influence their health through behavioural responsibility” (p. 161).

Awareness of the impact upon health of the individual was already well established in primary education in Queensland. For example, in 1948, the Queensland Health Education Council had published “a Handbook for Health Education” (Daly, 2007, p. 160). This resource was a first of its kind, as it “afforded teachers an updated collection of activities, songs and stories within chapters pertaining to nutrition, hygiene and safety” (Daly, 2007, p. 160). Although this publication was an early development and preceded this particular time, it epitomised these later developments by promoting the realisation that through social change, schools could more effectively attain the good health and well-being of their students. Thus, with an emerging source of health knowledge, improved teacher training and the formalisation of secondary schooling, school programmes of health education in WA focussed on the individual and their responsibilities over their health, in keeping with what was promoted across Australia (Daly, 2007; Ridge et al., 2002).

Health promotion (early 1980s until 2013)

With the recognition that many factors affect individual health, the latter half of the twentieth century brought new ways of communicating health messages in Australian schools. In reviewing the representation of school-based health education in Australia, McCuaig (2006b) attributes the development of the ‘Health Promotion Phase’ to the increased concern of health experts who scorned “the gross individualism of [traditional] health education programmes and their reliance on ‘victim blaming strategies’” (p. 59). Wharton, Ng and Daly (2007), commenting on McCuaig’s research, are less circumspect, and assert that McCuaig is suggesting that “the primary reason behind a preference for Individual Responsibility and the Behavioural Approach is that it absolves society’s leaders of the responsibility of addressing the real determinants of
health” (p. 175). In this context, refocussing school-based health education to incorporate the principles of health promotion—as articulated by the Ottawa Charter (WHO, 1986)—could favourably re-attribute health-related responsibility from the individual back to the government and government organisations. However, and conforming with McCuaig’s assessment (2006b), this development with its “neoliberal rationalities of efficiency and value maximisation” (Vander Schee & Gard, 2013, p. 211), dressed-up as well intentioned rhetoric, firmly entrenched school curricula as a means to achieve behavioural responsibility within young people.

As also noted by Stewart-Brown (2006), disseminating health-promoting information through educational programmes in schools—which specifically sought to develop personal skills—aimed to support the goals of a New Public Health. By reconceptualising health education to acknowledge health inequalities, school curricula re-prioritised particular health needs for particular groups and signposted the effect of economic circumstance (St Leger, 2000). In essence, this shift was aimed to better acknowledge the power, right and control of the individual in behaviour and choice as it transferred the health promotion principles of enabling, advocating and empowering across to the school context. In a more official capacity, this process was referred to as addressing the determinants of health (WHO, 2013).

The WHO (2013) lists the determinants of health as the social and economic environment, physical environment and a person’s individual characteristics and behaviours. Others have re-contextualised the determinants for their own purposes (AIHW, 2012; Combes, 1989; Marmot & Wilkinson, 2006), but this view continues to be clearly articulated by the WHO (2013), which states that “whether people are healthy or not, is determined by their circumstances and environment” (Introduction, para. 1). In WA, the HPE LA statement acknowledges this position, stating that:

The Health and Physical Education learning area recognises that improving students’ knowledge about health issues and practices does not guarantee they will lead healthy lifestyles. However, students who are able to identify and develop their own attitudes and values associated with leading a healthy lifestyle are better equipped to make personally- and socially-responsible decisions. (Western Australia Curriculum Council, 1998, p. 114)

This statement, with its strong focus on ‘lifestyle’, is distinguishable as a harbinger of the socially driven programmes associated with health promotion in the 1990s, as it attempts to deconstruct health from an individual to a social construct. However, Leahy (2013) believes that such statements in curricula when enacted, act in the reverse, as they dismiss governmental responsibilities back to the individual. Leahy takes issue
with such value-laden judgements in curricula and would consider this normative and individualised statement as exemplifying what she calls: “disgusting pedagogies” (p. 178).

In reflecting back on Tones and Tilford’s (1994) assertion that health promotion unseated the traditional view of health education, it is possible to disentangle this perception by evaluating their own formula for health promotion: health promotion = health education x healthy public policy. In essence, Tones and Tilford (1994) believed that school-based health education was surpassed by health promotion within schools because actions in health promotion curtailed pedagogical developments. These actions drew the focus away from pedagogy and the development of new pedagogical approaches to other areas of need. In keeping with other scholars mentioned in this review, Tones and Tilford believed that through the discursive processes of the curriculum, health promotion cemented the school as a site to reflect governmental, political, economic and social imperatives. Although honourable, they criticised it as a distraction from the core business of education.

In support and awareness of Tones and Tilford’s (1994) concern, this review briefly investigates the effect of the Health Promoting School model in Australia and WA in the 1990s. In so doing, it reasons that this model—although a worthwhile goal—may have influenced the efforts and energy of teachers and school administrators from the focus of health education pedagogy to school processes other than curriculum.

**The effect of the HPS model in Australian schools**

St Leger (1999) asserts that from 1950 until 2000, the direction of school health was shaped through the goals of the WHO, and specifically through the Declaration of Alma-Ata (1978) and the Ottawa Charter (1986). He believes that these conferences changed the face of school health by acknowledging the effect of individual health behaviour and addressing factors contributing to health within schools. This direction is clearly evident through the introduction of a settings approach to school health in Australia in the early 1990s (Australian Health Promoting Schools Association [AHPSA], 2013b).

Health Promoting School (HPS) is an Australian term that reconceptualised the programme otherwise known as Comprehensive School Health (Meeks et al., 2007). In Australia, HPS is a multifaceted framework and approach to school health, developed to counteract scepticism about a purely educational focus on health. Essentially, HPS looked beyond the classroom and the confines of traditional school-based health education to effect health change (Young, 2005a). More specifically, HPS aimed to
neutralise and increase control over the determinants of health via the school setting. As Weare and Markham (2005) state:

The health promoting school approach attempts to shape the whole school context, including the school’s ethos, organisation, and management structures, relationships, and physical environment, as well as the taught curriculum and pedagogical practice, so that the total experience of school life is conducive to the health of all who learn and work there. (p. 118)

The framework for HPS is based on the premise that a school has both the capacity and potential to effect the promotion of children’s health (Mayer et al., 2011). In this context, capacity is achieved by refocussing and strengthening all health measures available at school (AHPSA, 2001), and potential is realised when health promotion is integrated into every aspect of the school setting (School Health Coalition of Western Australia, 1997). This process capitalises on the knowledge that environmental influences affect health. Thus, HPS was designed to target the health needs of specific populations through schools and schooling (Young, 2005a).

School health in Australia in the 1990s, via the introduction of the HPS framework, was also infiltrated with the social vision of contemporary health promotion (AHPSA, 2013b), as it identified three key areas for the promotion of health: the curriculum, teaching and learning; the school organisation, ethos and environment; and partnerships and services to effect health promotion. Gillies, Dimitrijevich, & Lambert (2011) explain that within the HPS framework, “curriculum” refers to the teaching and learning timetabled as specific classes, what is taught and how it is taught and learnt at the school (p. 4). “School environment” refers to latent curriculum, the physical and social environment of the school (p. 4). For example, the latent curriculum includes the rules and regulations that govern the ethos and environment of the school. Finally, “school partnerships and services” refer to relationships between the schools and the wider community, and can include organisations such as health agencies and sporting teams (p. 4). The components of the framework are designed to link together to build capacity for a school to effect health change both in the immediate future and far reaching future (Gillies, Dimitrijevich, & Lambert, 2011).

Mayer et al. (2011) support Young (2005) with the suggestion that the introduction of HPS was partly to provide economic rationalisation and to improve the cost effectiveness of health education in schools. McCuaig (2006b) concurred with this assessment, declaring that linking school health to community needs has shown promising results for health and well-being. In their analysis of HPS, Weare and Markham (2005) referred to a “systematic review” by Lister Sharpe et al. in drawing
positive conclusions of HPS to address health issues (p. 119). Nader (2000) also advocated the strength of HPS, pointing out that the HPS framework can provide opportunities for individuals and school communities to better health by developing specific social structures that give control back to the school. All things considered, it is unsurprising that in the 1990s and 2000s the HPS framework in Australia received great attention from scholars and health advocates as it mobilised the focus of education and health sectors to the processes of health promotion at the school level (Marks, 2010; McCuaig, Coore & Hay, 2012; Shannon, 2007).

Regardless of the success of the framework in Australia and elsewhere, HPS has not been without its problems, as its success has largely been dependent on much organisation and concerted and sustained efforts from significant people (Rowling, 2009). Evidently, the additional responsibilities—which often occur outside of the curriculum and day-to-day operations—imposed significant demands upon teachers and administrators who were implementing HPS in schools (Marks, 2010; McCuaig et al., 2012; Ridge et al., 2002; Rowling, 2009). Basch (2011) captured the framework’s decline by commenting that administrative as well as other issues explain why HPS “nationally and internationally...have never been fully embraced” (as cited in McCuaig et al., 2012, p. 4). He argued that the framework’s imposition of additional demands upon teachers impeded its sustainability in schools.

In WA, many schools are reported to participate in HPS, yet the extent of this participation is unclear, as it appears to range in complexity and with individual interpretation of the framework (Western Australian Health Promoting Schools Association [WAHPSA], 2014). In 2011, the WAHPSA (2014) reported that two schools were members. This tiny membership does not align with the perception of WAHPSA as a large organisation, as reported on the AHPSA website. AHPSA credits WA as the only state in Australia that has an existing professional body (AHPSA, 2013a). This is in contrast with the earlier history of AHPSA, when states and territories had their own professional bodies (AHPSA, 2013b). Perhaps the WA membership and decline in national HPS representation is an indication that sustainability issues are very real.

In support of Tones and Tilford (1994), this review refers to Fleming and Parker (2007) who, in discussing HPS, argued that we “should not lose sight of the importance of school-based curriculum development and implementation” (cited in McCuaig et al., 2012, p. 4). Fleming and Parker reported “many HPS advocates regard the teaching and learning component to be the site through which a maximal influence on the health
behaviours of young people can be achieved” (cited in McCuaig et al., 2012, p. 4). Such comments remind us of the importance of curriculum (as Tonnes & Tilford [1994] asserted) because curriculum remains a core focus of schools.

**Schools as vehicles for health reform**

By confirming schools as a potential site to support health and enact healthy citizenry, this review, raised issue with well-intentioned health policies, agendas and practices enacted and affirmed in the classroom (Evans et al., 2004; Gard & Leahy, 2009; Leahy & Harrison, 2004; McCuaig & Tinning, 2010; Tinning & McCuaig, 2006; Vander Schee & Gard, 2013; Wright, 2009). It examined a variety of literature to demonstrate how curriculum space is contentiously viewed as a site for health action and reform (Burrows & Wright, 2004; Macdonald, 2013; Samdal, Nutbeam, Wold & Kannas, 1998) and in so doing, reflected upon the pedagogic work of teachers when a curriculum is charged with governmental imperatives to influence behavioural outcomes related to health (Anspaugh & Ezell, 2013; Beckett, 2006; Governali et al., 2005; Hagquist & Starrin, 1997; Kirby et al., 1994; Macdonald, 2013; Nutbeam, 2000; St Leger, 2000; Tones & Tilford, 1994). However, in broadly developing a nexus between schools, schooling and school-based health education and health, health care and health promotion, this review confirmed, “schools are regarded as constituting a very important arena for health education among children and young persons” (Hagquist & Starrin, 1997, p. 225). It provided reasons why health advocates look to schools and in particular, to the space of curriculum as a means to help ameliorate health issues (Begoray, Wharf-Higgins & MacDonald, 2009; Fetto, 2010; Mayer et al., 2011; St Leger, 2004; Tinning, 2004). As St Leger (2000) succinctly described, it is for the reason that schools “can easily reach a particular population group” (p. 721).

To support this knowledge gained thus far, this review examined recent Australian health data, educational documents and health commentary to confirm the logicality of schools as sites for health reform. The data identified diabetes, STIs (Chlamydia), mental disorders, road deaths (in males), weight and obesity issues, inactivity, high-risk alcohol consumption, drugs and homelessness as problematic health issues for school-aged children and youths (AIHW, 2011), finding that “the top three issues of personal concern [for young people are] coping with stress, school and study problems and body image” (Mission Australia, 2012, p. 4). Additionally, the data acknowledged childhood and youth as a significant period for the development of health behaviour (AIHW, 2003, 2008a, 2008b, 2011; Western Australia Education and Health Standing Committee, 2011, 2012).
Similarly, local, national and international conjecture endorsed the potential of schools. The Education Department of Western Australia (EDWA, 1985) sanctioned the potential by referring to ‘situational agency’, suggesting that access to 12 years of compulsory schooling affords the achievement of good health. Stanley (2003) advocated for school action with an economic rationalisation, and as a Professor of Medicine in WA—who daily witnesses the economic burden of ill health and disease—this standpoint, albeit biophysical, is understandable. Shannon (2007) offered reasoning by referring to a school’s potential to build, support and strengthen individual and community health, whereas Vidourek et al. (2011) was more specific, referring to the ways in which schools build connectedness. They proposed that connectedness is a positive means of decreasing risk-taking behaviours in students and young people. Finally, Basch (2011) cited academic and educational success as an outcome of schools that support, promote and encourage good health.

All of the previous points capture the ways in which schools, schooling, the HPE LA and school-based health education are imbued with the ideals of health promotion and the goal of a New Public Health. They validate why the holistic understanding of health as articulated in the HPE LA of The Curriculum Framework (Western Australia Curriculum Council, 1998) is actioned in WA schools through the educational content of The K-10 Syllabus for HPE (WA DET, 2007a, 2007c, 2007d). However, to legitimately exemplify the forte of the HPE LA’s positioning, the rationale is called upon. It states: “Without the benefits provided by this learning area, individuals face a reduced quality of life and society increasing health care and social costs” (Western Australia Curriculum Council, 1998, p. 114). This is a profound and provocative statement because—as will be established—it emanates from a learning area through which learning outcomes are open to interpretation and scrutiny in WA schools.

**The mismatch between praxis and practice**

A review of Australian ministerial declarations documents that health and well-being is at the core of education in Australia: the Hobart Declaration (Australian Education Council, 1989), the Adelaide Declaration (Ministerial Council on Education, 1999) and the Melbourne Declaration (Ministerial Council for Education, 2008). Nevertheless, in WA there is evidence that administrative decision-making within schools affects the potential of curricula, and in particular school-based health education, as a prime site to effect these declarations. Some administrative decisions affect the subject of health education directly—such as the allocation of curriculum time and the deployment of classroom teachers—while others indirectly, such as the
timetabling of the subject within the weekly school timetable. Subsequently, the disjuncture between Australian ministerial declarations and the reality of the WA school-based health education context is the focus of the remainder of this review.

Currently, in WA the teaching and learning of school-based health education is not mandated, with previous research in WA inferring a mismatch between the praxis of school-based health education—morally informed practice that takes into account the circumstances and conditions of the field of learning (Churchill et al., 2011)—and the representation and/or delivery of health education in schools (Shilton et al., 1995). This WA research is not alone in this perception, as scholars from other countries report similar mismatch (Allensworth, 1993; Beckett, 1990; Mayer et al., 2011; Seffrin, 1990). Primarily, this review found that globally, schools face constant challenges promoting health, especially through the representation of school-based health education, even though the benefits of doing so are clearly substantiated (Anspaugh & Ezell, 2013; Beckett, 2006; Burrows & Wright, 2004; Governali et al., 2005; Hagquist & Starrin, 1997; Kirby et al., 1994; Macdonald, 2013; Nutbeam, 2000; St Leger, 2000; Tones & Tilford, 1994), and in Australia, indirectly documented in government declarations.

Although the following examples were not written specifically about school-based health education in WA, they typify the ways in which the HPE LA is affected by administrative decision-making that responds to neoliberalist agendas on school performativity (Dinan Thompson, 2009), which unwittingly interrupt government declarations. Beckett (1990) referred to crowded curriculums, believing that schools provide too much curricula with too much content. Samdal et al. (1998) reported on the impact of competing priorities, attributing the low prioritisation of school-based health education within schools as restricting successes in student health. McConney and Price (2009) reported the practice of teaching out-of-field and considered the effect on curriculum delivery of teachers who have no qualifications in a subject, either as a major or a minor. Penney (2013) reported on the effect of ‘translations in curriculum text’, and considered the effect of a curriculum incorrectly interpreted and adversely delivered.

These previous examples suggest how the representation of school-based health education in lower secondary government schools in WA is interpreted, shaped and delivered. Whilst high-stakes diagnostic measures such as The National Assessment Program – Literacy and Numeracy (NAPLAN) (ACARA, 2013a) —introduced to Australian schools in 2008—are now considered as more disrupting in effect as they promote a competitive educational climate in Australia (Harris et al, 2013). For
example, the *My School* website (ACARA, 2014a), which allows Australian communities to readily assess and compare student educational outcomes is viewed as challenging schools in their commitment to educational excellence by narrowing and distorting the learning experience (Hattie, 2005). However, to identify and understand the effect of school performativity, and administrative and other school-based decisions upon the delivery of school-based health education, this review specifically investigates the lower secondary government-schooling context in WA. It examines the organisation of curriculum within these schools to develop a greater understanding of the potential contributions of the HPE LA to building, supporting and strengthening the health citizenry of young people in WA. Conversely, this review demonstrates there is accuracy in Shilton et al.’s (1995) claim that there is a mismatch between the praxis and delivery of school-based health education in lower secondary government schools in WA.

**The HPE LA Curriculum in WA and Australia**

An examination of curriculum documents, education departmental reports, conference proceedings, collegial conversations and personal reflection shows the late 1980s and early 1990s to be a time of high standing for school-based health education in lower secondary government schools in WA. Historical accounts (McBride, 2000; McBride, Midford & Cameron, 1999; McBride, Midford & James, 1995; Shilton et al., 1995) show that from the mid-1990s, this high standing was eroded as policies and practices in WA government schools had a corrosive effect upon school-based health education. This key area of the literature focusses on the developments that have contributed to the current status of the subject of health education in lower secondary government schools in WA as it builds a platform to critically view the impacts of these developments upon what is enacted in the classroom. From this point, the subject of health education in schools is referred to as ‘health education’, not as ‘school-based health education’, as in earlier key areas of this review.

**HPE in WA**

**Health education’s high standing in WA government schools**

In the past 25 years, WA governments have implemented two major curriculum changes that have affected lower secondary schooling in WA and the delivery of health education. The first was the implementation of the *Secondary Education Authority (SEA): The Unit Curriculum* (SEA, 1987), and the second the implementation of *The Curriculum Framework* (1998), which superseded *The Unit Curriculum*. 
The SEA: Unit curriculum

The Unit Curriculum evolved from the Report of the Committee of Inquiry into Education in WA, otherwise known as The Beazley Report (Beazley, 1984). From the 272 recommendations spanning 500 pages, the report brought “educational change” to WA (EDWA, 1986e, p. 1). It replaced the Achievement Certificate with a content-driven, input-based approach to teaching and learning that focused specifically on the achievement of educational objectives. The EDWA purported that the introduction would “open the way for schools to make changes that increase the flexibility of the curriculum, and provide students with wider opportunities for choice in what they learn and how” (EDWA, 1986e, p. 1).

In planning The Unit Curriculum, The Beazley Report recommended that physical education and health education be positioned together as ‘Physical and Health Education’, as one of the seven curriculum components (the term used at the time for learning areas) (Beazley, 1984). The intention for lower secondary education was that each of the seven components constituted six stages of teaching and learning, with 40-hour units designed for each stage. Essentially, the six stages were to be covered from years eight to 10, and on the smallest level, would attribute 80 hours of teaching and learning for a single year (EDWA, 1986e).

Although The Unit Curriculum was designed to offer a more balanced curriculum, there was some contention over its offerings when implemented, because schools were responsible for constructing individual policies and procedures when developing timetables. In practice, schools were allowed to allocate curriculum time and deploy staff to the components, and they were able to decide, “how many units should be taken from each component” (EDWA, 1986e, p. 4). Conference proceedings from a meeting of Senior Teachers of Physical and Health Education in 1988 record the concern of the teachers in attendance that were implementing the curriculum. The conference minutes report that the teachers believed “there is discrepancy between schools as to the time allocation for Physical and Health Education throughout the lower school education of students” (Western Australia Ministry of Education [WA MOE], 1988, p. 4). This early record is in keeping with Shilton et al. (1995), who reported variance in curriculum time between secondary schools, and raised concern over the trend to decrease curriculum time associated with the implementation of The Unit Curriculum. Shilton et al. reported in 1993 an average curriculum time of “76.2 minutes per week” to the subject of health education (p. 25).
It is important to clarify that when *The Unit Curriculum* was actually implemented in WA schools in 1987, health education was removed from the Physical and Health Education component that had been recommended by *The Beazley Report* (Beazley, 1984). Historical documents failed to reveal the reasons why health education was moved. No documentation could be found in the Department of Education (DOE) library that provides an explanation about the new positioning of health education, as this was the only point of difference in the organisational structure of the components between *The Beazley Report* and *The Unit Curriculum*. With the actual implementation of *The Unit Curriculum* (EDWA, 1986e), health education was allocated to a component called ‘Personal and Vocational Education’ (EDWA, 1987b), and physical education was attributed its own component, ‘Physical Education’ (EDWA, 1987c). Although physical education and health education were classified as belonging to two different components within *The Unit Curriculum*, personal experience suggests that Physical and Health Education teachers taught and represented both physical education and health education.

Irrespective of positioning, under the auspices of *The Unit Curriculum*, health education received strong strategic support pre and post development (EDWA, 1985; Shilton et al., 1995). This support came from the then-EDWA, the Ministry of Education (a departmental rename came with the change of government in 1988), and the returning Education Department (Ed Dept) in 1994 (N. Angwin, personal communication, November 20, 2013). This strategic support is clearly documented in the *Health Education K-10 Syllabus* document:

The development of a Health Education K-10 Syllabus is further evidence of the Education Department’s recognition that school health education has a significant role to play in promoting positive individual and community health. (EDWA, 1985, p. iii)

It was also validated through a team of personnel committed to health education and physical education, including a Health Education consultant, a Physical Education consultant, curriculum writers and various other support staff (EDWA, 1986d, 1987a). The support also reflected the intent of the Australian Government at the time, via the beliefs of *The Better Health Commission*:

The commission believes that the acquisition by students of health knowledge and decision-making skills conducive to good health is as important to the community on social, economic and ethical grounds as is the acquisition of language and mathematical knowledge and skills. (cited in, EDWA, 1986d, p. 1)
The Health Education K-10 Syllabus

In implementing The Unit Curriculum, the teaching and learning of health education in lower secondary government schools was delivered via three syllabus documents. The first comprised the overall Health Education K-10 Syllabus (EDWA, 1985). This document scoped and sequenced the objectives for all year levels from K-10. The second document comprised three teacher guides, for years eight, nine and 10 (WA MOE, 1989b, 1989c). These provided background information and understandings for the teaching and learning of the objectives. The third document comprised three booklets of teaching resource sheets for years eight, nine and 10 (EDWA, 1986a, 1986b, 1986c). These booklets supported the philosophy of the syllabus by dictating classroom activities.

Although different WA governments at different times produced these syllabus documents, all were packaged with attractive red covers and referred to by teachers as the ‘Red Syllabus’ (see Figure 2.2). The scope and comprehensiveness of these documents was indicative of the 1980s’ global prioritising of school health, and especially in the early 1990s in WA (McBride, 2000; McBride, Cameron, Midford & James, 1995; McBride et al., 1999; McBride et al., 1995; Shilton et al., 1995). It also signified the implementation of curriculum space with curriculum documentation.

Figure 2.2 Health Education K-10 Syllabus.

The Red Syllabus offered a contemporary, straightforward and user-friendly syllabus, focussed on the development of knowledge, skills and attitudes. It supported the educational objective of the curriculum by promoting skill-acquisition through the range of skills-based classroom activities. In secondary schooling, classroom activities
were packaged through resource sheets within six units of work, with the recommendation that all six units be taught from years eight to 10. Shilton et al. (1995) noted that in 1993 these units were used by 92 per cent of WA schools from all educational sectors.

In the 1980s and early 1990s in WA there was considerable interest in and actions towards the promotion of health in schools (McBride, 2000; McBride et al., 1995a; McBride et al., 1999; McBride et al., 1995b; Shilton et al., 1995). Health education prominently featured in the syllabus, and there was a state-wide focus to promote health through schools. However, this high level action and support also reflected the time and the promotion of other health-focussed initiatives that were synonymous with a New Public Health (Petersen & Lupton, 1996). At that time, Australia was grappling with the Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) epidemic, along with other, more locally based issues, such as antismoking. This focus was clearly documented in the background to the *Health Education K-10 Syllabus* document, which states that its development “began during a period of increased community and school interest in health education and in the broader issues of personal and social development of young people” (EDWA, 1985, p. 5). Essentially, WA accepted global health initiatives and, in some respects, led the way both nationally and internationally by incorporating health promotion in schools. In particular, this occurred through antismoking lobbying, child protection and the HIV/AIDS focus. This focus was evident in the content and direction of classroom activities articulated throughout the Red Syllabus and its two supplements: the HIV supplement (EDWA, 1994a, 1994c, 1994e) and the prevention education supplement (EDWA, 1994b, 1994d, 1994f).

Additionally, HPS was introduced to WA through the School Health Coalition of Western Australia (SCHWA), which was later followed by the School Development Health Education (SDHE) project and the Western Australian School Health (WASH) project (I. Cameron, personal communication, August 31, 2013). All of these projects focussed on connecting the child, school environment and community together to enable the school to support and link to community health concerns while tapping into health department campaigns and priorities (I. Cameron, personal communication, August 31, 2013).

**Eroding health education’s high standing in WA government schools**

A review of curriculum documents, reports and conference proceedings demonstrates that timetabled health education in WA schools has declined since the
1990s (McBride, 1995a; Shilton et al., 1995; WA Curriculum Council, 1998; WA MOE, 1988). However, before the 1990s, the EDWA (1986d) acknowledged the impact of an “increasing emphasis on mathematics, science and reading” (p. 2), and identified a need for “Health Education to be given greater identity and focus” (p. 14). The EDWA (1987a) then requested continued focus upon health education in schools by intensifying the demand for classroom time, yet Shilton et al. (1995) report that this intensity was not sustained, and that health education diminished. School health research and development decreased, all but ceasing by the middle of 2000, with the SCHWA, SDHE and WASH brought to an end (I. Cameron, personal communication, August 31, 2013). Consequently, the high standing of health education in WA government schools was eroded, as demonstrated through loss of curriculum time, strategic support and explicit syllabi, while the promotion of literacy and numeracy, along with other departmental priorities, also had a corrosive effect (WA DET, 2006).

Some attribute this erosion to the disappearance of subject area superintendents and the collapse of specific curriculum teams in the Ed Depart whose positions were dissolved through restructuring (D. Zines, personal communication, August 13, 2012). Some (D. Ansell, personal communication, October 21, 2013; I. Cameron, personal communication, October 31, 2013) suggest the erosion arose from the decentralisation of some curriculum and resource developments from the DOE to external agencies, such as the School Health and Alcohol Harm Reduction Project (Curtin University, 2011; McBride, Farringdon, Midford, Meuleners & Philip, 2004), Growing and Developing Healthy Relationships (Western Australia Department of Health, 2013) and School Drug Education and Road Awareness (SDERA, 2014). Some attribute the erosion to ‘devolution’, as the Ministry of Education and the superseding Ed Dept devolved power from the 1990s, reattributing the governance of school structural systems, policies and practices from a central office to government schools (Angus, 1990; Ministerial Independent Assessment Group on Devolution, 1994; WA MOE, 1993).

While the primary principles of devolution continue in WA, greater autonomy, responsibility and flexibility are now attributed to government schools through the ‘Independent Public School’ initiative formally introduced in 2010 (WA DET, 2009). This WA initiativeempowers participating government schools to autonomously shape the direction of teaching and learning in curriculum decision-making, school staffing and the allocation of curriculum time (WA DET, 2009).
The introduction of KLAs in WA

From the mid-1990’s, many factors corroded health education’s standing in government schools. However, most controversial was the development of KLAs across Australia and New Zealand (Sinkinson & Burrows, 2011). Notably, in 1998, health education in WA was officially integrated with physical education into the HPE LA (Western Australia Curriculum Council, 1998). It was removed from Personal and Vocational Education (EDWA, 1987b), which was then dissolved. Kirk and Macdonald (2010) explain that integration sought to group together “what were a number of isolated school subjects…into a more cohesive learning area” (p. 555). Wharton et al. (2007) provide reason for the integration:

An integrated curriculum is the organisation of teaching and learning experiences in which significant content, across and within learning areas, is selected to develop and extend student understanding of the world. It allows students to develop important understandings, concepts, values and skills that apply across and beyond the traditional subject areas. It enables students to explore, gather, organise and present information in order to see the relationships and links between their learning and to use these to make sense of their world. (p. 178)

Essentially, the new focus of the HPE LA was to allow students to develop connections between the physical, recreational and health-related content of the learning area as a means to conceive the link between the mind and body (Lupton, 1999).

Dinan Thompson (2002) dates the actual development of the HPE LA in Australia to 1991 and an Australia-wide collaboration in curriculum development by the Australian Education Council. She reports that the development of eight KLAs was an outcome of national projects stemming from the mid-1980s that aimed to unify Australian schooling. Realistically, the intent was to consolidate curriculum developments between the states by rationalising curriculum expenditure. This collaboration was, in turn, ratified through the endorsement of the Hobart Declaration (Australian Education Council, 1989), beforeeventuating in the development of the HPE LA. Dinan Thompson (2002) also accounts for the production of a statement document by the Australian Curriculum Corporation in 1994 as the true beginning of the HPE LA in Australia. This statement outlined the essential learning outcomes for the direction of HPE in Australian schools. It served to “define the area, outline its essential elements, show what is distinctive about it and describe a sequence for developing knowledge and skills” (Curriculum Corporation, 1994, p. 1). Ultimately, this statement was the precursor for learning area developments in WA.
Macdonald and Glover (1997) state that the establishment of the National Professional Development Program (NPDP) from 1994 to 1996 typified the collaborative approach to implementing the HPE LA in Australia at that time. The NPDP programme—with counterparts in Queensland and Victoria—focussed on “developing a model for teacher’s professional development in the HPE area and renewing the teachers’ subject matter knowledge for the area” (Macdonald & Glover, 1997, p. 23). Dinan Thompson (2002) believes that this project was beneficial as it “opened communication between curriculum development and schools” (p. 34), and refers to Penney (1998, p. 13) in forming her perspective. Penney credited the project for facilitating “notable advances in teaching and thinking practices” (quoted in Dinan Thompson, 2002, p. 34).

*The Curriculum Framework*

In 1995, the *Review of School Curriculum Development Procedures and Processes in Western Australia* identified a need for “a seamless curriculum among the different levels of schooling” (Western Australia Curriculum Council, 1998, p. 7). The resulting development aimed to “make explicit the learning outcomes which all Western Australian students should achieve” (Western Australia Curriculum Council, 1998, p. 6). This development, *The Curriculum Framework*, reformed the school curriculum in WA, as it brought forward a new ideological and philosophical perspective that promoted “learning as continuous” (Western Australia Curriculum Council, 1998, p. 1).

In promoting continuous learning, Donnelly (2007) measured the development of *The Curriculum Framework* as a deliberate move away from syllabus documents to a framework for curricula. From a practical perspective, this was intended to allow teachers and schools more room to develop their own teaching and learning programmes (Western Australia Curriculum Council, 1998). Previously in WA, concern had arisen with regard to the amount of syllabus documents, with criticisms largely emanating from these documents perceived as too prescriptive and restrictive to teachers and schools (D. Ansell, personal communication, October 21, 2013). However, the defining characteristic of the framework was the shift in focus from the achievement of educational objectives to outcomes-based education (OBE).

Berlach and McNaught (2007) reported that OBE was an educational phenomenon that was problematically introduced into Australia in the late 1980s and early 1990s. They attribute dissatisfaction with OBE to theoretical interpretations of the curriculum model inadequately progressing into curriculum design. Donnelly (2007)
offers some insight, and explains OBE as “a distinctive approach to curriculum that distinguishes it from…a syllabus” (p. 185). He expands by stating:

where as a syllabus details what is to be taught at the start of the year by giving teachers a clear and concise road map outlining what the year’s lessons will involve, an outcomes-based education approach identifies student-learning outcomes that are to be demonstrated or achieved by the end of the process. (p. 185)

Internationally and nationally OBE experienced a challenging slow growth, with critique of OBE largely stemming from the curriculum model’s failure to provide teachers with the necessary support needed to conduct their work. Donnelly (2007) argued that countries like the United States (US), Canada, New Zealand, and England and Wales gradually, but awkwardly, accepted the model throughout the 1990s. In 1998, The Curriculum Framework formally introduced OBE to WA and with it, formalised seven new learning areas within schools: the Arts, English, HPE, LOTE, Mathematics, Science, Society and Environment and Technology and Enterprise.

Despite claims The Curriculum Framework performed an educative function and offered greater flexibility to schools, it was viewed as destabilising education in WA and struggled to maintain traction in schools. From the perspective of all learning areas in government schools, its implementation was viewed as a backwards step in curriculum support (Donnelly, 2007; Garrett & Piltz, 1999). From the perspective of the HPE LA, the framework’s associated Curriculum Guides (Western Australia Curriculum Council, 2005) were viewed as flawed, as they did not assist the assimilation of learning outcomes within schools nor mandate the subjects through which these schools commonly delivered the outcomes. With specific regard to health education, the school-based process of self-determination—through which The Curriculum Framework legislated schools the right to allocate curriculum time, deploy staff to programmes of study and to endorse their own programmes of learning—did little to prioritise the subject in individual schools.

The K-10 Syllabus for HPE

After intensive consultation with teachers across the state and the opportunity offered with a change of government, WA reintroduced syllabi to schools in 2007. Unlike its predecessor, The K-10 Syllabus for HPE (WA DET, 2007a, 2007b, 2007c, 2007d) scoped and sequenced content for singular year levels. As Garrett and Piltz (1999) reported, this reorientation and re-articulation was necessary in WA “in order to achieve greater simplicity and compatibility between the framework and outcomes” (p. 205).
Accordingly, *The K-10 Syllabus for HPE* superseded *The Curriculum Framework* in the practical application of HPE in WA government schools, although the framework remained the legislated curriculum in WA. The syllabus documented 10 learning contexts:

1. wellness;
2. growth, development and sexual health;
3. lifestyle choices;
4. drug education;
5. safety;
6. movement skills;
7. strategies and tactics;
8. playing the game;
9. health-related fitness and recreation; and

These contexts were divided between health contexts (numbered one to five) and physical and outdoor contexts (numbered six to 10). The syllabus also directed that the “contexts related to health should [underline my emphasis] be taught as a skills-based subject” (WA DET, 2007a, p. 1).

With respect to the health contexts, most of the content listed as topics for learning in *The K-10 Syllabus for HPE* were presented from a risk and/or management of risk perspective (Evans & Davies, 2004; Leahy & Harrison, 2004). For example, the suggestions for content attributed to pregnancy in the early adolescence syllabus (years eight, nine and 10) were listed as “unplanned, unwanted, teen [SIC] and healthy” (WA DET, 2007d, p. 3). There was no mention of pregnancy as a celebration of life and/or love. Similarly, and within the early childhood syllabus (kindergarten to year two), hygiene was presented through the perspective of danger. For example, the suggestions for content advised teachers to explore “how germs and diseases are spread” as a result of poor hygiene practices (WA DET, 2007d, p. 3). Tinning (2014) referred to this pedagogical positioning as akin to taking up a particular position toward health knowledge with specific intent to ‘making’ a particular type of citizen”(aka, a productive citizen)” (p. 207). Tinning’s concern was that such positioning(s) displaces other ways of knowing about health as irrelevant or at worst non-existent, and this appeared to be the case with the negative perceptions of pregnancy articulated in the WA syllabus.
On face value, *The K-10 Syllabus for HPE* performed a health-promoting role and included the directive for the teaching of “life skills”, suggesting that these skills could be “taught independently or integrated” (WA DET, 2007a, p. 1). The syllabus lists life skills as “assertiveness, communication, decision-making, goal setting, leadership, resilience, risk management, self-control, self-understanding, social skills and stress management” (p. 1). However, when viewed from a critical perspective and collectively, these skills are also qualities needed for safe and responsible living in ‘at risk’ societies (Evans & Davies, 2004; Leahy & Harrison, 2004).

Leahy (2009), in largely speaking to the perceived crisis of an obesity epidemic—which she notes as burgeoning within health education curriculum in neoliberal times—analysed, with unease, the conviction of curricula similar to that presented in *The K-10 Syllabus for HPE*. She theorised that the curriculum she viewed, attempted to curb risk, by “cultivating certain bodily practices” (p. 172). As a particular perspective and possibly a persuasive force within curriculum, the underlying assumptions about such health knowledge were evident throughout the health contexts of the WA syllabus. These assumptions or pedagogical missions predicate the “kind of people students should become” (Gard & Leahy, 2009, p. 196) as they operate to regulate behaviour by making “a neoliberal body that becomes a future neoliberal healthy (and productive) citizen” (Tinning, 2014, p. 204).

Although *The K-10 Syllabus for HPE* aimed to provide teachers and schools with the support to “meet the learning needs of each child in developmentally and contextually appropriate ways” (WA DET, 2007b, pp. 1–2), within the health contexts, it prescribed praxis and stipulated pedagogy—skills-based subject. Additionally, by articulating the content through the ‘at risk’ perspective, the syllabus limited the experiences and choices of the students because teachers were persuaded—consciously or unconsciously—in the direction to which they were to engage their students’ in pedagogical encounters of health knowledge. Essentially, teachers were not only advised about their content choices but they were also channelled in the particular ways in which to deliver the content across all year levels.

Despite *The Curriculum Framework* being perceived as having shortcomings by not providing enough direction for teachers, it had not prescribed pedagogy. Nor had the framework listed content for teaching and learning in the health contexts so overtly as risk oriented as had been documented in *The K-10 Syllabus for HPE*. However, perhaps the most confounding impact of *The K-10 Syllabus for HPE* was that it did not have the backing of the resources that had accompanied the implementation of the Red Syllabus.
(EDWA, 1985, 1986a, 1986b, 1986c, 1986d, 1986e, 1987b, 1994a, 1994b, 1994c, 1994d, 1994e, 1994f; WA MOE, 1989a, 1989b, 1989c). Thus, without observing the enacted curriculum within the health education classroom of teachers in WA, it is difficult to assess if these teachers were implementing the content through the prescribed pedagogy or with the critique to explore different meanings of health.

**Cementing the low-status of health education in WA government schools**

The complexities of educational developments in WA in the 2000s influenced the standing of health education in government schools, with many of the positive gains of the 1980s and 1990s, regarding timetabling, curriculum support and subject status, negated. These developments included the implementation of *The Curriculum Framework*, the development of the HPE LA, the return to syllabus documents with *The K-10 Syllabus for HPE* and the rise of devolution and Independent Public Schooling within the government education sector. Additionally, controversy surrounds the ongoing effect of the introduction of the ‘Physical Activity Task Force’ (Government of Western Australia, 2012) and the mandate of the *Curriculum, Assessment Reporting Policy* (CAR policy) (Western Australia Department of Education [WA DOE], 2010).

The task force—established in 2001 with the specific goal of improving the health and physical activity of Western Australians—led to the implementation of the CAR policy for government schools in 2007. This policy, updated in 2010, remains the mandate for WA government schools, although the task force is now defunded. The CAR policy mandates that “all students in Year 1–10 participate in a minimum of two hours of quality physical activity each week, during the school day as a part of student learning programmes” (WA DOE, 2010, p. 5). The effect of the CAR policy upon health education’s standing in schools remains unclear; however, it has assisted the attribution of two hours of curriculum time to physical education in government schools (WA DOE, 2010).

Collectively, educational developments in the 2000s influenced the standing of health education in government schools in WA but conversely, the development of a sociocultural perspective to health—currently underpinning the HPE LA through *The Curriculum Framework*—can be viewed more positively. As a significant discourse in Australia, this perspective connects WA developments to Australian developments in HPE. It is relevant to this research as *The Curriculum Framework* was the legislated curriculum at the time of this study. Thus, by way of *The Curriculum Framework*, the remainder of this key area in the review of literature focusses on HPE developments in Australia. It posits the idea that the interplay—or perhaps lack thereof—between the
legislated curriculum in WA (*The Curriculum Framework*) and the practical application of HPE in WA government schools (*The K-10 Syllabus for HPE*) has done little to support health education’s standing in these schools.

**HPE in Australia**

*The sociocultural perspective of an integrated approach to the HPE LA*

A significant discussion in Australia and New Zealand has been the development of the HPE LA and its effect on the theory and practice of the subjects to which HPE now integrates. Given the knowledge garnered thus far, this discussion is contextually relevant to this research. It is particularly relevant to the context of health education in WA government schools because as a bi-product of integration there has been a “crisis of identity” (Ryan et al., 2012, p. 2) for the HPE LA in these schools.

Much of the academic discussion surrounding the integration of the HPE LA in Australia is descriptive in nature, focussing on a theoretical overview of the implications of integration for teachers (Evans et al., 2004; Governali et al., 2005; Macdonald & Glover, 1997; Mayer et al., 2011; Penney & Glover, 1998; Ryan et al., 2012; Tinning, 2000, 2004; Tinning & Glasby, 2002). The discourse does not adequately explore or acknowledge the effect of the learning area’s development for Australian schools. Rowling, Booth and Nutbeam (1998) recognised this liability early in the development of the HPE LA, suggesting that the discourse lacked the practical application necessary to affect the delivery of HPE in schools. Similarly, Cliff (2007) has assessed that academics in Australia have not gone far enough in exploring and explaining the implications of this perspective for HPE teachers. His concern is that HPE teachers—as active agents of curriculum text—may be unsure, unprepared and perhaps unaware of ways to critically engage with the sociocultural perspective.

