

Review and Maintenance Programme (RAMP) Health and Physical Education

An overview of themes in the research literature

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1. Introduction

In the second half of 2014 the Ministry of Education (MOE) initiated a process to review all materials funded and managed by them to support learning in the senior secondary school years – that is, those years of schooling when achievement is predominantly assessed by achievement standards that build towards NCEA qualifications (National Certificate in Educational Achievement). The process was given the acronym RAMP (Review and Maintenance Programme). The intention was that each curriculum learning area would be reviewed over a rolling cycle of three years. The stated focus was to ensure *“that materials that support NCEA continue to be aligned with NZC¹ and support the development and use of quality teaching and learning programmes in the secondary school”* (Ministry of Education briefing materials). For the purposes of the review “support materials” were to include all those developed by MOE and associated with NCEA: the achievement standards themselves; the matrix of key outcomes that accompanies the suite of achievement standards at each of NCEA levels 1–3; student exemplars and other assessment resources; and any specified conditions of assessment. The on-line senior subject teaching and learning guides were also in scope.

The Ministry of Education has sought several types of external input into the review process. An advisory group with demonstrated curriculum leadership and pedagogical expertise in the relevant learning area has the role of providing “on the ground” expertise related to the challenges of teaching and learning. At the same time the Ministry has requested a literature search for recent research related to implementation of NCEA in the relevant learning area and/or the uptake and enactment of the NZC in the final three years of schooling, informed by wider research of achievement in New Zealand across the years of schooling, and by any associated policy debates. External input from teacher and student focus groups is also planned to contribute to the review process and the findings from these focus groups will be fed into a final report with any recommendations for further development and support of each curriculum learning area. Achievement data for at least three previous years, along with feedback from relevant groups in NZQA and the Ministry itself, constituted internal sources of feedback.

These processes were implemented concurrently for the Mathematics and Statistics and Science learning areas of the NZC. Following this, the Technology and Health and Physical Education learning areas were included.

This report documents input to the RAMP process from the literature review of Health and Physical Education (HPE) practice in the New Zealand senior secondary school context. This

¹ The *New Zealand Curriculum (NZC)* provides an overarching national curriculum structure for all the years of schooling (Years 1-13).

review took place across a relatively short time span in mid-2015.² Three specific areas of importance to MOE were outlined for the advisory group and literature review team as:

- the critical connection between the NZC, teaching and learning, and NCEA
- the needs of priority learners
- the effect of support materials on school programmes.

With these priorities in mind, the NZCER reviewers searched for key relevant local literature. We found a range of papers debating the essence of HPE practice and the tensions inherent in this learning area. A small number of key international texts (mostly Australian) were also added to the New Zealand literature to check for emergent issues that might be of interest for the MOE as they determine their next steps in the provision of curriculum support. Search and selection processes are described in the Appendix 1. More than 100 references were added to the Endnote file before we stopped, confident that we had captured the main themes.

The following sections summarise key findings, organised to reflect the areas of concern for the RAMP process, and informed where appropriate by our awareness of local and international concerns being debated by communities of health and physical education educators.

Note that this report is an overview of key themes in the literature. It is not a comprehensive literature review. However, the manner in which we have structured the results of the literature overview process inevitably represents our thinking about the significance of the papers we found. One of us (Sally) has worked on many projects that explore the intersection between curriculum practice and the broader well-being and health promotion goals of the HPE learning area. The other member of the review team (Rose) was closely involved in the RAMP reviews for Science (Hipkins & C. Joyce, 2015), Mathematics and Statistics (Neill & Hipkins, 2015), and Technology (C. Joyce & Hipkins, in press). Rose has a broad general research background in exploring NCEA and generic issues of NZC implementation, with a specific focus on the role of key competencies in transforming learning. She was also part of the team which wrote the 1999 HPE curriculum. We have used our diverse backgrounds to reflect critically together on the structuring of the key themes in this review.

A brief discussion of the structure of the HPE learning area

At the heart of the HPE learning area is “the well-being of the students themselves, of other people, and society through learning in health-related and movement contexts” (Ministry of Education, 2007, p. 22). The HPE learning area is a combination of three “different but related subjects” (Ministry of Education, 2007, p. 22). These are health education, physical education (PE), and home economics. Four underlying and interdependent concepts underpin the learning area, and are intended to unify the three subject areas. These concepts are:

- **hauora**, which is described as a multi-dimensional Māori philosophy of well-being

² An annotated Endnote file constituted the second source of input from the literature search.

- **attitudes and values**, which incorporates a focus on social justice and positive and respectful attitudes towards the well-being of individuals, others, and the environment
- **the socio-ecological perspective**, a view of inter-relationships between individuals, groups, and society
- **health promotion**, a process that involves students in personal and collective action to build and maintain supportive physical or emotional environments.³

The HPE learning area is organised into four strands that explore different facets of well-being. Two strands are more individually focused: Personal Health and Physical Development; and Movement Concepts and Motor Skills. The other two are more collective and outward looking: Relationships with Other People; and Healthy Communities and Environments. HPE also includes seven key areas of learning which can be seen to be connected to different aspects of well-being: mental health; sexuality education; food and nutrition; body care and physical safety; physical activity; sports studies; and outdoor education.

Why learn HPE?

The RAMP review for the Science learning area documented considerable policy activity and debate about why *all* students should have rich and engaging opportunities to learn science at school (Hipkins & C. Joyce, 2014). An equivalent collection of policy papers was not found for the Mathematics and Statistics area. There is a parallel debate in the Technology learning area, although its focus is not on purposes for learning the subject per se, but rather on the types of learning experiences that are suitable for students with different learning needs (i.e., academic or pre-vocational) (C. Joyce & Hipkins, in press). In the HPE learning area this debate takes a different form again and is more concerned about how HPE practice can support students to contribute to their own and others' well-being as active and informed citizens. Aspects of this debate are discussed later in this overview.

A reflection on the framing of this overview

We looked for literature that related to the HPE learning area as a whole, or which related to its three contributing subject areas. Complexity is inherent in a learning area that includes three subject areas, four underpinning concepts, four strands, and seven key areas of learning. This complexity poses challenges when searching for unified practice. The three subject areas each have their own body of literature, as do some of the underpinning concepts and the seven key areas of learning. For example, outdoor education has its own body of research. Aspects of outdoor education practice are also connected with other literature such as that which discusses environmental education or place-based education (see, for example, M. Brown, 2012).

³ These shortened concept descriptions are summaries of the HPE learning area text from page 22 of NZC (MOE, 2007).

Much of the commentary we sourced appears to come from a community of relatively like-minded researchers who are actively engaged in building understandings about the nature and practice of socio-critical pedagogy in HPE. Most of this literature was in the form of commentary supported by some small-scale case studies or theses. Articles in journals for teachers and presentations at teacher conferences provided additional practical examples of emerging practice. We noticed that the literature about HPE practice from outside this learning area community sometimes represented perspectives that had stronger connections with 20th century views of HPE. A commentary on 20th and 21st century perspectives on HPE is provided later in this review.

The main body of literature we sourced related to PE practice. There is a substantial amount of recent writing in this space that discusses current philosophies of PE learning and explores the intersection of this philosophy with curriculum, pedagogy, and assessment practice. We have included a number of chapters on current debates and emerging practice from recent books in the *Routledge Studies in Physical Education and Youth Sport* series (Dowling, Fitzgerald, & Flintoff, 2012; Dyson & Casey, 2012; Hay & Penney, 2013; Ovens, Hopper, & Butler, 2013). Most of these books we refer to are edited by, and include, New Zealand writers. A New Zealand perspective on PE practice is also provided in *Issues and Controversies in Physical Education: Policy, Power, and Pedagogy* (S. Brown, 2011).

We also sourced some literature relating to health education and outdoor education. For example, the book *Health Education: Critical Perspectives* (Fitzpatrick & Tinning, 2014) provides an Australasian perspective on current debates and emerging practice in relation to health education. We found very little local literature relating to home economics or the intersection between home economics and PE or health.

Continuing evidence of a paradigm shift in the framing of issues

The first of the RAMP review series identified a paradigm shift in science education. We described the nature of the shift in terms of two quite different frameworks for thinking and drawing conclusions. One framework might be characterised as “business as usual”, that is traditional curriculum thinking, assessment, and pedagogical practice familiar to adults who were school learners in the 20th century. Alternative frameworks rethink these familiar assumptions and practices to arrive at different conclusions about appropriate curriculum, assessment, and pedagogical practices for the 21st century (Hipkins & C. Joyce, 2015).

We subsequently found evidence of similar 20th/21st century tensions within the Mathematics and Statistics learning area, with a predominance of 20th century framing in the research and commentary about mathematics, in contrast to a distinct trend to 21st century framing in statistics (Neill & Hipkins, 2015). This tension was also evident in the Technology learning area (C. Joyce & Hipkins, in press). In that learning area a 20th century framing perpetuates a view of

technology as mainly for pre-vocational learning—a pathway into trade-related employment. The 21st century view argues for a more general technology education for all students. In the latter framing, practical and academic learning mutually support achievement rather than being positioned as an either/or choice.

An equivalent paradigm shift is also evident in the HPE learning area. As the following sections will show, it takes a different form again. In common with the other completed RAMP reviews, we endeavour to clearly identify instances where one or other paradigm perspective clearly influences the manner in which debates have been shaped.

Where findings from the Science, Mathematics and Statistics, and Technology reviews are also applicable to HPE we have mostly chosen to paraphrase and cross-reference from the relevant review, keeping the focus of this report directed to substantive new issues.

2. Health and Physical Education in the NZC

The 2007 revision of the HPE learning area

Between 2004 and 2007, as part of the development and consultation phases of the New Zealand Curriculum Project, the Ministry of Education commissioned a series of papers from key writers. The papers from writers in the PE, health, and home economics spaces were commissioned to assist in informing the revision of the HPE learning area. The general brief was for the writers to address all or some of the following:

- provide an outline of what contemporary practice in an area or subject looked like
- clarify the place of a subject or concept within the HPE learning area
- identify the subject or concept's relationship to the key competencies
- identify barriers and enablers pertaining to students' learning in this area or subject.

For the HPE learning area, papers explored:

- physical education practice (Culpan, 2005)
- health promotion practice (Robertson, 2005)
- home economics practice (Street, 2006)
- key competencies as located within the HPE learning area (Burrows, 2005; Tasker, 2006)
- how 21st century learning perspectives are evident in HPE (Hipkins, 2005a).

The general tenor of these papers is one of support for the socio-critical and socio-ecological underpinnings of the 1999 HPE curriculum. This theoretical framing was also clearly reflected in the then proposed 2007 HPE learning area. The writers also considered that there was generally a good fit between HPE learning and the proposed key competencies (Burrows, 2005; Street, 2006; Tasker, 2006). However, some concern was expressed that the centrality of physical experience to people's lives might not be adequately reflected in the proposed competency framework (Burrows, 2005).

A number of ongoing tensions within the HPE learning area were identified. The writers suggested these needed to be addressed to maximise the educative value of HPE practice, as this practice was described in the new learning area. Tensions included the difficulties inherent in combining three subject areas, and challenges about whether the learning area was trying to achieve too much. Conflicting messages within HPE were seen as a concern. Culpan (2005) discussed the need to challenge the "healthism" (20th century) perspectives evident in government policy, and aspects of HPE and PE practice. A healthism perspective views PE learning as a site for the unproblematic promotion of physical activity as a mechanism to address concerns about issues such as obesity. Culpan argued that this perspective conflicts with the socio-critical framing of the HPE learning area. He suggested that teachers needed clearer

messages about how to embed a socio-critical conceptualisation of PE to ensure that physical activity is positioned as a process which supports students to become “reflective and critical consumers of physical activity” (p. 11). This debate is a manifestation of the paradigm shift from 20th to 21st century practice as it plays out in the HPE learning area.

While these papers are outside the time frame for this overview (2010 onwards), they have been included to enable reflection on whether the promise of the HPE learning area in shifting toward socio-cultural perspective and pedagogies has been achieved, and if, and how, the paradigm tensions that were raised have been addressed.

HPE in New Zealand schools: Points of difference

The HPE learning area has a few points of difference to other learning areas. Some of these differences, and any recent literature that comments on them, are discussed below. The chapters that follow can then be read with these differences in mind.

Some learning areas of the curriculum brought together discrete subjects within a common underpinning discipline area. For example, in the senior secondary school the subject called science separates into biology, chemistry, physics, and earth and space science. The HPE learning area is different in that it brought together three diverse subjects with no strong curriculum tradition of being offered in combination. Nor did they have similar underpinning disciplinary frameworks such as those found in science. Consequently those working within the three subjects had different pedagogical traditions and ways of working. The writers of the 1999 HPE curriculum⁴ found coherence in the socio-ecological framing that addressed shared concerns for student well-being, but this accommodation was not without its tensions, as we now outline. One tension is that the teachers and teacher educators working in the new HPE space also needed to find and make connections between the different facets of the new HPE learning area.

Challenges for developing coherent practice

Although physical education, health education and home economics are tied by common threads (e.g., the four underlying concepts of the HPE learning area) this conflation causes some challenges for developing coherent practice. We found two papers that addressed this issue.

⁴ One of the authors (Rose) was a member of this writing team.

Evidence from the literature

- Ovens (2010) suggests that the complexity inherent in having three subject areas, four underpinning concepts, four strands, and seven key areas of learning is a challenge for teachers when attempting to deepen their understanding of the HPE learning area. He considers that this complexity, combined with the competing discourses found in the wider NZC document, has the potential to lead to different interpretations of key messages and concepts.
- Smith and Philpot (2011) make a similar point in relation to teacher training for senior PE. They suggest that the two subjects, health education and PE, have yet to be integrated into a single curriculum space. Instead, each has its own pedagogical discourses. This continued divide between the two areas reinforces views that health education is something that is studied in class while PE happens outside or in the gym. They suggest that HPE needs to present a more integrated and coherent front.

The uncertain “home” of home economics

In New Zealand, learning experiences in the context of food are offered in both HPE and the Technology learning area. This can lead to confusion about the relationship between home economics and food technology, even though the underpinning philosophies of the two learning areas are very different. Despite the evident challenge, we found only a few examples of literature that discussed home economics practice in the light of HPE practice. Some discussion aimed at finding common ground between health education, PE and home economics can be found in the *Education Gazette*.⁵ Discussions with the HPE teachers and teacher educators at the RAMP HPE hui confirmed that there was little recent writing aimed at home economics practice within HPE. The one earlier report we found is outlined next. Note that the focus of this report was on NCEA rather than the nature of home economics as such.

Evidence from the literature

Hipkins, Conner, and Neill (2005) documented the initial impact of the NCEA framework on home economics practice, following the introduction NCEA achievement standards in 2002. Changes in home economics teaching and assessment practice were explored in 10 case study schools. Home economics teachers reported their subject had changed dramatically during the period of the study. Shifts were related to the new focus of the 1999 HPE curriculum and included a change from a science-based and content-driven approach to a socio-ecological curriculum with a focus on critical thinking.

We found few examples of literature that discussed whether the initial shifts discussed in Hipkins, Conner, and Neill have continued or are evident in a wider range of schools. We found two small

⁵ See: <http://www.edgazette.govt.nz/Articles/Article.aspx?ArticleId=8767> and <http://www.edgazette.govt.nz/Articles/Article.aspx?ArticleId=8456>

case studies located within broader publications. These showed a spectrum of practice from approaches that were more aligned with 20th century views of HPE (Burrows, 2011) to an example of home economics learning that supported systems and critical thinking (see pp. 64-67 in Hipkins, Bolstad, Boyd, & McDowall, 2014). This spread of approaches might be indicative of a broad range of interpretations of the overall intent of home economics learning.

A desire to provide a sense of clarity in relation to home economics practice in schools is noted internationally. In Australia, the community is working to better align home economics practice with the Australian national competencies framework. They are also attempting to send clear signals that home economics learning should be trans-disciplinary and transformative.

A case study from the literature: An Australian perspective on home economics

A recent paper provides an example of how Australian educators are working to define the essence of home economics learning and associated pedagogies (Home Economics Institute of Australia Inc., 2010). The paper explores the place of home economics within the curriculum. It also examines the fit between the recently developed general capabilities (key competencies) framework in Australia and home economics learning. Examples are provided which show how each capability could be developed through home economics learning. The paper's definition of home economics learning is taken from the work of the International Federation for Home Economics (IFHE). The definition states that:

...all home economics subjects and courses of study must exhibit at least three essential dimensions:

- a focus on fundamental needs and practical concerns of individuals and family in everyday life and their importance both at the individual and near community levels, and also at societal and global levels so that well-being can be enhanced in an ever-changing and ever-challenging environment
- the integration of knowledge, processes and practical skills from multiple disciplines synthesised through interdisciplinary and transdisciplinary inquiry and pertinent paradigms
- demonstrated capacity to take critical/transformative/emancipatory action to enhance well-being and to advocate for individuals, families and communities at all levels and sectors of society (IFHE, 2008) (Home Economics Institute of Australia Inc., 2010, p. 2).

Overall, the lack of writing about home economics from a New Zealand perspective suggests one gap that could be addressed in the provision of resources and support for teachers.

HPE promotes embodied learning

Another point of difference for the HPE learning area is that learning which integrates mind and body (or cognitive learning with forms of active or experiential learning) is central to HPE practice. The idea of embodied learning is discussed in relation to the “practical” aspects of

learning within HPE. The literature promotes embodied learning experiences as a unique aspect of HPE practice and which can contribute to students' meaning-making as well as well-being.

Evidence from the literature

- A background paper about the place of PE in the revised curriculum (Culpan, 2005), argues that PE learning provides a way for individuals and groups to make sense of the world through “embodied consciousness”. He suggests that movement is a rich and powerful vehicle for achieving a sense of meaning through the lived body. Culpan considers the inclusion of concepts such as hauora in the NZC promotes embodiment by showing the inter-relationship between the physical, social, mental and emotional, and spiritual nature of well-being.
- In another HPE background paper, Hipkins (2005a) argues that embodied knowledge is now seen as a valid and valued way of learning. Hipkins suggests that opportunities to come to understand something about oneself or others through movement and actions abound in the HPE learning area.
- In a commentary about the HPE learning area, Tinning (2009) argues that the unique contribution that PE makes to the curriculum needs to be highlighted. This contribution is HPE's role in developing physical literacies that represent a resource young people can use. Tinning suggests that the embodied, sensuous and aesthetic pleasures of movement are very important in the context of PE learning and promote well-being. He considers that making the subject too academic and scientific could marginalise these aspects of PE practice.
- Straker (2014) argues that the inclusion of outdoor education in the HPE learning area validates experiential outdoor experiences as a site for learning. For her thesis she interviewed 11 outdoor educators to explore the various meanings they gave to “the outdoors”, and how these meanings might shape their practice. Educators emphasised the design of learning experiences that were meaningful for students and holistic and multi-dimensional in nature. The experiences they designed combined embodied and experiential learning opportunities with opportunities for: systems, creative, reflective, and critical thinking; pro-environmental actions and education for sustainability; building cultural connections; challenge activities; and spontaneous learning moments. Straker also described a number of non-traditional outcomes possible from outdoor education such as increased well-being.

HPE practice intersects with wider school goals

Another point of difference for the HPE learning area is that, unlike other learning areas, HPE has goals and ways of working that overlap with the wider mission and ways of working of schools. The unique nature of this relationship is stated in the HPE learning area text.

This learning area makes a significant contribution to the well-being of students beyond the classroom, particularly when it is supported by school policies and procedures and by the actions of all people in the school community. (Ministry of Education, 2007, p. 22)

This statement implies that coherence between HPE practice and wider school practice is likely to enhance students' well-being. For example, activities that foster well-being are part of the HPE classroom learning experience, as well as wider school practice. In schools the many activities or services that can foster health and well-being include: extra-curricular activities; activities that make connections with parents, family, whānau and wider community members; student leadership opportunities; the processes used to foster class and school cultures and relationships; and health services and pastoral care networks. Other aspects of school practice, such as behaviour management and disciplinary procedures, can also have an effect on student well-being.

We found very little literature that explicitly considered the relationship between wider school practice and HPE learning. Some of the literature we did find presented a view that wider school practice was not always well-aligned with the ideals set out in the HPE learning area.

Evidence from the literature

- Hay and Penney (2013) introduce the idea of “lifewide” (as well as lifelong) learning. They consider how assessment might promote “lifewide” learning by drawing on and supporting students’ connections and networks that are formed outside of school structures. However they also note that a focus on these connections could also act to further “blur” or conflate health and PE learning with physical activity and/or sport. They consider this blurring could act against consistency of practice. As a way forward they suggest that a focus on sports or community networks within HPE practice needs to also include discussion of how the connections are made between curriculum, pedagogy, and assessment.
- Reflecting on the connection between the HPE learning area and wider school practice, Tinning (2014) suggests that the mix of messages that teachers receive about the connection between wider school agendas and HPE can result in confusion for HPE teachers about which approaches they are promoting in their role as health educators. A similar argument was presented in the earlier position paper by Culpan (2005).
- In a TLRI study, Petrie et al. (2013) worked with teachers from two primary schools to re-imagine HPE practice. Initially, some of the school approaches to sport and HPE were more aligned with a 20th century perspective rather than the socio-critical approaches underpinning HPE practice. That latter values difference and the participation of all. The team also observed that some school practices conflated HPE learning with sports participation.
- Cushman and Clelland (2012) conducted a survey of schools which asked respondents about student health issues that got in the way of learning. They found that schools

mostly focused on physical well-being, which they interpreted as suggesting that schools were not considering well-being in a holistic sense as promoted by the NZC.

Some literature provides suggestions about how learning in the HPE learning area and other aspects of school and curriculum practice could be better aligned. The rationale for this alignment is that HPE learning has a role to play in actively building students' well-being and/or addressing wider societal health and well-being goals.

Evidence from the literature

- Futter-Puati, Gillespie, and Tasker (2014) consider how HPE practice and wider school practice could be aligned to support student well-being and learning in the context of relationship education. They note that a focus on relationships is an integral part of the HPE learning area. They also suggest that the effect of relationship education within HPE could be enhanced through involvement of the whole community and through the alignment of school-wide approaches that promote a positive school culture; for example, restorative practices.
- A recent Education Review Office (2015) report, *Wellbeing for Young People's Success at Secondary School*, suggested that schools could be more deliberate in using the HPE learning area to promote well-being. ERO noted the constraint that the health curriculum is only compulsory up to Year 10 at many schools, and is mostly only taught for two hours a week. The report also suggested that schools:
 - need to map how well-being themes are taught across learning areas and levels to determine whether all groups of students, because of the subject choices they make, have opportunities to explore well-being themes outlined in NZC. (Education Review Office, 2015, p. 29)
- Clinton et al. (2012) discuss the need for school assessment frameworks that bring together learning achieved through HPE curricula with wider school practice to provide feedback that supports teachers and schools to promote well-being. They argue that schools are well placed to promote different facets of well-being across physical, social, mental, and emotional domains.

A non-compulsory learning area: Opportunities and challenges

It important to note that, although HPE is one of the eight key learning areas in the NZC, not all learning areas appear to have the same status within schools.

Evidence from the literature

- The HPE national monitoring report (EARU & NZCER, 2015) asked primary principals to rate the priority they placed on health and PE in comparison to other learning areas. The average rating for PE was 7th for Year 4 and 8th for Year 8. For

health, the ratings were 11th and 12th respectively. In contrast, reading, writing, and mathematics were rated in the top three at both Year 4 and Year 8.

- HPE is not compulsory in Years 11–13, and fewer students take this subject compared to other choices. A report of the age-16 phase of the longitudinal *Competent Children, Competent Learners* study noted that a health and PE combination was compulsory for only 18% of the 44 students who were in Year 11. PE by itself was compulsory at 32% of schools. In contrast, at Year 11, English and mathematics were compulsory at 98% of schools, and science at 68% (Wylie, Hipkins, & Hodgen, 2009).