Leahy, O’Flynn and Wright (2013) question the praxis of an integrated HPE LA in Australia, suggesting that the sociocultural perspective accompanying this approach “is unclear both in theory and in practice” (p. 185). They argue disconnection, reporting that there are difficulties between what the learning area proposes and what actually takes place in schools. Swabey, Castleton and Penney (2010) agree, and on researching the perceptions of beginning HPE teachers in Tasmania, found that “a key issue emerging for teacher education course design and content is the need to address and embed professional, social and cultural dimensions of teaching in the course” (p. 44). Sinkinson and Burrows (2011), in the New Zealand context, like many other scholars (Cliff, 2007; Colquhoun, 1997; Governali et al., 2005; Kirk & Gray, 1990; Rowling et
attribute difficulties to a perceived incompatibility between bundles of knowledge within the HPE LA.

Cliff (2007) unpacks the sociocultural perspective to provide insight to the discussion. He posits that the sociocultural perspective of the HPE LA is problematic for some teachers of HPE because it is “an approach to knowledge that understands it as socially constructed” (p. 3). In principle, this approach intends to move away from a focus on individual behaviour change to a more socio-critical view of the origins of health and/or ill health. Cliff further explains that the pedagogy of health education supports the sociocultural perspective as it is underpinned by constructivist assumptions of knowledge that focusses on a social view of health. Cliff’s point is clarified by Quennerstedt, Burrows and Mairorsdotter (2010), who point out that health education is “grounded in how young people are participating in processes of knowing” (p. 106), which is a constructivist view of health.

Conversely, Cliff (2007) explains that the pedagogy of physical education is traditionally underpinned by positivistic assumptions of knowledge, focussing on a biophysical, biomedical and scientific model of health. He contends, as does Tinning (2004), that in some aspects, physical education does reflect the sociocultural perspective underpinning the HPE LA but, in its entirety, physical education does not reflect a social view of health. The key point from the discourse is that the construction of the HPE LA is conceptually and logically confusing, with some aspects of HPE discipline knowledge viewed as epistemologically polarised (Governali et al., 2005; Macdonald & Glover, 1997; Sinkinson & Burrows, 2011; Tinning, 2004; Wright, 2004).

In exploring the effect of the Health and Physical Education Key Learning Area (HPE KLA) for teacher education in Australia, Macdonald, Hunter, Carlson and Penney (2002) evoked Bernstein’s pedagogic discourse regarding a “collection type” (p. 262) when the official knowledge of a curriculum consists of integrated knowledge. Bernstein (1996) identified two curriculum models for the HPE LA, referring to a ‘Collection model’ and an ‘Integrated model’. Accordingly, a collection model brings HPE curriculum content together under the semblance of the HPE LA but then segregates the content into subject-based disciplines in the processes of delivery. Conversely, the integrated model, assimilates the content and disciplines of the HPE LA into HPE integrated learning. Bernstein (1982, 1990, 1996) stated that the implications for pedagogy are unresolved when “curriculum consists of bundles of content that are closed off from one another, that is they are bounded or insulated” (cited in Macdonald
et al., 2002, p. 265). Macdonald et al. (2002) agrees, noting that in Australia the “HPE KLA draws on an array of knowledge structures, which are typically bounded disciplines” (p. 265).

In returning to the curriculum in WA, legislated via The Curriculum Framework and practically enacted through The K-10 Syllabus for HPE, there is evidence—as Bernstein suggests—of bounded content. However, within the content identified for the health contexts in the syllabus, there is also evidence of insulated content (Dinan Thompson, 2009). By presenting the content through the ‘at risk’ perspective, The K-10 Syllabus for HPE insulates the possibilities of the ‘skills components’ transferring across to other learning contexts and content. Effectively, this weakens the inclusion of skills-based pedagogy to support healthier, safer and more physically active living as it interrupts the constructivist ideologies of the sociocultural perspective.

For those schooled with a sociocultural understanding, this perspective is clearly evident in The Curriculum Framework. The framework states that HPE “examines the impact of interactions between the individual, the family, the wider community and the environment of the health of populations” (Western Australia Curriculum Council, 1998, p. 117), which acknowledges health as a social construction. More specifically, the framework states that students in the early adolescence phase or lower secondary years of schooling, “need to understand that health status is influenced by social, cultural and environmental factors” (Western Australia Curriculum Council, 1998, p. 127). The implication from this framework is that as a result of HPE schooling in WA, students are not only educated in health but are also educated in social justice principles pertaining to health and health access.

In WA, The Curriculum Framework states “learning and teaching programmes, developed by teachers should allow students to learn and achieve the essential knowledge, attitudes and values and skills in an integrated manner” (Western Australia Curriculum Council, 1998, p. 117). However, the examples used within the framework to illustrate integration describe what teachers in WA would typically accept in the practice of HPE as physical education and health education:

for example, a physical activity program may include knowledge of a game, the development of attitudes such as fair play and respect for the rights of others, and movement skills. It will also include interpersonal skills such as communication and conflict resolution for refereeing and team communication, and decision-making for choice of tactics and strategies. In a classroom context, a smoking education program might include essential knowledge about the effect of smoking, the development of values and attitude that support the decision not to
smoke and communication skills (including assertiveness skills) to cope with peer pressure to smoke. (p. 117)

There are aspects of the sociocultural perspective and an integrated approach to HPE (e.g. fair play and respect for the rights of others) within this example; however, the focus lies mainly on two discrete learning contexts (Bernstein’s collection model) and not an integrated context of HPE. Perhaps a more integrated example could have explored the effect of smoking tobacco on athletic performance.

The example used in *The Curriculum Framework* suggests one of two things: either there is disjunction between what the curriculum writers view as integration and what is theoretically considered an integrated approach (Kirk & Gray, 1990); or this example suggests that the curriculum writers have taken into account the WA HPE LA context, as reported by Shilton et al. (1995). That is, they understand the ways in which the HPE LA is delivered in WA schools and have accommodated for this context. While the real intention behind these examples remains unknown, it is concerning that this document demonstrates as Rowling et al. (1998) and Cliff (2007) suggest, that an integrated interpretation of the HPE LA is ongoing. Further, it suggests that in the WA context, the interplay between *The Curriculum Framework* and *The K-10 Syllabus for HPE* is yet to be adequately determined. Renwick (2014) captures the ambiguities of the WA context by stating: “the challenge for health education in schools is how the reading of health texts works with or against young people’s aspirations” (p. 206).

**The healthy citizenry perspective of the HPE LA**

Inspired by the work of McCuaig and Hay (2012), and to extend the discussion of the HPE curriculum and its neoliberal tenets further, this review explores the intricacies and complexities of the HPE LA in WA. It specifically investigates healthy citizenry as a critical discourse of HPE pedagogy in Australia as a means to understand the implications for teachers delivering HPE in WA. As acknowledged by McCuaig and Hay (2012), throughout Australia the HPE LA has sought to develop “health-promoting behaviours and civic responsibility” (p. 4), which impacts teachers’ pedagogic work in the name of health.

Critical discourse pertaining to the development of the HPE LA has gained currency amongst academics in Australia and New Zealand (Broadbear & Keyser, 2000; Burrows & Wright, 2004; Evans et al., 2004; Leahy, 2009; Leahy et al., 2013; Penney & Harris, 2004; Wright, 2004, 2009) and amidst recent curriculum developments (ACARA, 2014c; New Zealand Ministry of Education, 2007). Despite critical investigations of HPE curriculum and pedagogy reportedly lacking cohesion
(Leahy et al., 2013), this discourse signifies the importance of examining the ways that
the discursive processes of the HPE LA attempt to “shape and produce particular kinds
of people” (Leahy & Harrison, 2004, p. 130).

To effect healthy citizenry in WA, the HPE LA outcomes articulated in The
Curriculum Framework have been developed with a sociocultural perspective:

- Health and Physical Education develops an understanding of health
issues and the skills needed for confident participation in sport and
recreational activities. It enables students to make responsible decisions
about health and physical activity to promote their own and others’
health and well-being. (Western Australia Curriculum Council, 1998, p. 27)

However, the framework promotes the value of the healthy citizen by advocating that
learning in the HPE LA offers “potential for a better quality of life for all students, now
and in the future” (Western Australia Curriculum Council, 1998, p. 115). According to
Harrison and Leahy (2006), such rhetoric acts as a deliberate pedagogical mandate to
improve the health of young people in WA by insinuating that their current status of
health needs to be fixed. This view contrasts with recent health data pertaining to the
health of young people in Australia, which states “many young Australians are faring
well” (AIHW, 2011). Although the disjunction between the text and the data could be
attributed to the differing time frames, Harrison and Leahy (2006) condemn such
rhetoric as unnecessary. They judge governmental imperatives communicated via public
health narratives as aiming to produce what they call “a health-seeking, responsible
citizen” (p. 156) and they question, whether this edict is the place of education.

Underlying The Curriculum Framework’s contribution to HPE LA in WA are
political, economic, ideological and moral agendas reflective of the late 1990s, when
policy central to health promotion shaped the HPE LA (Leahy et al., 2013). In
identifying five learning outcomes from schooling in HPE (see Figure 2.3), The
Curriculum Framework promotes healthy citizenry by attempting to create self-
regulating healthy citizens (Harrison & Leahy, 2006), and to which teachers of HPE
play a significant part (Tinning, 2004; Tinning & Glasby, 2002). Beckett (2004)
believes that the learning outcomes of HPE that “contribute to the development of
healthy, active lifestyles for students” (Western Australia Curriculum Council, 1998, p.
117) are the means by which “young people’s bodies are a medium for the constitution
statements of this nature represent how the HPE LA curriculum attempts to produce
healthy citizens from citizens in need of healthy, active lifestyles. Lupton’s (1995)
research concurs with this assessment, but adds that although it is hard to criticise “the
functional objective to accomplish a continuing good health status for all” (p. 2) as is demonstrated within *The Curriculum Framework*, the patronising tenor of such rhetoric is concerning.

*Figure 2.3* The five outcomes of the K-12 HPE LA (Western Australia Curriculum Council, 1998, p. 117).

The functional imperative to enhance health behaviour and promote healthier living through critical inquiry, informed decision-making and problem solving is expressed within *The Curriculum Framework*, but as documented in earlier sections of this review, *The K-10 Syllabus for HPE* is largely lacking in these aspects. This could partly be attributed to the translation of the framework into its secondary text in 2007, to scope and sequence HPE content for HPE teachers. When applying Bloom’s (1956) taxonomy of learning to the syllabus, or a later revision of his work (Anderson & Krathwohl, 2001), it becomes evident that there is little foregrounding of a critical perspective of health. The syllabus outcomes are centred on the early levels of Bloom’s taxonomy and not on the higher levels, which would encourage higher-order thinking and for students to become critical consumers of health messages. Ostensibly, the syllabus does little to question and/or critically engage with health assumptions and power inequalities in the production and reproduction of knowledge, understandings and skills pertaining to health (Penney & Harris, 2004; Wright, 2004). Nor does the syllabus explore different meanings of health.

The process of teaching and learning with a critical perspective is more discernible in the curriculum for Health Studies (SCSA WA, 2013) (Anderson & Krathwohl, 2001). While this course is offered for senior schooling in WA and therefore
lies outside the scope of this study, it is pertinent because this course is imbued with a
critical discourse, and shows that it is possible to have such a discussion in a WA
curriculum setting. The Health Studies course encourages students to analyse, evaluate
and create a social imagination with respect to health, health care and health access
(Germov, 2009). By exploring health as a dynamic quality of life, students in the Health
Studies course critically engage with the meanings constructed by and from health
knowledge, as they are encouraged to challenge and dissect the dominant constructions
of health prevalent in society.

Irrespective of the ways in which lower secondary HPE students in WA are
expected to make sense of the educational outcomes and effect health-enhancing
decisions, the repercussion for teachers implementing The Curriculum Framework is an
important consideration for this research. However, of greater significance is the
accessibility and interpretation of The K-10 Syllabus for HPE as the primary source of
curriculum text by HPE teachers in WA. The implications for the practise of HPE in
WA from this document as curriculum text are unclear, especially regarding the
conceptual underpinnings played out in the health education classroom. However, the
syllabus is more pertinent to this research because curriculum decision-making in
schools in WA has placed some teachers delivering health education in positions where
they may or may not be aware of or even understand the healthy citizenry perspective as
a form of health reform within HPE curriculum.

Sinkinson and Burrows (2011) consider the significance of the language and
pedagogic work of the HPE LA curriculum in New Zealand, stressing a need for
cognisance of the imperative underlying the HPE LA. They caution that this curriculum,
when it is not completely understood by teachers, can be conveyed in inappropriate
ways. They contend that misunderstandings and misrepresentations of the HPE LA
curriculum can “convey implied risk, danger and nasty consequences” (p. 59). Others
(Burrows & McCormack, 2012; Burrows & Wright, 2004; Evans, de Pain, Rich &
Davies, 2011; Leahy, 2012; Martino & Beckett, 2004) raise concerns about the
complexity of the ways in which the HPE LA curriculum understands, constructs,
operationalisés and mobilises views of health, as exemplified in tenet of The K-10
Syllabus for HPE. McCuaig and Hay (2012) referred to the ‘principled position’ of the
HPE LA in developing their caution. They argue against the diversity of positions from
which translations and even re-contextualisations of the HPE LA curriculum contribute
“to the welfare and development of children in Australia” (p. 2). Scholars with similar
views to McCuaig and Hay, also caution against specific interpretation concerns,
voicing curriculum concerns based on ‘control’ (Shannon, 2007), ‘shaping’ (Burrows & Wright, 2007) and ‘blame’ (St Leger, 2001).

Beckett (2004) theorised the insight from an analysis of curriculum ideology of the HPE LA in Australia. She suggested that the insight contributed to dynamic understandings of the practise of HPE, which McCuaig and Hay (2012) and Harrison and Leahy (2006) conceded has significant implications for young people’s health. Likewise, the knowledge garnered from this review of literature beseeches teachers to understand and focus the control that they visibly exercise throughout the teaching and learning of the HPE LA outcomes (Burrows & Wright, 2007; Evans et al., 2004; Leahy, 2009; Lupton, 1995; Sinkinson, 2011; Wright, 2009; Wright, Burrows & Rich, 2012). The knowledge implores teachers to critique their pedagogic work—not as a way of destabilising what they do in the classroom, but to enhance their classroom practice and ownership of it (Evans et al., 2004). Harper (2009) best captures the significance of this insight, stating:

It is important to make sure that we are providing teachers with the skills, the confidence and the time to be the custodians of those policies...Only in doing this—in properly enabling schools to more confidently tackle these issues—will we create some lasting legacy that has the potential to affect generations to come. (p. 4)

Thus, when teachers delivering learning outcomes recognise themselves as patrons of government imperatives for health and health promotion, they are better equipped to relay the significance of the healthy citizenry perspective as a critical discourse underlying the HPE LA in WA (Tinning & McCuaig, 2006).

This key area of the literature review has explored curriculum developments in HPE in Australia and WA. It has specifically examined how The K-10 Syllabus for HPE (WA DET, 2007a, 2007b, 2007c) has replaced The Curriculum Framework (Western Australia Curriculum Council, 1998) in the practical application of the HPE LA educational outcomes in WA schools. It has explored, how, as a curriculum document, the syllabus is insufficiently constituted to effectively support HPE teachers to objectively deliver the healthy citizenry perspective. This point is significant to this research because the HPE LA in WA is mandated learning and a reason why health advocates turn to schools for health reform.

**The Australian perspective of the HPE LA**

Before concluding the fourth key area of this review, it is important to place into a wider Australian context the delivery of the HPE LA in lower secondary government schools in WA, and in particular, health education. To do so, this review will briefly
report on how HPE was delivered in other states and territories at the time of this study, as it posits that the HPE LA in Australia is variously delivered and not homogenous.

In looking Australia-wide in 2013, there are similarities and differences in the representation of HPE as states and territories localised their perspective of the learning area. In the state of Victoria, the HPE LA curriculum consisted of three strands:

- the health of individuals and populations;
- movement and physical activity; and
- the self and relationships (Victorian Curriculum and Assessment Authority, 2002).

Although this curriculum presented a sociocultural perspective of the HPE LA, it did little to encourage a critical discourse with healthy citizenry, as it mainly focussed on the development of knowledge and understandings pertaining to health. In most Victorian government schools, HPE was typically delivered through health education and physical education; however, some Victorian schools may have chosen to present HPE as one subject (T. Brown, personal communication, August 15, 2014).

In New South Wales, Personal Development, Health and Physical Education (PDHPE) represented the HPE LA in lower secondary government schools (Board of Studies New South Wales, 2003). PDHPE comprised of four strands:

- self and relationships;
- movement skill and performance;
- individual and community health; and
- lifelong physical activity. (Board of Studies New South Wales, 2003)

This objective-based curriculum is embedded with a critical discourse; however, it does not encourage students to critically engage with the content as per Bloom’s taxonomy (Anderson & Krathwohl, 2001). For example, learning in PDHPE requires students to “analyse attitudes, behaviours and consequences related to health issues affecting young people” (Board of Studies New South Wales, 2003, p. 12), but lacks opportunities for students to reflect on these attitudes or consider their effect on themselves. In 2013 the PDHPE strands were typically presented through one physical activity lesson, one theory-based lesson and one sport lesson (N. Kennedy, personal communication, August 14, 2014).

South Australia represented the HPE LA in lower secondary government schools through three interrelated strands of learning, attributed equal importance within the curriculum:
• physical activity and participation;
• personal and social development; and
• health of individuals and communities. (Government of South Australia, 2004)

Without experiencing this curriculum first hand it is difficult to ascertain the level of critical discourse pervading it. However, within the health-related curriculum there is significant text indicating a critical discourse. For example: “using case studies and scenarios to identify and clarify values, considering different points of view, weighing up alternatives and evaluating the consequences of translating value positions into practice” (Government of South Australia, 2004, p. 10) encompasses higher-order thinking with a critical discourse. There is also significant text to determine the sociocultural perspective of the curriculum through explorations and discussions of topics such as diversity, equity, race and culture. Like WA, HPE in South Australia is typically delivered in government schools as two separate subjects: health education and physical education (S. Pill, personal communication, August 15, 2014).

In Queensland, the HPE LA is represented through the essential processes of ways of working:
• health;
• physical activity; and
• personal development. (Queensland Studies Authority, 2007a, 2007b, 2007c, 2007d)

In this curriculum, an essential element to be learnt by the end of year nine is to “reflect on health inequities, and identify the impact of diverse influences on health and well-being, movement capacities and personal development, and the best use of positive influences” (Queensland Studies Authority, 2007c, p. 2). In lower secondary government schools in Queensland, HPE is typically delivered through health education and physical education (C. Brooks, personal communication, August 16, 2014).

The Australian Capital Territory represented the HPE LA through three essential learning achievements:

HPE takes action to promote health;
HPE is physically skilled and active; and
HPE manages self and relationships. (Australian Capital Territory Education and Training Directorate, 2007)

This curriculum is limited in its critical discourse but does have a sociocultural perspective. Most of the essential content starts with verbs such as ‘recognise’ and
‘identify’, with few critical verbs like ‘analyse’, ‘evaluate’ or ‘reflect’. The HPE LA in the Australian Capital Territory in lower secondary government schools is delivered via methods preferred by schools. However, the publication of a Physical Education and Sport Policy (Australian Capital Territory Education and Training Directorate, 2007) suggests that HPE is delivered in most schools via physical education, sport and health education.

In Tasmania, the Health and Wellbeing Curriculum (Tasmania Department of Education, 2007) represented the HPE LA for government schools. This curriculum is also comprised of three strands:

- understanding health and well-being;
- concepts and skills for movement and physical activity; and
- skills for personal and social development. (Tasmania Department of Education, 2007)

This curriculum includes a strong critical discourse, as demonstrated through the suggested content focus: “advocacy, challenging media portrayal and community attitudes towards wellbeing and young people” (Tasmania Department of Education, 2007, p. 12). A strong sociocultural perspective also underpins this curriculum, as it promotes “civic participation and citizenry” (Tasmania Department of Education, 2007, p. 6). In Tasmania, the representation of the HPE LA in lower secondary government schools is also left to the discretion of individual schools; however, most deliver the learning area as HPE (T. Gray, personal communication, August 14, 2014).

The Northern Territory represents the HPE LA in a similar way to South Australia and Queensland, through three strands of learning:

- promoting individual and community health;
- enhancing personal development and relationships; and
- participating in physical activity and movement. (Northern Territory Department of Education, 2012)

The later years of this curriculum aims to develop constructive and collaborative learners through a critical and sociocultural perspective. An example of an essential learning in this curriculum is the ability to “evaluate initiatives in health care, health promotion and safety based on a balanced assessment between prevention and treatment, and between personal and group responsibility, for health and safety” (Northern Territory Department of Education, 2012, p. 234). Typical HPE delivery in Northern Territory lower secondary government schools is also conducted via discrete
subjects: health education and physical education (N. McMaster, personal communication, August 15, 2014).

In concluding the fourth key area of this review, and in summary, this key area chronicled the history of the HPE LA in WA and Australia as a whole. It revealed that WA government schools are currently inured with the responsibility of decision making, and in particular, with decisions regarding the curriculum. This key area also examined the HPE LA curriculum to generate understandings about the sociocultural and healthy citizenry perspectives, and as a way of highlighting the effect of secondary curriculum text as dominant forms of curriculum text. In so doing, this review considered the discursive processes of the HPE LA curriculum for the health and well-being of young people in Australia, and identified the importance of the HPE teacher as a custodian of curriculum text (Harper, 2009).

Thus, this review progresses to an investigation of the teachers charged with the delivery of health education in lower secondary government schools in WA. By investigating the teachers and the teaching and learning undertaken in the health education classroom—which involves revisiting skill-based teaching and learning as a pedagogical directive in WA—this review connects the ideological, social, political and economic significance of the HPE LA in Australia to the context of WA.

**Teachers Delivering Health Education in WA Schools**

The final section of this literature review raises the question: “what sort of teacher education is necessary or desirable to prepare teachers for work with the new HPE KLA?” (Tinning, 2004, p. 242). Is it one that supports the integrated approach, or one that acknowledges the ways in which WA schools legitimise the learning area’s curriculum; a differentiated or fragmented approach placed within a devolved education system?

**The WA context and the delivery of health education**

It is difficult to surmise the best ways to prepare teachers to deliver the HPE LA outcomes in WA, because the organisation and structure of the HPE LA curriculum might not reflect how government schools actually work. In most government schools in WA, there is a possible disjunction between the curriculum setting and curriculum documentation, which Tinning (2000) notes has implications for practice. He believes this is to the point, where “many teachers and administrators merely use the new official discourse [HPE KLA] as a form of strategic rhetoric to mask no change in their actual practice” (p. 17).
Irrespective of the perceived difficulties of the HPE LA context, the literature review revealed a strong case for the teachers who deliver health education in WA government schools to be adequately prepared to teach in the classroom. Perhaps best captured by Hattie (2003), this is because “expert teachers are passionate teachers” (p. 8). However, a raft of scholarly work demonstrated the relevance of PCK (Shulman, 1986) and in particular, a need for teacher preparation to support the HPE LA’s contemporary perspectives (Colquhoun, 1991; Harper, 2009; Marks, 2010; Meeks et al., 2007; Paakkari et al., 2010; St Leger, 2001; St Leger, Kolbe, Lee, McCall & Young, 2007). This body of knowledge established that teachers could have a significant effect on the health and well-being of young people (Cohall et al., 2007; McCuaig, 2006a; Sinkinson & Burrows, 2011).

At the same time, this body of work also explored the significance of pedagogical encounters that unsuccessfully present a social view of health as per the sociocultural perspective, suggesting that some inadequately prepared teachers privilege particular forms of health knowledge over others. For example, McCuaig, Coore and Hay (2012) found there is a liability for HPE LA teachers when they present a sociocultural commitment to health and they reflect on the complexity of the HPE discourse. They comment that this perspective promotes “the idea that a problem exists, one that must be fixed and fixed according to contemporary health promotion theory and practice” (p. 110). Tinning and Glasby (2002) also comment on the social significance of this contemporary perspective and identify a “moral agenda” at work in promoting a “healthy lifestyle” (p. 112). Equally, Evans et al. (2004), Wright (2004) and Kirk and Gray (1990) stress that teachers who participate in the management of the body through the pedagogic work of the HPE LA need to be very clear about the practices of the self that they promote. Essentially, all of these authors emphasise the need for teachers to be conversant to a significant level of consciousness and competency with the HPE LA’s nuances so that teachers don’t subject narrow understandings of health upon young people (Harrison and Leahy, 2006).

While others have contemplated the diversity of thought to which pedagogic work centred in a sociocultural perspective requires, Quennerstedt et al. (2010) argue for social justice principles to permeate pedagogical content, strategies and processes at play in HPE. They found it necessary for the same reason as Paakari, Tynjala and Kannas (2010), that the process allows and enables multiple and multidimensional perspectives of health to ensue. Indubitably, all of this is not withstanding the obligation already bestowed on teachers to keep abreast of the culture of youth (Australian Youth
Australia-wide, the inadequacy of teacher training in preparing schools for HPE delivery remains a contentious issue (Macdonald & Glover, 1997; McCuaig et al., 2012; Rowling et al., 1998; Tinning, 2004), with one WA report identifying the school setting “as a unique opportunity to significantly influence young people as they pass through critical phases of development” (Western Australia Education and Health Standing Committee, 2011, p. 192). This report found that:

The learning area of health and physical education is a compulsory part of the school curriculum. However the subject matter used to deliver the outcomes of this learning area is for the school to decide. Drug and alcohol education is an area in which undergraduate teachers receive very little training, is controversial, and is believed to send mixed messages to the parent body (eg “they teach drug education, so there must be a drug issue in the school.”) Therefore it is often overlooked in place of less controversial but important health topics. Effective drug and alcohol education requires well trained teachers, provided with evidence-based curriculum resources, who have adequate dedicated time to teach the subject. (Western Australia Education and Health Standing Committee, 2011, p. 194)

Perhaps this report was written with awareness of perceived issues with teacher preparation across WA universities, as it recommended that “The Minister of Education encourage the State’s universities to develop a more comprehensive undergraduate and postgraduate teacher training curriculum in alcohol and drug issues” (p. 196). Although a narrow critique, this recommendation acknowledges the negative perceptions of aspects of the HPE LA teacher training in WA.

Similarly, the Australian Youth Forum (2012), in their submission to the Shape of the Australian Curriculum: HPE (ACARA, 2012) requested, “more practical and relevant training be invested in teachers” (p. 28). This was in response to students in HPE classes reporting that they were “often taught by people not trained specifically in these areas” (Australian Youth Forum, 2012, p. 21). An additional report by the Australian Youth affairs Coalition and Youth Empowerment Against HIV/AIDS (Giordano & Ross, 2012) identified “a need for consistency in the content and delivery of sex and sexual health information within schools” (p. 6). This particular report identified issues with the teachers delivering the information, noting that 16 per cent of teachers studied admitted to “no formal training in sexuality education” (p. 7), yet they were delivering this sensitive information in schools.
There is a plethora of support for the argument that teachers delivering the HPE LA—and in the case of this research, health education—are better prepared when they are qualified and trained in PCK. As Shulman (1986, 1987) advised, universities in teacher development should pay “as much attention to the content aspects of teaching as…to the elements of the teaching process” (p. 8). Swabey et al. (2010) agree, as they more recently found the key concern for beginning teachers to be “the teacher’s lack of practical pedagogical knowledge” (p. 34). This perspective is pertinent to this research because, as evidenced in the WA report, not all universities in WA prepare their pre-service HPE LA teachers with the relevant PCK. Some WA universities that specifically prepare teachers for employment in teaching positions within the HPE LA preclude aspects of the sociocultural perspective of HPE from the course offerings (A. Jones; P. Rycroft; P. Whipp; R. Williams, personal communication, December 4, 2012).

To further understanding of the teacher as having potential to develop knowledge, understandings and skills that enable young people to enhance health and well-being this review explored pedagogical approaches to promote health-enhancing dispositions. It consistently identified student-student participatory interactions and skills-based teaching and learning as a preferred pedagogical approach (Allensworth, 1993; Beckett, 2006; Cahill et al., 2014; Colquhoun, 1991; Cowley, David, & Williams, 1981; Governali, Hodges, & Videto, 2005; Harrison & Leahy, 2006; Lee, 1981; Marks, 2009, 2010; Meeks et al., 2007; Natvig, Albrektsen, & Qvarnstorm, 2010; Wharton, Ng, & Daly, 2007). As previously mentioned, *The K-10 Syllabus for HPE*—which is used by teachers in the practical delivery of HPE in WA—endorsed a similar approach, stipulating that learning in the health contexts should occur through skills-based learning (Western Australia Curriculum Council, 1998; WA DET, 2007a). Goldman (2011) hypothesised the preference for skills-based participatory pedagogies, explaining that the contemporary curriculum focusses on skill development because “good citizens need to develop critical and reflective awareness, to make informed choices and to take responsibility for their own decisions” (p. 539). This view is consistent with the HPE LA curriculum in WA, because it too seeks to empower students to take responsibility and action for their own and others’ health (Western Australia Curriculum Council, 1998).

**Health education pedagogies**

Churchill et al. (2011), in drawing on understandings of pedagogy, believe that teachers can work to support the learning diversity of students through the range of pedagogical decisions they make within and outside of the classroom. They believe a
teacher’s pedagogical choices and pedagogical actions define who they are as a professional, as these decisions explicitly shape the learning environment and the way in which the teacher interacts with the students. They report that there are pedagogies that connect to the practice of teaching—like productive pedagogies—whilst other pedagogies focus on the learning space and learner (Churchill et al., 2011).

Herbert and Lohrmann (2011) advise health education teachers to employ a variety of pedagogical approaches to enable young people to actively engage with the health discourses that take place within the health classroom. Like Broadbear and Keyser (2000), they support variations in pedagogy as these alternatives can target different levels of cognition, as framed by a revision of Bloom’s taxonomy of educational objectives (Anderson & Krathwohl, 2001). Herbert and Lohrmann (2011) are especially supportive of pedagogies that develop high-order thinking skills, as these skills can support young people to take action with regard to their health and the health of others. Other, similarly pedagogically focussed authors (Evans et al., 2004; Glanz, Rimer, & Viswanath, 2008; Meeks et al., 2007) give consideration to what is not taught in the pedagogical encounter as much as what is. These authors believe that in raising awareness of the ways in which young people operate to mediate their health, teachers can equip young people with a range of tools to have greater control over their health.

Irrespective of accuracies in terminoloy, the transmission or didactic pedagogical approach was used predominantly in historical accounts of the health education classroom to deliver health facts and health knowledge but as McCuaig notes (2006), with limited success. Now, when used in isolation, this approach is judged to be an ineffective means to support and promote health (Matthews, 2014). Collaborative, cooperative, dialogic and student-centred pedagogies may be considered as more effective as these pedagogies allow students to build and strengthen connections between themselves and the school (Natvig et al., 2010) and through skills-based activities may develop realistic solutions to address health issues (Meeks et al., 2007). These particular pedagogies require the teacher to take a less-teacher-like role and a more facilitatory role, and depend on the teacher clearly establishing a cohesive classroom culture that supports conversation and reflection.

Three other pedagogies that may be used in health education include authentic, transformative and inquiry-based pedagogies. Allen (2008), who is a supporter of authentic pedagogies, appreciates this approach for its interplay between the student and the health knowledge. He believes that authentic pedagogies develop conceptual understandings of health in terms that young people understand and which are within
their frame of reference. Transformative pedagogies are often used in teaching modules centred around drug education and the like, as these pedagogies specifically endeavour to bring about behaviour change or behaviour control (Glanz, Rimer, & Viswanath, 2008). Inquiry-based pedagogies are used to promote process over content and are particularly useful for creating learning experiences—like those to explore sexuality and sexual health—where students may want choose to know more or less about a particular topic. This approach is best used in contexts where students are required or permitted to construct the research context and to explore perspectives to develop their own ways of knowing.

Cahill et al. (2014) refer to participatory pedagogies as loosely grouping together “co-operative learning tasks which are dialogic in nature and involve student-to-student interaction, rather than just teacher-student interaction” (p. 703). They found that participatory pedagogies actively engage students in the learning process, which Meeks et al. (2007), Allen (2008), Glanz et al. (2008), and Natvig et al. (2010) believe is an appropriate learning paradigm for health education as it can help to strengthen and support health. Cahill et al. (2014), state that participatory pedagogies can help students:

develop their ability to identify norms, pressures and risks relating to drug use; prompt students to identify potential choices and options suited to a range of possible situations; and allow for them to develop and rehearse strategies and solutions to minimise or avoid harm. (p. 706)

Participatory pedagogies are often used in learning tasks such as role-plays, scenarios and problem predicting as these tasks seek to question, reaffirm or even develop new ways of thinking with regard to health.

Critical pedagogy as a discourse within the HPE LA has become increasingly significant according to critical scholars like Evans et al. (2004), Gard and Leahy (2009), and Fitzpatrick and Tinning (2013), because schools are key sites for health promotion. These scholars consider curriculum documentation for the HPE LA in neoliberal times to be saturated with notions of the ‘at risk self’ (Harrison and Leahy, and 2006c), which critical pedagogies can work to disassemble and interrupt. More particularly, critical pedagogies are significant to develop the sociocultural understandings of the HPE LA because this pedagogical approach is underpinned by the perspective that change is possible (Matthews, 2014).

Irrespective of the particular pedagogical approach, most of the authors in this review favoured learning tasks that provided students with opportunities to explore different ways of knowing health knowledge and to place this knowledge within skills-based participatory learning as a means to effect health citizenry. All of which, indicates
that skill development was viewed as essential learning in the delivery of health education.

**Skills-based participatory pedagogies**

A skills-based participatory teaching and learning framework for the HPE LA in WA supports the holistic understanding of health. Lee (1981), as an early commentator, justified the significance of teaching and learning that encompasses this perspective. He explained that when young people connect with learning in and through the affective domain, they process and apply values, attitudes and emotions, which in turn help them to create meaning from the learning. He notes that when this perspective is advanced within the pedagogic work of the health education classroom and in particular, via skills-based participatory pedagogies, students are more apt to transfer the learning to their own lives. He believes that these pedagogies provide students with the opportunity to practise life skills in relevant contexts.

Meeks et al. (2007)—more recent supporters of skills-based participatory pedagogies—advocate that before young people can make socially responsible decisions they need to understand the consequences of behaviour. They stress that young people do not need to experience the behaviour first hand, but can deduce the consequence and skills necessary from the opportunities that such learning presents. Meeks et al. believe that these skills can be stored within the psyche of the child for use when relevant and/or needed and that this is one of the reasons why nationally and internationally skills-based participatory health education is deemed effective in supporting health-enhancing dispositions and behaviour change (Cowley et al., 1981; Lee, 1981; Penney & Jess, 2004; St Leger & Young, 2009; Tang et al., 2008; Wharton et al., 2007; WHO, 2003).

Allensworth (1993) and Broadbear and Keyser (2000) specifically merit the focus of skills-based participatory pedagogies to developing higher-order thinking skills. They declare that the application of such skills as problem solving, refusal and reflection help promote good health. The WHO (2003) also support the merit of skills-based participatory pedagogies, proclaiming that skills development is necessary for the betterment of one’s own and others’ health, and for proactive community participation, which they believe should be the focus of any school community. Shannon (2007) has a similar viewpoint, suggesting that when “students are able to transfer their acquired skills and knowledge beyond the class environment […] they have the capacity to be a positive influence in their micro-community” (p. 207). Natvig et al. (2010) also value skills-based participatory pedagogies, praising how students can build connections to
other students and to the school from participation in such learning activities. In the
cconduct of their research, they found a teacher’s pedagogical approach as more
significant to “social support than personal involvement” (p. 270), suggesting that
students benefit from being part of an activity just as much as if they were at the centre
of the activity.

Others argue in favour of skills-based participatory pedagogies, and do so from
differing perspectives. Some assert that the delivery of facts and health information on
its own is not enough to effect behavioural change (Beckett, 2006; Black, Furney, Graf
& Nolte, 2010; Cowley et al., 1981; Kirby et al., 1994; Kolbe, 2005; McCuaig, 2006b).
Some argue that skills-based participatory pedagogies in health education can
“strengthen an adolescent’s protective factors, promote the competencies necessary to
make a healthy transition to adulthood and promote his or her adoption of positive
behaviours” (Mangrulkar, Whitmand & Posner, 2001, p. 6). Some argue that the
opportunity afforded through the maturity of adolescent discussions in skills-based
participatory pedagogy helps verify and debunk misconceptions, myths and
misunderstandings about health. They suggest that young people benefit from this
activity because it provides opportunity to consider and reconsider personal positioning,
which in turn can also allow students to consider the views and rights of others (Meeks
et al., 2007).

In summary, skills-based participatory pedagogies in health education has been
found—when delivered through the right context—to support young people to find their
place in the world, with possibilities to promote lifelong safe, healthy and more active
living. This potential directly links to the primary goal of the HPE LA in WA, as it
promotes the potential of positive health behaviours for life.

When skills-based participatory pedagogies are ignored

This review has described how skills-based participatory pedagogy in health
education is realised when students are provided with the opportunity to connect
learning to their own ideas, beliefs and values, and in particular, their own life stories
(Mangrulkar et al., 2001). It has presented this argument in support of meaningful,
applicable and personable learning in health education. Accordingly, this review has
positioned skills-based participatory pedagogy as an appropriate pedagogy for health
education in WA, as it specifically enables students to process, apply and reflect on
health decisions to uncover their own social health norms (Wharton et al., 2007).

Globally, scholars raise concerns about untrained and unqualified teachers
delivering health education without opportunities to develop skills (Begoray et al.,
2009; Fetro, 2010; Lynagh, Gilligan & Handley, 2010; Mayer et al., 2011; McBride et al., 1995a; Peterson, Cooper & Laird, 2001; Rowling et al., 1998). Some scholars argue that there are teachers who privilege the ‘what’ and ‘why’ questions of health, allowing health information and knowledge to become the foci. Similarly, they report the skills aspect as underdone and, at worst, ignored (Cahill et al. 2014). Cowley, David and Williams (1981) argued that unqualified and untrained teachers could rely too heavily on a didactic transmission of health information, stating that they do so because “the provision of facts and information is a relatively simple operation” (p. 6). Kirk and Gray (1990) deliberated how a didactic delivery is banal, lacking personal relevance and meaning, arguing that the approach is a reactive, rather than proactive or preventative, approach to teaching and learning in health, asserting that it is not conducive to the promotion of health-enhancing behaviours in young people. Other scholars referred to the ‘safety’ that this type of delivery offers teachers, because the delivery of facts does not challenge their confidence and competency with the content (McCuaig et al., 2012; Simpson & Freeman, 2004).

Sinkinson and Burrows (2011) argued that delivering health education content focussed on knowledge via transmission pedagogy, and lacking a skill proponent can result in students learning health information out of context. They claim there is a real danger in this type of delivery, stressing that health information in this context can be presented as unrelated and irrelevant, or beyond the social maturity of the student. Allen (2008) supports this understanding, advising that learning that lacks relevance “may be the single most influential reason students lack interest, enthusiasm, and inspiration in the classroom” (p. 43). Cahill et al. (2014) concur; stating that “understanding the purpose of activities” (p. 706) is the most influential factor in preventive health.

In WA, The K-10 Syllabus for HPE advises teachers to combine the ‘what’ and the ‘why’ questions with the ‘how’ through stipulating a skills-based delivery. This is for the reason that when realised, the possibilities for behaviour change distinguishes skills-based participatory teaching and learning from other methods of educating about health issues (WHO, 2003). While this approach is promoted through the discursive processes of the WA curriculum, its potential success in affecting young people is dependent on WA schools valuing the teachers timetabled to deliver health education. It is dependent on those teachers being familiar with curriculum documentation and the learning area’s social view of health as opposed to a bio-medical view of health. Additionally, the potential is dependent on the teachers understanding the significance and intent of a skills-based delivery in the health contexts.
Essentially, the potential of The K-10 Syllabus for HPE to support the health of young Western Australians is dependent on the teachers who deliver health education enacting a skills-based approach through their pedagogical choices. However, as schools in WA are afforded the responsibility and right to curriculum decision-making and in particular the deployment of classroom teachers, this review establishes that as a bi-product of this process, schools are charged with the ability to effect healthy citizenry. More particularly, the promotion of the health citizenry of young people in WA government schools is largely dependent on individual schools and their choices.

The teacher of health education

Teachers bring to the classroom their personalities, beliefs, likes and dislikes, skills, experiences and what they openly value as pedagogues (Black et al., 2010; Morgan Pigg, 2009). Furthermore, Burrows and McCormack (2012) note that the “personal and political aspirations of teachers inevitably impact what is taught in the name of health and/physical education and how it is taught” (p. 732). Seemingly, the implication for health education—due to the highly sensitive and controversial nature of some content—is that there is the potential for the subject to be delivered from a variety of perspectives and through multiple approaches (McCuaig, 2006a). Within the right context, this unique orientation should not be feared but rather embraced (Burrows & McCormack, 2012). However, in the wrong context, the diversity of delivery possibilities can be problematic (Burrows & McCormack, 2012; Harrison & Leahy, 2006; Leahy, 2009; Lee, 1981; Meeks et al., 2007;Sinkinson & Burrows, 2011; Tinning & Glasby, 2002; Wright, 2004, 2009).

Unlike many other discrete, discipline-based subjects—perhaps less vulnerable to diversity of personal perspectives—the social view of health conveyed in contemporary HPE curriculum in Australia places the learning area and it’s specific content open to deviations in representation. In some contexts this openness can be viewed as liberating (Burrows and McCormack, 2012) but in others, this openness can result in the curriculum being incorrectly or poorly represented.

Harris and Leggett (2013) who investigated beginning “PE” (p. 12) teachers in England, identified “slippage” and “recontextualisation” (p. 12) concerns with regard to their understanding of contemporary curriculum. In particular, they found that a teacher’s perception and understandings of health connected to lived histories—which in their research were found to be reduced, as the most of the teachers’ understandings “related to sport and fitness” (p.12). The investigation found the implication of this reduction in understandings to be problematic for practice, because these teachers
lacked the “multidimensional understandings of health” (p.12) needed to teach the new curriculum that now expressed “health in PE” (p.12). Although Harris and Leggett’s study investigated “PE” teachers in England and is not directly comparably to the Australian context, the authors identified that initial teacher training programs needed to communicate the sociocultural perspective of health so that teachers could remain open to other ways of knowing health. Harris and Leggett called to advance the rethinking of teacher training programs to recognise this perspective.

In an earlier study, Burrows and Wright (2004) questioned reconceptualisations of health in the New Zealand curriculum, and they particularly focussed on the ways in which teachers “produced, reproduced and defined” health and well-being (p. 200). They suggested that to some teachers, assisting young people to make sense of themselves, in a contemporary world, might prove too difficult. However, they encouraged teachers, through their pedagogical choices, to “dissect, disrupt and perhaps transform student thinking about what constitutes and contributes to well-being and health” (p. 203).

Despite the perceived difficulties in preparing teachers to deliver a social view of health, scholars largely attribute delivery issues of this perspective to unprepared or inadequately prepared teachers and/or unqualified or untrained teachers timetabled to deliver the content (Allensworth, 1993; Australian Youth Forum, 2012; Fetro, 2010; McBride, Cameron, et al., 1995; Paakkari et al., 2010; Peterson et al., 2001; Rowling et al., 1998). Kann, Brener and Allensworth (2001), in keeping with Harris and Leggett (2013), report that teachers can be unprepared because health education was not included in their pre-service training. Sinkinson (2011) clarifies this idiosyncrasy, stating that teachers whose primary qualification is in HPE sometimes do not study health education pedagogy as a compulsory component of their course. Tinning (2004, 2002, 2006), who has dedicated a great amount of time to researching beginning HPE teachers, queries whether these teachers are equipped with the cultural critique to unpack the nuances of the HPE LA.

Other scholars have spoken to teachers from other disciplines and learning areas who deliver health education in the classroom, claiming this is common for the subject (Australian Youth Forum, 2012; Kann et al., 2001; McConney & Price, 2009; Paakkari et al., 2010; Peterson et al., 2001; Wharf-Higgins et al., 2009). A WA-based study conducted by McConney and Price (2009) (although not specifically focussed on the delivery of health education in WA) refers to this practise as out-of-field teaching. In discussing its effect, they refer to research by Ingersoll (2003) to infer that the practise
is education’s “dirty little secret” (cited in McConney & Price, 2009, p. 88). They explain that out-of-field teaching is a way for school administrators to “top-up” the timetable of a teacher (McConney & Price, 2009, p. 89).

In reporting on 500 teachers, McConney and Price (2009) found that the overall rate of teaching out-of-field in WA schools during the 2007 and 2008 school years was estimated to be 24 per cent (p. 87). They also found out-of-field teaching to be much higher in the lower secondary years (p. 88), and reported that teachers timetabled to deliver Information Technology (IT) were the most significant group who lacked methodology training, at 46 per cent. Although the effect of out-of-field teaching on student outcomes and teacher welfare is unresolved in WA and Australia, McConney and Price suggest that it may have some bearing on teacher attrition rates. Tinning (2004) and Colquhoun (1990) have suggested that these teachers are not familiar with the subject’s PCK (Shulman, 1986), and would not necessarily choose to teach the subject, or enjoy doing so. Armour and Harris (2013) commented on these teachers feeling overwhelmed whilst Marks (2010) noted that a teacher’s lack of choice in what they teach, had the greatest potential to undermine the enacted delivery of a subject in the classroom. He reported that classroom success corresponded to “teachers who volunteered to teach the curriculum, verses being told to teach this, without consultation” (p. 422).

Australian and international literature reports that health education in schools is often delivered by teachers who are unprepared, inadequately trained and unmotivated to teach the subject’s content (Australian Youth Forum, 2012; Begoray et al., 2009; Fetro, 2010; Hallfors & Godette, 2002; Jourdan et al., 2008; Kirk & Gray, 1990; Lynagh et al., 2010; Mayer et al., 2011; Nation et al., 2003; Peterson et al., 2001). However, in the absence of strong Australian data that clearly identifies who these teachers really are, how these teachers feel about teaching health education and what they actually do in the classroom, it is difficult to ascertain the impact of their pedagogic work on student learning. Armour and Harris (2013) commenting from the context of England suggested that it was unlikely the aspirations of the curriculum would be realised. In WA the impact is unknown, as the question of the prevalence of unprepared, inadequately trained and unmotivated teachers delivering health education in WA schools has not been asked since 1995. Moreover, the qualifications of the teachers who ultimately deliver health education in lower secondary government schools have yet to be questioned.
Information on the nature of out-of-field teaching in WA and Australia is available for other subjects and learning areas (McConney & Price, 2009). For example, in Mathematics—where there is currently a teacher shortage throughout the country—research shows that 20 per cent of Mathematics teachers come from other learning areas (Goos, 2013). Shilton et al. (1995) (although out-dated now) found that 75 per cent of teachers delivering health education were inappropriately trained to do so. However, unlike Goos, did not ascertain whether the inappropriately trained teachers were in fact out-of-field teachers. This information is the basis of this research, and is critical for contemporary WA teachers, especially with an impending national curriculum for HPE and the implementation of the *Australian Professional Standards for Teachers* (Australian Institute for Teaching and School Leadership [AITSL], 2011b).

Up to this point, this review has argued that the teacher plays a significant role in the teaching and learning of the HPE LA outcomes (McCuaig et al., 2012; Ryan et al., 2012), and more specifically, to the successful representation of health education in the classroom. This is a view that correlates with and is currently supported by the Commonwealth of Australia (Commonwealth of Australia, 2014) and AITSL (2011a, 2011b). AITSL claims “a teacher’s effectiveness has a powerful impact on students, with broad consensus that teacher quality is the single most important in-school factor influencing student achievement” (AITSL, 2011b). With this knowledge, the development of the *Australian Professional Standards for Teachers* may be pertinent to the professional success of teachers required to deliver health education in WA government schools (AITSL, 2011b). This is because Australia is committed “to the specific educational goal that Australian schooling promotes equity and excellence and that all young Australians will become successful learners, confident and creative individuals, and active and informed citizens” (p. 1).

AITSL is defining the pedagogic work of teachers by identifying three domains of teaching—professional knowledge, professional practice and professional engagement—and outlines seven standards for teachers. These identify teachers as graduate teachers, proficient teachers, highly accomplished teachers and lead teachers. Standard one refers to teachers knowing their students and understanding how they learn. Standard two (see Appendix L) refers to teachers knowing the content and how to teach it (AITSL, 2011b). Standard three refers to the ways in which teachers’ plan for and implement effective teaching and learning. Aside from the other four standards, the possibility of timetabling unprepared and inadequately trained teachers to the health education classroom in WA government schools has the potential to undermine these
teachers’ capacity to achieve standards one, two and three of the *Australian Professional Standards for Teachers*. At present, the effect of these standards upon the teachers delivering health education is unknown, but of concern. It is a concern that this research takes very seriously.

**Summary**

This literature review explored five key areas of interest related to this research to commence with health as a holistic concept underpinning the rationale of the HPE LA in WA. It examined the connection between health promotion and contemporary health education by exploring historical perspectives of community-based and school-based health education. The review documented the history of health education as a separate, discipline-based subject in Australian and WA schools, and the developments that have affected the subject’s positioning within the HPE LA in WA. It described the construct of the HPE LA and investigated the social view of health that underpins the learning area’s curriculum. The review examined the role and pedagogic work of the HPE teacher when enacting a sociocultural perspective of health. This review also investigated the ways in which WA government schools support or interrupt the informed delivery of health education in the classroom.

In so doing, this review discerned that informed delivery of health education in WA lower secondary government schools does not guarantee that health education is delivered using preferred pedagogies (Allensworth, 1993; Kirk & Gray, 1990; Lohrmann, 2011; Marks, 2009; Rowling, 2009) or via a skill-based delivery as described in *The K-10 Syllabus for HPE*. It accepts that in the devolution of school governance, the structural systems, policies and practices in WA government schools can significantly affect the representation of health education delivered by teachers. However, this review agrees with scholars who claim that schools could be falling short in developing the knowledge, understanding and skills to enhance healthy citizenry (Allensworth, 1993; Goldman, 2011; Ryan et al., 2012).

This review was unable to effectively identify the qualifications, motivations or pedagogical practices of teachers who deliver health education in WA, Australia or globally. The large body of scholarly work that argued against unqualified and unprepared teachers delivering health education did so through inference rather than evidence. Subsequently, this review of literature purports that there has been insufficient pedagogical gain for health education from the development of the HPE LA in WA and resultantly, it supports an investigation of the teachers delivering health education in lower secondary WA government schools.
Chapter 3: Research Approach

This chapter outlines the approach used to conduct this research, and is organised into six main sections. The first section examines the theoretical perspective underpinning this research to explain why postpositivism is most appropriate for addressing the broad scope of this research. The second section displays a conceptual framework to position this research within the WA context, and the broader context of health education as a timetabled, discipline-based subject. The section conceptually examines the research approach and provides rationales for the research methodology. The third section describes the research methods, including the research instruments, sampling method and research administration. The fourth section outlines the processes followed to analyse the data. The fifth section discusses the ethical considerations that affected this research, and the sixth section provides a summary.

Theoretical Perspective

Creswell (1994) believed that research “paradigms in the human and social sciences help us understand phenomena” (p. 1). Kuhn (1970) believed that a research paradigm is guided by the researcher’s beliefs, values and experiences as they help the researcher think about the research as a whole. This research was developed from practical experience with health education as a timetabled subject in WA schools. It was specifically conducted to investigate lower secondary government schools in WA, and to explain a perceived phenomenon of poor representation of health education in such schools. This first section outlines the theoretical perspective underpinning this research. It explores my career experiences, academic studies and background in research as it examines the effects of these experiences on my current worldview.

A theoretical perspective is a position from which the world is viewed (Denzin & Lincoln, 1994). Kuhn (1970) and Creswell (1994) explain that this perspective is critical because it is inextricably linked to research design. Neuman (2007) argues that this perspective provides the framework for conducting research, specifying that it provides its parameters, strategies and procedures. I currently view the world with a postpositivist orientation, and this perspective underpinned this research because it best accommodates the broad scope of the context (Phillips & Burbules, 2000). More specifically, a postpositivist perspective acknowledges the import of investigating policies, practices, processes and people affecting the research context.
Phillips and Burbules (2000) state that the postpositive perspective allows the blending of discourse with concrete examples. In this research, the postpositivist perspective acknowledges the multiple sources of data (Gephart, 1999), the multiple discussions operating within the research (Creswell, 2013; Creswell & Plano Clark, 2007; Creswell, Plano Clark, Gutmann & Hanson, 2003) and the complexities of the research context (Denzin & Lincoln, 2008). Further, the postpositivist perspective accepts yet counteracts my assumptions of the research context (Creswell et al., 2003; Tashakkori & Teddlie, 2003), so that broader fields of understandings arise from the data. The postpositivist perspective supported competent inquiry and enabled “authorized conviction” of a broad research context (Dewey, 1966, p. 8–9, cited in Phillips & Burbules, 2000, p. 4).

**The journey to a theoretical perspective**

This research led to my current epistemological positioning as a postpositivist. However, from the outset I intended to use a constructivist interpretive perspective (Guba & Lincoln, 1989), as I believed that I understood the assumptions I held about knowledge and my intended field of research through my immersion in the pedagogy of health education in WA for nearly 20 years. As such, my assumptions derived from a career focussed upon the delivery of health education in the lower secondary classroom.

My career included experiences as a HPE teacher, a state and national curriculum writer, a university lecturer for pre-service teachers and an advocate for the better representation of health education in schools Australia-wide. Resultantly, I started believing that health education in WA schools was poorly represented—a poor cousin to physical education—and I considered this positioning within HPE as a social justice issue for young people and education. I strongly believed that health education deserved to be taken more seriously by teachers and school administrators, and I was determined to seek enlightenment on the issues facing the delivery through this research.

I also considered knowledge dynamic and active, constructed and reconstructed through experiences (Guba & Lincoln, 1989). Like Phillips and Burbules (2000), I believed that “human knowledge is not based on unchangeable, rock-solid foundations—it is conjectural” (p. 4). In acknowledging this view, along with my assumptions (Creswell, 2013; Guba & Lincoln, 2008), I conceded that removal from the classroom as my primary place of work undermined any claims of knowledge of the WA health education context. Although I strongly felt that I could make valid yet value-laden claims of health education’s poor representation, I recognised that these might have been false beliefs, and that my understandings of the WA context could be
misunderstandings. I had to admit that these beliefs “might not be the absolute truth” (Phillips & Burbules, 2000, p. 3).

I learnt that the origin and effect of the representation of health education was unclear and unknown, and that the effect was multidimensional and far reaching. I accepted that the representation could be viewed from multiple perspectives within multiple realities. I admitted that I did not really understand what was happening, and that I needed to aspire higher than my assumptions, beliefs and perceptions. Through these lessons this research emerged.

**In the beginning**

I was initially inspired by Piaget (1972), Vygotsky (1978), Rosenstock (1988) and Bandura (1977), as I believed these theorists best fit the epistemological positioning underpinning this research. However, as I reflected on my past academic achievements—what I knew and what I understood—my perspective changed: I had completed an undergraduate and post-graduate degree imbued with positivistic and behaviourist learning experiences. These degrees had focussed on science and scientifically based research.

Typically, a lecture for my undergraduate course focussed on the exploration of the biomechanics of movement, with physical activity sessions proceeding a little as follows: explanation of the movement, demonstration of the movement, shadow practice of the movement, copy and practice of the movement in a movement drill, refinement of the movement, placement and practice of the movement in a modified game setting and finally the movement within a game. There was little experience of a sociocultural perspective, as is common to the delivery of contemporary HPE (Cliff, 2007), and there was little time spent in understanding, appreciating or examining the role and placement of the coach, umpire or team manager in sport. As my undergraduate studies preceded the development of the sport education model (Alexander, Taggart, Medland & Thorpe, 1995; Siedentop, Hastie & Van der Mars, 2004) or the play with purpose, game sense or teaching for understanding approaches (Light, 2002; Pill, 2007, 2013; Werner, Thorpe & Bunker, 1996), I had not benefited from these programmes.

Similarly, my undergraduate experiences with the teaching and learning of health education were positioned from what I now understand is a positivistic perspective. Lectures were often centred on the statistical and theoretical perspectives of health issues—such as the incidence of disease—rather than developing a pedagogical
approach as a means of affecting behaviours contributing to the disease. For example, the health issue of HIV/AIDS was a large focus of our studies, as it was the 1980s.

In fairness to my lecturers and to the course, the course did include pedagogy in the teaching and learning of health education, physical education and outdoor education. However, the main focus was not pedagogy, although the constructivist aspects of educational pedagogy did appear. The orientation of these learning experiences was largely positivistic.

In my post-graduate study, I completed a quantitative study for the final year thesis. Although this was entitled *School Based Health Education: A Community Health Strategy*, it did not interview the community nor use qualitative research methodology. It examined “the quality of life concerns, health problems and perceived health education needs” of a school community in WA (Barwood, 1994, p. 3). It collected quantitative data via a community questionnaire and compared this to the available health data of the community. This quantitative study was framed within a positivist paradigm.

Creswell (2013) argued that there is merit in accepting and acknowledging the beliefs instilled through previous experiences. As I reflected upon the past, I appreciated Creswell’s argument and understood the effect of these beliefs on thoughts regarding research design, research questions and research methodology, as well as the review of literature. I realised that constructivism—although part of some aspects of the research approach—did not entirely underpin my view of knowledge or how I planned to conduct this research. I realised that my constructivist view of the world did not hold true for this research, and that I needed to acknowledge the biases I held regarding the subject of health education in WA (Creswell et al., 2003; Tashakkori & Teddlie, 2003).

This process of self-realisation did not come easily. I often felt confused and guilty, fearing that I was abandoning the essence of health education: constructivist pedagogies. I feared withdrawing from social learning theorist Bandura, and the other theorists mentioned earlier. However, through reading, consideration, contemplation and confidence, I reasserted the difference between constructivist pedagogies and constructivism as a theoretical perspective to inform the research methodology. I understood that constructivist pedagogies were intrinsic to the research, but that this research was not about seeing the world through my own eyes but through others’. Accordingly, I embraced social research. In learning from Creswell (Creswell, 2009, 2013; Creswell & Plano Clark, 2011; Creswell et al., 2003) and his associates Phillips and Burbules (2000), I realised that the dualism within this research was acceptable.
Postpositivism

As suggested by the prefix ‘post’, postpositivism is an epistemological and ontological approach to knowledge that succeeded the positivist philosophical paradigm. Philosophers, theorists and sociologists like Popper (1968), Weber (1998) and Kuhn (1970), who support postpositivism, reject the justifications underpinning positivism by disbelieving the ability of science to discern reality (Allmendinger, 2002; Fox, 2008; Powers & Knapp, 2011). Essentially, postpositivists do not accept that humans are able to apply a detached view to reality (Phillips & Burbules, 2000), but believe that through human behaviour multiple realities exist, which would account for varying views by teachers about the reality of health education in Western Australian schools. Crossan (2003) explained the distinction between the two paradigms, stating that “humans are not “objects”, and are subject to many influences on behaviour, feelings, perceptions and attitudes that positivists would reject as irrelevant” (p. 51). Thus, postpositivists believe that reality is mentally constructed and dependent on the meanings created through human interaction, accepting that all perceptions of reality are relevant.

Akin to the positivist researcher, the postpositivist researcher conducts research to explore the reality of phenomena, but unlike positivists, they accept that reality is a creation of the human mind. They accept that many realities may exist to explain phenomena, and in accepting this positioning, the postpositivist researcher conducts research in ways that accommodate human conjecture (Phillips & Burbules, 2000). Thus, in contrast to the quantitative perspective underpinning positivist research and my earlier efforts in research, postpositivists take a qualitative approach to research methodology, which may or may not include the collection of quantitative data.

Primarily, postpositivists make claims of knowledge but concede that knowledge is not the proof of absolute truth, but of sound proof. They accept that in light of further investigation, and perhaps through investigations sourced from differing perspectives, knowledge may well be disputed. Postpositivists acknowledge that interpretive research always involves a second level of sense-making, and as Fox (2008) points out, this affects research as the ability to know the world is constrained by the need for interpretation. Thus, the postpositivist accepts that knowledge is not indiscernible but that it warrants assertion from a particular experience through authoritative processes.

Subsequently, postpositivist research can be criticised as unscientific. However, to overcome the limitations of this interactive, participatory and interpretive research
approach, the postpositivist conducts methodologically rigorous, defined and
disciplined inquiries, triangulated through data from various sources (Greene, Caracelli
& Graham, 1989). Additionally, postpositivist researchers acknowledge that they are
not independent of the research but as much a part of it as the research participants
themselves (Tashakkori & Teddlie, 2003). They accept that as researchers, they are not
value free and that their research is value laden. Reflexivity is intrinsic to postpositivist
research, as the researcher acknowledges their own sense of reality as much as they do
that of the research participants. Fundamentally, postpositivist research focusses on
generating meaning and understanding, rather than explaining phenomena, and it
achieves this goal by making authoritative claims to know social reality (Phillips &
Burbules, 2000).

The realisation

As in Creswell’s work (2013), the approach selected for this research would be
“identified as belonging to postpositivism” (p. 24). Similarly, I “would not characterize
all of my research as framed within a postpositivist” perspective (p. 24). However, this
research is underpinned by postpositivism, as it best captures my current worldview.

This research started as postpositivist research, with a theory that health
education was poorly represented as a timetabled discipline-based subject in WA
schools, and that the mandating of HPE as a learning area had placed health education
in jeopardy. In doing so, this research sought to determine the “cause and effect” of
health education’s representation on the delivery of health education in the classroom
(Creswell, 2007, p. 20). I now understand this as a postpositivist perspective.

Throughout this research I have reflected on my life, and I have been fortunate
in gaining not only knowledge of my field but also a greater understanding of who I am.
I always wanted to fix things, often wondering why people do the things they do. From
a theoretical perspective, I recognise the duality and affinity in postpositivism, the why
questions, and yet the aversion to finding pragmatic solutions to social issues by
answering all the what questions.

Incorporating a theoretical perspective

This section addresses the research questions to demonstrate the duality in the
theoretical perspective underpinning this postpositivist research. For example, two of
the research questions are centred in the present.
These questions sought to identify:

1. How was health education timetabled at a lower secondary government school in WA?
2. Who was delivering health education at a lower secondary government school in WA?

These questions describe the research context, and when answered they are presented as numeric measures and displayed as statistical representations of the research context. As Phillips and Burbules (2000) note, they are a measure of the objective reality: what is the case. In this research, the measure is the 25th period (see Chapter Five).

The third research question focuses on the delivery of health education. As Creswell (2013) describes, this question focussed on “the actions, situations and consequences of inquiry” (p. 28). The question sought to identify:

3. Which pedagogical approach was preferred in the delivery of health education content?

This question is a textual representation of the participants’ voices. In the case of this research, the representation is a consensus view and called: United Voices (see Chapter Six).

Johnson and Onwuegbuzie (2004) argue, “that epistemological and methodological pluralism should be promoted in educational research so that researchers are informed about epistemological and methodological possibilities and ultimately, so that we are able to conduct more effective research” (p. 15). In acknowledging my worldview and postpositivist epistemology, a mixed methods methodology was selected, as it supports a postpositivist paradigm (Creswell & Plano Clark, 2007; Tashakkori & Teddlie, 1998). This approach—using both quantitative and qualitative research methods (Tashakkori & Teddlie, 1998)—was chosen for the same reasons that Greene and Caracelli found in 1997, that it could “strengthen” the research (cited in Creswell et al., 2003, p. 211) and answer the research questions. Mixed methods methodology was chosen in appreciation of the methodological benefits also recognised by Punch (2004), who argued that “we can describe without explaining, but we can’t really explain without describing” (p. 15). Moreover, mixed methods methodology was chosen as it honoured my past and acknowledged my future.

Mixed methods methodology was chosen as the best methodological fit in supporting the epistemological perspective underpinning this research, but also as the duality of the research methods offered attractive possibilities to offset my assumptions (Creswell & Plano Clark, 2011; Creswell et al., 2003). Thus far, this research has
reflected on the theory constructed of the WA context, and justified this theory as derived from my career immersed in health education delivery. In choosing mixed methods methodology, I acknowledged that separately, quantitative and qualitative research methods include elements of concern, and that the role of the researcher is to alleviate such concerns. It is the role of the researcher to ensure that the arguments proposed in the research findings are relevant and generalisable to similar contexts, and that they need to be supported with documentary evidence generated from the literature review and the analysis of data. Thus, this research acknowledged the need to expose and counteract my positioning and assumptions, and as such, practices and methods associated with education-based research were selected that supported my worldview, but which neutralised my assumptions.

Further, I sought professional advice and guidance over the construction and implementation of the research instruments for collecting data. Subsequently, this research used systematic processes for analysing all research data, to obtain reliable and valid findings. Similarly, I employed a professional and ethical approach to the conduct of the research, and this included refraining from engaging in discussions with the interview participants, so as not to influence their responses. This process enabled research data to be obtained that is integral to the research and accurate in the WA context of lower secondary government schools. For example, by including qualitative research methods, the theory inferred from the data is via induction, allowing the research findings to arise from the data itself and not from my opinions or familiarity with the issue and context. A postpositive perspective with mixed methods methodology was the best fit in enabling this research to develop free of restrictions imposed by the selection of other less liberating theoretical frameworks (Creswell & Plano Clark, 2007).

The theoretical perspective: The best fit to examine the WA context

As a postpositivist, I uphold the reductionist view (Crossan, 2003; Fox, 2008) that the representation of health education as a timetabled discipline-based subject is multidimensional, and this research was conducted to identify and assess the cause of what I perceived to be poor representation. This research sought to examine whether health education was being delivered, and if it was being presented as well as it could be in lower secondary government schools in WA. Hence, encouraged by Phillips and Burbules (2000), this research began with a theory—health education in WA is poorly represented and that the mandating of the HPE LA had placed health education in jeopardy—and being framed within postpositivism, mixed methods methodology was
used to test it. Data was collected to support or refute the theory, enabling aspects of the research to be couched in postpositivist ways that are acceptable when endorsing educational reform and enlisting the support of health professionals (Creswell, 2013). The intention of this research was to promote that all young people in WA receive quality health education, so it needed both stories and facts to advocate action.

**Reflecting on the theoretical perspective**

My viewpoint at the start of this research was transformed by the findings I made, resulting in a different perspective. However, I wish to return to Bandura, as I was initially inspired by his words. As he notes, “people do not operate as isolates”, and “need to work together to improve the quality of their lives” (Bandura, 1981, p. 158). Working together is a feature of life in human society. Thus, in learning from others, my epistemological positioning has been transformed into an understanding that through rigorous inquiry positioned within a postpositivist perspective, mixed methods research “does not necessitate a commitment to a claim of ‘absolute truth’ or its attainability” (Phillips & Burbules, 2000, p. 3), and that the findings of research are relevant only to the present.

**Conceptual Framework**

Conceptual frameworks explore the main concepts informing research (Punch, 2004). This research’s conceptual framework visually organised the main concepts affecting the delivery of health education in lower secondary government schools in WA, in particular how these concepts interrelate within the investigation of the representation of health education as a timetabled subject in lower secondary government schools in WA.
Figure 3.1 identifies the main concepts of this research as The Curriculum Framework: schools, the HPE LA and teachers. It signals the relationship of these concepts to one another and to the delivery of health education in the classroom. This framework also incorporates the WA context and theory garnered from the review of literature. It positions the concepts and aligns them to the research methodology and research questions. Figure 3.1 diagrammatically condenses the processes followed.
throughout this research, and simplifies the direction of thinking, displaying how the main concepts informed the research methodology.

**An overview of the main concepts within the conceptual framework**

The literature review identified the delivery of health education in schools as a positive means of assisting students to increase control over the determinants of their health (Shannon, 2007). It identified schools, school curricula and school teaching and learning programmes as ways to help strengthen and support safe, healthy and physically active living. The review provided philosophical, economic and theoretical reasons in support of school curricula, which specifically focusses on the development of health outcomes, and justified the delivery of health education content in the classroom.

In Australia, the legislation of compulsory schooling in all states and territories from kindergarten to year 12 positions school curricula as a comprehensible means of positively affecting the health of young people. In WA, health advocates position health education as a way to ameliorate and respond to health issues. However, in WA, health education is not legislated. Instead, the educational outcomes of the HPE LA are legislated. What this means for WA students is that schools have the flexibility to tailor their learning programmes to suit their perceived needs. These identified needs may or may not support the informed delivery of health education content or the health needs of the students.

The review of literature identified the teacher as having the most significant effect on the delivery of health education content in the classroom, as they are responsible for the development of the knowledge, understanding and skills related to the health-related outcomes of the HPE LA. The review reported that the teacher’s choice of delivery or pedagogical approach significantly affected students’ capacity for positive behaviour change, and also supported a pedagogical approach that developed higher-order skills like negotiation, communication, problem solving and decision-making, all commonly associated with skills-based participatory pedagogy.

WA is unique in Australia, as it is one of the few remaining states or territories to still mandate for government schools “two hours of quality physical activity each week as a part of student learning programs” (WA DOE, 2010, p. 5). This is commonly enacted through the delivery of physical education as a separate, discipline-based subject within the HPE LA. This research investigates the delivery of health education as a separate, discipline-based subject within the HPE LA, and focusses on the teachers timetabled to deliver the subject, and decisions made at the school level, which in turn
affect delivery. Subsequently, this research seeks to understand how and in what ways in WA government schools, and in particular the HPE LA, affect the delivery of health education in the classroom. In applying the conceptual framework (see Figure 3.1), this research investigated the WA context. The remainder of this chapter details how the investigation was undertaken.

**Conceptualising a research approach**

Cohen, Manion and Morrison (2007) state that “there is no single blueprint for planning research” and that “research design is governed by the notion of ‘fitness for purpose’” (p. 78). In planning for ‘fit’ research, this research considered the research questions, the context of the study, the participants and my assumptions of health education in WA, as previously stated. As such, a mixed methods methodology was selected, to align with the postpositivist epistemological perspective underpinning the research (Creswell, 2013), and to take into account the context of lower secondary government schools in WA (Phillips & Burbules, 2000). It was selected as the best research methodology as it could provide opportunities to explore and consider multiple realities (Berg & Lune, 2012). Mixed methods methodology was chosen as the best methodology for addressing the research questions, which were:

1. How was health education timetabled at a lower secondary government school in WA?
2. Who was delivering health education at a lower secondary government school in WA?
3. Which pedagogical approach was preferred in the delivery of health education content?

In using both quantitative and qualitative research methods, this research reduced the possibility of overlooking important data and for mistakes to infiltrate the research (Creswell, 2013; Creswell et al., 2003; Johnson & Onwuegbuzie, 2004). Lincoln and Guba (1985) use the metaphor ‘fishing nets’ to explain the overlapping capabilities of a combined approach in exposing some of the weaknesses of research using one method. They explain the production of better results as a catch; a fisherman may overlap different fishing nets to catch different types of fish. Using this imagery as a guide, this research used mixed methods methodology to help deliver quality and depth of understanding of the delivery of health education as a timetabled discipline-based subject in lower secondary government schools in WA.

In Chapters One and Two, this research discussed the need to establish contemporary data pertaining to the WA context, as there is no current data specifically
focussing on the timetabled delivery of years eight, nine and 10 health education in lower secondary government schools in WA. By including a quantitative research method to collect data, this research developed a means of providing statistical representation of the timetabled delivery of health education (Punch, 2004). This method was chosen to identify the extent to which health education was being timetabled in lower secondary government schools in WA, and the qualifications and training of teachers delivering the subject.

Bell (2010) contends that qualitative researchers endeavour to “understand individuals’ perceptions of the world” (p. 5). This research used a qualitative research method to uncover the beliefs, values and attitudes of select teachers regarding the timetabled delivery of health education, and in particular, their delivery of skills-based health education. This method was used to explain how the current representation of health education in lower secondary government schools eventuated.

**Research Methods**

Having selected mixed methods methodology for this research, the research methods consisted of two data collection techniques. The first was quantitative—a questionnaire—and the second, qualitative—semi-structured interviews. This research method is similar to the “concurrent triangulation design” proposed by Creswell and Plano Clark (2003, p. 229), in which both quantitative and qualitative data are collected during one phase and data analysis occurs concurrently with the interpretation phase, in which results are compared.

**Quantitative research method**

The quantitative research method for this education-based research collected descriptive numerical data described using statistical terms and/or representations. It collected quantitative data on two occasions: first through the administration of a pilot questionnaire (Appendix K), and second, via the questionnaire (Appendix A) used for the main study.

The quantitative participants consisted of 34 pilot questionnaire respondents and 75 respondents to the questionnaire used for the main study. More details about the participants and the sampling processes used are detailed later.

**Pilot questionnaire**

The pilot questionnaire (Appendix K) was hosted and conducted using the Edith Cowan University (ECU) online survey system, Qualtrics (Qualtrics Labs, 2012), from October to November 2011. It was advertised via email to health-related professionals I knew to be directly or indirectly involved in the delivery of health education in WA.
schools. Thirty-four of my associates participated in the pilot questionnaire and contributed their professional insight.

Specifically, the pilot questionnaire focussed on the participants’ professional expertise, with the purpose of assisting the construction of the questionnaire for the main study. This process involved participants responding to questions and collecting their comments about their understanding of health education, the HPE LA, and of the actual structure of the questions in the pilot questionnaire. Additionally, the pilot questionnaire served to check the functionality and processes available through Qualtrics (Qualtrics Labs, 2012).

*Sample method for the pilot questionnaire*

This research initially used two sampling strategies for the collection of quantitative data: purposive and convenience sampling. Punch (2004) calls purposive sampling that which occurs “in a deliberate way, with some purpose or focus in mind” (p. 184). As the pilot questionnaire was purposely advertised to health-related professionals whom I believed would be reliable, interested, knowledgeable and willing to participate, the participants were selected through purposive sampling.

*Data collection for the pilot questionnaire*

The pilot questionnaire was open for responses for four weeks, and returned 34 responses. Comments received from the pilot questionnaire, along with data generated from the analysis available through Statistical Package for the Social Sciences version 21.0 (SPSS 21), were used to revise the questionnaire for the main part of the study.

*Reliability of the pilot questionnaire*

Reliability is the measurement of consistency of a research instrument (Johnson & Christensen, 2012). It refers to the instrument’s ability to consistently measure and yield similar results when administered on a number of separate occasions (Johnson & Christensen, 2012). Punch (2004) notes that reliability can measure two things. First, the consistency of the research instrument over time: “if the same instrument were given to the same people, under the same circumstances, but at a different time, to what extent would they get the same scores” (p. 95). Second, to measure the internal consistency of the items used in a research instrument, and concerns, “the extent to which the items are consistent with each other, or all working in the same direction” (p. 95).

This research tested the internal consistency of the quantitative method in the following ways. The results of the pilot questionnaire and the questionnaire for the main study were analysed through the computer software program SPSS 21 for internal consistency using Cronbach’s Alpha. Cronbach’s Alpha is a coefficient of reliability.
commonly used to estimate the internal consistency of test items (Schreiber & Asner-Self, 2011). The coefficient alpha of reliability ranges in value from zero to one. The coefficient value of one means that the test is perfectly reliable. However, it is important to note that coefficient alphas are affected by missing data—that is, if a question is not answered by the participant, or if it is missed due to the questionnaire’s answering system. To overcome this in the case of the pilot questionnaire and the main study, the missing data (question variables) were handled using the imputation method available in SPSS (21). Cronbach’s Alpha was calculated for the pilot questionnaire, and was 0.74. Although 0.7 is considered acceptable in most social science research (Field, 2009), further analysis of the alpha coefficient scores for each individual question identified the least reliable questions.

Analysis identified that question 16 of the pilot questionnaire affected the questionnaire’s reliability. This sought to determine in what learning area the respondent’s school delivered the HPE LA outcomes associated with year 10 schooling. After consulting the coefficient alphas, the structure and wording particular to question 16, and coupled with the pilot’s individual results for question 16, revealed that the score was in fact due to the inclusion of data with missing variables. In some government schools in WA, health education is not timetabled in year 10 but is in years eight and nine, for reasons pertinent to the school. As question 16 was part of a three-part question, it was considered important to retain question 16 in the overall format of the questionnaire. Examination demonstrated that the problem was not so much the question itself but the wording. Some participants could not answer question 16, as it did not allow for a ‘not taught’ answer. Rewording and the addition of not taught for all three parts of the question significantly improved the questionnaire’s reliability in the main study.

The questionnaire used for the main study

Quantitative data for the main study was collected via a questionnaire in both online and paper formats (Appendix A). This questionnaire mostly focussed on the first two research questions:

1. How was health education timetabled at a lower secondary government school in WA?
2. Who was delivering health education at a lower secondary government school in WA?

As mentioned, 75 participants completed the questionnaire for the main study.
Sample method for the questionnaire for the main study

Initially, the questionnaire in the main study was emailed to 166 government secondary schools in WA. The schools were identified using a convenience sample available from the DOE Schools Online website (WA DOE, 2012). Punch (2004) explains that a convenience sample is “where the researcher takes advantage of an accessible situation which happens to fit the research context and purposes” (p. 101). As the contact details of DOE schools were conveniently available through the DOE Schools Online website, 166 schools were identified as providing lower secondary education. Contact with these schools was made via the principal and/or site managers. The 166 schools were emailed the information package (Appendices C, D, E, F, G) on three different occasions, due to a low response rate to the request for participation. The package was emailed at the beginning of November 2011, during December 2011 and at the beginning of February 2012.

Additionally, and because of the low response, the information package in paper format was posted in Perth using Australia Post at the end of February 2012, to 140 of the previous 166 DOE schools. This refinement occurred at the telephoned request of a remote community school. It was explained by the school personnel that the curriculum delivered at these schools may or may not correlate to the curriculum scoped and sequenced for lower secondary education in WA. For example, a student may be enrolled in year eight at a remote community school or an education support centre, but may receive a curriculum scoped and sequenced according to individual education plans. After further examination of the 166 schools, and from discussion with three other schools initially identified as providing lower secondary education, I decided to remove remote community schools and education support schools/centres from the convenience sample. Although 22 such schools had been sent information in the first round of contact, I did not receive a questionnaire response from any DOE employee based at these schools. As Punch (2004) notes, the remaining 140 schools can still be considered a convenience sample, as the filtering system available on the DOE Schools Online website allows them to be conveniently removed.

Sample size of the questionnaire for the main study

One aim of the research was to collect data in order to develop a better understanding of the types of teachers teaching health education in lower secondary government schools in WA. Thus, individual questionnaire responses were examined to ensure statistical validity. Of the 78 completed responses, two were identified to be from teachers primarily employed in private schools in WA. These schools did not fall
within the parameters of the study, so they were disallowed from the research. One other completed response to the questionnaire came from a teacher based at a senior college (WA DOE, 2012). As this school did not provide lower secondary education, the questionnaire response was also disallowed. Therefore, 75 valid questionnaire responses were considered to have provided some of the information to answer the research questions, and were deemed an acceptable response for the research for the reasons provided below.

First, 950 HPE teachers in WA secondary schools were supplied by the DOE in WA for 2012 (E. Goh, personal communication, July 23, 2012). This included part-time teachers and specialist HPE teachers, who may or may not teach health education. For example, the primary employment of some teachers of HPE is to teach specialist-sporting programmes, upper-school curricula and, in some cases, specialist dance programmes and/or subjects other than health education, like outdoor education. If part-time teachers are removed and only the full-time equivalent HPE teachers in WA consulted by the research (685), then the 75 valid responses are calculated as 11.1 per cent of the population.

Using \( n = \frac{N \times x}{((N-1)E^2 + x)} \) with a margin of error of 11 per cent and a confidence interval of 95 per cent, a population size of 685 gives a required sample size of 57. The sample size of 75 indicates an adequate sample.

To assess the response rate more fully, this research consulted two particular studies to highlight the response behaviour of HPE teachers to survey/questionnaire instruments. This consultation included an online survey conducted by ACARA in May 2012 (ACARA, 2012) and a survey conducted by La Trobe University in 2011 (Smith et al., 2011).

The ACARA Australia-wide survey, with 72 possible responses from WA, recorded a lower response rate than the 75 valid responses to the questionnaire for this research. As previously mentioned, ACARA are currently responsible for the development of the Australian curriculum. Phase 3 of the Australian Curriculum began in 2012, and included the development of the HPE curriculum. As part of Phase 3, an online survey was opened for key stakeholders throughout Australia to respond to the Draft Shape of the Australian Curriculum: Health and Physical Education (ACARA, 2012). As this is a significant HPE document, the findings of the survey are detailed in the Consultation Report-Draft Shape of the Australian Curriculum: Health and Physical Education (ACARA, 2012). This report recorded 549 valid responses to the online survey. Of these, 87 were identified as being from individuals in WA. Sixty-two
of these individuals identified themselves as secondary teachers/specialists. A further ten identified as outdoor education specialists.

The second Australia-wide study returned 226 valid responses from an online survey of school-based teachers of sex education (Smith et al., 2011). The research data showed that only 6.6 per cent of responses came from WA, equating to 15 teachers or 1.58 per cent of the total population (950) of HPE teachers in WA, as earlier identified as teaching HPE in secondary schools by the DOE (E. Goh, personal communication, July 23, 2012). If part-time HPE teachers are removed (265)—as was the case in my research—685 teachers remain, of which 15 teachers equates to 2.19 per cent. In comparing the 2.19 per cent response to Smith et al.’s study to the eight per cent of this research, Smith et al.’s response rate is significantly lower.

Smith et al. (2011) went some way towards justifying the low response rate through the phenomenon they referred to as “survey fatigue”, where the “high demands on schools to participate in research and evaluation studies…creates survey fatigue” (p. 13). The study also commented “it was difficult to reach school principals and to convince them to approve this research within their school” (p. 13). These phenomena are similar to what was experienced in this research. Thus, the sample size of this study corresponds favourably to the samples sizes of two comparable studies, indicating that the 75 valid responses are acceptable.

Details of the questionnaire for the main study

The questionnaire for the main study consisted of three main sections. Section one gathered demographic data on the questionnaire respondents, who were DOE teachers delivering health education in lower secondary government schools in WA. This data includes gender, qualifications and the learning area of allocation. The purpose of this data was to identify who was timetabled to deliver health education in lower secondary government schools in WA because the review of literature consistently identified that teachers delivering health education—globally—were often unprepared to teach the subject (Cohall et al., 2007; Harris & Leggett, 2013; Kann, Brener, & Allensworth, 2001; Lohrmann, 2011; Marks, 2010; Mayer, Smith, & McDermott, 2011; Sinkinson & Burrows, 2011; St Leger, 2001; Tinning, 2004; Tinning & Glasby, 2002). This data could determine if unprepared teachers were used to deliver health education in the schools studied.