Schools tend to prioritise core learning areas such as English, mathematics and science. These learning areas have long and established assessment traditions. For HPE, being a “non-core” area in Years 11 to 13 appears to present both opportunities and challenges.

Evidence from the literature

- One opportunity noted in the literature is that HPE teachers feel they have more space to innovate. For example, in the NZCER 2012 National Survey, teachers of health and PE were more likely than teachers of mathematics and science to strongly agree that NCEA gives them the freedom to design courses/programmes “how we want” (Hipkins, 2013).
- Pope (2014) notes that the lower status of HPE means school and teacher education departments are vulnerable to cost cutting. This has implications for maintaining a professional community of HPE teachers and specialists.
- Smith and Philpot (2011) suggest that one effect of the government priority on literacy and numeracy is that HPE teacher education programmes are being “squeezed out” of teacher training.

3. Building understandings about the socio-critical nature of HPE

The first of the RAMP review series identified a paradigm shift in science education and related tensions (Hipkins & C. Joyce, 2015). This shift and tensions was also evident in the reviews for Mathematics and Statistics (Neill & Hipkins, 2015) and Technology (C. Joyce & Hipkins, in press). This section explores the form of this paradigm shift in the HPE learning area and introduces the literature that attempts to build practice in relation to this shift. This section also considers the extent to which this shift supports an alignment between the intent of the wider curriculum and its enactment in HPE.

The paradigm shift in HPE practice

Thompson (2012) observed that HPE was one of the last curriculum areas written in the period 1993–1999. She and other commentators (e.g., Hipkins, 2005b; Ovens, 2010) consider the 1999 HPE curriculum (Ministry of Education, 1999) already incorporated 21st century principles.

On the whole, commentators suggest there was little change in the big picture framing of the HPE learning area in the 2007 revision. When the 2007 HPE learning area statement is read in combination with other transformative signals from the “front end”⁶ of the NZC (vision, values, key competencies, and so on) there is a sense that HPE has a stronger alignment between the “front-end” and the underlying HPE concepts than some other learning areas.

The shift from a 20th to a 21st century interpretation of curriculum is discussed in earlier and recent literature about HPE. This shift takes a different form to that discussed in the Science and Mathematics and Statistics RAMP reviews. For the HPE learning area, the shifts over time in the philosophy underlying this learning area were located within a global shift in health practice away from an “individual” view of health towards views that are underpinned by “societal” views of health and well-being. For the HPE learning area, Ovens (2010) cites Culpan’s description of this shift as a move away from a “**technocratic**” towards a “**socio-critical**” curriculum. The table below shows the essence of this shift for PE practice.

⁶ The “front end” of NZC refers to the vision, values, principles, and statements about pedagogy that provide a big picture framing within which the “back end” of NZC (the learning areas) are interpreted and enacted.

Table 1 The shifting strategic direction of physical education*

Technocratic curriculum (individual) Previous curriculum model (prior to 1999)	Socio-critical model (societal) Revised curriculum (1999 and 2007)
Focus on physical skill development	The focus is on all aspects of movement culture and taking into account the physical, social, spiritual, and emotional aspects of well-being
Health is conceptualised in deficit terms as freedom from sickness, which can be addressed by individual actions	Health is conceptualised in positive terms emphasising its holistic nature and interrelationship with society
Programmes are dominated by focus on development of techniques involved in playing sport, usually the sports in society	Movement is conceptualised and experienced in its broadest sense, with the significance of, influence and functions of movement, from both an individual and social perspective, being studied
Teaching is characterised by direct styles that position the teacher as an expert who transmits knowledge to a passive and unquestioning learner	Teaching is characterised by styles that encourage critical thought and reflection on information being taught. Teaching is sensitive to the diversity of learners, emancipatory, and focussed on action
Characterised by a very scientific view of movement in which the body, skills, and fitness are studied to enhance performance (typically in sporting contexts)	Ensures that a broad perspective, including scientific, economic, political, and cultural are studied to understand participation in, and construction of human movement culture

* Table adapted from page 29 of Ovens (2010), who adapted it from Culpan and Bruce (2007).

As Table 1 shows, the 20th century “technocratic” and the 21st century “socio-critical” approaches are premised on different views about what it is to be healthy. Technocratic approaches to health and well-being are called by a number of terms, including the “medical model”. The most commonly used term in the HPE literature is “healthism”.

In contrast to the “technocratic” approach, the “socio-critical” perspective is underpinned by a holistic view of well-being (hauora) which draws on systems-thinking ideas (the socio-ecological approach). The 21st century “socio-critical” framing looks at HPE practice through a social justice and equity lens. Through this lens, questions about the multiple contributing factors to community well-being are explored, taken-for-granted assumptions about health and well-being are challenged, differences and inequities are examined, and how well-being might be promoted is debated. The aim is to enable and empower individuals and communities to think critically about health and well-being, manage their well-being on their own terms, and take action to address issues of social justice. The ultimate aim is to develop students who are socially critical citizens.

Although HPE incorporates a 21st century framing, the tensions between 20th and 21st century interpretations of curriculum are still evident. Ovens (2010) suggests that some of the more transformative aspects of the 1999 HPE curriculum were diluted in the 2007 revision. For example, Ovens suggests that the recognition of Māori perspectives is one area that was more evident in the 1999 curriculum.

Tensions between 20th and 21st century interpretations are also evident in the framing of the strands within the HPE learning area. For example, some strands such as Healthy Communities and Environments clearly promote learning that is underpinned by socio-critical approaches. This connection is less clear for strands such as Movement Concepts and Motor Skills.

Navigating tensions and building understandings of a “socio-critical” learning area

We found evidence of commentary, research, and professional learning and development (PLD) activity to support teachers in grappling with the shift towards 21st century approaches in the HPE learning area. The majority of the papers sourced for this overview were located in this space, suggesting that developing a more nuanced view of socio-critical pedagogy is ongoing. Most of the papers were commentaries, supplemented by case study examples of practice.

Some papers outlined the history of the change in the HPE learning area and the implications of these shifts for teacher practice. Many papers aimed to deepen understanding about how socio-critical pedagogies might shape HPE practice or explored tensions of interpretation within the HPE learning area. Some considered the fit between HPE and the wider NZC document. Others attempted to align different forms of current HPE practice with their “technocratic” or “socio-critical” origins.

Many of the papers addressed different facets of a discussion about healthism or technocratic approaches versus socio-critical approaches. A frequently mentioned manifestation of “healthism” is a debate about whether HPE learning (and schools) should be a site for individuals to learn healthy habits that contribute to addressing the “obesity epidemic” or global concerns about “unhealthy” life styles. Some approaches that seek to educate “unhealthy” populations are seen as a manifestation of “healthism” and are not seen to be aligned with the intent of the HPE learning area or the wider curriculum.

One general theme underpinning most of this literature is a call for a stronger sense of clarity about what critical pedagogy might look like within HPE practice. This concern was common across the primary and secondary sectors. These debates and tensions are also evident in literature from Australia as their HPE curriculum undergoes a similar transformation (Leahy, O’Flynn, & Wright, 2013; Macdonald, 2013).

Evidence from the literature

- Weir’s (2009) thesis explored the effect of official policy changes in the health education curriculum and assessment practices over 1999 to 2004. The small number of secondary school health teachers in this study said that the 1999 HPE curriculum legitimated their teaching focus in relation to areas such as mental health and sexuality. However, most teachers positioned themselves within individual discourses that were more aligned with healthism than the intent of the new curriculum documents. One

common discourse, based on “reproductive health”, concerned preventing pregnancy and infections, and was associated with transmission teaching methods. A second common discourse was an “essentialist gender” approach which included traditional assumptions about gender. This did not necessarily allow for diversity in gender positioning. Implications included the need for more support for teachers to shift their pedagogical framing to better fit the intent of the new curriculum.

- Ovens (2010) attempts to define what socio-critical pedagogies might look like in HPE. He notes that one implication of the multiple and competing discourses in the 2007 curriculum is that teachers can interpret the intent of the wider curriculum, and HPE learning area concepts, in different ways. He uses the concept of critical thinking as one example. The intent of the HPE curriculum is to promote critical thinking through socio-critical pedagogy. This reading of critical thinking addresses social justice concerns by challenging taken-for-granted assumptions about health and well-being. Alternatively, the NZC call for students to develop critical thinking capabilities could also be interpreted as simply being about “a set of meta-cognitive skills to promote higher order thinking” (Ovens, 2010, p. 30). Such a reading is not so well-aligned with socio-critical practice.
- Burrows (2011) reports on the findings from a critical ethnographic study, conducted in two multi-cultural schools, that explored teachers’ and students’ responses to health-related government and school health messages. The schools had significant populations of Māori and Pasifika peoples whom Burrows notes are often portrayed as “high-need” communities. A case study shows how one home economics teacher responded to messages about obesity and health imperatives in ways that perpetuated Western middle class ideas of health and labelled students as “at risk”. Despite the messages around them, Burrows found that students were able to engage in critical thinking that drew on a range of understandings. She suggests that researchers, educators, and policy makers need to focus on understanding how health messages can “differently enable and constrain” (p. 350) students from different communities.
- Pringle and Pringle (2012) discuss the epistemological and ethical tensions that HPE teachers face in regard to competing obesity and physical activity discourses. They suggest that the dominant obesity discourse, underpinned by truth claims from science, is a form of “healthism” that can encourage educators to pathologise fatness and treat exercise as a medicine. This can result in behaviours that are, in themselves, also harmful for health (e.g., an emphasis on weighing and measuring students). Another discourse argues that obesity concerns are socially constructed and represent a moral panic. Overall, Pringle and Pringle raise concerns about how “healthism” approaches offer a narrow view of health and well-being, that is not aligned with the intent of the HPE learning area, and could potentially be damaging to some groups of students. They suggest that the existence of different discourses results in educators being pulled in different directions in regard to HPE practice. To find a way forward they suggest that HPE education needs to be “less about the transmission of knowledge and facts and

more about equipping students with skills so that they can critically engage with uncertainty and our culturally diverse and changing social world” (p. 157).

Some literature discusses approaches that aim to address some of the tensions highlighted in the above commentary and research. The overall aim is to align HPE learning with the intent of the NZC by building a focus on socio-critical pedagogies that assist students to become socially critical thinkers and citizens.

Evidence from the literature

- Fitzpatrick (2010) suggests that, although current curriculum documents offer a critical framing for HPE subjects, examples of critical practice are needed. Fitzpatrick (2010) and Fitzpatrick and Russell (2015) describe the findings from a PhD thesis that used a critical ethnography methodology to explore how young people in a secondary school in Otago engaged with and responded to HPE subjects. The thesis discusses the uneasy space that HPE subjects have in New Zealand secondary education. HPE is often associated with narrow norms and a sports culture. Fitzpatrick provides an account of how one teacher aimed to enact “a critical and culturally connected pedagogy” (abstract) in ways that supported the learning of Pasifika and Māori youth in his classes.
- A commentary by Thompson (2012) links different PE learning experiences to three models of citizenship: personally responsible, participatory, or justice-orientated. Thompson critiques the traditional PE emphasis on developing “personally responsible” citizens. She suggests this focus aligns with a healthism discourse. As an example of a practice that demonstrates the “personally responsible” view of citizenship, she cites a common PE pedagogy, Teaching for Personal and Social Responsibility (TPSR), developed by Hellison (2011).
Thompson argues that the revised HPE learning area, and the 2007 curriculum overall, is more aligned with ideas about developing justice-orientated citizens. She sees PE learning as increasingly being recognised as a platform for developing justice-orientated citizens who can contribute to social change. Thompson offers an example of students analysing media reports to explore gender stereotyping as one approach which could foster justice-orientated citizens.
- A need for examples of a critical HPE framing in action is also mentioned in regard to primary school practice. A recent TLRI project documented how a researcher–teacher partnership re-imaged HPE teaching and learning away from the prevailing focus on “fitness” towards inclusive approaches premised on holistic views of health and well-being (Cosgriff et al., 2013; Petrie et al., 2013).

Using the key competencies to explore the line of sight between the “front” and “back” end of the NZC

One way of exploring the alignment between the intent of the curriculum and its enactment in HPE is to explore the extent to which the key competencies from the “front end” of the NZC are reflected in HPE practice.