Section two gathered data on teachers’ schools and the time commitment of each school to health education. This was determined by the amount of time allocated to health education within its school timetable. Section two contained three subsections:
year eight health education, year nine health education and year 10 health education. These subsections gathered data on each of the three year levels’ time allocations for health education, in relation to the time allocation for the HPE LA in the school, as perceived by the teacher. Time allocation to health education was considered important, and its purpose was to establish the extent to which health education was taught within lower secondary government schools in WA.

Previous research in WA (Shilton et al., 1995), had reported on data collected from 1987-1993 with regard to the timetabling of health education and physical education as discrete subjects in both government and nongovernment primary and secondary schools in WA. The data reported curriculum time allocated to the two subjects per school week. The questions in section two of the questionnaire were designed to collect data similar to that gathered in Shilton et al’s research, so as to allow comparisons between the Shilton data and the data collected from this research. However, unlike Shilton et al., this research also collected data on the division of the HPE LA time between physical education and health education. Since the previous data was collected before learning areas were mandated in WA in 1998, there was no other research that had reported on the percentage of the HPE LA curriculum time allocated to health education and/or physical education in WA. The data from this research was used to identify variances in curriculum time between schools and the two subjects. It investigated the impact of the CAR Policy (WA DOE, 2010) in WA because the review of literature suggested that this policy had reduced the amount of HPE LA time allocated to health education.

Section three gathered data on the respondent’s delivery of health education at each school. It asked whether health education was allocated to the teacher’s timetable, or whether the teacher had requested it. It generated data rating each teacher’s enjoyment, comfort and satisfaction delivering health education content. It also investigated each teacher’s opinions on the delivery of health education, plus their approach to the teaching of specific attributes associated with the delivery of health education content, including skills relevant to health (Western Australia Curriculum Council, 1998). Additionally, section three included a question asking if there was anything else the teacher would like to offer about the teaching of health education at their school, and allowed for a qualitative response. The purpose of section three questions was to capture data pertaining to the delivery of health education in the classroom, as the literature review had established that the delivery of health content is a significant factor in positive behaviour change related to health. Additionally, the
review had identified skills-based delivery as the preferred pedagogy for learning in the health contexts (WA DET, 2007a, 2007b, 2007c).

The final question of the questionnaire invited respondents to volunteer for an interview. This request was positioned at the end of the questionnaire as an administrative requirement of the research. The DOE (Appendix B) asked that any approach to teachers be made through site managers only. Accordingly, no direct request was made to teachers; however, a request for participants was forwarded to teachers at the discretion of the site manager via the questionnaire.

*The relationship between the research questions and the questionnaire used for the main study*

The questions included in section one were designed to gather data to answer the first and second research questions:

1. How was health education timetabled at a lower secondary government school in WA?
2. Who was delivering health education at a lower secondary government school in WA?

The questions in section two of the questionnaire were designed to gather data to answer the first research question, and section three questions were designed to answer the second research question.

Sections one and two used language commonly associated with the delivery of health education as a separate, discipline-based classroom subject belonging to the HPE LA. Responses to these questions required respondents to understand the HPE LA as one of the eight KLAs within the curriculum legislated in WA: *The Curriculum Framework* (Western Australia Curriculum Council, 1998). These questions collected information based on two types of variables: categorical and quantitative. Punch (2004) explains that categorical variables differ from quantitative variables, as they “vary in kind rather than in degree, amount or quantity” (p. 86). For example, section one asked, “What gender do you identify with?” In answering, the respondent could select from one of three categorical variables: Male, Female or Other. Conversely, section two asked, “How many minutes per week are allocated to the teaching of health education at your school?” In answering, respondents were required to quantify the amount of health education in minutes. Questions in sections one and two were designed to enable a statistical representation of health education as a timetabled subject in WA lower secondary government schools to develop.
The questions in section three were designed to answer the second and third research questions:

2. Who was delivering health education at a lower secondary government school in WA?

3. Which pedagogical approach was preferred in the delivery of health education content?

These questions were designed to reveal information on the beliefs, attitudes and values of teachers delivering health education in WA. The first two questions were categorical in nature, requiring simple yes or no responses. These questions asked if the respondent was teaching health education and whether it was their choice to teach the subject. The remaining questions were designed to elicit a categorical variable using a Likert Scale (developed by Likert in the 1920s; Allen & Seaman, 2007) and Semantic Differential (developed by Osgood, Succi and Tannenbaum, 1957). By responding to a statement, rather than giving a specific answer, the respondents rated the strength of their agreement to the statement. These attitudinal questions helped further the development of the picture partially developed through the design of sections one and two of the questionnaire. One example of these questions asked for participants to rate their enjoyment of teaching health education on a five-point scale, from ‘definitely yes’ to ‘definitely not’.

Administration of the questionnaire for the main study

An information package informed schools about the research, the background, the questionnaire, proposed interviews and processes of data collection. Within the package, the principal and/or site manager was asked to consent to the school’s participation in the online questionnaire and interviews. Once agreement was received from the principal and/or site manager, it was intended that the Head of the Learning Area (HOLA) of HPE and/or designated person(s) would receive the questionnaire information, and for the schools to be able to access the questionnaire through an online link. Any and/or all health education teachers in the school would then be able to access the anonymous online questionnaire.

Only five emailed replies were received after all three emailed attempts were made. Four immediately declined to participate due to school circumstances. One agreed to participate, with the promise that the information package was being forwarded to the relevant person within that school.

One reply agreeing to participate was received after the first email was sent, received via Australia Post. Four replies agreeing to participate were received in
response to the Australia Post mail out, and received via Australia Post. One agreement was faxed to my home, in response to the Australia Post mail out. In total, of the 140 schools in the research sample, agreement from six schools was received. This is a very low response, but a snowball effect between HPE teachers enabled further respondents to participate without written school consent, as they were not approached while on DOE sites. Snowballing occurred as a result of the research being tabled at two health-related conferences at which teachers were in attendance (see Ethical Considerations later in this chapter).

Data collection from the questionnaire for the main study

The questionnaire for the main study was distributed to participants in three ways. First, the questionnaire was hosted using the same online survey system, Qualtrics. It opened for response in November 2011. Fourteen valid responses had been received at the end of the school year in December 2011. The questionnaire remained open over the school summer break, with no further responses. The questionnaire was re-advertised to schools at the beginning of the school year in February 2012. During term one in 2012, an additional 13 valid responses were received. The online questionnaire was closed at the end of the first school term, in May 2012. In total, 27 responses were received through the Qualtrics website.

Second, the paper questionnaire was distributed to the sample schools via Australia Post mail out in February 2012. Twenty-two valid questionnaires were returned as a result of this mail out.

Third, this research identified opportunities to gather more responses to the questionnaire aside from the Qualtrics and the Australia Post mail out, such as through engaging in conferences related to the HPE LA. The paper questionnaire was further distributed at two HPE-related conferences held by agencies interested in and willing to support the research. These conferences were ACHPER WA State Conference, held in November 2011, and the SDERA Keys for Life Workshops, held in March 2012. Twenty-six valid questionnaires were completed in paper format from these conferences.

From the three applications of the questionnaire, the research received 75 valid responses from secondary school teachers in WA. A summary of the survey questionnaire data gathering method, timeline for data collection and the number of responses is shown in Table (3.1).
Table 3.1

Survey Questionnaire Data Gathering Method, Timeline and Number of Responses

<table>
<thead>
<tr>
<th>Data gathering method</th>
<th>Timeline</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online: Qualtrics</td>
<td>Nov–Dec 2011</td>
<td>14</td>
</tr>
<tr>
<td>ACHPER State Conference</td>
<td>Nov 2011</td>
<td>11</td>
</tr>
<tr>
<td>Online: Qualtrics</td>
<td>Feb–May 2012</td>
<td>13</td>
</tr>
<tr>
<td>Return mail: Australia Post</td>
<td>Feb–May 2012</td>
<td>22</td>
</tr>
<tr>
<td>SDERA Keys for Life Conference</td>
<td>March 2012</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>Nov 2011–May 2012</td>
<td>75</td>
</tr>
</tbody>
</table>

Reliability of the questionnaire used for the main study

Cronbach’s Alpha, using the same imputation method to handle missing data in the pilot questionnaire, was applied to the results of the questionnaire for the main study, and a coefficient alpha of 0.81 was calculated. This score is considered acceptable (Field, 2009).

Qualitative research method

This research utilised a qualitative approach to obtain contextualised information of the WA setting. This approach is in keeping with Lincoln and Guba (1985), who view qualitative research as a means of obtaining trustworthy research.

Qualitative data was collected via semi-structured interviews. A semi-structured interview is one that is planned in advance with pre-developed questions, written in a manner allowing the interviewee to explore the interview question and explore what they believe to be an appropriate answer or response (Punch, 2004). The interview data collected at time of interview directs the coding that follows. The semi-structured interviews in the current study were designed to help answer the third research question:

3. Which pedagogical approach was preferred in the delivery of health education content?

However, parts of the questions also helped answer the first and second research questions:

1. How was health education timetabled at a lower secondary government school in WA?

2. Who was delivering health education at a lower secondary government school in WA?
**Practice interviews**

Bell (2010) has stated, “interviewing is an activity requiring careful preparation, much patience, and considerable practice if the eventual reward is to be…worthwhile” (p. 161). Utilising this advice, four practice interviews were conducted in November 2011, which proved useful as they helped refine my interview skills.

**Sample method, administration and data collection for the practice interviews**

This research used the same two sampling strategies for the collection of qualitative data as the collection of quantitative data. The research used purposive and convenience sampling.

Four practice interviews were conducted in November 2011. Using the same sampling method as the pilot questionnaire, purposive sampling, and these interviews intended to draw on the professional and personal expertise of each participant. Additionally, the purpose of these interviews was to improve the interview procedure, especially to practice the use of data capture technology and timing.

The first practice interview participant was a university associate experienced in interview procedure and protocol. This participant was deliberately utilised to coach my interview technique and skill, and to limit the opportunity for the interview to be influenced by my positioning. This interview was not recorded, as it included constant discussion and interruptions about the interview format and presentation. As an inexperienced interviewer, I gained valuable practice.

The two participants who followed were selected because of their expertise in the HPE LA, and because they could help with the refinement of the interview questions. These participants were health education colleagues delivering health education in lower secondary government schools in WA. The last participant was a recent university graduate of HPE, also a health education colleague, delivering health education in a lower secondary government school in WA. This inexperienced participant was utilised for the specific purpose of identifying difficulties or anomalies in the wording and understanding of the interview questions, so that they could be interpreted as intended. The questions used in the practice interviews were the same as for the interviews used in the main part of the study (Appendix H).

The second, third and fourth practice interviews were recorded using a digital sound recorder. In reviewing the sound recordings I discovered that one of the practice interviews had not fully recorded because the digital sound recorder stopped recording during the interview. To prevent this happening again, I elected to use both video and digital sound recording in all future interviews. This proved to be a useful decision, as
the video recorder stopped recording during one of the main study’s interviews, but the
digital sound recorder captured the full interview.

All practice interviews were timed and found to last between 40 and 55 minutes. Consequently, participants in the main study were asked to be available for one hour.

**Semi-structured interviews**

The semi-structured interviews consisted of nine questions (Appendix H), divided into four main sections. Section one contained questions focussing on the interviewee’s view of teaching health education. This included their own health education teaching in the classroom, assistance and support received, preparedness to teach, qualifications, training and professional development and enacted classroom teachings. These questions were designed to further explore the understandings of the delivery of health education developed from the review of literature, particularly in regard to teacher preparedness to teach health education (Cohall et al., 2007; Harris & Leggett, 2013; Kann, Brener, & Allensworth, 2001; Lohrmann, 2011; Marks, 2010; Mayer, Smith, & McDermott, 2011; Sinkinson & Burrows, 2011; St Leger, 2001; Tinning, 2004; Tinning & Glasby, 2002).

Section two contained questions about the delivery of health education as a timetabled discipline-based subject in the participant’s school. These questions focussed on decision makers, decisions and any changes that could be made in the school to affect the delivery of health education as a separate, discipline-based classroom subject. These questions were designed to explore the effect of WA developments on the delivery of health education in government schools as reported in the review of literature (Western Australia. Curriculum Council, 1997, 1998; WA DOE, 2010; WA DET, 2007a, 2007b, 2007c, 2009).

Section three contained questions about the teaching of health education in WA. These focussed on the participant and others’ views of health education in WA, and in turn, the representation of health education as a timetabled subject. Section four was an open-ended question. This section gave the participant the opportunity to provide an opinion on any health education issue that had not been addressed in the preceding questions.

**Sample method, administration and data collection for the interviews for the main study**

The nine participants in the main study’s semi-structured interviews came from the convenience sample available from the questionnaire responses. This research initially intended for these participants to comprise two groups: Group A, responders to the request for interview participants outlined in the final question of the main study
questionnaire, and Group B, volunteers who responded to the information letter in the information package. No responses were received to the request for interview participants as outlined in the information letter, so all nine interview participants came from Group A.

Twelve participants from lower secondary government schools (DOE schools) across WA offered themselves as interviewees after the first round of data collection. Nine participants were interviewed, as three of the initial 12 respondents were unavailable during the interviewing period. Of the nine, all were employed as full-time HPE teachers and were based at North and South Metropolitan schools. Most (eight) taught health education at their school.

The nine participants were first contacted via telephone at the completion of the Qualtrics online questionnaire (Qualtrics Labs, 2012) in December 2011, and interviews were scheduled at a time convenient to them. The participants were then emailed with details of the interview and the consent form. All participants were interviewed at a location of their request. The shortest interview was 35 minutes, and the longest 57 minutes.

At interview, participants were questioned on their views and opinions about the delivery of health education as a timetabled discipline-based subject in lower secondary government schools in WA. A laminated copy of each interview question was placed in front of the interviewee as I asked the questions. This enabled the interviewee to return to the question if he or she segued when answering.

Written consent was gained at the start of the interview, with agreement upon the terms of the semi-structured interviews. The interview participants are not identified in the research results, for the sake of confidentiality, but all interviews were recorded and transcribed to allow data coding. All interview participants were sent, in December 2011, an email and paper thank you letter (the latter via Australia Post) (Appendix I).

**Trustworthiness of the interviews for the main study**

As a collective and at the time of analysis, the nine interviews in this research were deemed to be trustworthy representations of WA. This is in keeping with Erlandson, Harris, Skipper and Allen (1993), who explain that these interviews are transferrable because of “shared characteristics” between the interview participants (cited in Creswell, 2013, p. 252). Lincoln and Guba (1985) agree, but add that when the research is thick and descriptive, with lots of similar details—as is the case in this research—the reader is allowed to transfer information to other settings.
Conversely, qualitative research theorists purport that contextual generalisations are not necessarily applicable across settings, and that research is always value laden (Johnson & Onwuegbuzie, 2004). Utilising this advice, the decision to use a mixed methods methodology to harness the opportunities to develop research findings from both quantitative and qualitative research methods was intended to capture contextual information that may or may not be representative across similar settings. As such, the generalisibility of the data is left to the reader, and it is up to the researcher to describe the setting as richly as possible. Mixed methods methodology—in particular, the inclusion of the practice interviews and semi-structured interviews—was used to overcome the concerns expressed by qualitative research theorists and to draw findings that afforded possibilities of generalisability to other WA settings.

In the case of this research, all nine interview participants repeated similar opinions and concerns, and were united in two main findings when answering the interview questions. Thus, the qualitative data at analysis showed that the interviewees were consistently repeating the same sorts of assertions described by Erlandson et al. (1993) as “shared characteristics” (cited in Creswell, 2013, p. 252). After consulting with my research supervisors, I decided that no further interviews were necessary, as theoretical saturation was deemed to have occurred, with the uncovering of new knowledge unlikely in further interviews.

**Data Analysis**

**Questionnaire analysis**

The analysis of the questionnaire response data was performed to produce descriptive statistical analysis. The survey responses were summarised accordingly, using simple frequency distributions, such as percentages shown in tables and graphs. Central tendency and variations of scores were interpreted through the mean and standard deviation (SD). These results are shown through tables and distribution curves in Chapter Four, and where there is a large spread or variance in the scores that may have violated normality, the median was considered a reporting statistic (Field, 2009).

**Treatment of ‘data not received’ in the questionnaire for the main study**

Analysis of the questionnaire data for the main study showed that some research participants did not respond to parts of the questions in section three. These questions asked the participants to provide data on their teaching of health education at their school. The questions specifically asked for data on their teachings to each school year group for lower secondary education, that is years eight, nine and 10. Where the
participant did not provide a response to a particular school year group, this was reported in the analysis as ‘data not received.’

Further analysis was conducted for each participant who did not provide data in the question subsections, and this analysis indicates that there was an issue with the structure of these questions. In looking closely at the individual responses, and the patterns arising from the data, it is possible to infer that these participants were either:

• not qualified and/or able to provide data;
• did not want to provide data; or
• accidentally skipped the question.

However, it is generally possible to infer from patterns that participants who did not provide data for their teaching of a particular school year group were not actually teaching health education to this year group, and perhaps never have. As the questions in section three did not allow for a ‘not applicable’ response, some participants might not have felt qualified or able to provide data for the question. Resulting from the analysis of the pilot questionnaire, a ‘not taught’ response had been included to some questions in section two.

In Chapter Four and the discussion of quantitative results, for each question exhibiting data not received, the datum has been acknowledged within the tables displaying the results. However, in the discussion of the results and in the calculation of the percentages of the responses, the data not received was removed so that the discussion pertains only to the data received. With a sample size of 75 respondents for section three in the questionnaire, the sample size for each subsection with data not received were:

• 67 for the year eight school group;
• 66 for the year nine school group; and
• 65 for the year 10 school group.

In referring back to the calculation of an adequate sample size for this research, all subsection sample sizes are adequate to infer the delivery of health education in lower secondary government schools in WA.

**Semi-structured interviews analysis**

The semi-structured interviews were recorded, transcribed and then systematically coded using Artichoke computer software (Fetherston, 2011). This “is an integrated program that creates and then interacts with a database designed for dealing with video” (Fetherston, 2011, para. 1). Artichoke was selected in preference to the capabilities of QSR International’s NVivo 10 software for analysing video data because
it was specifically designed for educational purposes. When considering the options for analysing qualitative data, I felt that as the program’s creator was my research supervisor, his availability, knowledge and experiences outweighed any benefits of using other software.

The video data from this research was imported into Artichoke and codes systematically attached to the video segments. Punch (2004) appreciates the use of computer software in manipulating empirical data by attaching codes. He believes that this enables the emergence of themes or abstract categories. Through the processes available in Artichoke, codes of similar themes were combined for use in theory building for the qualitative part of this research, and concepts tied together and presented.

The open coding of the empirical data used techniques found in most qualitative approaches, including grounded theory methods. This process aimed to explain the central themes emerging from the interview data, using systematic and exhaustive analysis as needed when open coding the semi-structured interviews. Grounded theory is a systematic methodology often used in social and qualitative research, in which codes are extracted from raw data and grouped with similar concepts (Birks & Mills, 2011). This research did not adhere to the complex elements of grounded theory methods, and did not use grounded theory to formally build theory, as it was not its aim.

The first interview was initially transcribed into Word document, and open codes attached to the raw data through segments of the interview (sentences or paragraphs). This segmentation follows Punch (2004), who refers to this act as “fracturing” or “breaking open” the data (p. 205). The emerging codes were recorded into an Excel spreadsheet, and this basic procedure in open coding was designed to create a guide for the exhaustive and systematic coding to follow, using Artichoke.

The first interview was re-transcribed and systematically coded in Artichoke, using 30-second segments of interview as the unit of analysis. The start and end times of each segment was then edited time-wise, to represent more cohesive discourse. Some edited chunks were shorter than 30 seconds, and others longer. The initial 30-second segments often cut into the discourse and confused the flow of the interview. Editing these segments proved useful to the systematic coding and re-coding that followed, and Artichoke allowed this process to be easily conducted.

The second interview was added to Artichoke. It was time sliced, edited and coded using the codes from the first interview as a guide. New codes were added as the open coding process proceeded. At the end of the systematic coding of the second
After each additional interview was transcribed and coded in Artichoke, all previous interviews were re-coded. This iterative process was applied once all nine interviews were coded in Artichoke. Punch (2004) recommends this process so as not to miss or overlook the possibilities of all data in the analysis process. He explains that in doing so, the researcher should proceed slowly and keep an open mind. In total, the nine interviews were coded and re-coded 20 times. This comprehensive, systematic, iterative and exhaustive process ensured that the themes that emerged were from the interviews as a whole. Punch (2004) explains this process—based in but not adhering to grounded theory methods—as exploring the “theoretic possibilities” of the data (p. 208).

As earlier predicted by Punch (2004), several key themes or abstract categories emerged during systematic coding, on top of the labels/codes developed through Artichoke. The emergent themes were then examined using the frequency data generated in Artichoke. This did not direct the thematic organisation of codes, as this process was achieved through qualitative interpretation of the interviews as a whole; however, it did quantifiably confirm that the key themes were indicative of the whole interview data. This thematic organisation of the codes into themes is presented in Chapter Six.

Ethical Considerations

Throughout, this research followed ethical procedures outlined by ECU and the DOE in WA. Approval to proceed with the research was granted by the Research and Scholarships Committee of ECU on October 28, 2011 (Appendix J). Data gathering using the questionnaire and interviews proceeded afterwards. Permission to approach and conduct research on DOE sites was granted on November 14, 2011 (Appendix B) by the Director of Evaluation and Accountability within DOE. This permission was given with the understanding that participation would be subject to the decision of the schools invited to participate and individual staff. Permission for schools to participate in the research was received from six government schools, through the return of a signed consent form from DOE Site Managers (Appendix D). Schools participating in the research were made aware that participation was voluntary, that the school would not be identified in any way and that they would receive a copy of the findings from the research upon completion. Permission to complete the main study questionnaire was not
required as it was designed as an anonymous survey. This allowed teachers to complete it without written school consent. Permission to participate in the semi-structured interview was obtained from all interview participants. Each interview participant was made aware of the need for informed consent prior to the interview, and was asked to sign the informed consent form at interview (Appendix F). All interview participants were informed both verbally and in writing that their identity would remain confidential, only accessible to my supervisors and myself.

The data gathered was stored in a locked filing cabinet in my possession. Electronic data was stored on my password-protected computer, and backup USB drives were stored in the locked filing cabinet. At the completion of research, the data will be stored in ECU’s School of Education locked storage facility in building eight of the Joondalup campus, and will be destroyed after five years.

The data gathered for this research will not be used for any purpose other than as described in the ethical considerations for the research, as outlined by ECU and the DOE.

**Summary**

The purpose of this research was to reveal the representation of health education as a timetabled discipline-based subject in lower secondary government schools in WA. A postpositivist perspective underpinned the use of a mixed methods methodology, with contextual reasoning supporting the collection of quantitative and qualitative data. More specifically, and in order to answer the research questions, this research used a questionnaire to collect quantitative data, and semi-structured interviews to collect qualitative data.

The questionnaire quantified the representation of health education in lower secondary government schools in WA as a separate, discipline-based classroom subject. It collected data from a convenience sample drawn from the population of 140 government schools identified to provide lower secondary education in WA (WA DOE, 2012). Like other HPE-related studies in Australia, this research found the uptake of the questionnaire hindered by the specific restriction imposed by the DOE in WA, in which contact with health education teachers was to be initiated through the DOE school principals and/or site managers. To overcome the initial low response rate, this research re-advertised the questionnaire to teachers on a number of occasions, and utilised the support of HPE-related conference providers. Although the sample size of 75 valid questionnaires was adequate for this research, a larger sample size would have been
preferable so that the research could generalise the insights to all DOE schools, rather than to some.

Nine teachers participated in the semi-structured interviews, and they all came from the convenience sample used for the questionnaire. The semi-structured interviews were recorded, transcribed and systematically coded using the computer software Artichoke (Fetherston, 2011). Semi-structured interviews were used to answer the third research question, by providing teacher perceptions of pedagogies used in the delivery of health education as a timetabled subject in discipline-specific classes in lower secondary government schools in WA.

In the following chapters, this research draws meaning from the results of the methodology, and this is reported, displayed and discussed. In Chapter Four, this research presents the results from the questionnaire used for the main study.
Chapter 4: Quantitative Results

This research used a questionnaire and semi-structured interviews to gather data. Results of the data analysis gathered by the questionnaire are presented in this chapter. The questionnaire was designed to answer the first two research questions, predominantly:

- How was health education timetabled at a lower secondary government school in WA?
- Who was delivering health education at a lower government school in WA?

The questionnaire aimed to provide information on the contemporary representation of health education as a discipline-based classroom subject taught in lower secondary government schools in WA, and specifically, the extent to which government schools in WA were timetabling lower secondary health education discreetly. Teachers delivering lower secondary health education in government schools were invited to participate in the research by completing the questionnaire (see Appendices C, E and G for invitations).

This chapter analyses the data collected from the questionnaire, and is organised according to the sections and titles of the questionnaire. Analysis of the questionnaire’s emergent data was performed using SPSS (21), which summarised the data using simple frequency distributions, percentages and tables and graphs. Central tendency and variations of scores have been summarised using means and standard deviation.

Section One: About You

The questionnaire, ‘The Status of Health Education in Lower Secondary Public Schools in Western Australia’, received 75 valid responses from November 2011 until May 2012. Valid responses required respondents to be secondary school teachers based in WA government schools and teaching lower secondary school health education.

Background and demographic data of questionnaire respondents

This section of the questionnaire gathered demographic data on the teachers who identified themselves as teaching health education in lower secondary government schools in WA.
Respondent demographics: Gender and age

There were 37 male and 36 female questionnaire respondents, with two respondents identifying with the ‘other’ category. One female respondent did not complete the question on age, resulting in 74 valid responses to that question. Table 4.1 presents the age categories of the 74 respondents, showing that the majority of respondents (33 per cent) were aged between 40 and 49 years of age.

Table 4.1
Respondents’ Gender and Age

<table>
<thead>
<tr>
<th>Respondents’ age</th>
<th>Male</th>
<th>Male Per cent of sample</th>
<th>Female</th>
<th>Female Per cent of sample</th>
<th>Other</th>
<th>Other Per cent of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>20–29 years</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>14</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>30–39 years</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>40–49 years</td>
<td>13</td>
<td>18</td>
<td>11</td>
<td>15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50–59 years</td>
<td>8</td>
<td>11</td>
<td>6</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60–69 years</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>51</td>
<td>35</td>
<td>47</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

There is a difference in the age distribution of the genders, as shown in Table 4.1. Most male respondents (13) are between 40 and 49 years, with the number of male respondents declining thereafter according to age. Female respondents do not show the same age distribution. Female respondents are most numerous between 40 and 49 years (11), with a comparable number between 20 and 29 years (10). The number of female respondents declines between 30 and 39 years, and again after 50 years.

Respondent learning area and qualification

Respondents were asked to select the learning area in which they mostly taught, and in which they were based. They could select from the eight learning areas comprising the current curriculum legislated in WA, *The Curriculum Framework* (Western Australia Curriculum Council, 1998). One respondent did not complete the question on learning area, resulting in 74 valid responses; however, closer examination of this respondent’s complete questionnaire revealed that their learning area was not HPE.
Table 4.2 shows that most of the teachers (86 per cent) in the sample who identified the main learning area in which they taught as HPE also taught health education. Teachers who stated a main learning area other than HPE taught the remaining 14 per cent.

Table 4.2

<table>
<thead>
<tr>
<th>Respondents’ qualification</th>
<th>Learning Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HPE</td>
</tr>
<tr>
<td>HPE trained with health education minor</td>
<td>40 (53 per cent)</td>
</tr>
<tr>
<td>HPE trained without health education minor</td>
<td>18 (24 per cent)</td>
</tr>
<tr>
<td>Non-HPE trained with health education minor</td>
<td>0 (0 per cent)</td>
</tr>
<tr>
<td>Non-HPE trained without health education minor</td>
<td>1 (1 per cent)</td>
</tr>
<tr>
<td>Post-graduate degree in health-related studies</td>
<td>1 (1 per cent)</td>
</tr>
<tr>
<td>Other</td>
<td>5 (7 per cent)</td>
</tr>
<tr>
<td>Total</td>
<td>65 (86 per cent)</td>
</tr>
</tbody>
</table>

Respondents whose main learning area is HPE

Of the 65 respondents who stated HPE as their main learning area, Table 4.2 demonstrates that 58 of the 65 respondents (89 per cent) have formal teaching qualifications in HPE, and seven (11 per cent) have no formal teaching qualifications in HPE. Table 4.2 also shows that 18 of the 65 respondents (28 per cent) stated no formal training in teaching health education, despite formal qualifications in HPE.

Respondents whose main learning area is not HPE

Of the 10 respondents who mostly taught in a learning area other than HPE, Table 4.2 shows that eight stated no formal qualifications or training to teach health education. Two of the 10 stated that they had received training to teach health education with qualifications obtained through degrees other than HPE. One other respondent, HPE trained but without a qualification to teach health education (see Table 4.2), stated English as the learning area mostly taught. Examination of this respondent’s data shows that she is female, aged between 30 and 39 years.

Figure 4.1 displays the learning areas of the 10 respondents who mostly taught in a learning area other than HPE. The largest grouping of respondents (four) stated English as the main learning area, with the Mathematics and the Arts having no respondents. It is possible that Mathematics and the Arts teachers may be in short
supply in WA government schools, so those who teach this subject may have no extra time to teach health education. Additionally, in some schools, HPE teachers with a teaching minor such as Mathematics or the Arts can teach the subject to fill any perceived teacher shortages. Perceived teacher shortage is discussed further in the following chapter.

Figure 4.1. Respondents whose main learning area is other than HPE.

From all questionnaire respondents, Table 4.2 shows that 43 per cent stated that their teaching qualification did not include formal training in teaching health education.

Section Two: About Your School

Demographic data on respondents’ schools

This section of the questionnaire investigated the extent to which health education is taught as a separate, discipline-based subject formally scheduled within the weekly timetable in lower secondary government schools in WA. It received 75 valid responses. To protect the identity of the schools and to adhere to the ethical considerations placed on the research by the DOE (Appendix B), the responses were de-identified and grouped according to the eight school regions (see Figure 4.2) listed on the DOE Schools Online website (WA DOE, 2012). The WA DOE school regions (see Figure 4.2) were Goldfields, Kimberley, Midwest, North Metro, Pilbara, South Metro, Southwest and Wheatbelt (WA DOE, 2014).
Figure 4.2. DOE school regions (WA DOE, 2014).

Locality of the respondent according to DOE school region

Figure 4.3 compares the groupings of the 75 respondents to the actual count of secondary HPE teachers, according to DOE school regions. To verify the count of secondary HPE teachers, all secondary schools listed within each school region were telephoned in December 2012, and data on the staffing of HPE teachers was collected.
Figure 4.3 shows that the research sample is mostly generalisable to the data collected at the time of the telephone calls, except in the Southwest, Goldfields and Pilbara school regions, where the sample was deemed under-represented.

Figure 4.3 also shows that the majority (71 per cent) of respondents were based at schools within metropolitan school regions, with minimal variation (four per cent) between North and South Metropolitan schools. Nearly a third of respondents (22) were at regional schools, with most (18) based in the Wheatbelt and Southwest regions. No respondents to the questionnaire were from the Goldfields and Pilbara regions.

![Figure 4.3](image)

*Figure 4.3. Respondent count and HPE teachers according to DOE school regions.*

**Locality of the schools represented by the respondent, according to DOE school region**

In WA, government schools are categorised according to school type (WA DOE, 2012), with 12 school types comprising primary and secondary education. Lower secondary government education in WA is mainly provided by district high schools, high schools and senior high schools. Some senior high schools in WA include enrolments of students in year 10.
The questionnaire received 75 responses for this section, representing 49
government schools that provide lower secondary education in WA. Table 4.3 shows
that 31 metropolitan and 18 regional schools are represented. These 49 schools
comprise over one third (35 per cent) of the total (140) DOE schools identified by this
research as providing lower secondary education in 2012 (WA DOE, 2012).

<table>
<thead>
<tr>
<th>DOE School Regions Represented by Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOE Schools</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>Goldfields</td>
</tr>
<tr>
<td>Kimberley</td>
</tr>
<tr>
<td>Midwest</td>
</tr>
<tr>
<td>North Metro</td>
</tr>
<tr>
<td>Pilbara</td>
</tr>
<tr>
<td>South Metro</td>
</tr>
<tr>
<td>Southwest</td>
</tr>
<tr>
<td>Wheatbelt</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Health education taught at the respondents’ schools**

Examination of the data on this question indicates inconsistency between three
respondents based at the same school. The questionnaire investigates whether health
education is taught in each or any of the lower secondary years in the school of each of
the respondents. Two of the three respondents stated that health education was taught at
the school, with the third stating that it was not. Further examination of all data for the
three respondents shows that the respondent’s statement that health education was not
taught at their school was inconsistent with other responses given at later stages of the
questionnaire. This close examination of the data suggests that the one respondent made
an error in answering the earlier question. Therefore, the erroneous data was amended to
 correspond with the data of the two other respondents from the same school, and to
align with the respondent’s own data given at later stages. Table 4.4 provides a
summary of the health education taught at the school of each respondent.
Table 4.4
 Health Education Taught at the Respondents’ Schools, by School Year Group

<table>
<thead>
<tr>
<th>School year group</th>
<th>Health education taught at respondents’ schools</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes count</td>
<td>Per cent of sample</td>
</tr>
<tr>
<td>Year 8</td>
<td>72</td>
<td>96</td>
</tr>
<tr>
<td>Year 9</td>
<td>72</td>
<td>96</td>
</tr>
<tr>
<td>Year 10</td>
<td>74</td>
<td>99</td>
</tr>
</tbody>
</table>

By school year group and school region

Of the three respondents who stated that health education was not taught to the years eight and nine school groups, all were from regional schools. The one respondent who stated that health education was not taught at their school at year 10 was also from a regional school. The data for the lower secondary years shows that health education was taught at the schools of all of respondents at metropolitan schools.

By school year group, school term and school region

The combined data of the three school year groups (see Table 4.5) shows that health education was taught in the majority (93 per cent) of respondents’ schools during at least one of the four school terms. Table 4.5 shows that this occurred mostly in the first half of the school year, in either in the first or second term, which suggests that for some schools, health education is taught for only a semester of the school year.

Table 4.5
 Health Education at the Respondents’ Schools, by School Year Group and School Term

<table>
<thead>
<tr>
<th>School year group</th>
<th>Health education teaching at respondents’ schools</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Term 1</td>
<td>Term 2</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Year 8</td>
<td>71</td>
<td>4</td>
</tr>
<tr>
<td>Year 9</td>
<td>71</td>
<td>4</td>
</tr>
<tr>
<td>Year 10</td>
<td>74</td>
<td>1</td>
</tr>
</tbody>
</table>

Year eight data

The data pertaining to year eight (see Table 4.5) shows that 89 per cent of respondents stated that health education was taught at their school across all four terms. Eleven per cent (eight) of respondents stated that health education was not taught during
at least one of the four school terms, with six of the eight respondents based at regional schools. Further analysis of the year eight data shows that the teaching of health education is not common at large schools, as some of the eight schools that did not teach health education to the year eight group were large.

Four (50 per cent) of the eight respondents also stated that year eight health education was not taught in the first half of the school year, with analysis indicating that three of the four were based at regional schools. Of these eight respondents, all stated that health education was not taught in the second half of the school year, in either or both terms three and four. Two of the eight respondents stated that health education was not taught for only one term, that being term four. Both respondents were based in schools in the Wheatbelt region.

The majority (95 per cent) of year eight health education was taught in the first half of the school year, with most (75 per cent) respondents who stated that health education was not taught based at regional schools.

Year nine data

Table 4.5 shows a similar pattern for the year nine group, with 87 per cent of respondents stating that health education was taught to the year nine school group across all four school terms. Ten respondents (13 per cent) stated that health education was not taught to year nine, and analysis showed that seven of these respondents were the same respondents from the data pertaining to the year eight group. Three of the 10 respondents were different to those of the year eight group, and these were all based at the same metropolitan school. One respondent from the previous eight respondents—who stated that health education was not taught to the year eight group—also stated that health education was taught to year nines. This respondent is not included in the 10 respondents for data pertaining to the year nine group.

Further analysis shows that three (30 per cent) of the 10 respondents also stated that health education was not taught to the year nine group in the first half of the school year, with all 10 respondents stating that health education was not taught in the second half of the school year. The majority (95 per cent) of year nine health education was taught in the first half of the school year, but unlike the data pertaining to the year eight group, the analysis of data pertaining to the year nine group shows that the 10 respondents were evenly spread between metropolitan and regional schools (50 per cent each).
**Year 10 data**

The data pertaining to the year 10 school group (see Table 4.5) shows that 93 per cent of respondents stated that health education was taught at their school across all four school terms. Six respondents from six different schools stated that health education was not taught to the year 10 group during at least one of the four terms. Four of these six respondents were from schools in which health education was also not taught to years eight and nine. Two of the six respondents were different to those for the years eight and nine school groups, with one respondent based at a metropolitan school and the other at a school in the Kimberley region. The Kimberley respondent was also the only one who responded that health education was not taught in term one. Two of the three respondents who stated that health education was not taught in term two were based at regional schools, and four of the five respondents who stated that health education was not taught in the second half of the school year were also based at regional schools. The majority (96 per cent) stated that year 10 health education was taught in the first half of the year, with most (67 per cent) of the six respondents who stated health education was not taught based at regional schools.

**The allocation of curriculum time for teaching health education**

The allocation of curriculum time to the teaching of health education in lower secondary government schools in WA is a school-based decision. The schools identified by the respondents allocated the time spent teaching health education as a percentage of the total time allocated to the teaching of HPE.

This section of the questionnaire (section two) also investigated the allocation of curriculum time for the teaching of health education at each respondent’s school, and to do so, it asked each respondent three questions. First, to state the time in minutes allocated to the teaching of health education; second, to identify the learning area through which health education was taught at their school. If the respondents stated that health education was taught through the HPE LA, the questionnaire automatically directed them to the third question. For those respondents who responded that health education was taught in learning areas other than through the HPE LA, the questionnaire automatically skipped the third question as this was irrelevant to these respondents. The third question asked the respondent to state the percentage of HPE curriculum time allocated to the teaching of health education.

Although the three questions investigated the allocation of curriculum time to health education at the respondents’ school, the responses were analysed as those of the respondents and not as a representation of the respondent’s school. These questions
were analysed in this manner as some respondents based at the same school stated different time allocations for the teaching of health education, meaning that respondents within two or more time frames could possibly represent one school (see Figure 4.4). To overcome this difference between the responses of some respondents based at the same school, the time allocation is reported within a ten minute time frame. Further, as the questionnaire did not ask respondents to state the curriculum time allocated to the teaching of health education over the whole school year, there was no correlation between respondents, schools and school regions, as some respondents stated in earlier responses that health education was not taught over the four terms.

**Time allocation for the teaching of health education (first question)**

Figure 4.4 shows that for respondents who stated that health education was taught at their schools, health education was mostly allocated curriculum time between 55 and 65 minutes per week. Figure 4.4 shows that 74 per cent of year eight health education, 75 per cent of year nine health education and 73 per cent of year 10 health education was allocated between 55 and 65 minutes of curriculum time per week. This allocation is close to one hour, and in most schools constitutes a single teaching period. Figure 4.4 also shows that health education was taught for less than 55 minutes per week in 17 per cent of the years eight and nine responses, and 14 per cent of the year 10 responses. Less than 10 per cent of respondents taught health education for more than 65 minutes per week in years eight and nine, and 14 per cent for more than 65 minutes in year 10.

![Figure 4.4](image-url)  
*Figure 4.4. Time per week allocated to the teaching of health education in the respondent’s schools.*
The mean number of minutes that health education was allocated per week for the year eight (61.76 minutes, SD=25.11), year nine (60.16 minutes, SD=20.95) and year 10 school group (65.16 minutes, SD=22.49) is close to one hour.

**Learning area allocation for the teaching of health education (second question)**

Chapter One established that neither health education nor physical education are mandatory subjects in WA lower secondary government schools, but that the HPE LA educational outcomes were mandatory at the time of data collection (Western Australia Curriculum Council, 1998). The health-related learning outcomes of the HPE LA commonly associated with the teaching of health education in lower secondary government schools may or may not be taught through the HPE LA, and may be taught through a learning area other than HPE. The questionnaire examined whether any schools in WA taught health education outside of the HPE LA (second question). The results for the respondents and schools where health education was taught show that for years eight and nine, all health education was taught through the HPE LA. For the year 10 group, one respondent at a regional school stated that health education was taught through the Society and Environment LA.

**Percentage of HPE LA time allocated to health education (third question)**

This question examined the division of the HPE LA in lower secondary government schools in WA, and investigated the time timetabled to the teaching of HPE. HPE LA curriculum time allocation is a school-based decision, where the division of time between health education and physical education takes into account the mandating of two hours per week of quality physical activity in all WA schools (WA DOE, 2010). This mandate was enacted in January 2010, before the implementation of the questionnaire, and as mentioned, is commonly referred to in government schools as the CAR policy. This ensures that physical activity is part of student learning programmes in all government schools (WA DOE, 2010).