The NZC vision for students is that they will be “confident ... connected ... actively involved ... lifelong learners” (Ministry of Education, 2007, p. 8). Among other attributes, the NZC vision suggests that schools will support students to develop the capabilities they need to be critical and creative thinkers, and informed decision makers who actively seek, use, and create knowledge to actively contribute to the sustainable future and well-being of New Zealand. A focus on this “front end” vision of the NZC, and the key competencies, appears woven within many different aspects of the HPE learning area statement. The NZC vision for young people shows synergies with the HPE core concepts:

Attitudes and values—a positive, responsible attitude on the part of students to their own well-being; respect, care, and concern for other people and the environment; and a sense of social justice.

The **socio-ecological perspective**—a way of viewing and understanding the interrelationships that exist between the individual, others, and society. (Ministry of Education, 2007, p. 22).

The apparently simple term “attitudes and values” masks a complex question—how should the HPE learning area develop students who are socially critical citizens? The socio-ecological perspective adds a systems thinking and socio-cultural dimension to HPE practice. These directions align with the underpinning theoretical background of the key competencies.

In a background paper about the fit between the then proposed key competencies and HPE learning, Burrows (2005) concludes there is a “good match” between HPE and the competencies.

The key competencies are clearly reflected in the HPE strands; for example, the strand Relationships with Other People has a strong link with the key competency *relating to others*. The strand Healthy Communities and Environments has a strong connection with the competency *participating and contributing*. The competency *managing self* could be seen to be interconnected with the concept of hauora and the strand Personal Health and Physical Development.

A description of a range of HPE-related competencies that students will develop is also included in the statements about health education, physical education, and home economics in the HPE learning area. Core HPE capabilities include critical thinking, which is an aspect of the key competency *thinking*. Another is critical action which could be seen to be connected with the competency *participating and contributing*.

Several papers explore the form that the key competencies might take within the HPE learning area if they are to reflect the socio-critical nature of HPE. Most of this literature is concerned with

ways students can be supported to be socially critical citizens who can challenge health messages and taken-for-granted practices.

Evidence from the literature

- Sinkinson and Burrows (2011) explore what 21st century health competencies might look like. They discuss a tension that must be navigated by health teachers. How can teachers offer notions of health using the “language of self-empowerment, autonomy, resilience, optimism, and wellness” (p. 60) while faced with deficit language and health models? They suggest that the re-framing of health education through a 21st century lens can assist teachers with this tension. Through this lens, the role of the health educator is to support young people to develop “health competencies” that enable them to think critically about deficit language and models, and support them to learn about self and the possible multiple ways of being in different situations. Sinkinson and Burrows suggest a range of possible 21st century health competencies that could be focused on in health education courses. These include resilience and critical literacy.
- A commentary from Gillespie (2013) discusses the conditions needed to foster students’ critical capabilities in HPE. Barriers that may inhibit teachers from fostering these capabilities are identified. They include: students’ interests, which may lean towards sports and movement contexts rather than critical thinking; school cultures that value compliance and do not reward students who might challenge rules; and limited time for teachers to engage with new approaches that foster criticality. She provides examples of approaches that have been successfully implemented by teachers to support the development of criticality, such as, creating learning experiences that: problematise perceptions by exploring assumptions and stereotypes; consider how knowledge is socially constructed; or explore different perspectives and their assumptions about the body and movement; for example, scientism, healthism.
- Gillespie and McBain (2014) describe a Critical Analysis Process (CAP) model. This model is designed for use by teachers to facilitate students to develop the competencies needed to engage in critical thinking and action. The model takes senior secondary students through a nine-step process designed to assist them to adopt a socio-critical stance. The model can also be used by teachers for planning and reflection.
- Gillespie, Penney, and Pope (2013) present the findings from a collaborative action research project that explored the opportunities PE presents to foster three of the NZC key competencies: *thinking*; *managing self*; and *relating to others*. Teachers see a range of benefits from foregrounding the competencies. These include: an enhanced focus on learning; shifts to more student-centred pedagogies; and that a focus on the competencies provided a useful lens to reflect on departmental curriculum planning. The study also highlights the value of research approaches that emphasise collaboration and support professional learning.

Complexity and systems thinking in HPE practice

A small amount of recent literature discusses the contribution that theories such as complexity and systems thinking, which are increasingly being used to understand educational practice, could offer PE practice. On one level, the inclusion of the socio-ecological perspective as an underpinning HPE concept could be viewed as compatible with systems thinking. One piece of literature we found suggested that the inclusion of systems perspectives was needed to ensure senior PE programmes and curriculum and assessment resources are up to date. A second piece of literature explored the utility of applying complexity thinking concepts to PE practice.

Evidence from the literature

- Bowes (2014) argues that teachers need to adopt a contemporary multi-disciplinary systems framework that takes into account the interconnected nature of the human system, to inform their approaches to skill acquisition in senior PE. The first part of her article describes and compares traditional motor skill learning and contemporary systems-based skill acquisition theories. The next section uses evidence from analyses of student scripts from the NCEA scholarship PE achievement standard, and of the Senior Subject Guidelines on TKI, to argue that traditional motor skill learning theories appear to dominate teaching in senior PE programmes. Bowes concludes that contemporary skill acquisition knowledge needs to be included in senior PE programmes and challenges teachers to “up skill” by reconsidering which skill acquisition knowledge is valued and taught in these programmes.
- The book, *Complexity Thinking in Physical Education* (Ovens et al., 2013), includes a number of chapters by Australasian writers. Two chapters provide a critique of the application of complexity thinking as a tool in enhancing understanding of PE practice. Fitzpatrick (2013) considers complexity, equity, and critical approaches to physical education. She presents an analysis of the same situation through three theoretical lenses (complexity, hybrid, and Bourdieu’s notion of fields). From this analysis she cautions that complexity theory approaches may not have a good fit with the social justice goals of the socio-critical approaches that underpin HPE. Her reasoning includes that the language of complexity theory can be dehumanising and draws attention away from holistic notions of the body and ideas of embodiment. Fitzpatrick concludes that a complexity lens is not the best tool to undertake analyses of exclusion or marginalisation through PE practice.
In a second chapter in this book, Tinning and Rossi (2013) also suggest a need to be wary of adopting complexity-based approaches within PE practice.

A way forward for HPE: Resisting binaries and dichotomies?

Most writers are in support of the socio-critical underpinnings of HPE; however, they note considerable tensions for teachers in interpreting the intent of the learning area; balancing the competing positions on the key debates within HPE; dealing with the challenge to their own or others' viewpoints that might arise when taken-for-granted assumptions are challenged; and addressing the social justice agenda of HPE by fostering competencies such as critical thinking and action. Finding a pathway through these tensions is needed to enact the intent of the HPE learning area in practice.

Some writers critique socio-critical approaches and offer future directions for HPE practice. A number suggest there is a need for a both/and approach that explicitly avoids dichotomies and attempts to bring together perspectives that at first glance seem incompatible. For some this both/and perspective is to accommodate the tensions evident between past practice and the current directions of the HPE learning area. For others, it is to better align curriculum, pedagogy, and assessment practice with the overall intent of the HPE learning area and NZC.

Evidence from the literature

- Bowes and Bruce (2011) worked with senior PE teachers from 20 schools as these teachers attended a series of workshops to plan learning experiences for the PE scholarship NCEA achievement standard. During these workshops, a number of tensions relating to the socio-critical approach of HPE were raised. Bowes and Bruce conclude that critical pedagogy can be implemented in senior PE, but they also discuss its limitations. They suggest that socio-critical approaches tend to conceptualise perspectives as binaries, for example, those with power and those without power. They suggest a post-critical, 21st century approach to HPE is needed which **resists binaries**.
- Hart (2014) explored school and student decision making in regard to four socio-critical NCEA achievement standards. She found that teachers and students were less likely to select these socio-critical achievement standards. At the two case study schools in Hart's study, teachers' selection was influenced by **dichotomous thinking** (i.e., binaries as suggested above). One example of this thinking is that "socio-critical achievement standards are non-practical". Other dichotomies that influence decisions included socio-critical versus biophysical discourses; theoretical versus practical knowledge; body versus mind; and physical education versus health. Hart notes that there are different ways of interpreting achievement standards, and some participants viewed the two ends of each dichotomy as a separate knowledge base rather than forms of thinking that could be integrated. Hart recommends that the HPE policy, practice, and research community find ways to avoid dichotomous thinking.
- Tinning (2009) suggests that HPE is over-claiming what it can achieve as a learning area. He raises a number of tensions for HPE teaching including that in recent years the

body has become a major source of anxiety among young people. This anxiety is compounded by “obesity epidemic” hysteria and thinking about bodies in scientific ways that has **marginalised the importance of movement**. Tinning supports the academic and socio-critical emphasis of senior PE. However, he suggests more balance is needed between the practical and academic aspects of PE to maintain HPE’s unique place in developing **physical literacies**. Tinning views these literacies as an important form of capital or resource that young people can use.

- Smith (2011) suggests that educators adopt Tinning’s idea of a **modest critical pedagogy** (which is modest about claims to bring about social transformation). Modest pedagogy is about “enabling plausible socially-critical action through the everyday classroom practices of teachers and learners” (p. 30). Smith discusses the capabilities that teachers need to enact a modest critical pedagogy. The capabilities include facilitating learners to question taken-for-granted beliefs that might marginalise some groups. He also notes it is possible to adopt a modest pedagogy that makes use of multiple forms of movement education.
- S. Brown (2015) attempts to find a pathway between two discourses in schools that have elite athlete programmes (EAPs) within the curriculum. One discourse is about prioritising achievement by a few students in high performance sports through EAPs, versus getting everyone healthy and active in HPE. The second is the social construction and potential labelling of the “elite athlete body as disciplined, attractive and healthy” (p. 228) versus a view of other bodies as unhealthy. Both discourses have the potential to contribute to the marginalisation of other students. Brown suggests one way forward is for **schools to use socially critical models within EAP programmes** to assist students to think critically about the role and function of sport and physical activity in their and others’ lives. Some examples of current practice are provided (e.g., students explore, and take action to address, a lack of physical activity accessibility at their school for different groups of students; or discrimination in sport).

4. Supporting students to lift achievement levels

This section begins with a discussion of achievement in HPE. Specific issues relating to HPE assessment practice in the senior secondary school are then discussed. Generic findings about raising achievement in secondary schools (Education Review Office, 2014) are not included in this overview as they have been explored in previous RAMP reviews.

Lifting achievement in senior HPE

Disparities in achievement start before secondary school

The Science (Hipkins & C. Joyce, 2015) and Mathematics and Statistics (Neill & Hipkins, 2015) RAMP reviews note that issues and disparities relating to student achievement start before secondary school. Recent evidence shows a similar pattern for HPE learning.

Evidence from the literature

The first national monitoring study in health and PE for Year 4 and Year 8 students took place in 2013 (EARU & NZCER, 2015). The study found that, on average, Year 4 students were exceeding the curriculum expectations expressed in the NZC, and Year 8 students were achieving below the expected level. Socioeconomic factors were strongly associated with performance, with students from lower-decile schools achieving at a lower level than those who attended higher-decile schools. On average, after the decile effect had been taken into account, achievement was lower for Māori and Pasifika students, and higher for New Zealand European students.

Motivation, engagement, and access to qualifications

Achievement is interconnected with motivation and engagement. We found a small number of papers that discussed students' engagement with HPE subjects. One interesting finding is that HPE is seen as low status in terms of the school curriculum, but conversely, high status in terms of student engagement. When interpreting the findings from this literature, it is also important to note that many students choose to drop the study of health and PE when it is no longer compulsory.