Table 4.6 shows that for most respondents, health education was taught for approximately one third (30 to 39 per cent) of the total curriculum time allocated to the HPE LA. Table 4.6 shows that for 76 per cent of the year eight group, 75 per cent of the year nine school group and 71 per cent of the year 10 school group, health education was taught for approximately one third of the total curriculum time allocated to the HPE LA. The mean percentage of the HPE LA curriculum time allocated to health education per week for the year eight school group is 32.04 per cent, SD=9.23. The mean percentage of the HPE LA curriculum time allocated to health education for the year nine group is 30.91 per cent, SD=9.18. The mean percentage of the HPE LA curriculum
time allocated to health education for the year 10 school group is 33.41 per cent, SD=11.93. The time per week allocated to the teaching of health education in all three year groups is similar. However, the year 10 group has the highest mean percentage and the greatest variation of HPE LA curriculum time allocated to health education among lower secondary education in the WA government schools involved in the study.

Table 4.6

Percentage Of HPE LA Time Per Week Allocated to Teaching Health Education in the Respondents’ Schools

<table>
<thead>
<tr>
<th>Year group</th>
<th>0–9 per cent</th>
<th>10–19 per cent</th>
<th>20–29 per cent</th>
<th>30–39 per cent</th>
<th>50–59 per cent</th>
<th>60–69 per cent</th>
<th>100 per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>3</td>
<td>0</td>
<td>7</td>
<td>57</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Year 9</td>
<td>3</td>
<td>1</td>
<td>10</td>
<td>56</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Year 10</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>53</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Coordination of health education

This question received 75 valid responses, and investigated whether there was a person at each of the respondents’ schools who is referred to as the Coordinator of Health Education. Forty two respondents (56 per cent) stated that there was a Coordinator of Health Education at their school, and 33 respondents (44 per cent) stated that there was not. There was no other analysis of this data, as close examination revealed that some respondents based at the same schools had differing opinions on the coordination of health education.

Section Three: About Your Health Education Teaching at Your Current School

Health education teaching

This section examined the opinions of the respondents about their teaching of health education at their current school. There were 75 valid responses to this section, and all are included in the analysis. However, as mentioned in Chapter Three, some respondents did not provide a response to some parts of the questions. Where no response was received, the tables present these occurrences as ‘data not received’, while acknowledging that not all respondents felt or recognised themselves as qualified or able to respond to the question. In calculating the percentages derived from the tables,
data not received was excluded, so the percentage in the discussion pertaining to each table is the percentage of data received.

The first question in this section asked respondents whether they taught health education at their current school. Sixty-two respondents (83 per cent) stated that they taught health education, and 13 (17 per cent) stated that they did not. Using these results, the analysis split the respondents into two groups: group one contains the teachers who stated that they taught health education, and group two contains the teachers who stated they did not. The following section explores the opinions of group one.

**Group one responses: Respondents who stated that they taught health education at their current school**

**Respondents’ choice to teach health education**

For the teachers (62) who stated that they taught health education (group one), the first question examined whether their teaching of health education at their current school was of their own choice. Table 4.7 shows that for the respondents who stated a response, health education was mostly taught through their own choice: 77 per cent for year eight, 88 per cent for year nine and 82 per cent for year 10.

<table>
<thead>
<tr>
<th>School group</th>
<th>Yes</th>
<th>No</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>41</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Year 9</td>
<td>44</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Year 10</td>
<td>45</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

For each of the three school year groups, some data was not received. It is possible that the data not received was from teachers who may or may not teach health education to one or more particular year group at their current school. For example, the nine instances of data not received in the year eight group may have come from teachers who did not teach year eight health education, but who taught health education to years nine and 10. As the questionnaire did not ask respondents to identify the year groups to which they taught health education, the analysis was unable to identify the reason for data not being received.
**Respondents’ enjoyment of teaching health education**

For the group of teachers who stated that they taught health education at their current school, 96 per cent of the responses were from teachers who stated that they enjoyed teaching health education, with only two per cent stating that they did not. There were 24 instances of data not received for group one (see Table 4.8), and as explained, the data not received may or may not have been from teachers who did not teach health education to a particular year group at their current school.

Table 4.8

*The Enjoyment Level of Respondents Who Taught Health Education at their School*

<table>
<thead>
<tr>
<th>School group</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>41</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Year 9</td>
<td>40</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Year 10</td>
<td>44</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>30</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>24</td>
</tr>
</tbody>
</table>

Further examination of the data from group one teachers who responded to this question (see Figure 4.5) shows that one respondent chose to teach health education but did not enjoy teaching years eight, nine and 10 health education at their current school. One teacher did not have a choice in teaching health education, and did not enjoy teaching year 10 health education at their current school. Figure 4.5 shows that there was significant enjoyment in teaching health education among group one teachers, whether they had a choice to teach the subject or not.
Figure 4.5. Comparison of respondents’ enjoyment of teaching health education (choice/no choice).

Respondents’ comfort level teaching health education

For the teachers who stated that they taught health education at their current school, 99 per cent of responses were from teachers who felt comfortable teaching health education (see Table 4.9), with 94 per cent of these responses from teachers who definitely felt comfortable teaching health education. There was only one response from a teacher who was uncomfortable teaching health education, and this was from a teacher who chose to teach health education. There were 22 instances of data not received for this question, and the data not received may or may not be from teachers who do not teach health education to a particular year group at their current school.

Table 4.9
Comfort Level of Respondents Who Taught Health Education at their School

<table>
<thead>
<tr>
<th>School group</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe not</th>
<th>Probably not</th>
<th>Definitely not</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>52</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Year 9</td>
<td>51</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Year 10</td>
<td>51</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>22</td>
</tr>
</tbody>
</table>
Respondents’ satisfaction level teaching health education

For the teachers who stated that they taught health education at their current school, Table 4.10 shows that 91 per cent of responses were from teachers who found it satisfying to teach health education, with only five per cent stating that they did not. There were 22 instances of data not received for this question, and the data not received may or may not have been from teachers who do not teach health education to a particular year group at their current school.

Table 4.10
Satisfaction Level of Respondents Who Taught Health Education at their School

<table>
<thead>
<tr>
<th>School group</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe not</th>
<th>Definitely not</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>40</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Year 9</td>
<td>39</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Year 10</td>
<td>42</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>29</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 4.6 shows that two respondents did not find teaching health education at their school satisfying. One respondent is the same respondent who did not enjoy teaching health education. Of the 12 respondents who did not have a choice about teaching health education, but who were teaching the subject, data [was] not received from one respondent. Figure 4.6 shows that most (91 per cent) teachers from group one found it satisfying to teach health education, whether they had a choice or not.
Summary of respondents who taught health education

The data reveals no significant difference between the responses of group one respondents according to the teaching of health education by school year groups. Most (96 per cent) of the 490 questionnaire responses from the respondents who responded for group one stated that they enjoyed, felt comfortable and were satisfied teaching health education at their current school. Of the respondents who stated that they did not enjoy, feel comfortable or found it satisfying to teach health education, close analysis shows that these responses were from the same three respondents. Two were male HPE teachers aged between 40 and 49 years, trained in HPE with a qualification to teach health education. The other response was from a female teacher aged between 30 and 39 years, who stated that most of her teaching is in a learning area other than HPE.

Group two responses: Respondents who stated that they did not teach health education in their school

This section explores the opinions of group two: the teachers who did not teach health education at their school.

Would the respondent choose to teach health education?

For the teachers who stated that they did not teach health education, the first question in this subsection asked if, given the choice, they would choose to teach health education at their school. Table 4.11 shows that most (82 per cent) responses were from teachers who stated that they would choose to teach health education. Five instances of data not received were received for group two. However, unlike group one, analysis was unable to identify a possible reason for the data not received result.
Table 4.11

*Given the Choice, Would Group Two Respondents Choose to Teach Health Education at their School?*

<table>
<thead>
<tr>
<th>School group</th>
<th>Yes</th>
<th>No</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>9</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Year 9</td>
<td>9</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Year 10</td>
<td>10</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Respondents’ enjoyment in teaching health education*

Table 4.12 shows that for the group two teachers who stated that they did not teach health education at their current school, most (89 per cent) responses were from teachers who stated that they would enjoy teaching health education, with no teachers stating that they would not enjoy teaching the subject if given the choice. Five instances of data not received were recorded for group two, and as mentioned earlier, the analysis was unable to identify a possible reason.

Table 4.12

*Enjoyment Level of Respondents Who Do Not Teach Health Education at their School*

<table>
<thead>
<tr>
<th>School group</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe not</th>
<th>Probably not</th>
<th>Definitely not</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Year 9</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Year 10</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>19</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

*Respondents’ comfort teaching health education*

For the teachers who stated they did not teach health education at their school, 91 per cent of responses show that these teachers would feel comfortable teaching health education if given the choice (see Table 4.13). Table 4.13 also shows that no teachers in group two would feel uncomfortable teaching health education. Again, there were five instances of data not received for group two, with analysis unable to identify a possible reason.
Table 4.13

Comfort Level of Respondents Who Do Not Teach Health Education at their School

<table>
<thead>
<tr>
<th>School group</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe not</th>
<th>Probably not</th>
<th>Definitely not</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Year 9</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Year 10</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Respondents’ satisfaction with teaching health education

For the group of teachers who stated that they did not teach health education at their school, Table 4.14 shows that 91 per cent of the responses were from teachers who stated they would find it satisfying to teach health education if given the choice, with no respondents stating that they would not find it satisfying. Again, there are five instances of data not received for group two, with the analysis unable to identify a possible reason.

Table 4.14

Satisfaction Level of Respondents Who Do Not Teach Health Education at their School

<table>
<thead>
<tr>
<th>School group</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe not</th>
<th>Probably not</th>
<th>Definitely not</th>
<th>Data not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Year 9</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Year 10</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>16</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Summary of respondents who do not teach health education

The data reveals no significant difference between the responses of the teachers in group two, according to the teaching of health education by school year groups. Most (91 per cent) of the 102 responses stated that they would enjoy, feel comfortable and feel satisfied teaching health education at their school. No responses from group two teachers stated that they would not enjoy, feel comfortable or find it satisfying to teach health education at their school.
Health education attributes

This section of the questionnaire examined the opinions of the 75 teachers about the attributes associated with the teaching of health education: content knowledge, skills relevant to health and attitudes and values relevant to health. Figure 4.7 shows that respondents did not view any health education attributes as unimportant, with 99 per cent considering all three attributes important. The respondents felt that developing skills relevant to health was the most important of the three attributes.

![Respondents' opinion of health education attributes](image)

*Figure 4.7. Respondents’ opinions of health education attributes.*

Respondents’ teaching of health education at their school

This question examined the teaching style of the 75 teachers who validly responded to this question, best describing their delivery of health education at their school. Table 4.15 shows that most respondents (84 per cent) stated that they often taught content knowledge with skills-based activities, and this result is in keeping with the result of the previous question (see Figure 4.7), where 97 per cent of the teachers stated that they viewed skills relevant to health as very important. Further, 84 per cent of respondents who stated that they often teach health education through content knowledge and skills-based activities do so in ways that included participatory learning (group work). There is variance between the respondents who stated they ‘Always’ (25 percent) delivered health education—with either skills-based activities or skills-based
activities that included participatory learning—to those respondents who stated that they ‘Often’ (59 per cent) did so. This variance could be attributed to teacher pedagogical choice; however, it could also be attributed to the context of health learning at the respondent’s particular school. For example, some health contexts are pedagogical suited to participatory skills-based pedagogies, whilst others are less suited such as individual goal setting.

The data in Table 4.15 shows that most of the respondents (84 per cent) described their pedagogical approach to the delivery of health education as in keeping with the preferred pedagogy articulated in The K-10 Syllabus for HPE (WA DET, 2007a). As the question in the questionnaire did not examine whether the respondents were aware of skills-based pedagogies as the preferred pedagogy for learning in the health contexts, the data from this question cannot be used to determine if the teacher’s pedagogical choice resulted from knowledge of the syllabus.

### Table 4.15

**Respondents’ Teaching of Health Education**

<table>
<thead>
<tr>
<th>Teaching style</th>
<th>Teaching of health education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always</td>
</tr>
<tr>
<td>I teach content knowledge</td>
<td>28 (37%)</td>
</tr>
<tr>
<td>I teach content knowledge with skills-based activities</td>
<td>19 (25%)</td>
</tr>
<tr>
<td>I teach content knowledge combined with skills-based activities that include participatory learning (group work)</td>
<td>19 (25%)</td>
</tr>
</tbody>
</table>

Examination of the data for Table 4.15 shows that the two respondents who stated that they never taught any of the three teaching styles for health education did not teach health education at their current school. Examination of the data of the three respondents who stated that they seldom taught content knowledge as a teaching style of health education revealed that one also does not teach health education at their current school. The two remaining respondents who stated that they seldom taught content knowledge as a teaching style of health education also stated that they often taught content knowledge with skills-based activities. From these responses it can be inferred that the two respondents interpreted this question differently to what was intended. The
inconsistency between the three parts of their data for this question indicates that they may have discounted the first teaching style, rather than interpreting the first teaching style as a component of the next two teaching styles. For example, for a teacher to be able to teach content knowledge combined with skills-based activities, the teacher must also teach content knowledge. Further examination of the data in Table 4.15 showed that the two respondents were the only respondents who may have possibly interpreted the question differently than was intended.

Respondents’ opinions of health education

This question examined respondents’ opinions on the school curriculum and the place of health education within it. Table 4.16 shows that 80 per cent of respondents agreed with the statement “I teach in a crowded curriculum.” Despite this view, 95 per cent agreed that health education is an essential subject with nobody disagreeing that health education is an essential subject in a crowded curriculum.

Table 4.16
Respondents’ View of the School Curriculum and Health Education

<table>
<thead>
<tr>
<th>Statement</th>
<th>Respondent’s opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>I teach in a crowded curriculum</td>
<td>30</td>
</tr>
<tr>
<td>Health education is an essential subject in a crowded curriculum</td>
<td>50</td>
</tr>
</tbody>
</table>

To further explore the opinions of the respondents, the data in Table 4.16 was split into the two previously mentioned groups: group one (teachers who stated they taught health education at their school) and group two (teachers who stated they did not teach health education at their school). Figure 4.8 shows no significant difference in opinion between the two groups.
Extended Comment Question

The second last question provided the respondents with the opportunity for extended comment. This specifically invited participants to comment on the teaching of health education as a timetabled subject at their school. There were 36 written responses, and content analysis of these responses was conducted within the same software programme: SPSS (21), used for the statistical analysis of the questionnaire’s quantitative data. This process utilised pre-existing codes, as Boynton and Greenhalgh (2004) stressed that this analysis should be planned in advance and draw upon analysis skills accustomed to qualitative research. In addition to the pre-existing codes, another code emerged. This ‘Other’ code enabled the coding of particular issues that may or may not have transferred to the responses of all respondents. Such responses included: “I ensure that every student speaks in every class” and “health curriculum here is very reactionary to community or school needs.”

Figure 4.9 shows that the most frequent response (50 per cent) focussed on issues pertaining to the timetabling of health education at the respondents’ schools. Most issues related to the use of teachers outside the HPE LA to deliver health education at the respondents’ schools. One teacher commented that “health education has been often farmed out to whoever is under loaded outside the PE faculty [HPE], which at times, has not been in the best interests of the students.” Other responses agreed, expanding: “generally taught by HPE staff but does not always work out this
way due to staff/timetable”, “when we have a specialist teacher the role is easy”, and “best taught by teachers who have a passion for the subject.” One respondent went on to explain the frustration at their school with the issue of “teachers outside the faculty doing health education, [resulting in] some of our resources [going] missing due to careless mismanagement by some teachers.”

Respondents also argued that health education was not allocated enough time within the school timetable: “it’s difficult to achieve status with the small amount of time allocated”, “more time is needed to teach the essential health content” and “one session a week probably isn’t enough.” Other issues described include concerns about resources, professional development and the HPE curriculum. One respondent commented: “resources and training are inadequate from DOE”, and another: “the health curriculum is too crowded and vague”, that it “lacks funding.” One respondent encapsulated the tone of all responses with the comment: “health is arguably seen as the least important subject at this school as evident by a large number of teachers with no qualification in the subject being assigned to teach the classes.” Possible reasons for these 36 respondents are explored in the analysis of the qualitative data gathered through the semi-structured interviews, outlined in the next chapter.

**Concluding Comments**

Analysis of the questionnaire responses show that of the 49 government lower secondary schools studied, the DOE identified 31 schools as metropolitan schools and 18 as regional schools with health education taught in most (97 per cent) of these
schools (WA DOE, 2012). In the year levels studied, health education was mostly allocated curriculum time between 55 and 65 minutes per school week (74 per cent of the schools allocated this curriculum time for year eight, 75 per cent for year nine and 73 per cent for year 10), with this curriculum time equating to approximately one third of the total curriculum time allocated to the HPE LA.

The analysis of the questionnaire responses also show that health education in lower secondary government schools in WA was delivered by male (37) and female (36) teachers, with the majority of these teachers (33 per cent) aged between 40 and 49 years of age. Forty three per cent of these teachers stated that they had gained a qualification to teach that did not include training in health education and this included one third of the teachers who had gained a qualification to teach HPE. Furthermore, 14 per cent of the teacher respondents indicated that they were delivering health education as a teacher who was based in a learning area other than HPE. This included teachers who were based in the learning areas of Technology and Enterprise, Society and Environment, Science, LOTE and English. Although most of the teacher respondents stated that they would or did enjoy, feel comfortable and were satisfied teaching the health education at their school, and that they believed developing skills relevant to health is very important, when given the opportunity of a qualitative response, they voiced concerns over the use of teachers to teach health education who are based in a learning area other than HPE.
Chapter 5: Qualitative Results: United Voices

This chapter analyses the data collected from the semi-structured interviews, with the aim of answering the final research question:

3. Which pedagogical approach was preferred in the delivery of health education content?

This chapter is titled: ‘United Voices’, despite representing the multiple realities and voices presented in the interviews. This title acknowledges the postpositivist perspective underpinning this research as it accepts that there has been a level of sense-making as a consequence of exploring the meanings created from the multiple realities (Crossan, 2003; Fox, 2008; Phillips & Burbules, 2000). This title recognises that the participants’ perceptions of the delivery of health education in lower secondary government schools—partially gathered from the questionnaire data—although perceptions, warrants an authoritative claim of their social reality. This chapter, through an exhaustive interpretive process concedes there is a consensus view amongst the participants: united voices (Phillips & Burbules, 2000).

The participants

Nine teachers participated in the semi-structured interviews, all conducted in December 2011. The nine participants were allocated a pseudonym:

- Jessie, an early-career HPE teacher based in a North Metropolitan school;
- Fiona, an experienced HPE teacher based in a South Metropolitan school;
- Daniel, an experienced HPE teacher based in a South Metropolitan school;
- Brenda, an experienced HPE teacher based in a South Metropolitan school;
- Fay, a highly regarded health education specialist based in a South Metropolitan school;
- Kath, a highly regarded health education specialist based in a North Metropolitan school;
- John, a HOLA of HPE based in a North Metropolitan school;
- Didier, a HOLA of HPE based in a North Metropolitan school; and
- Claire, a HOLA of HPE based in a South Metropolitan school.
The nine participants represented a mixture of HPE teachers: two were career-focussed health educators, one was an outdoor education specialist, one a sport specialist, two were career-focussed physical educators and the remainder were ‘generalist HPE teachers’. In the context of this research, the term generalist HPE teacher refers to a HPE teacher who does not specialise in any of the HPE learning area’s subjects, sporting and/or recreational contexts such as outdoor education, specialised tennis or physical education studies.

The semi-structured interviews

The semi-structured interviews consisted of nine pre-developed questions, written in a manner that invited the participants to explore their perceptions of health education in lower secondary government schools in WA. The interview questions were:

1. Tell me about the teaching of health education, what do you think is going on?
2. Tell me about the assistance or support you receive to teach health education and what you think may help you teach health education?
3. Tell me about your preparation to teach health education, your undergraduate degree, post-graduate degree or any professional development that is offered for the teaching of health education?
4. How would you teach a skills-based approach to health education in your classroom?
5. Who makes the decisions with regard to the teaching of health education in your school, how do you think these decisions come about?
6. Can you suggest changes that could be made at your school to enhance the delivery of health education?
7. Tell me about health education in Western Australia, how do you think it is viewed and even how the view came about?
8. Can you suggest ways to improve the status of health education in WA?
9. Open question?

The interviews were recorded and transcribed to develop interview data. Artichoke computer software (Fetherston, 2011) was used to code the interview data through a systematic, exhaustive and iterative process.

Analysis of the interview data

Six themes emerged from analysis of the coded interview data. Four of the six emergent themes are discussed in this chapter in order of importance with the research
findings indicating that the school context, priorities and timetabling of health education in lower secondary government schools (Theme One) was of greatest concern to the teachers interviewed. Resources and professional development (Theme Four) were of concern to the teachers but were slightly less important.

Two of the six emergent themes were not significant to the overall findings of the research and so are not explored in this thesis. These themes emerged as a consequence of the systematic coding within Artichoke and were used to identify the person speaking at a particular time during the interview. For example, the fifth theme emerged as a consequence of a code used to identify the particular teacher being interviewed, and the sixth theme emerged as a consequence of a code used to identify myself (the researcher) asking the interview question. The six emergent themes are:

1. the school context, priorities and timetabling of health education in lower secondary government schools;
2. health education pedagogies and teachers delivering health education;
3. the representation of health education in WA;
4. resources and professional development for health education;
5. the teacher (the interviewee); and
6. the question (the researcher).

From this point forwards, theme five and theme six are removed from any further discussion within this thesis.

For the remainder four key themes, a range of issues emerged which contributed to the overall development of each of the themes. For example, five issues contributed to the development of ‘Theme One’ with ‘Issue One’ being of most importance to the participants. Three issues contributed to the development of ‘Theme Two’, five issues contributed to ‘Theme Three’ and two issues contributed to ‘Theme Four’. In total, the coded interview data identified 15 issues, which contributed to the development of the four themes presented in this chapter.

Accompanying the 15 issues, there were two pervasive issues of concern, which were common to the coded data of the nine participants with the participants constantly reiterating these issues throughout the length of the interviews. Johnson and Christensen (2012) suggest that the commonality of these pervasive issues amongst the participants provides descriptive validity to the research context, enabling the participants’ perception of the WA setting to be generalisable to some schools in WA (Creswell, 2013; Denzin & Lincoln, 2003, 2008; Johnson & Onwuegbuzie, 2004; Lincoln & Guba, 1985). Both of the pervasive issues are discussed throughout this chapter, but as they
represent the consensus view of the nine participants, they are discussed at the end of this chapter in the summary. The two pervasive issues that were concerning to the interview participants are: the use of out-of-field teachers to deliver health education at their particular school and the perception that unqualified and/or untrained teachers were often used to deliver health education in WA schools.

This chapter concludes with a summary that synthesises the qualitative data, its four themes and the issues within the themes. The summary specifically responds to the third research question as it presents the participants’ perceptions of skills-based pedagogies in the delivery of health education in lower secondary government schools in WA.

**Theme One: The School Context, Priorities and Timetable**

In WA, the daily organisation of a school’s curriculum is commonly referred to as the school timetable. Schools across the state apply different formats, formulae or contingencies to the organisation of this structure, and although the timetable can vary from school to school, there was commonality with the participants’ interpretation of the term ‘timetable’ as defined in the first sentence. This commonality in understanding is used henceforth.

Nine participants believed that the organisation of the school timetable at their school was the responsibility of the school’s administrative team. They viewed the specific decisions about the timetabling of health education to be the responsibility of this team. Fiona’s comment was typical of the nine participants, she said: “the timetabling of health education comes from the administration.” The participants identified that the school’s administrative team could include the principal and/or site manager, deputies or similar school-based administrators and other administrative personnel. Nevertheless, they felt that the timetabling of health education was often the responsibility of one deputy: “there is always a deputy who is in charge of timetabling” said Daniel.

The participants believed that timetabling occurred in one of two ways: with or without consultation with the particular school’s HOLA of HPE. Claire said: “admin will allocate the time and obviously this is with a discussion of the HOLAs at this school.” Jessie said: “the head of department will sit with our admin and they will start doing the timetabling.” Conversely, Kath said: “in terms of who teaches health education in the school, that is controlled by the administration.” This is a view supported by Jessie, who agreed by saying that “it comes from higher above than my department.” Kath, when questioned about her school’s timetabling of health education,
expressed frustration with this system. She said: “the decisions that are made about staffing; I am not allowed to be a part of that, it is totally from the top down, which at my age and with my experience is quite demoralising.”

**Issue One: School administration and school staffing**

The participants felt that the timetabling of health education by the schools’ administrative teams affected the delivery of health education in the classroom, and that at times, this affect was negative. Kath summarised the collective belief of the nine participants: “I don’t believe that the best decisions are made in terms of who can teach.” She explained further: “it is often who is available at the time and whose load is light—so we don’t necessarily get people who put their hand up to teach health education.”

The participants reported that the timetabling of health education by the schools’ administrative teams affected the delivery of health education in the classroom for three distinct but related reasons. The first was explained by John: “the deputy says that health education is going to be on at these times during the week and sometimes when he or she puts it on at those times we don’t have a health education teacher to teach it.”

The second reason was explained by Didier, who spoke of “contingencies” at his school that affected the timetabling of health education. He said:

If there is an English class that needs to be taken over four periods a week in lower school then that class may be given to an under loaded phys-edder and that has a domino effect whereby health education has to be taken out, quite possibly, and spread out, revised, and given to whoever is available.

Daniel reported something similar, saying:

There is a shortage in the school of Maths and Science teachers. I do the Science and [name removed], does the Maths, and we are both HPE! Basically, the timetablers [deputies] will say “you can only do X amount of HPE because you are doing these things [Maths and Science].” We then have to get another teacher to do it [health education].

The nine participants believed that health education was affected when teachers whose main learning area was outside of the HPE LA taught health education as a response to school timetabling priorities. The literature review termed these teachers, out-of-field teachers (McConney & Price, 2009).

Additionally, six participants identified a third reason why timetabling negatively affected the delivery of health education. They reported that the timetabling of health education was also affected when teachers within the HPE LA who did not favour teaching health education were timetabled to do so. Brenda said: “some staff don’t like to teach health education as much as they like to teach physical education.”
Fiona said: “I believe that some teachers who are primarily geared towards teaching phys-ed are being thrown into the deep end and being given health education classes even though they are trained to do so.” Fay added: “we also have staff who would prefer not to teach it [health education], but because we have so many classes they have to teach it.” Fay explained the effect on the delivery of health education of this type of timetabling. She said that such HPE teachers:

- tend to want to be doing the PE and not the HE, and so for them, it is a last minute thing; they don’t spend time doing preparation…they see themselves as phys-edders and not health-edders and it is not their learning area as such.

As a group, the nine participants viewed the timetabling of health education by school administration as the most important effect upon the delivery of health education in the classroom. They were supportive of using teachers “who want to teach it” (Daniel). Fiona admitted: “I find that teachers who are sometimes put into teach health education [without choice] aren’t passionate about it because it is the onus of the HPE department to run the course.” Daniel summarised the group’s view: “If you are teaching something and you are passionate about it, you put in the effort and you will go that extra yard.” Fay offered a solution and predicted a potential outcome, saying:

- Get teachers who are either interested in it, or are trained, because if they are not interested in it and they are just thrown into it as a fill-in because they don’t have enough of their own subject–it’s not going to happen.

Fay clarified what she meant when stating: “it’s not going to happen.” She identified that some teachers’ may feel uncomfortable delivering particular health education content and that from her experience, these teachers inevitably avoided teaching this content.

**Issue Two: School priorities**

Nine participants reported an inconsistency between government secondary schools in the schools health education curriculum, and the subsequent timetabling of that curriculum. When asked to explain further, they replied: “I think that there is a very big range of what is going on” (John); “I think it is really varied” (Fay); “Across the state, there is a great variation in health education” (Kath) and: “I know there is a lot of schools that don’t do it at all, because it doesn’t fit, and that is sad because it shouldn’t be that if it doesn’t fit that you don’t get taught it” (Fiona). John suggested that in government schools across the state: “There is very little going on in some places because of administrative limitations, crowded curriculum and those sorts of issues.”

When prompted to expand their statements, the participants said that the timetabling of health education reflected the school’s commitment towards it, and that
in some government schools the other priorities of the school affected the delivery of health education. This view was substantiated by the review of literature, which suggested that school priorities often reflected a perceived competitive educational climate, where schools administrators felt pressured to demonstrate academic performance (Harris et al., 2013). Kath said: “I know it has enormous potential but my concern is that it is very piecemeal across the state.” When asked to explain, Jessie stated: “if it is not English, Maths, Science or S and E [Society and Environment] then it is not really a priority.” Fiona questioned the actions of her school regarding a particular year group, which no longer received health education because a language class had replaced it. She said, “How many kids will really go on to use a second language compared with how many kids will go on to benefit from the things they learnt in health education?”

The perception that health education timetabling is a product of a crowded curriculum was common to seven of the participants. Brenda said: “it struggles in a crowded curriculum to find time and space.” Jessie said: “most of the academic subjects are going to get all the credence and all the time.” Kath said: “I think that health education is being pushed to the side with the amount of subjects in the curriculum being offered to schools.” In contributing to this discussion, John posed a question and referred to the implementation of The Curriculum Framework in response, saying: “with the eight learning areas, then why not eight equal amounts of time in the school day?” He answered: “As it turned out that was never the intention…but for a short period of time that was a possibility.”

The discussion on the impact of school priorities on the delivery of health education expanded when several participants reported that school priorities affected the rooming of health education. Fay said:

One of the problems, like in most schools, is that health education is one of the last things to get timetabled so we get the rooms that are left over. We often get rooms that don’t have multimedia projectors and stuff like that.

Brenda aired a similar frustration about the allocation of an art room for teaching health education. She said:

Health education is timetabled like any other core subject; 32 [students], and an art room is made for 22 [students]. It’s open plan and you want to talk sex stuff with the kids; it doesn’t happen because they know that there is going to be other people listening. You don’t have the privacy of a classroom.
Conversely, John spoke of the positive way that his school prioritised the rooming of health education, saying: “health education has now been given a fixed room…that’s been excellent for the teaching of HPE in the school.” He reflected on how, in the past, his teaching had been limited because “I would have my year eight health education class in a Maths room, I would have my year nine health education class in a Science room, I would have my year 10 health education class in an English room; for just that one period a week there is no way you could take over that room.” John believed that his school’s actions supported the creation of an environment where quality health education could be delivered.

Similarly, the teachers reported that the time of day and the day of the week that health education was timetabled affected the delivery. Claire said: “we’ve had year eights [for] period five on a Friday; it’s pointless teaching health education then.” Didier said: “we have had health education put on a Friday afternoon, all at once, and it strained resources.” He explained: “Friday afternoon is not the best time to have anything and I felt that we were having health education as a second relation.”

Daniel spoke of the number of students in his health education class: “I have 36 kids in here sometimes because that is the way the timetable works.” He explained how the large class size affected the delivery in his classroom, saying: “I normally would love to do a bit of group work, go out and show them this. I couldn’t do that with 36 kids.” Daniel believed that class size affected the pedagogy he could deliver in health education.

As a group, the nine teachers felt that other school priorities and subjects seemed more important and affected the delivery of health education. They felt that their schools’ failure to prioritise health education was evident in many ways, including rooming, timetabling during the week and class sizes. They felt that the processes informing the timetabling of health education often marginalised the subject in their schools. Jessie, who encapsulated how the teachers felt, said: “the view then is that it [health education] is not important. It’s not important! It’s not [as] important as everything else in schools.” This view was supported by the other participants, who felt that health education should be prioritised in schools because, as Kath said: “it is one of the few subjects where kids get to examine who they are as young people.”

**Issue Three: HPE LA priorities**

Seven participants also indicated that a school’s priorities regarding the timetabling of health education may or may not also include the priorities identified and chosen by the HPE LA itself. As such, they felt that the internal priorities of the HPE
LA affected the timetabling of health education at their school. Claire reflected that at her school, health education was “probably fifth down the list”, and that “it was not a priority.” Other teachers commented on the ramifications of specialist HPE teachers who were unavailable to teach health education in their particular school due to the priorities within the HPE LA. Fay said: “there are a couple of phys-edders who don’t teach [health education] because their timetables don’t allow it; like the special…coordinator. I don’t think the outdoor education guy teaches it either.”

HPE teachers being unavailable to teach health education at a school was perceived as a negative effect of the HPE department’s low prioritising of health education, and not in the best interest of delivery in the classroom. Claire, who reflected on a fellow HPE teacher who was unavailable to teach health education, articulated this belief. The teacher was praised as being “confident” and “really good at it.” When asked why the teacher did not teach health education, the reply was “because she is a specialist [subject name removed] teacher and it doesn’t fit her load.” Claire then complained how HPE was subsequently “off loaded”, and that “it is always health education that is given to someone from another area outside of HPE and basically they are not interested in teaching it.”

Further, the participants suggested that the personal priorities of the HOLA of the HPE LA had the potential to affect the delivery of health education. John said:

I think another limiting factor is that the people in charge of HPE might not think that it is particularly important. As far as priority is concerned…health education goes to the bottom of the pile because that’s an easier way to handle it because they are not interested in it.

Claire referred to how other HOLAs think health education “is a waste of time.” Kath explained the effect of the HOLAs’ low prioritising of health education, saying: “we don’t ever seem to get faculty professional development time to discuss health education.” Fay offered her beliefs, saying:

I think a lot of it too comes down to who your HOLA is in the learning area. If you’ve got a HOLA who is supportive of health education and who thinks it is important then they will ensure that the right things are being done.

Kath, who thought that her HOLA valued the input she gave to health education—and that this was positive prioritising—concurred with this belief, saying:

In this school I am particularly lucky that the HOD [a title replaced by HOLA in 1998] is very supportive and has allowed me to run this section, health section, and I have done so for many years. I make decisions about health education.
When questioned further about the effect of the HOLA, some teachers voiced concerns about the gender imbalance of the HOLAs of HPE in WA government schools. John said: “When I go to meetings of HOLAs most of them are male and most of the agenda is PE or outdoor education, and health education is tacked on the end.” Kath suggested that the ratio of male to female HOLAs “could skew the priority within HPE.”

In December 2012, all secondary schools listed on the DOE’s Schools Online website (WA DOE, 2012) were telephoned, and data was collected to examine the staffing of HPE teachers at the school, and in particular, the gender of the Teacher in Charge (TIC) of HPE. As some of these schools are officially allocated the position of a HOLA of HPE from the DOE, and other schools have a TIC of HPE—to which the school may or may not assign the role—the data is an estimation of the gender division of the TIC of HPE. It does not give an estimation of the gender division of the HOLAs of HPE in WA government secondary schools. The allocation of the HOLAs of HPE was not available to me. However, schools that did identify a TIC of HPE reported that there were 104 (79 per cent) male TICs of HPE and 28 (21 per cent) female TICs of HPE. This is a ratio of almost four to one in favour of male teachers. Some schools telephoned in 2012 reported that they did not have a TIC of HPE due to the size and location of the school.

**Issue Four: The 25th period**

The discussion of the timetabling of health education in WA government schools increased, with nine participants commenting on what they perceived to be the poor representation of health education in WA schools. Fay referred to this representation as “historical.” Other teachers said: “it is compulsory” (Brenda); “it’s tacked on to PE” (Daniel) and: “it is an addition to PE” (Kath). At some stage during the interviews, the nine participants referred to health education as the “25th period”, and complained about the effect of this representation. They were referring to the fact that health education is often timetabled in the last hour of a weekly timetable of 25 hours. When asked to explain, Fay said: “When we went to unit curriculum in 1987, we went to a five period day so there was that one period, that odd period, that 25th hour that became health education.” Didier said: “In lower school, we got 25 hour periods, so the administrators see it is convenient to have it as the 25th period.” Fiona said: “We run on 25 sessions a week and of course there is the odd number and the odd number is often allocated to health.”
Didier explained that in a 25-hour weekly timetable the “MESS subjects” (Maths, English, Science and Society and Environment) were allocated four hours teaching time within the 25 hours, while option subjects were allocated two hours per week. He said: “the MESS subjects are all in fours. There’s lots of twos—the option areas. So with two’s and four’s, what do we do with the 25th period? In year eight and year nine it is health education.” Physical education in all participants’ schools was allocated two hours within the weekly timetable. Claire noted:

Phys-ed [HPE] gets three hours a week for each year group. The division of that is decided by phys-ed, we’ve actually decided to give two periods to PE and one to health education. Health education is the 25th period.

John echoed this view: “we’ve always opted for two hours PE and one period for health education; it’s timetabling expedient according to our deputy.”

**Issue Five: The CAR policy**

Two hours of quality physical activity in government schools was mandated for “student learning programs” with the updated implementation of the CAR policy in WA (WA DOE, 2010, p. 3). The definition of “student learning programs” is not articulated within the policy, but is largely advocated in schools as belonging to the domain of teaching and learning physical education (p. 3). Brenda exemplified this common interpretation, saying: “PE in [years] eight, nine and 10 has to be two hours—mandatory.” As two hours of physical activity is mandated in WA government schools and that physical education is often advocated as the appropriate “student learning programs”, the participants felt that the introduction of the policy in 2010 legitimised and cemented health education as the 25th period. Didier said: “in this school we get two periods of PE and one of health education.”

Fiona raised concerns over what she perceived to be the precarious representation of health education arising from it being timetabled in this way. She explained: “I believe if it [school timetable] was an even number [26 periods], because kids do everything in pairs at this school, then it [health education] would be one of the first things to go.” Daniel agreed, and suggested that schools “make it like PE. Two hours has to be done in health education as well.” Kath supported this suggestion: “we’ve done it with physical activity and I think we need it with health education so that time is committed to it.” However, Daniel provided an informed suggestion, referring to the defunct Physical Activity Task Force (Government of Western Australia, 2012): “make sure it is implemented…Come out with a Health Activity Task Force.” Fiona continued the discussion, saying:
I think the time allocation is certainly an issue and it all comes down to time. Changes: more time for health, there is never enough time for health. It is always rushed and you never get through what you want to get through. One hour a week isn’t enough to do anything really.

Fiona reflected the thoughts and feelings of the participants, saying: “with the spiralling cost of health care in Australia, there isn’t enough time dedicated to health education in lower school and that’s government schools.”

**Summary: Theme One**

The participants felt that the context for health education in their lower secondary government schools had the greatest effect on the delivery of the subject in the classroom, with five main issues affecting this delivery. The first concerned the organisation of the timetable by the school’s administration. The second was the learning and teaching priorities of the particular school. The third concerned the priorities of the HPE LA itself, and included the priorities of the HOLA of HPE. The fourth related to the belief that health education was the 25th period within a 25 hour weekly timetable. The fifth concerned the implementation of the CAR policy in 2010 (WA DOE, 2010). The teachers felt the CAR policy helped to cement health education as the 25th period.

Kath summarised theme one, saying: “I think it [health education] is piecemeal and it depends on the school, the ethos, the policy, the HOD [HOLA of HPE], the staff…I think [health education] doesn’t hold its rightful place because the learning has enormous potential.” Fay supported Kath, and requested that the school’s administrative teams ensure “that [health education’s] not a fill-in subject and it’s not the last subject to be timetabled or roomed.” Daniel was unequivocal in requesting that administrative teams timetable teachers who have “a passion” for health education. Daniel’s comments lead to the discussion of theme two, and are indicative of the effect of teachers who do not have a passion for health education but are timetabled to teach it.

**Theme Two: Health Education Pedagogies and Teachers Delivering Health Education**

**Issue Six: Unqualified and qualified teachers**

This research has used the term ‘unqualified’ to classify those teachers who are delivering health education without having gained qualifications in the HPE LA. In Chapter Four of this research, 23 per cent of the teachers who were delivering health education in the schools studied were classified as unqualified to deliver health education. Qualified teachers of HPE are those teachers who have gained a qualification in the HPE LA.
Theme one found that participants reported incidences of teachers whose main learning area was not HPE being timetabled to teach health education in their government schools. The participants believed this was common in all WA government schools, a view substantiated by McConney and Price (2009) who reported the overall rate of WA teachers teaching out-of-field in 2007-2008 was 24 per cent. This view was unsubstantiated but remarked by Shilton et al., (1995) as common in WA schools. Fay substantiated her school’s use of out-of-field teachers to deliver health education when she said: “we’ve got three outsiders who teach it.” Kath said: “we’ve had librarians teaching it. We’ve had a Science teacher teaching it. We’ve had a French teacher teaching it.” None of the teachers confirmed or substantiated the use of out-of-field teachers in other learning areas at their schools, nor did they confirm the qualifications of these teachers.

The nine participants were concerned about the effect of out-of-field teachers on the delivery of health education in the classroom. They articulated their concerns as: “they don’t have the information so the kids are missing out” (Jessie); “it makes it harder and harder to maintain a vital health education programme in the school” (Kath) and: “it makes it difficult to give extra support because they are outside of the area” (Brenda). Didier, in reference to HPE resources at his school, said: “when you have people take the course outside of the department, pages get lost.” More importantly, the participants thought that such teachers lacked the appropriate qualifications in health education, and often referred to them as unqualified teachers, saying: “some people that [sic] do teach health education aren’t qualified” (Jessie).

The participants questioned whether the unqualified teachers were delivering the “interrelated outcomes” of the health education curriculum (WA DET, 2007a, pp. 1–2) in the manner in which The Curriculum Framework intended (Western Australia Curriculum Council, 1998). Fay said: “it is a bit of a catch 22 situation—particularly when you have people who don’t have a background in it—how do you ensure that they are teaching what you want them to teach and how it should be taught?” Daniel said: “we don’t know how it is being delivered and we don’t know the results the kids are getting. What they are really getting out of it.”

In discussing the pedagogy of health education and the delivery of the curriculum, Brenda said: “I think that kids get a lot out of health education if it is taught the right way.” This teacher has a preferred pedagogical approach for delivering health education, which acknowledges PCK, content knowledge and subject-specific knowledge (Paakkari et al., 2010; Shulman, 1986, 1987; Shulman, Hutchings & Wilson,
In stating this preference, Brenda is referring to the health-related outcomes of the Health and Physical Education Learning Area Statement, as articulated in *The Curriculum Framework* (Western Australia Curriculum Council, 1998). In promoting a holistic understanding of health, the statement conveys a contemporary view of health education PCK (Shulman, 1986, 1987), knowledge framed by the interrelationship of the health-related outcomes: knowledge and understandings, interpersonal skills and self-management skills (Western Australia Curriculum Council, 2005). John commented that the unqualified teachers at his school would find this view difficult: “the way we teach now, the self-management skills and interpersonal skills, they probably struggle with that.” Brenda agreed, and thought that at her school: “Science, S and E [Society and Environment] and Maths [teachers] wouldn’t do a lot of collaborative group work or these skills-based approaches.”

The use of unqualified teachers frustrated Jessie. She believed that her school was ignoring contemporary health education pedagogy and reducing the curriculum to knowledge-based activities. She perceived that these teachers’ delivery of health education was a case of: “I’ll just go and do this worksheet.” Daniel was also frustrated, thinking it was a case of: “shut up, sit down and do a worksheet.” Kath agreed, saying that unqualified teachers at her school “fall back to things like worksheets and controlled types of activities–very little activity, and much more literacy-based health education.”

Didier conceded that unless time was spent making observations within the classroom, it was difficult to tell what unqualified teachers actually delivered. He said: “I couldn’t say in depth whether the teachers outside are using those sorts of skill methods; hopefully they are but if you’re teaching you can’t actually go and watch them.” In considering an alternative, Kath observed that qualified teachers delivered health education at her school. She said: “the teaching staff, if they are within your faculty, you tend to get a better result than when they are outside of your faculty.” Five other participants, who all reflected on their observations of qualified teachers delivering health education, supported this belief. The first said: “we are trying to teach kids to decision make and have self-management skills and interpersonal skills, and I think our learning area is focussed on that...and we can teach it” (Jessie). The second teacher said: “we actually do quite a bit of skills-based stuff…so for us it’s not difficult” (Claire). The third said: “in terms of skills and getting kids to do stuff there is a lot of that that goes on” (Fiona). The fourth teacher said: “decision-making, problem solving and that sort of stuff, that’s all pretty much embedded in what we teach” (Brenda). The
fifth spoke highly of his qualified staff (HPE teachers) and the ways that he perceived they taught health education. This was opposed to the ways in which he perceived the unqualified teachers, who were “outside” of his department. Of his qualified staff he said: “there are some very innovative things happening by the teachers in here” (Didier).

The delivery of health education by qualified teachers was imperative to the nine participants, as they were concerned about the affect timetabling unqualified teachers had on the pedagogical delivery of health education. Kath said: “they have a very different framework in mind of how to teach,” and Jessie said they “go off on their own little tangents.” Daniel, on reflection, said: “if you look on the news it is all about alcohol, it is all about drugs, it’s all about road accidents which are all health education topics.” He continued by advocating that health education “should be done by the correct people.” When prompted further, he referred to qualified HPE teachers. Jessie supported Daniel, and championed “timetabling teachers that are qualified” because, in her words, “we know what we are doing.” Jessie was specific in her response stating that she often used skills-based health education pedagogies, which utilised participatory activities such as “placemats” and “graffiti sheets.” She praised these activities as they “make them [students] think deeper.”

Eight of the teachers described how they used skills-based participatory activities in the delivery of health education in their classrooms. Didier recalled how he chose “group work”, “case scenarios”, “classroom discussions” and “group discussions” as opposed to pedagogies that delivered “just the facts.” Daniel referred to participatory activities that focussed on “decision-making skills”, “team-building” and “trust.” He described activities that worked toward solving problems such as “role-plays” but commented that the success of these activities depended on the maturity level of the students. Fay spoke of using authentic pedagogies in her classes. She said: “whether it is in a drug situation or a sexuality situation” students need to examine their options. In her classes the students looked at “the issues ... What are the consequences, positive and negative?” and explored “choice” by “evaluating it [choice].” Fay said that she even made her students look at issues from the point of view of what will happen “if this goes wrong, what do you do next time?”

Claire, in reflecting on her students, believed that using skills-based participatory activities was “not difficult.” She described how she used a lot of “cooperative learning strategies” in her classes. Brenda relayed how her school was currently focussed on the development of instructional strategies, with the school
principal organising professional development for all the teachers in this particular area. She said that in the midst of this professional learning she had thought:

I’ve done the placemat, I’ve done the fishbone, I’ve done this and that but that little collaborative activity in a group, I didn’t realise I could set it up like that to get those boys who don’t do a lot working a bit better.

Only one teacher conceded that she did not do enough skills-based pedagogies in her classes, but in reflecting on her approach commented, “there is a lot of that, that goes on … there is, but not a lot compared to other ways of delivery.” This teacher felt that due to the time constraints of teaching health education that she found it hard to fit everything into the one hour and as a result most of her delivery was “stand-up and discussions, videos, DVD’s, going on to the Internet to find information and group activities.” Without entering the classroom of the nine teachers this research is unable to confirm that the participants were utilising skills-based participatory pedagogies in the delivery of health education as they claimed, nor how often they were used.

**Issue Seven: Untrained teachers**

Four of the participants thought that some teachers whose main learning area was HPE lacked training in health education because they had completed a qualification without studying the pedagogies of health education. They referred to these HPE teachers as untrained teachers, and were concerned with the effect of them teaching health education at their school. Fay said: “in our school in particular, teachers who aren’t trained are teaching [health education].” The participants offered two reasons for this. They believed that university courses for HPE teachers had changed over time, and that some HPE teachers may have completed university degrees that were not specific to the teaching and learning of health education as a separate, discipline-based subject.

Fiona explained that health education pedagogy was no longer a compulsory component of some university HPE courses. She said: “it was a major in Physical and Health Education in our days. It’s changed now…health education is the minor.” Daniel confirmed Fiona’s statement, saying: “all of my electives [minor] that I could choose were in health education.” Daniel graduated from the same university as Fiona, and completed a course in which health education pedagogy was not compulsory but considered an elective and/or minor component to the HPE course. Fay had experienced something similar to Fiona, and recalled her course: “I did a diploma of teaching and we certainly did health education as it was part of our diploma of teaching. We had knowledge but we also had the pedagogy.” Claire also had a similar experience to Fiona and Fay but was more specific when she spoke about the university she had attended: “I went to ECU, back years ago, and we actually did quite a bit on health education. The
teacher’s colleges back then; we actually learnt how to teach health education.” Claire’s experience confirms that the ECU course has changed. ECU no longer includes health education pedagogy as a compulsory component of the HPE course, as it is now an elective component (A. Jones, personal communication, December 4, 2012). This is unlike the course Claire took “years ago.”

Reason two was also explained by Claire: “I’ve actually had a few staff from UWA where they’ve done a science degree or so forth and...some of them are really poor at teaching health education.” She continued to argue how the choice of a degree not specific to HPE teaching and learning affected the delivery of contemporary health education curriculum in the classroom. She said: “a lot of [the contemporary health education curriculum] is doing group work and discussions and they don’t feel in control of that, so it is easier to do chalk and talk.” Fay agreed, saying that teacher training was “a bugbear for a lot of us, particularly because we are getting graduates come out who don’t have a background in health education.” She continued:

A lot of them come out with a degree in human movement but not health. They don’t have the work at university to help them [teach health education]. If we could ensure that happened then we would be a long way down the track to improving [health education].

John espoused the benefit of a university course with compulsory health education pedagogy:

I’ve never felt that I haven’t been on top of the content, the strategies or the pedagogy. I feel I’ve been lucky in that regard and it has enabled me to be fairly confident in the way I have conducted classes.

Fay added her recommendation for schools that use what she thought were untrained teachers: “it’s about up-skilling the staff.” She also conceded that up-skilling was “not always easy” and that some HPE teachers who she believed to be untrained did not value professional development in health education. She said that when required to complete professional development, some untrained HPE teachers “will go under sufferance because they are made to…but trying to get them to go is like pulling teeth.”

John said that health education should “be taught in schools by people who are trained.” Kath said: “I would love it to be taught by trained HPE teachers”, she reiterated her point by stating: “it is really important that it is taught well.” When asked why, she replied: “I think [health education] is enormously important as part of a young person’s life.” Conversely, Didier was strategic with his advice, saying: “what I’ve tried to do here is to get the administration to spread the health education classes over the week so that there is more chance of trained teachers in the PE department health education.”
The five universities in WA that prepare teachers for the HPE LA in schools were contacted in 2012 regarding their course offerings. Each of these universities shared information with regard to course structure, unit outlines and student completion of units that were centred in the training of health education pedagogies. One of the five universities explained that students could complete a qualification in HPE without having gained training in health education pedagogies. The four remaining universities reported and demonstrated through unit outlines that they were providing students with training in health education pedagogies as part of the HPE qualification. The information offered by one of the four remaining universities was contradicted by four of the research participants who reported that this university may produce students who had not gained training in health education pedagogies. These participants did not favour having students from this university for student practicums.

Issue Eight: Teachers feeling uncomfortable and/or refusing to deliver health education curriculum

This research recognises that the perceived effect that untrained and unqualified teachers have on students when delivering the health education curriculum warrants further investigation, so that such an investigation moves analysis from opinion to observation and facts. Six participants claimed that untrained and/or unqualified teachers affected the delivery of health education when they refuse to deliver the curriculum. Jessie reported that teachers at her school “call us to run their classes.” Claire reported: “we had a music teacher last year that [sic] basically refused to do anything.” John reported, “generalists or teachers who are non-health trained are reluctant to teach health education.” When asked why the unqualified and untrained teachers were reluctant, John opined: “because of the nature of the content.”

Five participants reported incidents of untrained and unqualified teachers feeling uncomfortable delivering aspects of the curriculum. Didier said that health education “pushes the boundaries.” Daniel said: “not everyone can stand up and talk about sex to teenagers or drugs to teenagers or puberty to teenagers.” Fay said:

In high schools you have to be careful who you get to teach the material. If you get people who aren’t comfortable talking about sexuality and why kids have sex at a young age, sexual abuse and that sort of stuff; if the teachers aren’t comfortable, [delivery of the curriculum] is not going to happen, and they are going to avoid that issue and that’s the sort of information that the kids need to be getting.

The nine participants felt that the lower secondary health education curriculum contained critical information essential to the health and well-being of young people. Jessie believed that years eight, nine and 10 contain really important content, including
“puberty and adolescence.” Claire said that the curriculum was “something the kids need to live their lives”, and that they could “probably do without a lot of other things but they can’t do without some of that knowledge.” Fay thought that lower secondary schooling was a time at which young people were “most at risk” of developing unhealthy behaviours, and Kath felt this was partly due to the age group’s access to and use of the Internet and technology. She argued that young people were “able to cite information” but lacked “the understandings underneath, especially in terms of levels of risk or potential harms of behaviours.” Kath said that she tried to “debunk some quite sophisticated or a little bit precocious knowledge, especially about sexuality issues.” Thus, some of the participants were prepared to “spoon feed” (Fay), “up-skill” (Fiona) and “support” (Kath) unqualified and untrained teachers who were delivering health education in their schools so that young people in these teachers’ classes received the curriculum in the manner they “deserved” (Kath).

Daniel conceded that delivering some aspects of the curriculum was not easy for everyone, and that “you’ve got to have a knack for it, or a passion for it, otherwise people just clam up.” He cautioned that “parents can’t even do that with their own kids”, so it was understandable why some teachers “just can’t do it.” Some participants were less sympathetic. Jessie thought that it was “good for the kids” when she was asked by other teachers to teach their health education classes at her school, but that it wasn’t “really fair…because [the teachers] don’t feel comfortable.” Claire was infuriated by a teacher at her school, and reported that she “wrote out every lesson for him and he still didn’t teach it.” Some participants were more understanding of these teachers, saying that they felt they were unsupported. Fiona recalled: “in regards to the staff that are dragged into teaching health at this school because things don’t fit on the grid line and staff who get allocated classes, really there is very little support.” She then remarked that at her school, the administration “gave an art teacher, who had done no health education whatsoever, that class just to fill her timetable up, with very little support. It was basically here you are, here is everything and off you go.”

The lack of support perceived to be afforded to unqualified teachers was opposed to the support the respondents perceived for themselves. Brenda said: “we are very supportive in the school among our small group of people.” John said: “within our group, our HPE staff, we get on, we are a collegial group.” Brenda disagreed with the overall perception that unqualified teachers were unsupported, saying: “sometimes when other staff outside our department are teaching health education, they can come to us and get assistance. So there is support there.” Jessie offered some advice, saying: “if
you are going to put teachers in an area, provide them with the professional development. Rather than, just go: here you go.” While this suggestion was a positive recommendation aimed at supporting unqualified teachers, the same participant said: “I don’t know if schools think it is worth the money to teach [unqualified teachers], when it’s just one period a week.”

**Summary of Theme Two**

The participants felt that unqualified and untrained teachers were a reality of the school context but that they could negatively affect the delivery of health education in their schools. They were concerned that these teachers were not delivering the curriculum in the manner intended because they lacked an understanding of contemporary health education pedagogy. The participants acknowledged that their perceptions were lacking evidence, as they had not entered the classrooms of unqualified and untrained teachers, however, they had experienced these teachers outright refusing to deliver some essential health education content.

The participants felt that unqualified and untrained teachers—who they believed were in favour of knowledge-based teaching and learning—were overlooking skill development. Kath remarked that the essence of contemporary health education pedagogy “supports student personal growth” by “developing the young person.” She argued that in health education, “young people need to be able to discuss their attitudes and feelings, beliefs and behaviours” because she viewed it critical “in terms of them sorting out where they sit in a lot of health issues.” She argued: “young people—they are still sorting out their own sense of identity. I think they need to share with other people their thoughts.” As a group, the nine participants believed that for this to occur, then the teachers delivering health content needed to be trained. Their belief was articulated by John, who suggested that “the obvious thing would be to keep all of the teaching with health specialists”, such as qualified and trained health education teachers. Although the participants favoured having qualified and trained teachers deliver health education they were unable to substantiate the affect of qualification and training in the classroom.

**Theme Three: The Representation of Health Education in WA**

**Issue Nine: Dissonance in the perceived value between health education and policies and practice**

The nine participants were united in their belief that discrete health education classes in schools are “one of the most important subjects” (Daniel). Claire believed that this is especially the case:
for some of the kids because they don’t know how to look after themselves. They don’t know how to eat correctly. They don’t know how to exercise correctly. They don’t know how to behave in relationships and, all of those things impact on us in society.

Fay said that a lot of this information “is parental stuff”, but that teachers often “don’t get the back-up from the parents.” She expressed frustration with the perceived dissonance between importance and action regarding the development of health knowledge and health skills in young people at her school. She believed there was a misplaced conception in her school of health education as a “fix it” for societal ills. Flippantly, Fay said: “whenever there is a problem in society: health education is going to fix it.” Daniel concurred with Fay’s frustration, proclaiming that whenever there is a health issue in society, “the Minister will come out and say ‘we’ve got to educate’ and then, there will be a nice little PR thing about we’ve got this [health education curriculum].” Daniel, when prompted to explain his frustration, replied: “it might be [fix it], but it is only one hour a week.”

The nine participants felt that the representation, recognition and value that health education was afforded by schools, and in their particular school, was not commensurate with the perceived importance of the subject to support and strengthen young people’s health. As such, they believed that the representation of health education in their schools affected delivery in the classroom. Fiona articulates this unified perception:

The money that has been thrown into health after people are ill is huge, and I believe that if the government really wanted to cut down costs in the hospital system, and that if they got more health [education] going in the school system, then that would reduce money spent.

Kath had a similar perception, saying:

Some of the issues that we are dealing with—like mental health, obesity, drug use—they are major issues in society, and if we reflected that in our education programmes then we might have a chance of making some difference because we can be proactive about these things.

Fiona and Claire referred to health education’s treatment as a “Mickey Mouse subject” in their school. Brenda reflected on schools, parents and students, saying: “I don’t know that [health education] is valued that highly across the state.” Daniel said: “is it valued then? I don’t think it is. If you are going to look at it logistically, there is one hour for health education and four hours for Science. That’s where it falls down.” John said: “[health education’s] never going to compete with Maths and English and so on because as far as the students are concerned, they are top priority.” Jessie said: “we have kids that do music and things and they are always taken out of [my] health
[class].” Didier said: “it’s always people out of their department teaching it. So that makes me think that it is not viewed as something important.” Fay said: “some of the old school HOLAs that are still around, there is a few of them, they may not think it is important.” Kath said: “I set up a health [education] committee…that committee hasn’t been valued by the school administration and is now defunct. I consider that to be a huge loss.” Claire said: “I got a parent that wrote a note this year to say that my son is not interested in health education so he doesn’t have to do it. I’m serious! When you get parents and that’s their attitude, you wonder.”

**Issue 10: Diminished focus on health education**

Seven participants believed that the current educational environment in WA had changed, and that this has affected health education in the classroom. Claire said: “in the 80s there was quite a big focus, when we first started teaching phys-ed, but I think it has sort of dropped off at the moment. So it is basically left up to the school to keep that focus.” Didier said: “in the past, I can remember having someone that you could refer to and who was leading health education in the Education Department [DOE]. What’s happened now and in recent years is that it has all come back on to the faculty.” John recalled a time when health coordinators in schools were financially rewarded, saying: “that doesn’t happen anymore.” Daniel believed that health education in schools had been put “on the back burner.” Claire reiterated this view, but was optimistic about a future in which health education reclaimed a greater focus in schools, saying:

I think overall there is not enough help given to health education and if DET [Department of Education and Training, the DOE’s former name] gets behind the programmes and everything, like they used to…I think it would make a bit of a difference.

Fiona captured the essence of theme three when she stated that health education “doesn’t appear to be going anywhere in terms of the subject itself.” She also captured the participants’ view that health education was stagnant, the curriculum was somewhat out of date and that this affected its delivery in the classroom. Fiona argued: “the content of health education is a little bit out of date in terms of what is the priority to teach.” She continued by identifying an impact: “the influence of technology on young people these days is not being acknowledged.” In fact, Fiona believed that a revamped and contemporary curriculum was needed to support the health and well-being of young people, and she suggested that the existing curriculum did not support this, saying: “professionally, it [the health education curriculum] really needs an overhaul.”

When asked to explain their views of the curriculum, some participants recalled similar concerns in the past. Claire said: “20 years ago we got the health education
books [curriculum] from the state government, which we’ve still got on our files, the Red Syllabus. But, they’ve not been updated. Nothing has been updated or kept up to date.” Didier said:

When the K-10 syllabus was written it was a very useful document. It had a lot of resources in it; however, what has happened over the years, as the years have gone on, when you quote road traffic accidents, you can’t use those resources because it refers to 1989.

Didier was optimistic about future curriculum perspectives, saying: “it would be terrific having a resource [curriculum] that can be used in this new millennium of 2010–2020.” Conversely, Claire pointed out health issues in the community that she thought the curriculum had failed to address: “kid’s obesity has skyrocketed and that is a HPE process, but the government [in developing a new curriculum] hasn’t focussed on that.”

Fiona identified specific content that she thought the curriculum neglected: “there is not very much about cyber-safety in health education and keeping yourself safe online in terms of bullying, et cetera.” Kath agreed: “cyber-bullying is the biggest issue at the moment.” She continued, saying that health education is “one of the few subjects where kids get to examine who they are as young people.” She pointed out that this was dependent on young people being “the centre of their learning”, and she was unsure of the extent to which young people were represented by the existing curriculum. Didier offered a suggestion: “it would be a wonderful thing if someone, somewhere, could get hold of that resource [the Red Syllabus] or create new ones and get an upgraded version of them.” He continued: “Is it going to happen [an updated curriculum]? Probably not, because what we are going to get is a national curriculum.”

Only three participants mentioned the impending Australian Curriculum for HPE in 2014 and beyond. Kath admitted: “national curriculum—I’m unsure where it is going to take us. I don’t feel really well-informed about the direction which it is heading for health education.” Claire said: “I don’t know what will happen with national curriculum.” Didier, despite being aware that some secondary schools in WA were allocated the role of mentor for the Australian Curriculum, could only comment: “we’ll stand by and see what comes of all that, the rollout of the Australian health curriculum.”

Seven of the teachers’ demonstrated agency to improve their delivery of health education by describing the ways in which they updated or resourced the health education program at their particular school. Kath thought it was her responsibility to “keep abreast of information and keep up with latest resources that are out there.” Brenda commented that at her school health education “evolves with things that are changing. We change the topics and we follow what is going on in the community and
society.” John commented how the staff at his school took matters into their own hands. He said: “the staff at this school have all been through different courses so they are fairly up to date. Whether it is ‘Mindmatters’ or ‘Keys for Life’ or what ever is appropriate.” Didier reported:

In the ‘West Australian’ there is a health section that takes place, I think it is on a Wednesday. There is some really good information in there about health and we use that information in our classes from time to time when it is appropriate and when it fits.

Conversely, two teachers commented that the health education programs at their particular schools needed updating but neither teacher offered ways in which to improve the programs.

**Issue 11: Reliance on health education champions**

Two of the participants felt that their school’s administrative team, parents and students valued health education. Didier said: “in this school, health education is highly regarded”, and Brenda said: “the principal is supportive of having health education. She values it.” However, most participants attributed the valuing of health education in their schools to the significant input of particular teachers or champions of health education. John said: “you’ve got lots and lots of good stuff happening in health [education classes in my school], mainly because of the motivated, interested, dedicated individuals.” Didier said: “the teaching of health education in the school I’m in at the moment has a high profile because of past people who were here, who set it up pretty well.”

Some participants did not believe that the valuing of health education was attributed to any organisation external to their school, including the DOE. Claire said: “DET [DOE] doesn’t do a lot of health education and everyone has been left to their own devices.” Fiona reiterated this, saying: “it’s proactive teachers in the school…as individuals.” Kath substantiated the positive effect of health education champions by referring to her own experience:

I’ve spent, at this school, time raising [health education’s] status and that’s what has made the difference. Once people realised how serious I was about [health education] being a very important subject, then it sort of became its own momentum. So it is well established in the school here.

Six participants suggested that the lack of curriculum development in their school was indicative of the overall lack of support that HPE received from the DOE and the state government. Kath said: “I see a lack of advocacy for HPE at the highest levels.” Brenda said: “support is internal for us, there is not a lot that comes from outside.” Claire said: “as for assistance, I would say we’ve had zero from the state
government.” Fiona said: “the biggest thing for me in regards to my opinion on health education in schools is that I’m disappointed in the government.” This teacher viewed the lack of support as a government strategy for “saving money” (Fiona), and the other teachers agreed, believing it was an example of fiscal restraint.

The fact that the participants felt that the good intentions of a few people, or the actions of champions of health education, drove health education in their schools to a large degree has already been mentioned. Fiona supported this belief, saying: “really the only support for health education teachers are from the health coordinators in the school.” Jessie agreed, saying: “I’m lucky enough to have [name of health coordinator removed], who is so educated in health and has supported me.” Brenda was also complimentary, saying: “we are very lucky to have a health coordinator…she is really good.” Conversely, Didier criticised a system of education that relied too heavily on champions and did not provide direction from the top. He said: “we used to have a Health Education Coordinator, but as things have tightened up and the timetable has gotten more complex, it has come back to the Head of Department [HOLA].” John agreed, saying that the health coordinator in his school was “so dedicated.” He stressed that her dedication to the subject had never been rewarded, recognised or acknowledged in either “time or money” and that that was disappointing.

**Issue 12: A focus on physical education**

Four participants attributed the poor representation of health education in their schools to the perceived prioritisation of physical education across the state, as a part of the HPE LA. Claire perceived that “the view within the system of education is that it is phys-ed [then] health ed.” Brenda said: “I would say [health education] is an addition to PE.” Daniel said that the representation of health education was “lower than PE.” Kath, when referring to the HPE budget at her school, justified her perception of health education’s poor representation by recalling that the health education budget had “been cut.” This cut occurred while the physical education budget had been “rejigged.” Kath viewed the “rejigging” as a consequence of the HPE LA prioritising physical education over health education. When asked to comment further, she replied: “it is historical that PE has been more dominant of the two.”

**Issue 13: Health Studies courses**

Regarding curriculum developments, five of the participants viewed the introduction of years 11 and 12 courses for Health Studies, released in 2009, as a positive move for health education in WA. Two of them believed that Health Studies could affect the representation of health education in schools. Kath said: “I think if
you’ve got upper-school health education or Health Studies in the school it helps. It seems to me now that we’re looking at pathways from year eight through to year 12. So if it is established in upper-school it seems to have more status in the school.” Fiona was not so certain:

the only difference is that Health Studies has come on board in upper-school for those kids who are interested in health education; they are now able to take it on in upper-school. That’s about the only thing that has changed.

**Summary of Theme Three**

From the data collected from question seven of the interview, the nine participants were united in the belief that health education is viewed poorly across the state, but they offered conflicting perceptions for this low status. Generally, they perceived the low status to be a complex issue. When asked how the representation could be improved, the nine participants were similarly conflicted. Jessie suggested: “I think we need to start small, within your school.” Fiona suggested: “I think it should be more specialised subject, a stand-alone subject.” Daniel suggested: “three things: teachers in the area, passionate teachers and two hours a week.” Claire suggested: “I think the government should be putting out more information to parents—whether it is through the paper or TV advertisements and on the Internet—about the importance of health education.” Brenda suggested: “prompting staff to put more time and effort into organising activities and not just sitting there completing the book.” Kath suggested: “committed time, just like we have for physical activity.” John stated: “I think maybe that it needs promotion, maybe a newsletter, a lot more information going to parents.” Didier stated: “I really think that there is an opportunity for universities to get involved.”

Of all the participants, Fiona spoke the most about curriculum issues affecting the delivery of health education. In responding to question one of the interview, she stated:

I believe the government isn’t investing enough in health education at the secondary level because we teach in classes to kids that prevention is better than cure but they are not proactive on taking this on board in terms of the curriculum.

She continued:

It is quite disappointing to see the same thing being churned out year after year and nothing new being developed. So that’s disappointing. And the content, some of it is out of date now, and not so relevant now, and there are more relevant issues that should be taking priority in the syllabus.
However, as a group the nine participants’ suggestions for improvement related to common themes that were emerging from the analysis. Fay articulated how she perceived these themes to be connected by returning to the issue that the analysis identified as the most important theme: “timetabling issues are important in raising the status.” Fay stressed how schools needed to prioritise the timetabling of health education, and that when it was timetabled appropriately, it could be delivered in the manner intended. This, she believes, will lead to an improved status for health education.

Finally, irrespective of status and representation, the nine participants were united in their perception of the importance of the subject to the health and well-being of young people. Claire reflected participants’ beliefs and pondered the effect of poor representation, saying:

I think with all the things that are happening and all the problems in society—alcohol, drugs, relationship breakdowns—they are all related to health education. It is really a poor part of the whole education process and that’s how it has been treated.

**Theme Four: Resources and Professional Development for Health Education**

**Issue 14: Resources to support health education content delivery**

All but one of the participants was complimentary about the resources available to assist teachers with the delivery of health education. This teacher believed that what was needed “to better teach health education” was “resources that are current and up to date” (Jessie). She believed that “a lot of [resources] aren’t really relevant to some of the kids…they aren’t really realistic so it does make it hard to use them effectively and for our students to get anything out of them.” The other participants disagreed. Daniel said: “I am always impressed in health education with the amount of resources and the teacher friendly resources that is [sic] out there.” Fay said: “there is some great new stuff out there.” John said: “as a teacher of health education, I think that there are lots of really good resources out there now. Packages, whatever you like to call them.” Jessie was much younger than the other participants, so her age may have contributed to her differing opinions.

Daniel who suggested that good resources positively affect the delivery of health education in the classroom best represented the participants’ majority view of teaching resources. He said:

I think what you get is good resources. If you are fresh, starting out, the drug resilience packs are there, the “Keys for Life” [SDERA], the
“Growing and Developing Healthy Relationships”, the resources are there. It is just a matter of you putting a programme together.

John said:

Whether it is from the drug council, family planning, or the AIDS council, there are lots of really good student-centred packages available now. So as a classroom teacher, I feel that I’ve got more than enough information and strategies to run an effective programme in the classroom.

Fay also explained the affect: “packages that are created by outside agencies [other than the DOE] help us to teach health education because they provide us with resources, and when you are time-poor, resources actually help you.” Didier felt that the resources available to health education teachers were good, but he added that the teaching of health education could benefit from a coordinated approach to the development of new resources. He suggested that “a centrally based thing would be really good” (Didier).

When asked to expand, he replied:

I think we have the [DOE] or Cancer Foundation moving at different levels. A coordinated approach would be really good, even if it came from a university like Curtin or Edith Cowan, where there was a central focus for reference.

**Issue 15: Professional development**

In addition to resources, the participants believed that professional development positively affected the delivery of health education in their classrooms. Brenda recalled how professional development had affected her teaching, saying: “I am far more equipped to be able to teach [health education], far more equipped. I don’t think I would have been able to teach it as well if I hadn’t have done [professional development].”

Despite this, five participants felt that attending professional development was not always easy. Didier said: “ongoing professional development is really essential…being able to get all the staff to get to them is really difficult.” Claire said: “the funding cuts in state school means that a lot of our professional development days are taken up with other things.” Fay said: “there is stuff around, it is just finding the time to get it.” Fiona said: “in terms of professional development, I’ve hardly done any.”

In reviewing professional development, seven participants valued the role of SDERA (2014) in preparing health education teachers in WA. Claire said: “probably the only assistance we get are from SDERA.” Brenda said: “a big chunk of our stuff comes from SDERA.” Fay said: “SDERA, they actually model the strategies and you get a chance to do the activities as though you were a student…that sort of professional development is great for teachers.” Jessie said: “I’ve done SDERA and all that, so we can implement [health education].” Kath said: “SDERA…I think their professional
development is wonderful.” Didier said: “SDERA, is a really good voice of health education in the state.”

Daniel pointed out that there is no cost to schools for teachers undertaking SDERA professional development, as all costs are paid by SDERA. He noted: “the great thing about SDERA is that they pay for your relief. The reliefs are paid so that’s always been a positive.” Didier explained: “there is a cost of teacher relief which is getting up to $500 [per day, as of] next year. The teachers who do the relief don’t get that but that is what it costs the school.” Didier admitted that although SDERA professional development was effectively free, he had not participated. Fay was frustrated with some of the teachers at her school, who had not undertaken any SDERA professional development although it was free, saying: “there is about four or five teachers down there that haven’t done any of the SDERA professional development and that’s pretty basic stuff and it’s because they don’t see it as being important.” Claire concurred: “I think generally my staff needs a bit more professional development.”

**Summary of Theme Four**

The nine participants felt that although there were good resources and options for professional development, preparation for teaching health education in their school was largely self-initiated. Fiona said: “in terms of preparation it is really personal interest and professional reading that you pursue under your own steam.” Kath said: “I read widely and gather resources from all sorts of places.” Fay said: “I read a fair bit…bring them in and use them as resources.” Didier said: “it is really up to your own devices…a lot of it is self-initiated.” Daniel said: “I try to up-skill myself.” Brenda said: “it is all self-initiated.” John explained his concern: “I think it is important that the teachers continue to get first-rate professional development so that they do a good job and that kids go home and talk to their parents.”

**Chapter summary and concluding comments**

Throughout the interviews the nine participants often returned to two issues that they believed affected the timetabled delivery of health education in their lower secondary government schools. The first issue for the participants concerned the use of out-of-field teachers (McConney & Price, 2009) who were timetabled to deliver health education. John encapsulated their concern, referring to this practice as “tragic.” John’s comments led into the second issue, the timetabling of qualified and trained teachers to deliver health education.

The nine participants felt that out-of-field teachers affected what was delivered in the classroom, as they were often unqualified and untrained in the PCK of health
education (Shulman, 1987). Fiona provided an example of how out-of-field teachers were used in the participants’ schools, saying: “staff often are pulled in, I know it happens at this school, from other teaching areas with no physical or health education teaching background.” Didier provided an example of how out-of-field teachers were used at other schools, saying: “in going to [HOLA] meetings on a regional basis it would seem that health education is spread outside the faculty a lot more and is taken by people who may not necessarily have health education training.”

The nine participants felt that the timetabling of qualified and trained teachers had the greatest effect on the pedagogical delivery of health education at their schools. However, they conceded that timetabling was only one part of a system of health education that required change. They considered the problem difficult to identify, as the use of out-of-field teachers was dependent on too many variables, including schools’ administrative teams, school priorities, HPE LA priorities, the 25th period, the CAR policy, a crowded curriculum, the perceived low status of health education, a strong focus on physical education, too much reliance on health education champions, an outdated curriculum and a lack of curriculum support from the DOE.

In summation, the nine participants felt that health education was placed in schools for the benefit of young people, and that the development of skills was imperative to their health and well-being. They felt that there was much that could be addressed within their government schools to ensure that health education was delivered in the manner intended and as described in The K-10 Syllabus for HPE. However, the majority of the participants’ suggestions focussed on timetabling teachers who they perceived could prioritise skill development as the focus of their pedagogical approach to learning in the health contexts. Fay summarised the collective belief of the nine participants by stressing: “[make] sure that the teachers are appropriately trained and that you have appropriately qualified staff teaching it.” Despite repeatedly demanding for qualified and trained teachers to deliver health education, the nine participants could not adequately assess what was happening in the classrooms of the teachers who they perceived as not prioritising skills in the delivery of health education. The nine participants admitted, although their comments about their perceptions of unqualified and untrained teachers were based on what these teachers had told them, they were not based on what they had observed. Thus, without entering the classroom of unqualified and untrained teachers and observing classroom practices and pedagogical choices, the perceptions of the nine participants were conjecture and not fact.
Chapter 6: Discussion of Research Insights: The Mismatch

The literature review identified quantity and quality as criteria for health education in schools to support healthy living (Centers for Disease Control and Prevention, 2013; Kirby et al., 1994; Nation et al., 2003; Ryan et al., 2012; Shilton et al., 1995). This chapter quantifies and qualifies the representation of health education in some lower secondary government schools in WA, based on three contextual insights developed from the research data. This chapter explores the contribution of these insights to the current body of knowledge regarding health education in Australian schools and questions what we do and what we could do regarding the delivery of health education in lower secondary government schools in WA.

This chapter begins with an overview of the research questions by briefly presenting the research insights and how they contribute to an understanding of the research context. These insights are then explored independently and in greater detail as a response to each research question.

**Overview of the Research Questions and Research Insights**

The first research question sought to quantify how health education was timetabled in lower secondary government schools in WA. The quantitative data shows that health education was timetabled as a separate, discipline-based subject in most of the 49 lower secondary government schools studied. The second research question aimed to qualify who delivered health education in these schools. The quantitative data revealed that the teachers who responded, and who were timetabled to deliver health education classes held four combinations of teacher qualifications and training. These combinations of qualifications and training were: qualified and trained, qualified and untrained, unqualified and trained, and unqualified and untrained. The quantitative data also showed that qualified and trained HPE teachers delivered most of the health education in the schools studied, however, it also revealed the extent to which unqualified and untrained teachers were delivering health education. The third research question intended to explore the teachers’ preferred pedagogical approach to delivering health education and identified skills-based pedagogies as the preferred approach. However, in answering the third research question the combined qualitative and quantitative research data richly described the complexities of the research context, which the participants’ perceived as negatively affecting the delivery of health education as a skills-based subject in their schools.
Insight One: Capacity to Support and Strengthen Health Citizenry

In the WA lower secondary government schools studied, the HPE LA was afforded capacity to support and strengthen the health citizenry of young Western Australians through the provision of HPE LA curriculum time. Analysis of the quantitative research data shows that health education was timetabled as a separate, discipline-based subject for, on average, one hour per week, whilst physical education was timetabled for two hours per week. This contextual insight disputes the perception articulated by the WA media that health education is not taught in WA schools (Daube, 2011; Dimitrijevich, 2011; O’Leary, 2010, 2011b, 2012a).

Although this insight demonstrates that there was provision—through the allocation of HPE LA curriculum time—to support health citizenry of young Western Australians, this insight of the WA context does not qualify if that capacity was realised. This research did not access the classrooms of the teacher participants and as such this discussion centres on the provision of HPE LA curriculum time. The research data does not allow for a discussion of the achievement of the educational outcomes of the HPE LA in the schools studied. Despite this limitation, this research insight is useful to further the understanding of the development of the HPE LA in Australian schools as it quantifies the delivery of health education in some lower secondary government schools in WA.

Whilst there was commonality in the provision of health education across the schools studied, there was variation between the schools in the amount of curriculum time allocated to health education. This variation—between the schools—exposes the possibility of a contravention of the explicit goal of ‘equity and excellence’ in the delivery of health education, as outlined in the Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council for Education, 2008). Variation in the learning experiences in the HPE LA the schools promote does not reflect equity or excellence in learning opportunities available to WA students. This contextual insight, which highlights inequity in the allocation of curriculum time in some WA schools supports previous research in WA (Shilton et al., 1995), Australia (Kirk & Gray, 1990; Rowling et al., 1998) and the US (Allensworth, 1993; Bartlett, 1981; Mayer et al., 2011) that also reported variation in the number of minutes allocated to health education between schools.

Unlike in the earlier WA based study by Shilton et al (1995), in which the inequity between schools in the curriculum time allocated to health education is unexplained, the inequity identified in this research can be attributed to decisions about
curriculum time being decentralised from the DOE to individual schools (WA DET, 2007a). The HPE LA Syllabus Guide advises that decisions about HPE LA time “should be influenced by student achievement data, indicating students’ learning needs in the context of the school” (WA DET, 2007a, pp. 5–3). It is unclear how WA schools relate student achievement data to HPE LA needs or even, health needs in the context of the school, as the syllabus guide does not advise how schools are to achieve this decision. However, in effect, this syllabus directive allows schools the autonomy to allocate curriculum time to health education timetabled as a separate, discipline-based subject, and this may account for the variance through contextual differences between WA schools (as shown in Figure 4.4, Chapter Four).

The Shilton et al. (1995) research reported that curriculum time allocated to school health education had declined in WA schools between 1987 and 1993, from 82 to 76.2 minutes per week. Since Shilton et al. (1995) and excluding this research, no other research has collected data in WA on the curriculum time allocated to the timetabled delivery of health education as a separate, discipline-based subject of the HPE LA. Figure 6.1 shows similarities between the Shilton et al.’s (1995) research and this research. However, Figure 6.1 also highlights how the research differs: health education curriculum time has continued to decline compared to the growth in physical education curriculum time. This is a trend unreported by Shilton et al. (1995).

![Figure 6.1](image)

*Figure 6.1. Average number of minutes per week allocated to health education and physical education in lower secondary government schools in WA, 1987–2011/12 (adapted from Shilton et al., 1995, p. 25).*
More specifically, Shilton et al. (1995) reported that in 1993 the Ed Dept documented the appropriate curriculum time for physical education as 120 minutes per week, with government schools, on average, allocating 114.4 minutes per week to physical education. This documented curriculum time reflected physical education’s’ positioning at that time as an independent component (subject) belonging to The Unit Curriculum (EDWA, 1986e). Such documentation for the HPE LA curriculum time no longer exists in WA. However, the 120 minutes (shown in Figure 6.1) may be attributed to some schools accommodating the CAR policy’s two-hour mandate of physical activity for government school students through the delivery of physical education (WA DOE, 2010; WA DET, 2007a). Figure 6.1 shows that—despite moving from an independent component (subject) belonging to The Unit Curriculum (EDWA, 1986e) to the position of an integrated discipline-based subject belonging to the HPE LA with The Curriculum Framework (Western Australia. Curriculum Council, 1998)—the curriculum time allocated to physical education has grown since 1993.

Figure 6.1 also shows inequity in the division and/or percentage of curriculum time allocated to the teaching and learning of timetabled health education (one third of HPE curriculum time) to that of timetabled physical education (two thirds of HPE curriculum time). This unequal division of HPE LA curriculum time is also without policy as there is no directive in the syllabus guide or any other educational policy document that accounts for this particular division. The mandate outlined in the CAR policy refers to physical activity and not physical education (WA DOE, 2010), and allows for other opportunities outside the HPE LA curriculum time for the mandate to be fulfilled. The teachers who participated in this research indicated that their schools use physical education as the natural place to implement the CAR policy, however, they did not offer ways in which their schools could fulfil the CAR Policy outside of HPE.

The participants were concerned that in accounting for the CAR Policy through physical education, their schools relegated health education to second place within the three hours of curriculum time allocated to the HPE LA. They were concerned that the unequal division, irrespective of the total amount of HPE LA curriculum time assigned to health education, heightened the possibility of inequities in the representation of HPE curriculum content. However, without examining the educational outcomes of the HPE LA that were achieved through physical education, this research is unable to confirm that some of the educational outcomes—commonly achieved through learning in the health contexts—were overlooked.
With specific regard to the percentage of HPE LA curriculum time attributed to health education, this research found that this percentage had decreased since first reported by Shilton et al. in 1995. This decrease in time is specific knowledge undocumented in any other Australian research, and highlights the effect of the development of the HPE LA in WA. In 1993, the combined curriculum time attributed to physical education and health education in WA was 190.6 minutes per week (Shilton et al., 1995). Although that time was not specifically attributed to the HPE LA, it was allocated to the two subjects, which at the time represented the current construction of the HPE LA. The time allocated in 1993 equated to 60 per cent of the time attributed to physical education, and 40 per cent attributed to health education. This research has found that the current division in WA lower secondary government schools is two thirds to one third. That is, 67 per cent of the HPE LA curriculum time is attributed to physical education, and 33 per cent to health education. The decline of HPE LA curriculum time—which this research attributes to health education—is a trend that was undocumented by Shilton et al. (1995).