Evidence from the literature

- A report of the age-16 phase of the longitudinal Competent Children, Competent Learners study, which follows about 500 young people, noted that the two most enjoyed subjects of the students when they were in Year 9/10 and Year 11/12 were the arts and health/PE (Wylie et al., 2009). Only 4 percent identified health/PE as their least favourite subject. Students' preferences in relation to health/PE stayed similar over time. The young people were more likely to identify subjects with a strong practical component as their most enjoyed subject.
- Analysis of NZQA data shows that relatively high proportions of Māori and Pasifika students complete senior HPE NCEA achievement standards, and these students achieve well in HPE in comparison to other learning areas (Fitzpatrick, 2011). Fitzpatrick outlines the multiple reasons for Māori and Pasifika students' interest, and success, in senior HPE. One reason may be that teachers and students adhere to stereotypes that position Māori and Pasifika youth as inherently physical, and therefore natural sports people. Other reasons are that NCEA offers teachers the ability to create diverse programmes that focus on local content and thus have the potential to connect with students whose knowledge systems are marginalised (e.g., Māori and Pasifika students who are in a cultural minority and also tend to be working class) and that, through internal assessments, students have more opportunities to succeed.
- She also notes that HPE subjects are perceived by school staff as low status compared with other subjects. Given this, she questions whether achievement in HPE reinforces or challenges the underachievement of Māori and Pasifika students in New Zealand. Fitzpatrick concludes that HPE NCEA subjects offer the potential to include local content that is meaningful for young people who are underachieving in the New Zealand education system. However, HPE subjects also suffer from a misinterpretation that "traps them in the physical" at the expense of considering the intellectual dimensions of the learning area. Māori and Pasifika students are vulnerable to being caught in a similar essentialist stereotype of being "good at" PE or practical learning. Fitzpatrick concludes that HPE teachers need to engage with the practical/intellectual debate to ensure the academic status of HPE subjects is acknowledged and awareness is raised about the potential of HPE to support students who are disenfranchised.

Note that home economics is among the learning areas with the highest proportion of external achievement standards translated into te reo Māori. This is one indication that this aspect of HPE learning has a fit with the goals and aims of Māori medium education, and provides some evidence that Māori students, as one group of priority learners, engage with aspects of HPE learning, in ways that support them to gain qualifications.

An assessment-driven environment

The evidence presented above suggests that students tend to enjoy and are motivated by their learning experiences in HPE. Other evidence suggests that teachers feel the structure of NCEA gives them the freedom to design courses/programmes “how we want” (Hipkins, 2013). However, some studies and commentators identified concerns in relation to the demotivating or harmful aspects of assessment.

Evidence from the literature

- In the NZCER 2012 national survey, teachers of health and PE, as well as mathematics and science, showed a stronger pattern of disagreement than other teachers that NCEA motivates underachievers to do their best (Hipkins, 2013). This suggests that HPE teachers may have some concerns about the effect of assessment demands on lower achieving learners.
- A recent ERO report on well-being and young people’s success at secondary school identified a concern that students were experiencing the curriculum as very assessment driven which was causing anxiety for many learners (Education Review Office, 2015). Good practice schools were responding to this by reviewing assessment requirements, spreading assessment requirements across the year, or exploring options for cross-crediting between learning areas.

An assessment culture that supports achievement

A policy document, *Directions for Assessment in New Zealand*, produced at the request of the MOE, recommends that all young people should be educated in ways that develop their capacity to assess their own learning. Doing so requires building the “assessment capability” of both students and teachers, and of others in the wider system—for example, school leaders, Ministry personnel, parents, boards of trustees, and teacher educators (Absalom, Flockton, Hattie, Hipkins, & Reid, 2009). Capabilities are a combination of knowledge, skills, processes, and dispositions. A student who is building his or her assessment capabilities is working towards becoming a lifelong learner who can self-reflect and build on their learning experiences.

Assessment literacy is a component of the broader concept of assessment capabilities. Understanding the workings of an assessment process, such as NCEA, is a core aspect of assessment literacy. The earlier RAMP reviews show strengthening teachers’ and students’ ability to work with NCEA assessments is a concern for the science and mathematics and statistics communities. The Science learning area review (Hipkins & C. Joyce, 2015) notes the complexity required of teachers’ curriculum/assessment thinking and decision making in the senior secondary school, when working with NCEA.

Developing assessment literacy and capability in HPE

In the HPE space, there is a substantial amount of writing that discusses the need for assessment literacy, explores current assessment practices and how these might enable or constraint students' ability to gain qualifications, and/or explores new assessment formats that might support students to both document their learning as well as develop assessment capabilities through self- and peer assessment.

Building and consolidating an assessment culture suited to the HPE learning area, within which both teachers and students are assessment literate, is one focus of recent literature. In their book, *Assessment in Physical Education: A Sociocultural Approach*, Hay and Penney (2013) suggest that the notion of assessment literacy is a new, and therefore undeveloped, idea in PE in comparison with traditional core subjects such as English and mathematics. They consider the HPE community to be broadening and deepening its knowledge of assessment practice. Hay and Penney attempt to outline a new paradigm for HPE assessment that aligns curriculum, pedagogy and assessment with socio-cultural approaches to learning. Hay and Penney, and other writers, also talk about processes that might build students' assessment capabilities such as self- and peer assessment.

One general theme underpinning the literature on assessment in HPE is the need to ensure assessments are effective in enabling all students, and particularly those who might be at risk of underachieving, to demonstrate their learning. Some of the discussions in this space are presented below.

Evidence from the literature

- Hay and Penney (2013) note that building students' assessment literacy is one way of building student agency and addressing the power dynamics inherent in schools where teachers make most of the decisions about course content and assessments.
- Analyses of Starpath data suggest that more focus is needed on building students' knowledge of the NCEA system (Jensen, Madjar, & McKinley, 2010). Starpath data show that many students, and particularly those who identify as Māori or Pasifika, or who attend low decile schools, do not understand the differences between unit standards and achievement standards or all the different assessment requirements needed to gain NCEA or progress to academic pathways. Jensen et al. provide a case study example which show how a student's choice of "vocational" subjects, including PE, could act against the student's desire for an academic pathway.
- The literacy load in many NCEA achievement standards is a concern of some teachers at schools in the Sport in Education project (Boyd & Hipkins, 2015, in press; Hipkins & Boyd, 2014). These teachers consider they first need to be able to understand NCEA the assessment requirements themselves, so they can translate them for students.
- A recent presentation at the 2014 PENZ conference reports on an analysis of national NCEA results (S. Joyce & Dixon, 2014). The presenters discuss what this data tells teachers about the generic and subject-specific literacies that students need to

understand health education NCEA requirements and demonstrate their learning. Most of the focus is on written literacy. Similar workshop presentations to the above are also part of the Health, PE and Home Economics: Secondary Student Achievement national workshops (S. Joyce, 2014).

Innovations in formative and verbal assessment

One benefit of having a less well-developed assessment culture in HPE, in combination with being perceived as “low status”, is that a space is made for innovations in assessment practice. Some HPE literature examines assessment practices to consider ways of broadening the range of assessment purposes and formats used within HPE teaching and learning.

An equity theme could be seen to run through this literature. Broadening assessment formats can enable a diverse range of students to demonstrate their learning in ways that do not rely on traditional written forms of assessment. Bowes (2010) considers that the introduction of NCEA opened the door for more equitable assessment practices. However she cautions that the development of an assessment culture in PE, with an associated focus on academic work, could reinforce a mind/body dualism by privileging theoretical over practical knowledge. She argues that the recent realignment of NCEA achievement standards with the NZC, and the reworking of the achievement standards to ensure they are more meaningful for students, is a step in the right direction. Bowes concludes that there is a need to maintain perspectives on PE and an associated assessment culture that emphasise the “pleasurable” and practical nature of the discipline.

The New Zealand HPE community appears to be active in supporting teachers to develop assessment literacy aligned with the practical and performance aspects of the HPE learning area. The *New Zealand Physical Educator* journal has a number of articles that have the overall aim of supporting teachers to consider different forms of effective assessments and adopt a wider range of assessment practices. Some articles discuss recent innovations in verbal, self-, or peer assessment. Other articles discuss assessment purposes and provide examples of formative assessment for learning approaches in HPE. We found fewer examples of literature with this focus in the other RAMP reviews. Some of the reasons why a wider range of assessment practices might be more prevalent in HPE include the “newness” of the assessment culture, as discussed earlier, which appears to have created more space for innovations. Another reason is likely to be a desire to find forms of assessment that have a good fit with the practical and embodied learning experiences that are a core aspect of HPE learning.

Evidence from the literature

- Park (2011a) describes a successful trial of verbal assessment formats to support students to document their learning to meet the requirements of NCEA achievement standards. Suggestions are presented about effective ways of conducting verbal assessments and their potential benefits for teachers and students. These verbal assessments are intended to replace traditional written tests.
- Sulzberger (2014) describes how a school raised student achievement in senior PE through the use of learning logs and formative feedback. Students logged their learning in a digital (using iPad apps) or written format. Teachers used the logs to provide formative feedback and feed-forward. Looking at the evidence in the logs gave teachers information on gaps in knowledge that could then be addressed. The logs contributed to students' evidence portfolio for internal PE NCEA assessments. The school analysed their NCEA data. They found improved achievement rates in the senior PE achievement standards when teachers used the logs for formative purposes. Teachers considered the logs contributed to students' assessment literacy by supporting them to understand the requirements of NCEA assessments.
- Hay and Penney (2013) discuss how a range of assessment techniques can support assessment for learning by providing a platform for student reflection. Examples of techniques included self- and peer assessment approaches as well as approaches that enable students to reflect on their learning through watching video recordings of performance or listening to audio commentary. Hay and Penney also discuss how assessment can promote "lifewide" learning by drawing on and supporting the connections and networks students form outside of school structures.

Innovations in digital assessment

Some recent writing examines the characteristics of innovative and authentic assessment in HPE that make use of digital technology. Again, an equity theme is running through this literature. A driver for the use of technologies is to enable a range of students to demonstrate their learning in ways that are not reliant on written assessments.

Another driver for the use of technologies is related to the practical underpinnings of HPE. Assessments that match the practical or performance focus of HPE are needed to ensure assessments are aligned with curriculum and pedagogy and do not reinforce a mind/body dualism.

Some of the verbal assessments discussed above made use of digital technologies to provide a record of evidence. Other examples of discussion and practice in this space are presented in the next box.

Evidence from the literature

- Hay and Penney (2013) discuss a range of digital assessment techniques that can support assessment for learning and student reflection. Examples include routine capture of performance through mechanisms such as video recordings, audio commentary, or still photographs that can then be reflected on and analysed by students.
- Williams and Penney (2011) describe an Australian project that aimed to use digital technologies to develop authentic approaches to the formal assessment of subjects which have a performance component. One aspect of the project involved the trial of a range of digital formats to assess student performance and tactical knowledge in the context of high PE stakes assessments. In the same project, digital formats were also used to facilitate assessor judgement of students' learning (Penney, Gillespie, Jones, Newhouse, & Campbell, 2011).

Specific affordances of e-technologies and digital assessment

The idea of affordances is typically employed in research with a socio-cultural theoretical framing. Use of this term signals that learning is a complex combination of what the student knows, and can already do, and the resources they can access to help them achieve their learning goals. Such resources include people and things (such as tools that make use of technology). "Opportunities to learn" is a related term. In the context of affordances, availability of resources is not seen as the only thing that affects whether students do have opportunities to learn. How they (and their teachers) understand the nature of the task and their ability to achieve it, whether and how students perceive value in the learning on offer, and the potential of the support being offered, all affect whether and how students actually learn. A few articles and theses discuss these affordances in relation to HPE learning.

Evidence from the literature

- Walsh (2013) found that a blended course (self-directed online lessons blended with traditional classroom lessons) assisted in raising boys' achievement in an NCEA achievement standard. Walsh comments that the success of the course was influenced by a combination of student characteristics, the ability to address technical difficulties, the use of specific online activities underpinned by social constructivist theory, and the role of the teacher.
- Park (2011b) discusses one school's use of iPad technology to support and document PE learning. The teacher profiled in this article made a number of observations about how use of this technology motivated and engaged students. The technology had three main features that enhanced PE learning (camera recording of learning, videos could be watched or recorded and reflected on by a class, and flexible data storage). The teachers

and students had also sourced a range of low-cost applications (apps) that were supporting learning by assisting students to become more self-directed. The teacher intended to conduct further trials of the use of iPads to ascertain if this usage appeared to be making a difference to assessment results.

The line of sight between the NZC, HPE, and NCEA

Are the theoretical underpinnings of the NZC and HPE reflected in NCEA achievement standards? If the concepts underpinning the NZC and HPE are driving assessment practices, we would expect achievement standards that support students to be social critical citizens who are developing the capabilities they need to engage in critical thinking and action. Thus we would expect to see some achievement standards that encourage critical thinking about the many influences on well-being, as well as achievement standards that support students to taken critical action in ways that integrate content knowledge with opportunities to build the key competencies.

The evidence presented below shows that there does appear to be an alignment between the NZC, the socio-critical intent of HPE, and some NCEA achievement standards. This alignment suggests that in the HPE learning area, current practice is a lever that influences assessment practice. This is one point of difference for HPE in comparison with other learning areas. The RAMP reviews in Science (Hipkins & C. Joyce, 2015) and Mathematics and Statistics (Neill & Hipkins, 2015) suggest that a focus on learning area content is the main driver of assessment practice.

Building social critical and active citizens through NCEA practice

Building socially critical citizens

A recent analysis suggests that a focus on students developing the competencies needed to be **socially critical citizens** is clearly reflected in some, but not all, NCEA achievement standards. However these achievement standards are less commonly used compared with those that reflect more traditional readings of the HPE curriculum.

Evidence from a case study

In an analysis of how schools and students made decisions about the selection of NCEA achievement standards, Hart (2014) identifies four PE achievement standards that she considers are explicitly socio-critical:

- PE, Level 1–AS90070: Explore how the body is portrayed in physical activity⁷
- PE, Level 2–AS90432: Examine the relationship between physical activity and health, and implications for self and society⁸
- PE, Level 2–AS90437: Investigate the sociological significance of a sporting event, physical activity or festival
- PE, Level 3–AS90743: Examine a current physical activity event, trend or issue impacting on New Zealand society

Hart analysed national data (from 2006 to 2010) about NCEA achievement standard usage. These data showed a pattern of non-selection, by schools and students, of these “socio-critical” achievement standards in comparison to the other achievement standards.

Case studies of two schools (one school with high selection of socio-critical achievement standards, and one that did not use these standards) indicated that decision making on the selection or non-selection of socio-critical achievement standards was complex (this complexity is discussed in earlier references to Hart’s study).

Building active citizens through health promotion

The NZC vision also suggests that schools will support students to become **actively involved citizens** who are “contributors to the well-being of New Zealand—social, cultural, economic, and environmental” (Ministry of Education, 2007, p. 8). A focus on active citizenship is also reflected in the key competency *participating and contributing*. In the HPE learning area, participating and contributing is probably best exemplified through the inclusion of health promotion as one of the four underlying concepts of HPE. The idea that students might take action as part of their learning aligns with the HPE tradition of being an active or practical learning area.

A focus on health promotion models, and different forms of action, is represented within NCEA achievement standards in each of the three areas that make up HPE. For example:

- Health, Level 2–AS91237: Take action to enhance an aspect of people’s well-being within the school or wider community
- Health, Level 3–AS91465: Evaluate models for health promotion

⁷ This standard was replaced in the 2010 alignment. A new “socio-critical” standard at Level 1 is AS90965: Demonstrate understanding of societal influences on physical activity and the implications for self and others.

⁸ This standard appears to have changed in the 2010 alignment. The nearest equivalent is AS91327: Examine the role and significance of physical activity in the lives of young people in New Zealand.

- PE, Level 3–AS91503: Evaluate the use of health promotion to influence participation in physical activity
- Home Economics, Level 3–AS91467: Implement an action plan to address a nutritional issue affecting the well-being of New Zealand society.

At the time of the revision of the NZC, the place of health promotion was discussed. In one of background papers, Robertson (2005) suggested that health promotion could be seen as the fulfilment of the HPE learning area. We did not find any recent literature that discusses health promotion in a New Zealand context. Instead, most of the literature focuses on the nature of critical thinking and how it might support critical action (see the previous discussion about developing socially critical citizens). A discussion about health promotion is on the agenda for a few commenters.

Evidence from a case study

In a recent PENZ conference presentation, Dixon and Bryce (2014) identify a gap in models of practice and health promotion resources for teachers that could assist in deepening understandings of the NCEA health promotion achievement standards. Their presentation summarises the collaborative process they used to address this gap as they developed health promotion resources and a PLD process for teachers.

Aligning curriculum and assessments to better meet the intent of the NZC

In HPE there appears to be a stronger alignment between curriculum, pedagogy, and NCEA assessments than in other learning areas. However, one concern that threads through some literature is that the intent of the HPE learning area and assessment practice might be mismatched. A few writers comment that assessment practice needs to be aligned with the “message systems” of curriculum and pedagogy to better reflect the socio-critical underpinnings of HPE. Some commentators provide recommendations and solutions to address a perceived disconnect between curriculum, pedagogy, and assessment practice.

Evidence from the literature

- From her analysis of decision making in regard to “socio-critical” NCEA achievement standards, Hart (2014) suggests there is a need to raise awareness about the different ways achievement standards can be interpreted; otherwise, some interpretations can result in a narrowing of HPE learning that is out of line with the “socio-critical” underpinnings of this learning area. Recommendations from this study included a need for educational policy makers to ensure that curriculum resources and assessments support teachers to avoid dichotomous thinking and support the practice of socio-critical pedagogy.
- Cosgriff and Gillespie (2011) discuss the recent review and alignment of HPE NCEA achievement standards. The review outcomes are presented as a possible catalyst that could support teachers to reconsider how assessment practice might assist in shifting the focus of outdoor education. The desired shift is a move away from the traditional adventure and risk-based focus towards a more holistic approach that promotes sustainable practices and a consideration of place. The writers argue that this shift is one way of strengthening the alignment between the curriculum and the principles and future-focused issues of the NZC. This paper provides practical examples of how HPE NCEA achievement standards could be re-considered or re-packaged to promote critical and sustainable action in ways that are aligned with the NZC.
- Macdonald, Hunter, and Tinning (2007) provide an Australian-based critique of two HPE-focused rich tasks designed for use in Queensland’s New Basics curriculum. They argue that the two tasks they reviewed did not fully realise the intent of the New Basics agenda or contemporary HPE discourses in that they promoted views more aligned with healthism perspectives. They suggest that, for cross-curriculum resources to be meaningful, more attention needs to be paid to the core knowledge and concepts from each of the learning areas that might contribute to resources or tasks.

5. Supporting priority learners to achieve

This section considers how HPE practice might support or constraint the learning of priority learners. Generic findings about improving outcomes for groups of priority learners such as Pasifika students (Education Review Office, 2012) are not included, as they have been explored in previous RAMP reviews.

A wider concern for equity and social justice

A concern for social justice and access to opportunities for all is a core underlying focus of the socio-critical pedagogy and key concepts of the HPE learning area. Some writers say HPE learning and sports practice can enable or constrain equity of access to learning experiences. As well as equity for people from a range of cultures and ethnicities, and for people with special education needs, writers in the PE and health space also explore issues of difference and equity in regard to gender, social class, and for those who may be marginalised by others' perceptions that they do not fit the "norm" of a healthy body. Recent perspectives on inclusion, equity, and power in relation to HPE are included in the books: *Equity and Difference in Physical Education, Youth Sport and Health* (Dowling et al., 2012); and *Issues and Controversies in Physical Education: Policy, Power, and Pedagogy* (S. Brown, 2011). Specific considerations in terms of priority learners are discussed below.

Pedagogies that create space for considering diversity and culture

We found a number of New Zealand-based research projects and commentaries which explore how HPE practice could reflect students' cultural world views, interests, and ways of working. Much of this literature focuses on the culture and world views of Māori learners. There appears to be rather more research and writing relating to what might be broadly termed "culturally responsive pedagogy" for HPE than is documented in the RAMP Mathematics and Statistics (Neill & Hipkins, 2015) or Science reviews (Hipkins & C. Joyce, 2015). This could be related to the explicit use of hauora as one of the four underpinning concepts of the HPE learning area. In addition, the other three underpinning HPE concepts, and the socio-critical pedagogy they stem from, clearly foreground the need for a consideration of holistic models of health and well-being, diversity, and multiple perspectives, as well as learning experiences that connect with the interest of students and their communities, and build individual and community well-being. Thus the NZC signals that a focus on culturally responsive pedagogy needs to be embedded within HPE practice.

The place of hauora in the HPE learning area

In the Aotearoa New Zealand context, much of the literature about culturally responsive practice is connected to Aotearoa New Zealand's position as a bicultural society; with an indigenous population and a partnership formalised in the Treaty of Waitangi. The location of a Māori concept of well-being, hauora, as one of the four underlying concepts of HPE is one signal that this learning area is aiming to explicitly make a connection with the NZC Treaty of Waitangi principle. The positioning of hauora in the HPE learning area is one example of a “joining-up” of the front end of the NZC with the core concepts and practices in the HPE learning area.

However, attempting to provide a bicultural foundation for HPE is not without its tensions. These are debated in earlier and recent literature about the NZC and HPE practice. Different perspectives are evident about the inclusion of hauora in the NZC, and the way indigenous knowledge and ways of thinking are represented (or not) within discussions about health and well-being.

Evidence from the literature

- Ovens (2010) suggests that both the 1999 and 2007 HPE learning areas had a transformative intent. He cites the inclusion of hauora as an underlying concept as an example of a recognition of Māori perspectives on health and well-being. Ovens also argues that some of the more transformative aspects of the 1999 HPE curriculum, such as the focus on hauora, have been diluted in the 2007 NZC revision.
- Heaton (2011) considers attempts to co-opt Māori models or philosophies within HPE, such as the concept of hauora, can result in simplistic translations of complex and culturally-bound concepts, with meaning being lost in translation. She suggests there is a possibility that the co-opting of Māori concepts and ways of being could have the effect of maintaining colonial power structures, promoting narrow views of health or “healthism”, and invalidating indigenous knowledge or holistic notions of well-being.
- Hokowhitu (2014) argues that the health perspectives and evidence that students might draw on in their school studies often pathologise indigenous people as unhealthy and promote a mind/body dualism. He makes a connection between healthism and colonialism by presenting the idea that colonialism is also a “*disease*” that can obscure local knowledge and invalidate holistic views of well-being.
- Erueti and Hapeta (2011a) challenge Western interpretations of movement and well-being as primarily being about the physical. They consider HPE practice from a Māori perspective and present a view of te whare tapa wha model of hauora⁹ and te ao kori¹⁰ that acknowledges their holistic nature. Examples of practice are provided to support teachers to integrate te ao kori as a culturally appropriate tool that promotes hauora. Erueti and Hapeta conclude that if PE practice is to become culturally responsive then

⁹ A Māori model of well-being outlined by Mason Durie. This is one of the four underpinning concepts of the HPE learning area.

¹⁰ Loosely translates as “the world of movement”.

“teachers need to be receptive to the significant role of the construction and dissemination of indigenous knowledge to realise that ‘the least important aspect of Māori physical activities is in fact the physical’” (p. 131).

Culturally responsive practice

Although there are tensions in attempting to honour the Treaty of Waitangi principle of the NZC, the HPE community appears to be active in continuing to explore ways of providing a stronger bicultural focus to HPE. The literature also includes examples of how the Treaty of Waitangi principle, and culturally responsive practice, might be enacted within HPE.