Whilst this research has developed specific knowledge about the allocation of HPE LA curriculum time in some WA government schools, this knowledge contributes to the understanding of contested time associated with the HPE LA in Australia (Harrison & Leahy, 2006). This research contributes knowledge of the ways in which the HPE LA is structured and designed in WA, and how some schools may promote or marginalise the subjects that represent the HPE LA. This insight supports Lohrmann (2011), who reported similar evidence of “the ‘establishment’ [schools’] prejudices and biases against health [education]” (p. 260) in US schools. It supports Seffrin (1990), who also found that the gap between best practice and common practice in US health education, including the allocation of curriculum time and preferred curriculum time, was wider than in any other learning area.

Exposing the possibility of prejudices and biases functioning in government schools in WA raises further concern about the implications for health education with the proposed implementation of the Australian Curriculum for Health and Physical Education (AC: HPE) in 2014 and beyond. The notional time, as outlined in the Shape of the Australian Curriculum: Health and Physical Education, is 80 hours of curriculum time for the HPE LA per year (ACARA, 2012, p. 10). The ACARA notional time is currently the amount of time subsumed in physical activity by physical education in WA, as a possible consequence of the CAR policy (WA DOE, 2010). The potential effect of the implementation of the AC: HPE in WA is concerning, as research suggests
that 40 to 50 hours of curriculum time per year are needed in health education to elicit or effect behaviour change (Allensworth, 1993; Meeks et al., 2007; Nation et al., 2003; SCHWA, 1997). The minimum curriculum time advocated by research for health education is currently the maximum time allocated to timetabled health education as a separate, discipline-based subject in WA. Whilst it may be true that health education is part of the HPE LA in WA, the data presented in this research suggests that the future for health education in some WA government schools may be unclear.

By exploring Insight One: Capacity to Support and Strengthen Healthy Citizenry, this research has revealed disparities between the discipline-based subjects that represent the HPE LA in some WA government schools. It specifically identified inequities in the division of HPE LA curriculum time between physical education and health education, which may have contributed to a reduction of curriculum time that is allocated to health education (Shilton et al., 1995). This research suggests that health education’s current positioning in some WA government schools coincides with the structural development of the HPE LA in Australia (Western Australia. Curriculum Council, 1998).

Tinning (2004) ruminated on the unification of health education with physical education in Australian schools, and explored the complexities and implications of the HPE LA for universities and schools. He suggested that the HPE LA is a distinguishing characteristic of education in Australia and New Zealand and reported that in “the UK, USA and continental Europe, health education is separated from physical education” (p. 242). In reviewing other countries with similar education systems to Australia—such as New Zealand (Burrows & Wright, 2004; New Zealand Ministry of Education, 2007)—this research found that Canada was another country that integrates the two subjects as HPE (Ontario Ministry of Education, 2010). Other countries—including Singapore and Finland—present health education as an independent subject (Finnish National Board of Education, 2004; Singapore, 2007). The Swedish curriculum suggests that health education be combined with physical education in a learning area called “Physical Education and Health”, but examination of the curriculum content shows that this is the physical education curriculum, as “Health” refers specifically to the health benefits of physical activity (Skolverket, 2011).

As shown by the research data, the integration of HPE in some lower secondary government schools in WA is a union that has promoted physical education over health education with regard to the allocation of curriculum time. This insight may offer support to Tinning (2004), as he debated the amalgamation of two conspicuously
different subjects regarding “knowledge, identity and ways of thinking” (p. 241). This research found that ‘ways of thinking’ in some WA government schools has contributed to a reduced representation of health education, which in turn could affect the HPE LA’s capacity to support and strengthen the health citizenry of its students.

Additionally, it found the HPE LA partnership has, at best, been advantageous for physical education, and at worst, disadvantageous for health education, by reducing the allocation of curriculum time to the subject. This contextual understanding is in keeping with Sinkinson and Burrow (2011) who argued that in New Zealand, “the partnership [HPE] has, at best, been an uneasy one” (p. 54). Penney also considered the consequences of an integrated HPE but her work focussed on the idea of a PE subsumed by HPE (1998). Later (2010), she reconsidered what holds physical education and health education together as HPE, as she believed much can be learnt from such an examination. In reflecting on this scholarly advice and especially Penney’s early deliberations (1998), this research found that there has not been a discussion of an integrated HPE in the context of WA lower secondary government schools. In fact, in echoing Penney’s concerns this research has highlighted that in creating the new learning area of HPE in WA, the structure, identity and pedagogy of health education and physical education have been retained as discipline-based subjects. Thus, amid the discourse of integration, the contextual insight developed from this research shows that very little has changed in WA schools, except physical education has not been subsumed by HPE as considered by Penney, but health education.

In summary of the first insight and in response to the first research question, this research reports that health education was timetabled in the lower secondary government schools studied and afforded capacity—through the allocation of HPE LA curriculum time— to support and strengthen healthy citizenry in young people in WA. However, the insight developed from this research resonates with the concerns of scholars in Australia who reason that the timetabling of two separate, discipline-based subjects to represent HPE is not without issue (Kirk & Gray, 1990; Macdonald & Glover, 1997; Penney, 2010; Penney & Glover, 1998; Sinkinson & Burrows, 2011; Tinning, 2004). In the context of WA government schools, this research has shown that the design, structure and representation of the HPE LA are part of a complex issue, which marginalises health education and promotes physical education. This has been demonstrated through the reporting of an unequal division of HPE LA curriculum time, a decline in the curriculum time allocated to health education whilst there has been an increase in curriculum time allocated to physical education, and the declining
percentage of curriculum time allocated to health education. This organisational insight could explain how health education’s current representation has been enacted, legitimised and cemented by the educational policies, procedures and practices of WA government schools. This insight could further explain why health education currently appears to lack legitimacy with some schools and teachers, as exposed and considered by previous research in WA (Shilton et al., 1995) and reported by the participants in this research.

In concluding the first insight developed from this research, this chapter returns to Kirk and Gray (1990) who examined the effect of integrating health education and physical education before the HPE LA was mandated in Australia. In arguing against the integration of HPE, Kirk and Gray demonstrated the “ascendency and decline of school subjects over time” (1990, p. 71). They suggested a link between learning areas with integrated content and an inadequately prepared teaching force delivering the content. By exploring the second insight developed from the research data, this research may offer some support to Kirk and Gray who believed that integration was not in the best interest of either physical education or health education. This research now discusses the teachers who deliver health education in lower secondary government schools in WA as it continues to explore the mismatch between what we do and what we could do regarding the delivery of health education in lower secondary government schools in WA.

**Insight Two: An Idiosyncratic Delivery**

Analysis of the quantitative research data shows that there were four combinations of teacher qualifications and training, distinctive to the teachers timetabled to deliver health education in some WA lower secondary government schools (see Table 6.1). In brief, the combinations were:

- **Type one:** qualified and trained, constituting 53.3 per cent of participants;
- **Type two:** qualified and untrained, constituting 25.3 per cent of participants;
- **Type three:** unqualified and trained, constituting four per cent of participants;
- **Type four:** unqualified and untrained, constituting 17.3 per cent of participants.

This contextual insight fills a gap in previous research conducted in WA (McBride et al., 1995a; Shilton et al., 1995) as it provides criteria to evaluate the
deployment of teachers to health education timetabled as a separate, discipline-based subject in lower secondary government schools in WA. Previous research conducted in WA, did not quantify nor qualify the qualifications and training of the teachers delivering health education through research data (McBride et al., 1995a; Shilton et al., 1995).

Table 6.1

*Combinations of Teacher Qualifications and Training Distinct to Health Education Delivery.*

<table>
<thead>
<tr>
<th>Qualified in HPE</th>
<th>Trained in health-related pedagogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Type 1</td>
</tr>
<tr>
<td>Type 2</td>
<td>Type 3</td>
</tr>
<tr>
<td>Unqualified in HPE</td>
<td>Untrained in health-related pedagogy</td>
</tr>
<tr>
<td>Type 3</td>
<td>Type 2</td>
</tr>
<tr>
<td>Type 4</td>
<td>Type 4</td>
</tr>
</tbody>
</table>

The first type of teacher (type one) timetabled to deliver health education in the schools studied were what the research participants referred to as a qualified and trained HPE teacher. This description refers to teachers timetabled to deliver health education who had gained a qualification in the HPE LA with training in health education pedagogies. Half of teachers surveyed here were of this type.

The second type of teacher (type two) timetabled to deliver health education were what the research participants referred to as a qualified but untrained HPE LA teacher. This type of teacher was perceived to be qualified in the HPE LA but untrained in health education pedagogies. A possible example of the type two teachers could be a teacher who gained a degree in sports science or similar, then completed further study to qualify as a HPE LA teacher. More particularly, this teacher may have gained understandings of health contexts as a part of their under-graduate qualification but may not have gained understandings of health education pedagogies required to deliver health education in WA schools. Another possible example of why the type two teacher was viewed as a “bugbear” of the graduate teacher program in WA (Fay). This type of teacher was believed to have gained a qualification in the HPE LA but did not study health education pedagogies as a compulsory component of the under-graduate teacher qualification. The participants who were interviewed in this research did not favour having this type of pre-service teacher on practicum at their schools’ as they perceived
this type of pre-service teacher as unprepared to teach health education because they did not have the pedagogical understandings to teach health education as a skills-based subject. One quarter of all the surveyed teachers were of this type, even though the HPE LA was mandated in WA in the late 1990s and is no longer a new learning area in WA (Western Australia Curriculum Council, 1998).

The third type of teacher (type three) timetabled to deliver health education was referred to by the participants as unqualified but trained. These teachers were perceived to be unqualified in the HPE LA but trained in health education pedagogies or health-related pedagogies. A possible example of this type of teacher is one who may have completed a degree in the preparation of food and technology, and who, as a component of that degree, was trained in health-related pedagogies. Fewer than five per cent of the teachers surveyed were of this type.

The fourth type of teacher (type four) timetabled to deliver health education was referred to by the research participants as unqualified in the HPE LA and untrained in the pedagogies of health education. One fifth of the questionnaire respondents were reported as type four teachers. According to the review of literature, it is likely that this type of teacher is potentially the least effective of all four types of teachers timetabled to deliver health education because qualifications and training were identified as criteria to support the delivery of health education in schools (Allensworth, 1993; Beckett, 1990; Clarke, O’Sullivan & Barry, 2010; Ridge et al., 2002).

Overall, this research quantified that half of the teachers delivering health education in the lower secondary government schools studied were untrained to deliver health education. This includes a third of the qualified HPE LA teachers because they were reported to be qualified in HPE without having gained training in health education pedagogies. Despite this contextual insight, without observing the teaching and learning that occurred in the classrooms of any of the four types of teachers’, this research cannot qualify the affect of qualifications and training on the quality of the delivery of health education. However, it can suggest that within the context of health education, this idiosyncratic delivery may challenge the Melbourne Declaration on Educational Goals for Young Australians because it does not support the opportunity for “high-quality teaching” in health education (Ministerial Council for Education, 2008, p. 11). More particularly, when the educational outcomes of a learning area require teachers to deliver content through a specific pedagogy (skills-based) and that content is delivered by teachers who may not be trained to support that learning then the effect of the delivery is uncertain. This insight supports the review of literature as it ascertains that
excellence in health education in WA is somewhat dependent on the teachers timetabled to deliver the subject (Evans et al., 2011; Ministerial Council for Education, 2008). Further, this contextual insight of the teachers delivering health education highlights how government schools in WA could fall short in developing the knowledge, understanding and skills necessary to enhance healthy citizenry.

Within the context of health education and the schools studied, the insight of an idiosyncratic delivery brings into question the achievement of the Australian Professional Standards for Teachers (AITSL, 2011b) and contradicts the Australian Government’s quest for quality teaching (AITSL, 2011a; Commonwealth of Australia, 2014). Additionally, because schools and universities have a specific “responsibility to work together to support high-quality teaching and school leadership” such inconsistency between the teachers delivering health education has the potential to undermine the promotion of equity and excellence in educational outcomes for all young Australians (Ministerial Council for Education, 2008, p. 11). This insight also confirms a link between the timetabled delivery of health education in WA schools and perceived inadequacies in some university courses that prepare HPE LA teacher(s). This insight exposes the organisational ambivalence functioning in government schools in WA (McBride, Cameron, Midford, & James, 1995).

The idiosyncrasies of the teachers timetabled to deliver health education in the schools studied are confronting, especially as this research drew on a body of literature (Allensworth, 1993; Beckett, 1990; Clarke, O’Sullivan & Barry, 2010; Ridge et al., 2002) that “identified the classroom teacher as the most significant component of effective school health education” (Ryan et al., 2012, p. 3). This insight is problematic because the literature identified the most common barrier to effective school health education to be inadequately and poorly trained teachers (Begoray et al., 2009; Butler, 2001; Fetro, 2010; Mayer et al., 2011; Peterson et al., 2001). Furthermore, the effect of decontextualised and re-contextualised health education content when inadequate translations of PCK are subjected on young people is unknown (Evans et al., 2004, 2011; Nation et al., 2003; Tinning & Glasby, 2002).

The insight of an idiosyncratic delivery substantiates the suggestions of earlier research in WA that the delivery of health education by unqualified and untrained teachers was common across government schools. Shilton et al. (1995) reported, “fifty per cent of secondary respondents stated that less than one fifth of the school staff had appropriate training in health [education] and only 19 per cent of schools had most teachers appropriately trained” (p. 28). McBride et al. (1995a) reported, “an unfortunate
lack of adequate teacher training in health education and health promotion for teachers other than secondary-trained health education specialists [type one teacher]” (p. 13). The data developed from this research places into perspective the extent to which unqualified and untrained teachers were delivering health education in 2012, and how the preparation for some teachers could be improved. For example, McConney and Price (2009) reported that 46 per cent of teachers delivering IT were untrained or out-of-field, and that IT had the greatest incidence of these types of teachers in WA. However, this percentage is lower than the 47 per cent of unqualified and untrained teachers delivering health education found in this research.

The literature review revealed that the deployment of teachers to deliver health education curriculum is a global concern (Jourdan et al., 2008; Jourdan et al., 2010; Peterson et al., 2001; Ransdell, Grosshans & Trunnell, 2004), and as Kann et al. (2001) reported from the context of US schools, there is inconsistency in teacher qualifications and training in health education. Similarly, Begoray, Wharf-Higgins and MacDonald (2009) found teachers in Canada were delivering health education “without specific health education training” (p. 39), and Fetro (2010) argued that the performance of health education teachers in the US is questionable when two thirds are inadequately professionally prepared. While Paakkari et al. (2010) cited incidences of teachers of “home economics, biology, citizenship education and psychology delivering health education” (p. 917) in Finland; they considered the effect of these teachers. They considered it difficult to know whether they were delivering “all the critical aspects of teaching health education” (p. 917). Their and other researchers’ concerns are similar to those shared and voiced by the participants of this research, and are in keeping with their perception that out-of-field teachers are often insufficiently prepared to deliver health education content.

In support of the findings of other research, this research draws attention to the specific issues and problems and/or difficulties when teachers are inadequately trained and qualified to deliver health education (Cohall et al., 2007; Colquhoun, 1991; Harper, 2009; Meeks et al., 2007; St Leger, 2001). As Simpson and Freeman (2004) found in the United Kingdom, inadequately trained teachers return to a “traditionalist didactic” delivery mode, and this type of delivery is “better suited to a bygone age” (p. 341). Kirk and Gray (1990) questioned the effect of this type of delivery in Australian schools, and noted that untrained teachers focus on “merely transmitting health information” (p. 68). Broadbear and Keyser (2000), who are a lot more critical from the context of the US, call these teachers’ classroom contributions “anti-intellectual culture” and
“unimaginative didactic teaching” (p. 323). The participants in the research interviews referred to this type of delivery as “chalk and talk”, and they recalled stories of unqualified and untrained teachers (teacher types two, three and four) relying too heavily on worksheets to deliver health education content. They considered that unqualified and untrained teachers delivered health education content through knowledge-based activities, as opposed to developing knowledge, understandings and skills, as is outlined in *The Curriculum Framework* (Western Australia Curriculum Council, 1998).

Hallfors and Godette (2002) reported that the evidence-based curriculum preferred in US schools requires “teacher training for proper implementation” (p. 465), as they assimilated “quality problems” (p. 466) with a lack of teacher training. Nation et al. (2003) agreed, as they found that when teachers are untrained, “high-quality, research-based programs [curriculum resources] can produce disappointing results” (p. 454). Jourdan et al. (2008) developed a global perception, stating that the training of teachers is a “central factor linked to the quality of project implementation” (pp. 36–37). Sinkinson and Burrows (2011) from the context of New Zealand, in commenting on research conducted by Ennet et al. found that inadequately trained teachers are “barriers to adherence and contributors to program contamination” (cited in Sinkinson & Burrows, 2011, p. 64). This study’s participants concurred with these assessments. They reported similar concerns, referring to delivery issues with educational programmes in health education that require fidelity to be effective, and their concerns do not go unnoticed. In WA (Curtin University, 2011; McBride, Farringdon & Midford, 2002) and Australia (Cahill et al., 2014), research supports the participants’ claims that question the veracity of content delivered by unqualified and untrained teachers.

From the perspective of teacher training, Lynagh, Gilligan and Handley (2010) found that “community views of the role of the [health education teacher] have expanded in recent times, with Australian teachers often playing the role of trusted adult” (p. 5). They recommend that training teachers “cannot be overlooked, particularly as many teachers will not go on to receive any further training” (p. 7). The insight of this research support this assertion, as the participants reported difficulties encouraging other teachers to attend health education training and/or workshops. As Lynagh et al. (2010) explained, this was partly due to the “sensitive subject matters, as well as feeling comfortable and confident in teaching” (p. 7).

Previous research by Rowling et al. (1998) in Australia suggested that a teacher’s comfort level affects the content that they choose to deliver. They reported
that classroom content “tended to reflect the teachers’ area of ‘most expertise’”, and that this was at the expense of other important content (p. 48). This perception was also more recently reported by another Australian research team (McCuaig et al., 2012), who found that such teachers “stay within their own comfort zones” (p. 6), and in so doing, marginalise the students who need the information the most. The participants in the research interviews offered vignettes of unqualified and untrained teachers (types two, three and four) refusing to deliver aspects of the health education curriculum content. They stated that they felt frustrated by the requests of these teachers who additionally sought HPE staff in their particular school to deliver the content on their behalf.

McConney and Price (2009) suggest that from the context of out-of-field teaching in WA, there is a propensity for such teachers to experience stress when required to deliver content on which they have no qualifications or training. Despite accepting the limitations of their data, McConney and Price believed that out-of-field teaching could contribute to teacher attrition. They also perceived the use of out-of-field teachers as a distraction for school personnel; as such teachers were often required to provide extra support to out-of-field teachers. This was the case reported by Claire, who as a HOLA of HPE was required to provide health education lesson plans for a teacher teaching out-of-field. Claire expressed her frustration at this teacher’s refusal to deliver the health education content, even though she carefully prepared lessons for him.

In summary of the second insight and in response to the second research question, this research reports four combinations of teacher qualifications and training distinctive to the teachers timetabled to deliver health education in the schools studied. This is knowledge that might challenge the capacity of the HPE LA curriculum in these schools to support and strengthen the health citizenry of young Western Australians because the quality of curriculum delivery is undetermined. Resultantly, this research supports the argument for qualified and trained teachers to deliver health education because it found using qualified and trained teachers within the capacity of the structural systems functioning in lower secondary government schools in WA. However, with caution harnessed from the literature review—including that of Harrison and Leahy (2006)—this research acknowledges that it is difficult to resolve the issue of an idiosyncratic workforce in such a problematic arena as WA government schools. This research recognises that the use of unqualified and untrained teachers to deliver health education is part of a complex issue where timetabled health education was marginalised. More specifically, because health education was:
• integrated with a prioritised subject—physical education;
• placed within a decentralised system of lower secondary government school education; and
• overlooked by some university courses that prepare HPE LA teachers in WA and which may inadvertently proliferate a division within HPE.

Despite the limitations of the research data, the insight of an idiosyncratic delivery is useful to further the understanding of what we do and what we could do regarding the timetabled delivery of health education in lower secondary government schools in WA because the insight presents an unfavourable picture. This research now expands the discussion of the second insight by exploring the possibilities of an ideal delivery.

**Insight Three: An Ideal Delivery**

According to the research participants, ideal delivery of health education in lower secondary government schools in WA is by qualified and trained teachers of the HPE LA, who possess the motivation to teach, and who use skills-based participatory pedagogies. The reality is not ideal, as this research quantified that qualified and trained HPE LA teachers (type one) delivered health education in only half of the situations (53 per cent) researched, while untrained HPE LA teachers (type two) and out-of-field teachers (types three and four) delivered the remainder (47 per cent). Furthermore, the research participants reported incidences of type two, type three and type four teachers ignoring skills-based pedagogy when delivering health education and refusing to teach the subject’s important but controversial content. This view is consistent with the literature examined, which raised concerns about unqualified and untrained teachers delivering health education. The literature argued that these teachers often deviate from a preferred approach to incorrectly or poorly represent the content (Fetro, 2010; Paakkari, Tynjala, & Kannas, 2010; Peterson, Cooper, & Laird, 2001). More specifically, the literature argued that these teachers often overlook a skills-based approach in favour of a didactic delivery of health facts because they may feel more comfortable with this type of delivery. This method of teaching exists despite research stipulating that the delivery of facts and health information on its own is not enough to effect behavioural change (Beckett, 2006; Black, Furney, Graf, & Nolte, 2010; Kirby et al., 1994; Kolbe L, 2005; McCuaig, 2006).

Irrespective of the prevailing view amongst the participants, this research found that a skills-based participatory pedagogical approach was the preferred option for 99 per cent of the research participants, with 84 per cent of them stating that they often used a skills-based participatory pedagogical approach to deliver health education.
Additionally, the majority of the participants stated that they enjoyed delivering health education and considered themselves satisfied, competent and confident health education teachers. Rather than contradicting Insight Two, this third contextual insight demonstrates the critical importance of both insights by suggesting that in the context studied, teacher motivation was considered to be even more significant to the delivery of health education than qualifications and training because all of the untrained teachers reported delivering a skills-based approach to health education. Further, suggesting that teacher enjoyment affects the delivery of a skills-based participatory pedagogical approach in the classroom.

Most teachers who participated in this research viewed health education positively and enjoyed delivering it, with the majority believing that it should be delivered through programmes of teaching and learning that aim to develop all three learning outcomes: knowledge, understanding and skills (Western Australia Curriculum Council, 1998). More specifically, 99 per cent of participants viewed the skills attribute as the most important to delivering health education content (see Figure 4.7). This is a view broadly accepted as a framework to positively influence health (WHO, 2003), and a view that supports the holistic and sociocultural perspectives underpinning the HPE LA in Australian schools (Tinning & McCuaig, 2006).

This insight of an overwhelming favourable position of the research participants towards health education is significant considering that some were not afforded the right of choice in delivering health education (see Table 4.7, Chapter Four). Some of the participants were timetabled to deliver health education as a consequence of curriculum decision-making in their schools. Twelve teachers delivered year eight health education as a result of curriculum decision-making, six delivered year nine health education for the same reasons, and ten for year ten. Of the participants that did not choose to deliver health education, only three viewed the subject unfavourably, but these teachers still supported skills-based participatory pedagogies as a preferred pedagogical approach. Resultantly, the majority of participants enjoyed delivering health education and considered themselves satisfied, competent and confident health education teachers, irrespective of their qualifications and training. This is knowledge that was unreported in other research, suggesting that Insight Two and Insight Three together provide evidence that the overarching requirement needed for successful teaching of health education in the context studied was enjoyment, competence and confidence. However, this research acknowledges that this combination needs to be explored further so that its significance can be learnt, and a better representation of health education in WA.
In reviewing the literature, this research found that a large body of research concurs with the value afforded to a right of choice to teacher enjoyment of health education, specifically by teachers whose main learning area is HPE (Kirk & Gray, 1990; Macdonald & Glover, 1997; Marks, 2010; Rowling et al., 1998; Sinkinson & Burrows, 2011; Tinning & McCuaig, 2006). However, this research found that the body of knowledge that specifically speaks to teachers whose main learning area is other than HPE is limited. Paakari et al. (2010) from the context of Finland were the only other researchers to have explored this specific group of teachers. Other research reports teachers whose main learning area is not HPE delivering health education (Cohall et al., 2007; Kann et al., 2001), but does not confirm the assertion with data pertaining to teaching qualifications, training and/or learning areas.

Research about teacher choice over teaching health education by those teachers whose main learning area is HPE is significant (Kirk & Gray, 1990; Macdonald & Glover, 1997; Marks, 2010; Rowling et al., 1998; Sinkinson & Burrows, 2011; Tinning & Glasby, 2002; Tinning & McCuaig, 2006). Tinning (2004) is foremost in reporting on this aspect, finding that: “the mission of ‘making’ healthy citizens, and the nature of the HPE KLA has profound implications in particular for the teachers who previously had defined themselves as physical education (PE) teachers” (p. 242). The integrated approach of the HPE LA forces some teachers into “becoming someone they don’t want to become” (p. 244). This is because the health education component of HPE “represents a significant threat to their ontological security” (p. 250).

Morgan Pigg Jr (2009) elucidates Tinning’s suggestions, by reporting “personal philosophy begets professional philosophy” (p. 13). He credits a greater understanding of the application of personal philosophy in professional practise, as he believes it illuminates the production of a teacher’s pedagogy. In this research, the interview participants believed there was value in understanding and acknowledging the personal philosophy towards teaching health education of some HPE teachers in their schools. They believed it would enable greater understanding of these teachers’ enacted delivery of health education, and in particular, their pedagogical approach to content. Burrows and McCormack (2012) also value this insight, as they noted that understanding a teacher’s convictions generates greater understanding of that teacher’s teaching choices.

Tinning’s earlier research (2004) agrees with the insight of professional philosophy. Tinning theorised that traditional physical education was “underpinned by a positivistic ideology” (p. 246), and concluded, in later research, that this positioning is
adverse to the holistic and sociocultural philosophies that should underpin the preparation of contemporary HPE teachers (Tinning & McCuaig, 2006). In some respects, this research supports Tinning’s assertion, as the participants reported HPE teachers in their schools classifying themselves as ‘phys-edders’, not ‘health and phys-edders’. The interview participants even reported some phys-edders categorically refusing to teach the social aspects of a sociocultural HPE—health education.

Kirk and Gray (1990) cautioned over challenges with physical educators becoming “defacto health educators” before the HPE LA was mandated in Australia, because in their view, there was a “degree of antagonism to this arrangement” (p. 72). Sinkinson and Burrows (2011) suggest that complexities exist with this association because for “most teachers of H&PE [HPE], physical education remains the ‘first subject’” (p. 59). Paakkari et al. (2010) consider the issues arising from the development of a teacher’s professional identity, advising that there is a greater need for universities to explore “the central role of the self in knowledge construction” (p. 917). Evidently, Paakkari et al. (2010) support the development of an ‘HPE identity’ signified by Tinning, and would be sceptical of universities that promoted divisional and/or preferred discipline-based subject identities for HPE LA teachers. They would also consider significant the consistency of the reports of the interview participants.

The contribution of this knowledge of an HPE identity is interesting, as Tinning (2004), in his examination of HPE, appraised the contribution of a WA university for the preparation of its HPE teachers. He reported that the university was developing a more holistic sociocultural perspective to their HPE curriculum, as it was seeking ways to better align with the contemporary perspective of HPE that is attributed to an integrated learning area. He reported that this particular curriculum development was to counteract the existing university curriculum, which primarily focussed on a biomedical, biophysical and human movement, scientifically positioned delivery of physical education, that Burrows (2004) reported as standard for universities. Tinning was complimentary of this new development as, along with other scholars (Black et al., 2010; Kirk & Gray, 1990; Paakkari et al., 2010; Ryan et al., 2012) he considered the personal and professional identity of the teacher as an important consideration in the preparation of HPE teachers.

Tinning (2004) was referring to the same university that reported that health education was not a compulsory component in its preparation of HPE LA teachers. In fairness to this university, the participants in this research also reported experiences with other universities that they perceived to be inadequately preparing undergraduate
HPE LA students with a sociocultural perspective of HPE via the inclusion of compulsory health education pedagogy. However, the universities themselves did not substantiate the participants’ claims, as they reported delivery of compulsory health education pedagogy as part of their pre-service course.

In light of the disjuncture between the perceptions of the participants and the universities preparing HPE LA teachers in WA, a closer examination of the offerings of all WA universities is warranted. First, how is the university developing the sociocultural and critical perspective of the HPE LA and HPE pedagogy through its course offerings? Second, what are the specific course offerings contributing to the development of an HPE identity? Finally, of the university to which Tinning referred, has it changed its course to pre-service HPE teachers since 2004, and if so, why? There must be a profound reason why any university in WA or Australia that specifically prepares HPE LA teachers does not include health education pedagogy as a compulsory component. This information is worth sharing.

In returning to the second insight developed from this research, it is not surprising that there is also a call for universities to include health education pedagogy or health-related pedagogy in all generalist courses preparing teachers (Jourdan et al., 2010; Kann et al., 2001; Peterson et al., 2001; Rowling, 2009). Pragmatically, this is to ensure that all teachers—primary and secondary—are cognisant with health issues and are health literate, competent in demonstrating consistent, contextualised health messages and supportive of the practices and processes that promote lifelong health (Colquhoun, 1997; Harper, 2009; Marks, 2010; St Leger, 2001; St Leger et al., 2007). This call is supported by the findings of the Mission Australia Youth Survey (Mission Australia, 2012), which reports that one in two youth would turn to a teacher for health information. It is also supported by Cohall et al. (2007) who found, “sixty-three percent of teachers surveyed indicated that they had referred a student to the school-based clinic” (p. 348).

The call for universities to adequately prepare pre-service teachers with health-related knowledge and pedagogy is, as researchers rightly point out, because most teachers in the course of their career will encounter a student who is in a health crisis (Fetro, 2010; Paakkari et al., 2010). Couple this knowledge with the realisation that next to family, teachers are “among the most important influences in the lives of school-aged children 6–18 years” (Cohall et al., 2007, p. 345). Teachers, because of the institutional arrangement of the school day, have the opportunity to affect the lives of students and to enhance and facilitate these opportunities through both informal and formal means.
Moreover, this research demonstrates that the probability of teachers in lower secondary government schools in WA being timetabled to deliver health education at some point in their career is high. Thus, having an understanding and appreciation of the pedagogy of the subject through which the health-related content is delivered in WA schools would be advantageous to all teachers.

Although this research can confirm the qualifications and training of the research participants, without classroom access it cannot confirm the perception that some teachers delivering health education overlook the preferred pedagogies required to teach health education in WA schools. More specifically, without observing the pedagogical practices of type two, type three and type four teachers, this research cannot confirm that untrained and/or unqualified teachers of health education are not delivering health education as a skills-based subject. In fact, the combination of Insight Two and Insight Three suggests that further research is required to substantiate the effect of qualifications and training on the quality of the delivery of health education in the research context. Furthermore, as so many participants voiced the same perception, this research supports classroom observations, believing that the participants are warranted in stating that untrained and unqualified teachers rely heavily on a knowledge-focussed pedagogical approach to health education. Additionally, as this research was framed with a postpositivist perspective, it recognises and acknowledges the dilemma that the participants’ perceptions and stories present for their schools. Specifically, this research acknowledges the perception that the skills aspect of the HPE learning outcomes was not being addressed and/or developed in some classes of health education, and by some teachers. This research acknowledges that the participants’ concerns were grounded in personal experiences with unqualified and untrained teachers who were not developing skills in health education. Resultantly, these perceptions are real concerns, questioning the achievement of the educational outcomes mandated through the HPE LA (Western Australia Curriculum Council, 1998). These are concerns that, if confirmed, expose a contravention of goal two of the Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council for Education, 2008). The goal states:

Australian governments commit to working in collaboration with all school sectors to support all young Australians to become: confident and creative individuals–have knowledge skills, understanding and values to establish and maintain healthy, and satisfying lives (Ministerial Council for Education, 2008, p. 10).
Conversely, the research participants perceived that unqualified and untrained teachers were delivering some aspects of the HPE LA outcomes (knowledge and understandings), as they reported some teachers favouring knowledge-based teachings and learning in the classroom over skill-based teachings and learning. Other research supports this perception (Broadbear & Keyser, 2000; Kirk & Gray, 1990; Simpson & Freeman, 2004). Further, the participants reported teachers refusing to deliver aspects of the content and curriculum, and other research supports this (Lynagh et al., 2010; McCuaig et al., 2012; Rowling et al., 1998; Sinkinson & Burrows, 2011). Thus, all things considered, this research supports further research on the basis that it would investigate classroom practice and qualify the affect of qualifications and training on the achievement of educational outcomes in the health education classroom. This research suggests that further research is the best means to establish the quality of health education delivered in the research context and for a better representation of health education to evolve.

Finally, in summary of the third insight and in response to the third research question, this research reports that a skills-based participatory pedagogical approach is the participants’ preferred approach to delivering health education in the context studied. This approach is required to fulfil the mandate documented in *The Curriculum Framework* (Western Australia Curriculum Council, 1998) and should be enacted through the educational outcomes of *The K-10 Syllabus for HPE* (WA. DEET, 2007a). However, without observing the classroom practices of the teacher participants, this research is unable to confirm that some teachers in lower secondary government schools may not be delivering health education as a skills-based subject.

**Conclusion**

This research found a gap between *what we know, what we do and what we could do* regarding the representation of health education in lower secondary government schools in WA. It confirms the gap identified by Seffrin (1990) “between common practice and what ought to be” (p. 152), as it identified disjuncture between praxis and practice. It confirms the gap identified by Beckett (1990) “between the actual and the possible” (p. 97), as it identified the capacity for healthy citizenry. It confirms the gap identified by Allensworth (1993) “between the state-of-the-art and the state-of-practice” (p. 18), as it identified an idiosyncratic delivery. It confirms the gap identified by Mayer et al. (2011), who recorded the gap as the “disparity between schools’ potential contribution and the current reality” (p. 350).
To better understand the gap between *what we do and what we could do* in lower secondary government schools in WA, and to identify any remaining gaps that this research has not exposed, this discussion drew attention to the demands of health advocates who position health education in schools as a health solution. It focussed on the institutional arrangements, organisational nuances and pedagogic priorities in lower secondary government schools in WA, as well as the ways in which HPE in its current iteration in Australia attempts to fulfil its capacity to support and strengthen the health citizenry of young people, and as afforded through its positioning as a mandated key learning area (Western Australia Curriculum Council, 1998).

To further understand *what we do and what we could do*, this discussion encouraged health advocates to seek the counsel of Williams and Aspin (1981), who encouraged the pedagogic work of schools to be scrutinised carefully. It encouraged health advocates to examine and finely inspect the representation developed by the insights of this research. When health advocates focus on the research insights they will be compelled by the knowledge this research has to offer and how it is useful in contributing to a better understanding of the HPE LA in some Western Australian schools. In particular, the specific understandings of the delivery of health education in lower secondary government schools in WA that this research presents, as well as the knowledge that the HPE LA, as articulated in *The Curriculum Framework*, does not take into account the WA context. The knowledge that the integration of the HPE LA in WA is counterproductive and may be misaligned with the expectations and goals of health citizenry as it promotes inequity between health education and physical education in the allocation of curriculum time. The knowledge that in some lower secondary government schools in WA, health education is delivered by an idiosyncratic workforce of four types of qualifications and training. Finally, the realisation that health education’s current low status could be the product of a devolved system of education that fails to action curriculum imperatives in schools.

This discussion of the insights developed from this research has, in some respects, bridged the gaps in knowledge exposed by previous research in WA, and highlighted possibilities for new research. However, this research has shown that there is not just a gap in knowledge regarding the delivery of health education, but rather an expansive gulf between *what we know, what we do and what we could do* in lower secondary government schools in WA.
Chapter 7: Conclusion: Counteracting a Mismatch

In 2009, the Australian Government committed to improving teacher quality in Australian schools, with work commencing on the establishment of professional standards for teachers (AITSL, 2011b). In recognising that world-class education is dependent on the quality of the teachers delivering education in schools, the standards aimed to define what Australian teachers should know and do. In 2010, the standards were endorsed as a public statement of educational reform to enhance teacher quality and support the *Melbourne Declaration on Education Goals for Young Australians* by promoting equity and excellence in Australian schools (Ministerial Council for Education, 2008).

This research investigated the representation of health education in lower secondary government schools in WA with the intent of promoting excellence in the delivery of the subject. As a consequence of this research, three contextual insights were developed which helped to quantify and qualify aspects of the delivery. Together, these insights suggest that in the context of health education, the schools studied were challenged in their commitment to promote and support teacher quality, as defined by AITSL. Predominantly, the schools were timetabling teachers who, according to the research participants, were unprepared to deliver health education in the classroom.

Although the affect of unprepared teachers delivering health education in the research context is unknown, the review of literature suggests teacher preparedness is needed for effective health education. To support and strengthen the health of young Western Australians, this research has developed some suggestions for practice and future research, which seek to promote high-quality effective teaching in health education. These suggestions acknowledge the limitations of this research, the complexities to the research context and the knowledge garnered from the review of literature. Thus, this final chapter endeavours to reconcile *what we do and what we could do* in the lower secondary government school context in WA to promote health education as a health-strengthening resource.

**Realising Capacity to Support and Strengthen Healthy Citizenry in Young Western Australians**

In WA, curriculum for the HPE LA is written as integrated curriculum, yet in most government lower secondary schools it is commonly delivered through two separate subjects: physical education and health education. In March 2011, I
commenced this research with the purpose of investigating the representation and delivery of health education as a discipline-based subject in lower secondary government schools in WA. This research began with a perception of health education that had developed during my career as an HPE LA teacher in WA. I believed that health education was poorly represented and poorly delivered in WA schools, perceiving it as a poor cousin to physical education. Over four years, this research collected quantitative data about the timetabling of health education in 49 lower secondary government schools, which has identified the curriculum time allocated to health education and the teachers timetabled to deliver the subject. This data was combined with the opinions of a group of health education teachers to produce contextual insight into the representation and delivery of health education in particular WA schools.

On a positive note, this research found that health education was taught in most lower secondary government schools studied, although its allotted curriculum time was found to have gradually decreased since 1987, while physical education curriculum time increased. This disparity in the allocation of curriculum time to the HPE LA subjects confirms Shilton et al’s (1995) earlier research and is concerning, as it shows that amidst curriculum reform in WA the disparity between the two subjects has remained unchanged. Despite the discrepancy in curriculum time between physical education and health education, this insight confirms that the HPE LA in these schools had the capacity to support and strengthen safer, healthier and more active citizenry through the HPE learning programmes offered to their students. This confirms that HPE, as a mandated learning area in schools, had the capacity to respond to the calls and critically engage with the concerns of health professionals in WA who position health education as a means of ameliorating health issues.

On a negative note, this research found that the teachers who delivered health education in the schools studied held four different combinations of qualifications and training. Significantly, half of the teachers delivering the subject were neither qualified nor trained to deliver health education. Further, this research found that a third of qualified HPE LA teachers were not trained to deliver health education. As many health issues originate in childhood, and that AITSL identified teachers as having a significant effect on student educational outcomes (AITSL, 2011b), the idiosyncrasy of the teachers delivering health education is problematic. Additionally, it is problematic because health education in WA is required to be delivered as a skills-based subject. Irrespective of the complexities of the research context, this insight suggests one of two
things: either schools did not value the capacity afforded through the curriculum space of health education, or they did not fully appreciate the significance of this space, its potential to support and strengthen the health and well-being of young Western Australians.

This research suggests that the potential to educate for safer, healthier and more active citizenry within the context of a lower secondary government school in WA could be compromised. Specifically, because the representation and delivery of health education has fallen into question in two aspects:

1. Quality: (a) teachers’ pedagogical approaches; (b) teacher PCK; and
2. Quantity: allocated curriculum time.

This research has shown that health education is affected by the complexities of the lower secondary government school context and decisions made in universities and schools, particularly, by school administrators and teachers. However, this research has also shown that possibilities exist for health education to support and strengthen the health of young Western Australians. The conceptual framework presented in Chapters One and Three has been redeveloped to symbolise a conceptual model of these effects (see Figure 7.1).
Figure 7.1 illustrates how health education in lower secondary government schools in WA is affected by the various challenges within WA education. When health education’s potential is held in high regard, Figure 7.1 signifies the pathways for the
HPE LA to support and strengthen health citizenry, as mandated through the educational outcomes of *The Curriculum Framework* (Western Australia Curriculum Council, 1998). It signifies how universities and schools can align with the aims of AITSL and support quality teaching by appropriately preparing and deploying qualified and trained teachers to the health education classroom, who know both the content and how to teach it. However, when the potential of health education is compromised—as suggested through the insights developed by this research—Figure 7.1 illustrates the way that the subject can be denied a specialist workforce, even though most HPE LA teachers are both qualified and trained to deliver health education. It illustrates the way that health education curriculum time does not equate to the curriculum time of physical education, and how this lopsided division is without policy. Figure 7.1 illustrates that it is unrealistic to expect health education—timetabled as a discrete, disciplined-based subject in lower secondary government schools—to contribute to the health and well-being of young people in WA.

This research identified policies and practices at play in lower secondary government schools in WA that negatively affect the delivery of health education at the classroom level. It identified how the practice of satisfying a government mandate through the allocation of HPE LA curriculum time privileges physical education above health education by illuminating the inequities within the learning area itself. It identified how the short-term gain of timetabling an unqualified and untrained teacher out-weighs the importance and potential of curriculum space to positively affect the health and well-being of young people. It identified how the timetabling of teachers who are unprepared undermines the potential of the learning areas’ educational outcomes. This research identified how the requirement for health education to be delivered as a skills-based subject—as articulated in *The Curriculum Framework* and enacted through the health contexts of *The K-10 Syllabus for HPE*—can be jeopardised by a teacher’s pedagogy.

Figure 7.1 does not detail all factors affecting the delivery of health education in the schools studied; however, it signifies the pathways to which decisions at universities and lower secondary government schools in WA affect the representation of health education. Figure 7.1 symbolises the mismatch between *what we know, what we do and what we could do* regarding the delivery of health education in lower secondary government schools in WA. Figure 7.1 symbolises the mismatch between praxis and practise.
Suggestions for Practice

The following suggestions have been developed with the specific purpose of counteracting the mismatch between what we know, what we do and what we could do in lower secondary government schools in WA regarding the delivery of health education. They endeavour to find a balance between the postpositivist perspective underpinning this research, the limitations of the research data and the reality, symbolised in Figure 7.1.

The following suggestions have been developed from a pragmatic perspective, using The Curriculum Framework as a basis because this was the current legislated curriculum in WA at the time of research. They honour my preferred positioning as a practitioner of health education who has focussed on developing workable solutions that aim to enhance the delivery of health education at the classroom level. They recognise that there are administrative demands on teachers who work in government schools, and they acknowledge the effect of the impending AC: HPE. The following suggestions embrace the Australian National Professional Standards for Teachers (AITSL, 2011c) and support the Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council for Education, 2008). The following six suggestions for practice specifically aim to position schools as a health-strengthening resource. They aim to develop the best teachers and support high-performing schools. The suggestions fall into two categories—schools and universities—and are listed in order of preference within the two categories. Some suggestions could have resonance in other states and territories.

Suggestions for schools

**Suggestion One: Adequately prepare HPE LA teachers with health education pedagogies**

It was a major in Phys and Health Ed in our day. It’s changed now. I know it’s changed now, since we went through, and now the health is the minor. (Fiona)

HPE LA teachers who are untrained in health education pedagogies could be adequately prepared to deliver the subject through professional learning. Adequately prepared HPE LA teachers delivering health education or health-related content can support Australian schools—specifically, lower secondary government schools in WA—improve the quality of the HPE LA teaching profession and positively affect students, their learning and educational outcomes. This recommendation resonates with other Australian contexts, as the HPE LA was introduced to all states and territories in 1994 (Curriculum Corporation).
**Suggestion Two: Adequately prepare non-HPE LA teachers with health education pedagogies**

If you are going to put teachers in an area, provide them with the professional development. (Jessie)

Non-HPE LA teachers timetabled to deliver health education and who are untrained in health education pedagogies could be adequately prepared to do so through professional learning. Adequately prepared non-HPE LA teachers can support Australian schools—specifically, lower secondary government schools in WA—to improve the quality of the teaching profession and positively affect students, their learning and educational outcomes. This suggestion resonates across Australia, as the use of out-of-field teachers to deliver health education is a global issue with training considered a central factor in improving the delivery of subject content (Fetro, 2010; Hallfors & Godette, 2002; Kann et al., 2001; Lohrmann, 2011; Mayer et al., 2011; McConney & Price, 2009; Sinkinson & Burrows, 2011).

**Suggestion Three: Equity in the allocation of HPE LA curriculum time**

We’ve got mandatory two hours of PE...Two hours has to be done in health education as well. (Daniel)

Health education and physical education in lower secondary government schools in WA could be given equal status within the HPE LA, through the allocation of equal curriculum time. Equality in the division of HPE LA curriculum time in lower secondary government schools in WA can strengthen the potential of the HPE LA curriculum to effect safer, healthier and more physically active young people. This recommendation commits WA government schools, in the context of the HPE LA, to the educational goal of equity and excellence in Australian schooling (Ministerial Council for Education, 2008).

**Suggestion Four: Timetable teachers who want to deliver health education**

You got to want to teach it...otherwise people just clam up—so to speak—and they just can’t do it. (Daniel)

To improve the representation of health education at the classroom level this research suggests that teachers who want to deliver health education be timetabled to do so. In so doing, teachers who feel confident, comfortable and enjoy delivering the subject’s content will teach this essential information. Teachers delivering health education in lower secondary government school classrooms who want to deliver the subject can support WA government schools to positively affect students, their learning and educational outcomes.
Considerations for universities

**Consideration One: Appropriately prepare pre-service HPE LA teachers**

We also have some [HPE teachers]—they see themselves as phys-edders and not health-edders and it is not the learning area as such (Mark).

To ensure quality teaching for the HPE LA in WA schools, and that all HPE LA teachers meet the *Australian Professional Standards for Teachers* (AITSL, 2011b), programmes of study for undergraduate and graduate-entry pre-service HPE LA teachers should consider all mandatory aspects of the legislated WA curriculum. Appropriately prepared pre-service HPE LA teachers can positively affect the educational outcomes for all students in all WA schools.

Consideration of the pedagogical approaches and subject content consistent with the delivery of the HPE LA’s educational outcomes can help WA schools, through the separate learning contexts of physical education and health education, to commit to equity and excellence in Australian schooling (Ministerial Council for Education, 2008). This consideration commits WA universities to putting students first by endorsing programmes of study that acknowledge that “graduates need to be confident with the content of the subjects they are teaching and proficient in using the best strategies to ensure all their students benefit” (Commonwealth of Australia, 2014, p. 3). This consideration could be customary practise for all Australian universities preparing pre-service HPE LA teachers, because the HPE LA was introduced to all states and territories in 1994 (Curriculum Corporation).

**Consideration Two: Appropriately prepare pre-service non-HPE LA teachers**

We’ve had library staff teaching [health education] this year, we’ve had home ec staff teaching it and we’ve had other general staff teaching it—it makes it difficult. (Brenda)

To enable quality teaching for health education and the HPE LA, and for all teachers in WA to meet the *Australian Professional Standards for Teachers* (AITSL, 2011b), undergraduate and graduate-entry pre-service teachers, irrespective of their chosen learning area, could be adequately prepared to deliver quality health education in WA. Adequately prepared pre-service non-HPE LA teachers support schools and the HPE LA to effect healthier and more active young people, and they support government schools to put students first. This consideration for universities commits all schools in WA, in the context of health education, to the educational goal of equity and excellence in schooling (Ministerial Council for Education, 2008). This consideration may have merit in other Australian contexts.
Future Research

At present in Australia we are at a point of curriculum uncertainty for the HPE LA, because we are awaiting final endorsement of the AC: HPE. In anticipating this, we await the eventual rollout or uptake of the AC: HPE in Australian schools. I contemplate how the AC: HPE will be variously taken up across the states and territories; how it will be reconfigured in some states and territories, especially in WA schools; what the proposed WA P-10 HPE Curriculum will contain; and most importantly, how this new curriculum will facilitate or impede the delivery of health education in lower secondary government schools as a separate subject of the HPE LA.

Nonetheless, without observing the delivery of health education in the classrooms of the teachers studied, the extent and effect of the findings of this research on student learning remains unknown. Without data in all subsections of my questionnaire, the timetable of some of the teachers in this research is unknown. Without conducting further research, this study cannot confirm whether all HPE LA outcomes, as mandated by The Curriculum Framework (Western Australia Curriculum Council, 1998) are being developed in lower secondary government schools in WA.

It is concerning that this research is unable to confirm whether all schools studied were committed to the educational goals for young people, as outlined in the Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council for Education, 2008). Likewise, whether they were fully committed to quality teaching, as recognised by the Australian Professional Standards for Teachers (AITSL, 2011b). As a postpositivist perspective underpinned this research, I accept that the research insights are more about creating an understanding of the WA government school health education context than about explaining the context’s particular phenomena. I accept that this research provides educators and academics in WA with the motivation and contextual knowledge to seek improvements in the delivery of health education at the classroom level, and specifically, in the preparation of pre-service HPE LA teachers.

It is heartening that this research has provided new insights into the current representation and delivery of health education in lower secondary government schools in WA. Without this insight, the significance of teacher attitude and right of choice in the context of health education, and the perceived effect on classroom practice, may not have eventuated. This is significant, as the weight of teacher qualifications and training—as reported in the literature review—could have outweighed the necessity to
further explore the effect of teacher choice and attitude in the context of health education.

A school valuing the subjects that it offers its students, and that it charges its teachers with delivering in some respects, determines quality teaching. Thus, this research makes the following suggestions for methodologically sound research to generate greater clarity of the WA context, and to develop contextual solutions that continue to enhance the representation of health education in all WA schools.

**Suggestion One: Observation of classroom practice to ascertain the effect of choice, qualifications and training on health education’s delivery**

This first suggestion for future research is based on the finding of four types of health education teacher, as shown in Table 6.1 (see Chapter Six). They are:

- type one: qualified and trained teacher;
- type two: qualified and untrained teacher;
- type three: unqualified and trained teacher; and
- type four: unqualified and untrained teacher.

This suggestion utilises the knowledge that some teachers in lower secondary government schools deliver health education through choice, while others do not. Observations of the four types of teachers timetabled to deliver health education through choice and the four types of teachers denied choice could highlight similarities and differences in teaching practice.

**Suggestion Two: Investigation of the qualifications and training of HPE LA teachers timetabled to deliver all HPE LA subjects**

This second suggestion for future research aims to substantiate the qualifications and training of the teachers who deliver all discipline-based subjects of the HPE LA in lower secondary schools in WA. Comparison of the qualifications and training of teachers delivering these discipline-based subjects could highlight similarities and differences in the policies and practices pertaining to the timetabling of the discrete subjects of the HPE LA. Equity between the qualifications and training of teachers can support quality teaching of the HPE LA educational outcomes.

**Suggestion Three: Investigation of university courses preparing HPE LA teachers**

This third suggestion focusses on specific university courses in Australia that prepare secondary teachers for the HPE LA in both undergraduate and graduate-entry programmes of study. Comparisons between university courses preparing secondary HPE LA teachers, categorised according to states and territories, could identify variance in course structure, focus and content. University courses that adequately prepare
beginning HPE LA teachers with subject content and pedagogy (AITSL, 2011a, p. 5) and multi-disciplinary HPE knowledge (ACARA, 2013b) can support the HPE LA to effect safer, healthier and more active young people.

**Suggestion Four: Investigation of the outsourcing of health education in WA schools**

In addition to the insights of this research, there is also the question of the effect on health education in WA of outsourcing the subject to external providers. Although external provision has not been reported as common practice in the delivery of health education in secondary schools in WA, nor a focus of the literature review, based on the extent to which unqualified and untrained teachers were found to be delivering the subject, this research suggests that an investigation of the outsourcing of health education in WA schools is warranted. This suggestion acknowledges that external provision is accepted as commonplace within the delivery of physical education in Australian and New Zealand schools, and attributed to the lack of teacher expertise (Petrie, Penney & Fellows, 2014; Whipp, Hutton, Grove & Jackson, 2011; Williams, Hay & Macdonald, 2011).

These suggestions could add to the knowledge of the representation and delivery of health education, as well as the other discipline-based subjects of the HPE LA. Further, these suggestions could enhance quality teaching in HPE and support the achievement of high-performing schools in WA.

**Concluding Comments**

The most important concern a young person can have is their health, followed by concern for the health of a loved one. In recognising this, this research acknowledges that for some, health is extremely challenging. Therefore, it positions schools as a key site in supporting health-enhancing action in young people, and as a health-strengthening resource with the capacity to effect safer, healthier and more physically active young people.

In recognition of this view, the insights of this research and knowledge garnered from the literature review affirm that schools could play an increasingly significant role in determining the health of our nation. From the perspectives of prosperity and happiness, schools could play an increasingly critical role, as the benefits from healthy and physically active living outweigh the effect of under-achieving and ill health. From the perspective of economics and productivity, schools could play an increasingly crucial role as the burden of lives compromised by poor health choices unsympathetically affect an already strained health care system. From the perspectives
of longevity and independence, schools could play a necessary role in supporting and strengthening lifelong healthy, physically active living.

This research confirms that lower secondary government schools in WA have the potential to be a health-strengthening resource. However, to ensure that all young people receive quality health education, all schools should realise the capacity afforded through curriculum space of the HPE LA to effect health citizenry.
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Appendix A: Research Questionnaire

THE STATUS OF HEALTH EDUCATION IN LOWER SECONDARY PUBLIC SCHOOLS IN WESTERN AUSTRALIA

WELCOME

Thank you for participating in the survey of Health Education in Lower Secondary Public Schools in Western Australia.

Your feedback to this survey is very important and part of ongoing research that aims to generate considerations for curriculum planning and developments for the teaching and learning of health education and the Health and Physical Education learning area in Western Australia. This survey is unique and will help to develop a picture of health education in lower secondary public schools in Western Australia.

This survey contains three sections:

1. about you;
2. about your current school; and
3. about your current health education teaching.

Please note that this survey is anonymous. However, if you choose to answer the last question in this survey, your answer will be removed from the survey findings.

If you have any questions, please contact Donna Barwood on 0411 888 001 or dmbarwoo@our.ecu.edu.au.
SECTION 1 – ABOUT YOU

1. What gender do you identify with?
   - Male
   - Female
   - Other

2. What is your age?
   Please select one of the below age groups.
   - 20 - 29 years of age
   - 30 - 39 years of age
   - 40 - 49 years of age
   - 50 - 59 years of age
   - 60 - 69 years of age
   - Prefer not to answer

3. What is your main learning area?
   Please select only one of the below areas in which you teach most at your school.
   - Health and Physical Education
   - The Arts
   - English
   - Languages Other Than English
   - Mathematics
   - Science
   - Society and Environment
   - Technology and Enterprise

4. What are your formal teaching qualifications?
   Please select from the choices below. HPE refers to Health and Physical Education.
   - HPE trained with health education minor
   - HPE trained without health education minor
   - Non-HPE trained with health education minor
   - Non-HPE trained without health education minor
   - Post-graduate degree in health related studies
   - Other (please specify)
SECTION 2 - ABOUT YOUR SCHOOL

5. What is your school postcode?

Your school postcode

6. What is the name of your school?

This information will be used in the analysis but only as the means to remind schools to participate in the survey.

7. In what year(s) is health education taught at your school?

Choose multiple options if applicable.

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8. In what term(s) is health education taught at your school?

Choose multiple options if applicable.

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9. How many minutes per week are allocated to the teaching of health education at your school?

Please calculate carefully. If your school has a 6 day cycle (or more), calculate the minutes on a 5 day cycle. (For example, 60 mins/6 days = 50 mins/5 day cycle).

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<th>Year 10</th>
<th>Time in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
10. In which learning area does your school mostly teach the health related outcomes of HPE in year 8?

The year 8 HPE outcomes that relate to health are most commonly taught through the subject of health education within the HPE learning area, however, in some schools they may be taught in a learning area other than HPE. Please select only one of the below learning areas.

- Not taught
- Health and Physical Education
- The Arts
- English
- Languages Other Than English
- Mathematics
- Science
- Society and Environment
- Other

11. What is the percentage of HPE time allocated to the teaching of year 8 health outcomes?

For example, 100% of year 8 HPE learning area time may = 30% year 8 health education (health outcomes) and 70% year 8 physical education.

Year 8 HPE health outcomes

12. In which learning area does your school mostly teach the health related outcomes of HPE in year 9?

The year 9 HPE outcomes that relate to health are most commonly taught through the subject of health education within the HPE learning area, however, in some schools they may be taught in a learning area other than HPE. Please select only one of the below learning areas.

- Not taught
- Health and Physical Education
- The Arts
- English
- Languages Other Than English
- Mathematics
- Science
- Society and Environment
- Other

13. What is the percentage of HPE time allocated to the teaching of year 9 health outcomes?

For example, 100% of year 9 HPE learning area time may = 30% year 9 health education (health outcomes) and 70% year 9 physical education.

Year 9 HPE health outcome
14. In which learning area does your school mostly teach the health related outcomes of HPE in year 10?

The year 10 HPE outcomes that relate to health are most commonly taught through the subject of health education within the HPE learning area, however, in some schools they may be taught in a learning area other than HPE.

Please select only one of the below learning areas.

- Not taught
- Health and Physical Education
- The Arts
- English
- Languages Other Than English
- Mathematics
- Science
- Society and Environment
- Other

15. What is the percentage of HPE time awarded to the teaching of year 10 health outcomes?

For example, 100% of year 10 HPE learning area time may = 30% year 10 health education (health outcomes) and 70% year 10 physical education.

Year 10 HPE health outcomes

16. Is there a health education coordinator at your school?

- Yes
- No
SECTION 3 - ABOUT YOUR HEALTH EDUCATION
TEACHING AT YOUR CURRENT SCHOOL

17. Do you teach health education?
Choose multiple options if applicable.

- Yes
- No

*If your answer to question 17 is ‘No’ please skip ahead to question 22*

18. Was it your choice to teach health education?
Choose multiple options if applicable.

<table>
<thead>
<tr>
<th>Year</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 9</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 10</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

19. Do you enjoy teaching the subject of health education?
Choose multiple options if applicable.

<table>
<thead>
<tr>
<th>Year</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 9</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 10</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

20. Do you feel comfortable teaching the subject of health education?

<table>
<thead>
<tr>
<th>Year</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 9</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 10</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

21. Do you find it satisfying teaching the subject of health education?

<table>
<thead>
<tr>
<th>Year</th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 9</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Year 10</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
If you answered question 21 please skip ahead to question 26

22. Would you choose to teach health education?
Choose multiple options if applicable.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

23. Would you enjoy teaching the subject of health education?
Choose multiple options if applicable.

<table>
<thead>
<tr>
<th></th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24. Would you feel comfortable teaching the subject of health education?

<table>
<thead>
<tr>
<th></th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25. Would you find it satisfying teaching the subject of health education?

<table>
<thead>
<tr>
<th></th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26. How important is the acquisition of the following attributes in the teaching of health education?

<table>
<thead>
<tr>
<th></th>
<th>Extremely Important</th>
<th>Very Important</th>
<th>Important</th>
<th>Neither Important nor Unimportant</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring content knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing skills relevant to health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing attitudes and values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
27. To what extent do the following statements describe your teaching of health education?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>I teach content knowledge</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I teach content knowledge combined with skills-based activities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I teach content knowledge, combined with skills-based activities that include participatory learning (group work)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

28. What is your opinion?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I teach in a crowded curriculum</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Health education is an essential subject in a crowded curriculum</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

29. Final Questions

Before completing this survey is there anything else that you would like to tell us about the teaching of health education in your school?


30. Last Question

Are you willing to further assist this research by agreeing to a confidential interview?

Please be assured that your response to this question will not be included in the data collection for this research and that your responses to this survey will remain anonymous. This question answer is not included in the survey findings.

Please indicate with your name and a contact telephone number in the space below. To ensure confidentiality a mobile contact is the preferred contact.


THANK YOU FOR YOUR PARTICIPATION

On request to the investigator, a report of the aggregated findings will be released and sent to your school presumably in early 2014.
Appendix B: DOE Research Approval

Ms Donna Barwood
41 Summerhayes Drive
KARRINYUP WA 6018

Dear Ms Barwood

Thank you for your completed application received 10 October 2011 to conduct research on Department of Education sites.

The focus and outcomes of your research project, The Status of Health Education in Lower Secondary Schools in Western Australia, are of interest to the Department. I give permission for you to approach site managers to invite their participation in the project as outlined in your application. It is a condition of approval, however, that upon conclusion the results of this study are forwarded to the Department at the email address below.

Consistent with Department policy, participation in your research project will be the decision of the schools invited to participate and individual staff members. A copy of this letter must be provided to site managers when requesting their participation in the research. Researchers are required to sign a confidential declaration upon arrival at the Department of Education site.

Responsibility for quality control of ethics and methodology of the proposed research resides with the institution supervising the research. The Department notes a copy of a letter confirming that you have received ethical approval of your research protocol from the Edith Cowan University Human Research Ethics Committee.

Any proposed changes to the research project will need to be submitted for Department approval prior to implementation.

Please contact Ms Allison McLaren, R/Evaluation Officer, on (08) 9264 5512 or researchandpolicy@det.wa.edu.au if you have further enquiries.

Very best wishes for the successful completion of your project.

Yours sincerely

ALAN DODSON
DIRECTOR
EVALUATION AND ACCOUNTABILITY

14 November 2011

151 Royal Street, East Perth Western Australia 6004
Appendix C: Site Manager Information

HEALTH EDUCATION IN LOWER SECONDARY PUBLIC SCHOOLS IN WESTERN AUSTRALIA

Dear Principals/Site Managers,

My name is Donna Barwood and I am a PhD student at Edith Cowan University, Perth. I am conducting a research project that aims to investigate the delivery of Health Education in Lower Secondary Public Schools in Western Australia. The project is being conducted with the support of Dr Christine Cunningham and Associate Professor Anthony Fetherston from Edith Cowan University.

I would like to invite your school to take part in this research project. Your school’s participation is very important, as it will help to create a picture of health education in Western Australia. It will offer insight into the status of health education in WA public schools and the decisions made at the administrative level that impact on the delivery of health education in the classroom. It is hoped that your school’s contributions will help to generate considerations for future directions in curriculum planning and proffer advice for school-based administrators in pedagogical developments for the delivery of the HPE learning area. All secondary public schools in Western Australia will be invited to participate.

The research involves two forms of data collection. The first is an online survey questionnaire and the second is a semi-structured interview. Participants are invited to do both or one and this includes either of the two methods.

SURVEY QUESTIONNAIRE
Teachers of health education will be invited to participate in the online survey. The online survey questionnaire can be accessed online via the link below:

https://ecuau.qualtrics.com/SE/?SID=$V_3mYVX0nBmv5Rtju

The online survey questionnaire should take no more than 15 minutes to complete. It aims to collect data about the teaching of health education in your school. The survey is anonymous unless the participant chooses to answer the last question: this is a request for interview participants. This question is removed from the results of the questionnaire.

INTERVIEWS
The types of people I would like to interview are teachers of health education and key curriculum decision-makers in your school, such as: yourself; a deputy or a similar school-based curriculum administrator; and the Head of Health and Physical Education Learning Area. The interview will take place at a time and location that is convenient for the interviewee and will last approximately 60 minutes. The interview will be recorded and participants will need to need to sign a consent form. The form will be returned to Donna Barwood at the interview.
Participation is voluntary and I do not anticipate any risks associated with participating in this research. Participants will not be asked to do anything typically regarded as uncomfortable. They will be free to withdraw from the research at any time and there will be no penalty for doing so. There will be no consequences relating to any decision to participate in this research project, other than those already described in this letter. Decisions made will not affect the relationship with the research team or Edith Cowan University.

All information collected during the research will be treated confidentially to ensure participant privacy. The interviews will be coded to remove the identity of the participant so that they remain anonymous. All data collected will be stored securely on ECU premises for five years after the project has concluded and will then be destroyed.

Any information published will be written in a manner that is both ethical and respectful and being consistent with Department of Education policy, a summary of the research findings will be made available to the participating sites(s). You can expect this to be available in early 2014.

If you have any questions about this research project or require further information you may contact the following:

Student Researcher: Donna Barwood
TelephoneNumber: 0411 888 001
Email: dimbarwoo@our.ecu.edu.au

Supervisor: Dr Christine Cunningham
TelephoneNumber: (08) 9370 6807
Email: c.cunningham@ecu.edu.au

This project has been approved by the Human Research Ethics Committee at Edith Cowan University and meets the requirements of the Department of Education as indicated in the attached letter. Should you have any concerns and wish to talk to an independent person, you may contact the ECU Research Ethics Officer at:

Human Research Ethics Office
Edith Cowan University
100 Joondalup Drive
JOONDALUP 6027 WA
Phone: (08) 6304 2170
Email: research.ethics@ecu.edu.au

This research is significant and your schools participation would be greatly appreciated. I will keep your school’s involvement in the administration of the research procedures to a minimum. If you have had all questions about the project answered to your satisfaction, and are willing for your school to participate, please complete the consent form on the following page.

This information letter is for you to keep.

Yours in health

[Signature]

Mrs Donna Barwood
PhD student: School of Education
Edith Cowan University
Appendix D: Site Manager Consent

HEALTH EDUCATION IN LOWER SECONDARY PUBLIC SCHOOLS IN WESTERN AUSTRALIA

CONSENT FORM FOR DEPARTMENT OF EDUCATION SITE MANAGERS

- I have read the information regarding this research project and understand the aims, procedures, and risks as described within it.

- For any questions I may have had, I have taken up the invitation to ask those questions, and I am satisfied with the answers I received.

- I understand that participation in the project is entirely voluntarily.

- I understand that this school’s participation in the research can be withdrawn at any time without affecting the relationship with the research team or Edith Cowan University.

- I understand that data collected can be withdrawn at any time.

- I understand that this research may be published in a PhD thesis or dissertation but that the school will not be identified in any way.

- I am aware that I can contact Dr Christine Cunningham if I have any further queries. I have been given her contact details in the Information Letter.

- I understand that this school will be provided with a copy of the findings from this research upon its completion.

- I am willing for this school, ___________________________ to become involved in the research project, as described.

Name of Site Manager (printed): ___________________________________________

Signature: ________________________________________________________________

Date: ____________________________________________________________________

Thank you for your assistance in this project.
Appendix E: Staff Information

HEALTH EDUCATION IN LOWER SECONDARY PUBLIC SCHOOLS IN WESTERN AUSTRALIA

Dear colleague and teacher(s) of health education,

My name is Donna Barwood and I am a PhD student at Edith Cowan University, Perth. I am also a teacher of Health and Physical Education. As part of the requirements of a PhD, I am conducting an investigation of the delivery of Health Education in Lower Secondary Public Schools in Western Australia. I would like to request your participation in this research.

Your participation is very important. It will offer insight into the status of health education in WA public schools and the decisions made at the administrative level that impact on the delivery of health education in the classroom. It is hoped that your contributions will help to generate considerations for future directions in curriculum planning and proffer advice for school-based administrators in pedagogical developments for the delivery of the HPE learning area.

The research consists of two forms of data collection. The first is an online survey questionnaire and the second is a semi-structured interview. You are invited to do both or one and this includes either of the two methods. The online survey questionnaire can be accessed online via the link below:

https://ecuau.qualtrics.com/SE/?SID=SV_3mYVX0nBmv5Rjju

The online survey questionnaire should take you no more than 15 minutes to complete. It aims to collect data about the teaching of health education in your current school. If you wish, you can leave the survey at any point to return and complete at a later time: all your answers will be retained. The last question on the survey asks for participants to be interviewed for the research. If you would like to take part in an interview, please complete the last question. You will be contacted to arrange a suitable time. As some participants will choose to complete only the online survey, this part of the data collection is anonymous.

You can also respond to my request for interview participants without completing the online survey. The types of people I would like to interview are teachers of health education and key curriculum decision-makers in your school, such as: the Principal; Deputy or a similar school-based curriculum administrator; and the Head of Health and Physical Education Learning Area. If you would like to take part in an interview without completing the survey please contact, Donna Barwood, using the contact details on the next page.

If you agree to be interviewed the interview will take place at a location that is convenient for you and will last approximately 60 minutes. The interview will be recorded and will offer you the opportunity to expand on your thoughts, beliefs and any issues you wish to discuss about the teaching and learning of health education. If you would like to
participate in an interview, you will need to sign the attached consent form and return it to Donna Barwood at the interview.

All information collected during the research will be treated confidentially. The names of those participants offering themselves for interview in the survey will have their name removed from the survey results. The interviews will be coded to remove the identity of the participant so that they remain anonymous. All data collected will be stored securely on ECU premises for five years after the project has concluded and will then be destroyed.

Participation is voluntary and I do not anticipate any risks associated with participating in this research. You will not be asked to do anything typically regarded as uncomfortable. You will be free to withdraw from the research at any time and there will be no penalty for doing so. Any information published will be written in a manner that is both ethical and respectful and on request, I would be happy to provide you with a summary of the research findings.

If you have any questions about this research project or require further information you may contact the following:

Student Researcher: Donna Barwood
Telephone number: 0411 888 001
Email: dmbarwoo@our.ecu.edu.au

Supervisor: Dr Christine Cunningham
Telephone number: (08) 9370 6807
Email: c.cunningham@ecu.edu.au

This project has been approved by the Human Research Ethics Committee at Edith Cowan University and meets the requirements of the Department of Education. Should you have any concerns and wish to talk to an independent person, you may contact the ECU Research Ethics Officer at:

Human Research Ethics Office
Edith Cowan University
100 Joondalup Drive
JOONDALUP 6027 WA
Phone: (08) 6304 2170
Email: research.ethics@ecu.edu.au

This research is significant and your participation would be greatly appreciated. It affords you the opportunity to have your say in the research findings about health education in lower secondary schools in WA. Your support of the research project would also be appreciated, please feel free to advise your colleagues and peers of the availability of the online survey questionnaire.

Yours in health

Donna Barwood
PhD Student: School of Education
Edith Cowan University
Appendix F: Interviewee Consent

CONSENT FORM FOR INTERVIEWEES

- I have read the information regarding this research project and understand the aims, procedures, and risks as described within it.

- For any questions I may have had, I have taken up the invitation to ask those questions, and I am satisfied with the answers I received.

- I understand that participation in the project is entirely voluntarily.

- I understand that participation in the research can be withdrawn at any time without affecting the relationship with the research team or Edith Cowan University.

- I understand that data collected can be withdrawn at any time.

- I understand that this research may be published in a PhD thesis or dissertation but that I will not be identified in any way.

- I understand that participating in this research project will involve an interview that will be recorded. I understand that by participating in the interview my identity will be kept confidential and only accessed by the researcher and her supervisor.

- I am aware that I can contact Dr Christine Cunningham if I have any further queries. I have been given her contact details in the Information Letter.

- I understand that I can request a copy of the findings from this research upon its completion.

- I freely agree to participate in this project.

Name of Interviewee: __________________________

Signature: __________________________

Date: __________________________

Thank you for your assistance in this project.
Appendix G: Research Flyer

HEALTH EDUCATION SURVEY
of
LOWER SECONDARY PUBLIC SCHOOLS IN WESTERN AUSTRALIA

Please go online to
https://ecuau.qualtrics.com/SE/?SID=SV_3mYVX0nBmv5Rtju

and help to create a better understanding of health education in schools in Western Australia

Donna Barwood is conducting this survey as part of her research project and requirements of a PhD at Edith Cowan University, Perth. Donna is also a teacher of Health and Physical Education.

Participation in the survey is voluntary and should take no more than 15 minutes. Participants will remain anonymous unless they choose to offer their contact details for further interview. Those choosing to do so will be asked to sign a consent form with their names removed from the research findings. All information collected during the research project will be treated confidentially.

If you have any questions about this research project or require further information you may contact the following:

Student Researcher: Donna Barwood  
Telephone number: 0411 888 001  
Email: dmbarwoo@our.ecu.edu.au

Supervisor: Dr Christine Cunningham  
Telephone number: (08) 9370 6807  
Email: c.cunningham@ecu.edu.au
Appendix H: Interview Questions

HEALTH EDUCATION IN LOWER SECONDARY PUBLIC SCHOOLS IN WESTERN AUSTRALIA

INTERVIEW QUESTIONS

1. Tell me about the teaching of health education, what do you think is going on?

2. Tell me about the assistance or support you receive to teach health education and what you think may help you teach health education?

3. Tell me about your preparation to teach health education, your undergraduate degree, postgraduate degree or any professional development that is offered for the teaching of health education?

4. How would you teach a skills-based approach to health education in your classroom?

5. Who makes the decisions with regard to the teaching of health education in your school, how do these decisions come about?

6. Can you suggest changes that could be made at your school to enhance the delivery of health education?

7. Tell me about health education in Western Australia, how you think it is viewed and even how the view came about?

8. Can you suggest ways to improve the status of health education in WA?

9. Open question?

Thank you for your assistance in this project
Appendix I: Interview Thank You

HEALTH EDUCATION IN LOWER SECONDARY PUBLIC SCHOOLS IN WESTERN AUSTRALIA

Dear

Thank you for agreeing to be interviewed for the research project: *Health Education in Lower Secondary Public Schools in Western Australia*. Your input will be very valuable and will help to create a picture of health education in Western Australia. It will help to generate considerations for future directions in curriculum planning and proffer advice for school-based administrators in pedagogical developments for the delivery of the HPE Learning Area.

I greatly appreciate your time and effort, and hope that you had a fabulous rest over the holiday period. Wishing you all the best for 2012.

Yours in health

Mrs Donna Barwood
PhD student: School of Education
Edith Cowan University
28 October 2011

Mrs Donna Barwood
41 Summerhayes Drive
KARRINYUP 6018

Dear Mrs Barwood

I am pleased to write on behalf of the Research Students and Scholarships Committee who have approved your PhD research proposal: The Status Of Health Education In Lower Secondary Public Schools In Western Australia.

I also wish to confirm that your proposal complies with the provisions contained in the University’s policy for the conduct of ethical research, and your application for ethics has been approved. Your ethics approval number is 7374 and the period of approval is: 27th October 2011 until 1st December 2013.

Approval is given for your supervisory team to consist of:

Principal Supervisor: A/ Professor Anthony Fetherston - ECU
Co Principal Supervisor: Dr Christine Cunningham – ECU

The examination requirements on completion are laid down in Part VI of The University (Admissions, Enrolment and Academic progress) Rules for Courses Requiring the Submission of Theses available at: http://www.ecu.edu.au/GPFS/legal_legs/uni_rules.html

Additional information and documentation relating to the examination process can be found at the Graduate Research School website: http://research.ecu.edu.au/grs/

Please note: the Research Students and Scholarship Committee has resolved to restrict doctoral theses to a maximum of 100,000 words with a provision that under special circumstances a candidate may seek approval from the Faculty Research and Higher Degrees Committee for an extension to the word length. (RSSC 99/24).

I would like to take this opportunity to offer you our best wishes for your research and the development of your thesis.

Yours sincerely

Amy Roberts
Senior Student Progress Officer
Research Assessments – SSC

Principal Supervisor: A/ Professor Anthony Fetherston - ECU
Co Principal Supervisor: Dr Christine Cunningham – ECU
HDR: Sarah Kearn
THE STATUS OF
HEALTH EDUCATION
IN
LOWER SECONDARY PUBLIC SCHOOLS
IN WESTERN AUSTRALIA
(THESE IS A RELIABILITY CHECK ONLY)

WELCOME

Thank you for participating in the survey of Health Education in Lower Secondary Public Schools in Western Australia.

Your feedback to this survey is very important and part of ongoing research that aims to generate considerations for curriculum planning and developments for the teaching and learning of health education and the Health and Physical Education learning area in Western Australia. This survey is unique and will help to develop a picture of health education in lower secondary schools in Western Australia.

This survey contains three sections:

1. about you,
2. about your current school, and
3. about your current health education teaching.

The survey takes about ten minutes to complete. The survey will be online from .... until ..... You have the option of saving your responses and re-opening the site to complete the questionnaire at a later time but no later than (.....).

Please note that this survey is anonymous. However, if you choose to answer the last question in this survey, your answer will be removed from the survey findings.

If you have any questions, please contact Donna Barwood on 0411 888 001 or dmbarwoo@our.ecu.edu.au.
SECTION 1 - ABOUT YOU

What gender do you identify with?

☐ Male
☐ Female
☐ Other

What is your age?

Please select one of the below age groups.

☐ 20 - 29 years of age
☐ 30 - 39 years of age
☐ 40 - 49 years of age
☐ 50 - 59 years of age
☐ 60 - 69 years of age
☐ prefer not to answer

What is your main learning area?

Please select only one of the below areas in which you teach most at your school.

☐ Health and Physical Education
☐ The Arts
☐ English
☐ Languages Other Than English
☐ Mathematics
☐ Science
☐ Society and Environment
☐ Technology and Enterprise

What are your formal teaching qualifications?

Please select from the choices below. HPE refers to Health and Physical Education.

☐ HPE trained with health education minor
☐ HPE trained without health education minor
☐ Non-HPE trained with health education minor
☐ Non-HPE trained without health education minor
☐ Post graduate degree in health related studies
☐ Other (please specify)
### SECTION 2 - ABOUT YOUR SCHOOL

**What is your school postcode?**

Your school post code

**What is the name of your school?**

This information will be deidentified in the analysis.

**In what year(s) is health education taught at your school?**

*Choose multiple options if applicable.*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9 health education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 health education</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**In what term(s) is health education taught at your school?**

*Choose multiple options if applicable.*

<table>
<thead>
<tr>
<th></th>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Year 9 health education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 health education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**How many minutes per week are allocated to the teaching of health education at your school?**

*Please calculate carefully. If your school has a 6 day cycle (or more), calculate the minutes on a 5 day cycle. (For example, 60 mins/6 days = 50 mins/5 day cycle).*

<table>
<thead>
<tr>
<th></th>
<th>Time in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td></td>
</tr>
<tr>
<td>Year 9 health education</td>
<td></td>
</tr>
<tr>
<td>Year 10 health education</td>
<td></td>
</tr>
</tbody>
</table>

**Is there a health education coordinator at your school?**

- Yes
- No
How does your school teach the health related outcomes of HPE in year 8?

The year 8 HPE outcomes that relate to health are most commonly taught through the subject of health education within the HPE learning area, however, in some schools they may be taught in a learning area other than HPE.

Please select only one of the below learning areas.

- Health and Physical Education
- The Arts
- English
- Languages Other Than English
- Mathematics
- Science
- Society and Environment
- Technology and Enterprise

What is the percentage of HPE time allocated to the teaching of year 8 health outcomes?

For example, 100% of year 8 HPE learning area time may = 30% year 8 health education (health outcomes) and 70% year 8 physical education.

Year 8 HPE health outcomes

How does your school teach the health related outcomes of HPE in year 9?

The year 9 HPE outcomes that relate to health are most commonly taught through the subject of health education within the HPE learning area, however, in some schools they may be taught in a learning area other than HPE.

Please select only one of the below learning areas.

- Health and Physical Education
- The Arts
- English
- Languages Other Than English
- Mathematics
- Science
- Society and Environment
- Technology and Enterprise

What is the percentage of HPE time allocated to the teaching of year 9 health outcomes?

For example, 100% of year 9 HPE learning area time may = 30% year 9 health education (health outcomes) and 70% year 9 physical education.

Year 9 HPE health outcomes
How does your school teach the health related outcomes of HPE in year 10?

The year 10 HPE outcomes that relate to health are most commonly taught through the subject of health education within the HPE learning area, however, in some schools they may be taught in a learning area other than HPE.

Please select only one of the below learning areas.

- [ ] Health and Physical Education
- [ ] The Arts
- [ ] English
- [ ] Languages Other Than English
- [ ] Mathematics
- [ ] Science
- [ ] Society and Environment
- [ ] Technology and Enterprise

What is the percentage of HPE time awarded to the teaching of year 10 health outcomes?

For example, 100% of year 10 HPE learning area time may = 30% year 10 health education (health outcomes) and 70% year 10 physical education.

Year 10 HPE health outcomes
SECTION 3 - ABOUT YOUR HEALTH EDUCATION TEACHING AT YOUR CURRENT SCHOOL

Do you teach health education?

*Choose multiple options if applicable.*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Year 9 health education</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Year 10 health education</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Was it your choice to teach health education?

*Choose multiple options if applicable.*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Year 9 health education</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Year 10 health education</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

To what extent do you enjoy teaching the subject of health education?

*Choose multiple options if applicable.*

<table>
<thead>
<tr>
<th></th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9 health education</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 health education</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To what extent do you feel comfortable teaching the subject of health education?

<table>
<thead>
<tr>
<th></th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 9 health education</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10 health education</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To what extent do you find it satisfying teaching the subject of health education?

<table>
<thead>
<tr>
<th></th>
<th>Definitely yes</th>
<th>Probably yes</th>
<th>Maybe</th>
<th>Probably not</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 8 health education</td>
<td></td>
<td></td>
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<tr>
<td>Year 9 health education</td>
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<tr>
<td>Year 10 health education</td>
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</tr>
</tbody>
</table>

How important is the acquisition of the following attributes in the teaching of health education?

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Extremely Important</th>
<th>Very Important</th>
<th>Not at all Important</th>
<th>Neither Important nor Unimportant</th>
<th>Very Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring content knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing skills relevant to health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing attitudes and values</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

To what extent do the following statements describe your teaching of health education?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>I teach content knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I teach content knowledge combined with skills-based activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I teach content knowledge, combined with skills-based activities that include participatory learning (group work)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

What is your opinion?

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I teach in a crowded curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health education is an essential subject in a crowded curriculum</td>
<td></td>
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</tr>
</tbody>
</table>
Final Questions

Before completing this survey is there anything else that you would like to tell us about the teaching of health education in your school?

Last Question

Are you willing to further assist this research by agreeing to a confidential interview?

Please be assured that your response to this question will not be included in the data collection for this research and that your responses to this survey will remain anonymous. This question answer is not included in the survey findings.

Please indicate with your name and a contact telephone number in the space below. To ensure confidentiality a mobile contact is the preferred contact.

Block 4

THANK YOU FOR YOUR PARTICIPATION
Appendix L: Aspects of Standard 2: Professional Knowledge

This is a screenshot of Standard 2. It was taken from the Australian Professional Standards for Teachers (AITSL, 2011b). It focuses on professional knowledge constituting teacher quality for graduate and proficient teachers.