Evidence from the literature

- Erueti and Hapeta (2011b) discuss the wider issues surrounding Māori achievement and the development of strategies (such as Ka Hikitia) and initiatives (such as Te Kotahitanga) that aim to promote Māori achievement. They explore how teachers might integrate Māori knowledge into PE teaching practice. Knowledge is seen as taking three forms: concepts (pedagogies such as highlighted in the Te Kotahitanga effective teaching profile); contexts (for example, as shown through Māori-based programmes such as Tu Toa); and content (as shown in Ki-o-Rahi, a traditional Māori game). Erueti and Hapeta conclude by challenging teachers in mainstream settings to incorporate culturally responsive practices to ensure a “positive shift in Māori cultural capital in secondary schools” (p. 147).
- McLeod, Brown, and Hapeta (2011) explore the meaning of the Treaty of Waitangi principle, as included in the NZC, and discuss how treaty principles might apply to HPE learning. They suggest that HPE teachers work towards the use of a kaupapa Māori theory approach to adopting these principles. This kaupapa prioritises Māori knowledge and world views, and engages Māori in an equal partnership in curriculum development.
- Cosgriff et al. (2012) argue that outdoor education experiences which are focused on culture and place offer a different approach to outdoor education than traditional approaches with their emphasis on adventure and risk. They suggest that this reframing of outdoor education is one way institutions and schools are working to enact the meaning of the Treaty of Waitangi principle of the NZC.
- M. Brown (2012 and 2013), Straker (2014), and Townsend (2014) provide examples of place-based outdoor education approaches that connect students with people and sites of cultural significance, with an aim of exploring connections to place in ways that enhance students’ well-being and cultural identity. The thesis by Townsend (2014) describes how the place-based focus of one school enriched learning for Māori students.
- Boyd and Hipkins (2015, in press) provide case studies of senior HPE pathways or academy programmes that are specifically designed to support a group of students, who

mostly identify as Māori and Pasifika, and who are not achieving to their full potential. These programmes offer a range of supports to assist students to gain NCEA credits and stay at school. Some of the features that make connections to students' cultures or world views include using community action projects or other mechanisms to engage students in learning and creating a sense of belonging to the class, school, or the wider community; and a whānau structure through which academic and pastoral support is provided by key teachers.

- A thesis by Fitzpatrick (2010) and a related article by Fitzpatrick and Russell (2015) describe a critical ethnography located in a multi-ethnic high school in Otago. This study aims to address a gap in the literature for examples of practice that show how teachers can use critical and culturally connected HPE pedagogical approaches to support Māori and Pasifika students' learning.
- A regular column in the *New Zealand Physical Educator* journal entitled "Te Ao Kori" (the world of movement) explores how HPE practice might incorporate Māori forms of movement, and foster cultural identity and Māori world views.
- Legge (2011) presents a movement-focused exploration of the inclusion of te ao kori (e.g., haka, poi, waiata a ringa) into PE teacher education. She suggests that teaching te ao kori can act as "a site for the construction and dissemination of Māori cultural knowledge" (Legge, 2011, p. 90) as students deepen their understanding about culturally significant movement.

Ensuring students with special education needs access HPE learning

Inclusion is another of the foundational principles of the NZC. In one of the background papers that informed the 2007 curriculum revision, Burrows (2005) notes that HPE learning experiences can be sites for students to be excluded. One reason she gives for this is the visibility of students' bodies and physical capabilities in PE experiences can place them at risk of being physically or emotionally alienated.

Some commentary and studies explore the general theme of how schools or teachers might better include and enable the HPE learning of students with special education needs.

Evidence from the literature

- Hay and Penney (2011) explore what inclusivity might mean in PE by drawing on Bourdieu's theory of fields to look at inclusion from a social construction perspective. They note that numerous fields in the wider system can affect students' ability to access learning experiences. These fields include education policies; the curriculum; school ethos; community expectations such as schools' desire to present a picture of high achievement in sport to their community; PE teachers' beliefs about student ability and enactment of the curriculum; and interactions between students. Hay and Penney suggest that some of the "rules" within each field are overt and others are less visible. To be effective, interventions that aim to promote inclusion and equity need to address all these layers including the "rules" within each layer that are less visible and more resistant to change.
- Writing from a primary school perspective, Gordon (2011) argues that working towards inclusion involves challenging taken-for-granted assumptions. He suggests that the extent to which students are included depends on how "philosophically committed the teacher is towards ensuring inclusion happens" (p. 20), as well as the beliefs and attitudes of students' peers. Gordon discusses the idea of "functional exclusion" where students are included in PE classes in some (tokenistic) form, but excluded from meaningful participation.
- Some of the chapters in the book, *Cooperative Learning in Physical Education: An International Perspective* (Dyson & Casey, 2012), discuss how cooperative pedagogies can contribute to inclusive secondary school environments.

Seeking student input into curriculum design

Increasing the opportunities for student input into curriculum design is one way of ensuring learning meets students' needs and interests. Several papers consider how student input might enable wider representation of diversity. Some identify a lack of research that foregrounds the experiences or voices of young people with disabilities in relation to PE and sport, or suggest ways this could occur. Another area where student input is called for is sexuality education.

Evidence from the literature

- A thesis by Morrison (2012) investigates how “one young man with a dyspraxia label (Tom) negotiates and understands his physicality and sense of ‘self’ in a climate where physical competence and masculinity are inevitably linked” (abstract). Morrison describes a range of dominant discourses connected with sport and PE, including those related to views of body image and masculinity. These discourses shape the way Tom experienced PE and sport, and how he was able to regard himself. Morrison also highlights Tom’s agency as he re-worked these discourses and identified what and who could support him to engage in physical culture on his terms. Morrison concludes that her findings act as a message to educators that “one size fits all” curricula which focus on a small range of activities related to traditional sports, and normative ideas of what counts as “performance” in PE, do not serve all young people equally well. She suggests that the perspectives of young people with disabilities need to be more visible in policy formation to ensure better outcomes for all learners.
- S. Brown (2015) provides examples of how students can use socially critical approaches, which harness the knowledge of their peers, to reflect on and take action on topics that could promote inclusion (e.g., students could explore the extent of equity or accessibility for all to physical activity and sports experiences at their school).
- Allen (2008) conducted a study which suggested that, to be effective in meeting the needs of young people, sexuality education needs to pay attention to the topics of interest to youth. Her findings suggested that sexuality education needs to enable young people to critically engage with key public debates such as those surrounding abortion and teenage parenthood. To better meet young people’s needs, topics are also needed that support learners to make decisions that contribute to them developing positive and varied gender and sexual identities.

Designing learning that steps off from the needs and world views of learners can create tensions for some aspects of HPE practice. For example, including a range of world views can be complex in sexuality education if some of the cultural groups represented at the school do not recognise diversity in sexual orientation. An evaluative report on the teaching of sexuality education (Education Review Office, 2007) suggests there is a need for open communication with parent communities if sexuality programmes include values that are dissimilar to community values. The report also provides case study examples of good practice including approaches that represent multiple views.

6. Coherence, pathways, and futures

Coherence, authentic contexts, and post-school transitions

This section discusses the connection between curriculum coherence and authentic learning contexts. Curriculum coherence is one of the eight NZC principles that provide a foundation for schools' curriculum decision making. The NZC provides high-level signals that students' learning should be situated in real contexts of genuine relevance to them and their communities. Other forms of curriculum coherence are connections between learning areas, and connections within schools and with the wider community that support students' future pathways.

Coherence, real-life contexts, and subject integration

First we look at literature about connections between learning areas and how these might support schools to offer courses designed around authentic contexts. In the RAMP Technology (C. Joyce & Hipkins, in press) and Science (Hipkins & C. Joyce, 2015) reviews there is a body of literature that discusses the potential for these learning areas to be integrated with other learning areas. The main aim of these connections is to provide more authentic or real-life learning experiences.

We did not find much literature about cross-curriculum integration or the use of authentic contexts to support HPE learning. One reason may be that the use of authentic contexts is already well-embedded within HPE learning. A quick review of NCEA achievement standards shows that many require students to engage with local or New Zealand contexts or issues. This sense was confirmed through discussion with HPE teachers and teacher educators at the RAMP HPE hui. These educators considered the HPE learning area, in part because of its practical origins, offers teachers ample space to design a range of learning experiences and NCEA assessments that are authentic and real-life.

The literature we did find illustrates an emerging HPE practice. This is a desire to look beyond the HPE learning area to offer a more holistic and coherent curriculum that is aligned with the wider intent of the NZC. This desire appears to be driving the development of stronger links between HPE and other learning areas. These links are forged in an effort to enhance achievement through encouraging learner engagement and conceptual understanding. We found several examples of courses that made such cross-curriculum connections. In general, making these connections is not common practice in the senior secondary school (Education Review Office, 2013).

One place where a connection between authentic contexts and cross-curriculum learning can be found is in the place-based outdoor education literature. As already noted, this literature documents a shift away from the traditional challenge and risk-based outdoor education experiences that are not connected to the location in which they occur. A more holistic model of

outdoor education is evolving. This model prioritises in-depth and authentic examinations of “place” that creates space for connections across learning areas. Authentic contexts and learning area connections are also discussed in papers about pathways or academy classes.

Evidence from the literature

- M. Brown (2012, 2013) describes an action research project which involved the teachers from two secondary schools working with university partners to develop a “place responsive” approach to outdoor education. Both schools developed programmes based on local journeys. Teachers from other learning areas were invited to contribute and the resultant learning experiences connected PE (outdoor education) with social sciences, education for sustainability, and literacy learning. Students engaged in learning experiences that were linked to geographical, historical, and cultural contexts. Benefits for student learning are discussed elsewhere in this overview. For teachers, a place-based approach assisted them to make changes to their practice as they developed more holistic and integrated ways of working.
- Boyd and Hipkins (2015, in press) provide case studies of senior Sports Leadership pathways classes or Health and Sports Academies that are designed to support a group of students, who mostly identify as Māori and Pasifika, and who are not achieving to their full potential. A focus on authentic community-based and cross-curriculum learning experiences was one of the design features of these classes or academies. One example is discussed below in the section on post-school transitions.
- An ERO report on secondary school pathways noted that, although the NZC suggests that schools should develop courses that promote inter-disciplinary learning, courses that spanned two or more learning areas were not common in the 74 schools they reviewed (Education Review Office, 2013).
- Recently, NZQA have developed NCEA achievement standard resources designed to support cross-curriculum and contextual learning experiences. These resources include some that link NCEA achievement standards from more than one learning area. Most resources use authentic sport and physical activity contexts in learning within a single subject such as accountancy, business studies, economics, geography, or history.¹¹

Coherence, real-life contexts, and post-school transitions

Another form of coherence is alignment of school practice to ensure courses build towards future pathways. A small number of papers in the HPE space discuss vocational pathways as a form of authentic learning. These papers show how a range of design features, including cross-curriculum

¹¹ For example, see internal assessment resource Physical Education 2.5C and Generic Technology 2.3C for Achievement Standards 91331 and 91356. Available from <http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards/Health-and-physical-education/Physical-education/Level-2-Physical-education>

learning, can support student learning and pathways. Tensions are also raised about how HPE learning could constrain students' pathways.

Evidence from the literature

Health-focused academies are one example of secondary school initiatives that aim to promote coherence between learning areas and assist in providing clear pathways for students to tertiary study or work (Bolstad et al., 2013; Boyd & Hipkins, 2015, in press; *Education Gazette*, 2012). These academy programmes share a focus on supporting Māori and Pasifika student achievement by offering engaging and real-life learning contexts, support with NCEA, assistance with career pathways, and pastoral support through classes structured to promote a sense of whānau.

- Some academies such as the Health and Sports Science Academy (HASSA)¹² at Papakura High School include HPE learning as a core focus (Boyd & Hipkins, 2015, in press). HASSA provides an environment of learning support for Māori and Pasifika students who are interested in careers in sports promotion, social services, or allied health. In HASSA, to support students' conceptual understanding, learning is based on thematic units and local contexts. HPE NCEA achievement standards are aligned with achievement standards in other areas such as biology or history. This academy is discussed in evaluation case studies (Boyd & Hipkins, 2015, in press) and conference papers about Youth Guarantee initiatives (Williams & Palmer, 2014).
- Some academies design learning on health-related contexts that are not located within the HPE learning area. One example is the Health Science Academy at James Cook High School in which the core subjects are sciences, mathematics, and English (Bolstad et al., 2013).
- Williams and Palmer (2014) suggest that contextual learning, such as that which occurs in vocational pathways initiatives, can engage and motivate learners and support them to gain NCEA credits. They present evidence that suggests that the Youth Guarantee initiatives, such as HASSA, are being successful in improving outcomes for priority learners.
- From research on the Starpath project, Jensen et al. (2010) raise a tension about vocational pathways options in secondary schools. They note that student interest in some subjects may constrain their latter study pathway options. One of the findings from the Starpath project is that:

Māori, Pacific and lower decile secondary school students are particularly at risk of ending up with inappropriate choices if their academic potential is not realised early enough and they do not receive clear guidance about the best course choices. (Jensen et al., 2010, p. 46)

¹² HASSA provides extra support for students to progress towards their pathways of interest. A whānau structure is used. Students have a home-room and spent more time with key teachers. Teachers from different learning areas work together to plan learning around key themes. Achievement standards from these learning areas are selected to fit the themes.

Jensen et al. (2010) provide case study examples which show how a student's choice of "vocational" subjects, including PE, can act against the student's desires for an academic pathway. Jensen et al. note that schools have a positive role to play in assisting students to make subject choices. They make a number of recommendations designed to strengthen practice in schools including a need to provide clearer information for students and parents about pathways which gives "greater transparency in the naming of different types of subjects" (p. 50) as "vocational" or "academic" to ensure students understand which subjects lead to which pathways; offer more academic counselling for students; and develop a red flag system which indicates which students are making inappropriate subject choices or which students are at risk of not achieving the needed mix or amount of credits.

Partnerships between schools and communities of interest

Working to provide more authentic contexts for learning, and productive vocational pathways, usually involves the forging of stronger connections between schools and the wider community. In this section we address the challenge of establishing these partnerships. The NZC's high-level signals are that students should be connected with community partners in ways that support their learning.

Forming connections with the community to promote well-being is clearly noted in the NZC as a core aspect of HPE practice. This aspect of HPE learning is discussed in a previous section about health promotion. The HPE strand Healthy Communities and Environments is focused on learning experiences that enable students to take critical and responsible action as they contribute to building healthy communities and environments. Clearly, strong school–community connections are necessary for the aims of this strand to be realised in practice. However making strong school–community connections has implications for the way the curriculum is planned and organised. It also has implications for the kinds of relationships, time frames and resources needed to support this interconnection, including resources provided by the HPE communities as well as both the local and the wider community.

A small amount of literature discussed the ways schools currently form connections with community partners, and how these connections might strengthen HPE learning.

Evidence from the literature

- M. Brown (2012, 2013) describes how place-based outdoor education activities can provide opportunities for students to work with community members in ways that assist in connecting students with sites of local or cultural significance. Students' cultural identities are fostered by connections with community members and local cultural practice and world views.
- Boyd and Hipkins (2015, in press) provide examples of how learning that is part of HPE NCEA assessments can support community connections. The schools in the Sport in Education initiative are working to build stronger connections with local primary schools and other community groups. As part of their HPE study, senior secondary students work with local primary school teachers and students to promote well-being. These "real" learning experiences provide the secondary students with a sense of belonging to their community, a range of opportunities to develop the key competencies, as well as opportunities to gain NCEA credits.
- Dixon and Bryce (2014) suggest that collaborations with health agencies and community members can assist in building health promotion practice.

Partnerships with parents and whānau

Connections with parents and whānau are at the heart of a community partnership. The HPE learning area text notes that "it is expected that schools will consult with their communities when developing health and sexuality education programmes." (Ministry of Education, 2007, p. 22). A recent report by the Education Review Office (2015), *Wellbeing for Young People's Success at Secondary School*, noted that boards of trustees in good practice schools prioritised self-review and consultation with parents and whānau in ways that suited these groups. Overall, the report noted consultation about curriculum with parents and whānau was "quite limited". Schools tended to consult about "the content of sexuality education programmes but not about other aspects of the health curriculum or wider curriculum" (Education Review Office, 2015, p. 23).

Partnerships with students

One core group in a school community is students. Partnerships with students are discussed in an earlier section, *Seeking student input into curriculum design*.

Partnerships with external providers

In the HPE learning area, external providers are a core part of the wider community with whom schools are connected. A few studies explore the sometimes problematic nature of schools' relationship with these providers. One common debate in this literature concerns whether connections with providers are aligned with the intent of HPE learning or whether they reinforce a healthism discourse and a deficit view of teachers' professional knowledge. Although the writers

in this space are mostly discussing practice in the primary sector, connections with external providers are also common in the secondary context.

Evidence from the literature

- The national monitoring study report of student achievement found that Year 8 teachers were more like to rate the PLD they received as good or excellent compared with Year 4 teachers (EARU & NZCER, 2015). The report suggested that this could be related to the greater level of assistance Year 8 teachers reported receiving from external providers. One conclusion of the report was that the relationship between external providers and HPE teaching needed more investigation.
- Powell (2014) raises cautions about the use of external providers for school health programmes. He considers using curricula developed by external providers can contribute to the “corporatisation” of HPE. One concern is that external provider curricula and approaches can lead to HPE becoming a site for addressing health goals (such as actions relating to the obesity epidemic) rather than a space for students to develop as critically aware citizens.
- Writing from a primary school perspective, Fellows (2013) found that school staff perceive external providers support them to offer higher quality programmes with expert input. However, in his thesis study Fellows also concludes that external provider programmes may maintain low teacher confidence in HPE by not improving the skills of teachers. He suggests that any use of providers needs to be underpinned by clear principles to ensure the intent of the school’s HPE programme is met.

Innovations that look to the future: Re-framing HPE courses

In this section, we reflect on the extent to which recent examples of school innovations in HPE practice make connections across multiple dimensions of the “front” and “back” end of the NZC. The innovations we discuss include place-responsive outdoor education approaches (M. Brown, 2012, 2013; Cosgriff et al., 2012; Hill, 2011; Taylor, 2014; Townsend, 2014) and the health and sports focused academies which included the HPE learning area (Boyd & Hipkins, 2015, in press). Both these approaches have already been described in this overview.

On the surface these innovations look dissimilar. However, they share common ground in that they make clear connections between the “front end” principles and pedagogies promoted in NZC and HPE learning. These tailored learning programmes are both examples of different ways of aligning curriculum, pedagogy, and assessment practices with the wider intent and principles of the NZC.

One commonality between programmes is a strong emphasis on foregrounding local context and students’ culture and identity. For example, in place-based outdoor education studies this can take the form of teachers working to foster students’ cultural connections with a particular place or setting (M. Brown, 2012, 2013; Townsend, 2014). In the health and sports academies, local connections are foregrounded through students working on local community projects or exploring

events that had a big effect on their community such as Springbok tour protests (Boyd & Hipkins, 2015, in press).

A second commonality is an emphasis on socio-critical pedagogy and a consideration of diversity. For example, in place-based outdoor education studies, teachers support students to connect with and consider indigenous, as well as other perspectives, in relation to a particular place (M. Brown, 2013; Townsend, 2014). In the health and sports academies, students are supported to engage in critical thinking about how they might work with primary students in ways that promote these students' cultural identity and well-being (Boyd & Hipkins, 2015, in press).

A third commonality is a focus on coherence in the form of connections between learning areas that are based around authentic contexts and big picture themes. In the health and sports academies, this learning is supported by the alignment of NCEA achievement standards. Students' learning experiences contribute to achievement standards from different learning areas (e.g., PE and history). For both the place-based and academy approaches, connections between learning areas, and particularly social sciences, appear to be enhancing the HPE focus on critical pedagogy and the consideration of multiple perspectives about an issue or place.

An emphasis on students taking action to promote well-being is also evident in these learning programmes. For example, some of the place-based projects include opportunities for students to engage in actions to support environmental sustainability (M. Brown, 2012). However, prioritising both critical thinking and action is not without its challenges. Some of the place-based literature discusses the difficulties of shifting both teacher and student practice towards a social justice framing that values critical action (Hill, 2011).

Overall, these innovations appear to be well-aligned with a number of aspects of the "front end" intent of the NZC. The future-focused issues such as sustainability and citizenship are a more central aspect of learning experiences. The emphasis on making connections between learning areas also ensures learning experiences are holistic rather than siloed.

We also found some examples of innovations that were located primarily within the HPE learning area (i.e., not cross-curricula) but which also appear to have a strong alignment with the wider directions and future-focused issues of the NZC. Some examples are discussed in the section on culturally responsive practice.

A number of these examples were from the outdoor education space. This literature discusses how outdoor education is connected with the NZC future-focused issues such as sustainability and citizenship (Hill, 2011; Straker, 2014) or can build competencies such as systems and critical thinking (Straker, 2014).

Another innovation is project-based learning experiences that have a focus on building citizenship and action competence. One example, is provided in Hipkins et al. (2014) from a school that prioritises 21st century pedagogies. At this school, individual students, or student teams, spend extended periods of time designing and conducting impact projects. There is an expectation that the project will be meaningful to the wider community and that students will connect with

relevant people or groups in the community as they develop their project. One example is a student team that developed a website and started a youth health council as they explored ways to promote mental health issues at their school (Hipkins et al., 2014, pp. 103-111). Students gained NCEA credits from this work. In this case study, the impact project was related to HPE learning; however, at this school, projects are not necessarily tied to curriculum areas. This may suggest that innovative curriculum designs that aim to meet the intent of the NZC do not always have an easy fit with the requirements of NCEA achievement standards.

7. Areas where teachers need more support

Evidence of the need for support

Across the RAMP reviews, a clear theme in the research literature is the **complexity** of the curriculum and assessment thinking now being asked of teachers. The challenges they experience imply a need for ongoing professional learning and support. For HPE, the literature suggests that ongoing attention is being placed on deepening the HPE community's understanding of the pedagogical shift promoted in the 1999 and 2007 HPE learning area. One main focus is on exploring the ideas underpinning socio-critical pedagogies, and what they might look like in practice, particularly when this practice seeks to balance the many tensions and dichotomies within HPE teaching and learning.

Aligning teacher training and PLD approaches with the NZC: Developing socially critical teachers

We sourced a small amount of literature that discussed teacher PLD or initial teacher education in HPE. This literature needs to be read in the light of the concerns expressed by Pope (2014) and Smith and Philpot (2011) that the lower status of HPE is affecting tertiary providers and schools' ability to maintain a professional community of HPE teachers and specialists.

This lower status is evident in the prioritisation of PLD opportunities for teachers. As an example, the NMSSA study found about two-thirds or more of Year 4 and 8 teachers had received HPE PLD in the last two years (EARU & NZCER, 2015). In contrast, more than 80% of teachers in the mathematics and statistics study had attended PLD in this learning area in the last two years, and over 85% in the English writing study.

Reflecting on the shift in the 1999 curriculum, Weir (2009) suggests that teachers need more support to shift their framing away from individual discourses that align with healthism towards views of HPE pedagogy that align with the (then) new 1999 curriculum documents. More than 10 years later, supporting a shift in teacher beliefs and practice is still very much on the agenda in relation to the 2007 revision of the NZC and the HPE learning area.

One thread running through the discussion about teacher education is that teachers have a range of values positions that may or may not align with the socio-critical framing of the HPE area and the NZC overall. A number of writers comment on the reasons teachers may not be committed to socio-critical approaches and the challenges of shifting trainee teachers towards these approaches.

Evidence from the literature

- Tinning (2012) argues for a greater focus on critical pedagogy within HPE initial teacher education (ITE) in order to align ITE with the NZC. He suggests that teachers may be attracted to HPE teaching because of their interest in sport, and therefore may not start ITE with the social justice orientation that is promoted in the curriculum. To support teachers to shift their practice, Tinning suggests that, rather than focusing on standards and sophisticated curriculum documents, more investment is needed in supporting ITE teachers to develop a personal commitment to the values underpinning a socio-critical approach. One way of achieving this is through more active reflection on how teachers “learn to think and feel about education, social justice, physical activity, bodies, and health” (Tinning, 2012, pp. 235–236).
- Thompson (2012) says the overwhelming strength of the “healthism” discourse in society is one thing that is acting against a commitment to social justice education by HPE teachers. Like Tinning (2012), Thompson suggests that “grassroots” PE teachers may not have the same commitment to critical pedagogies as did the theorists and practitioners who were the writers of the HPE curriculum.
- Gillespie (2011) found that PE teachers entered ITE with a range of different curriculum values orientations (belief structures and philosophical positions). Different values positions were associated with the development of different forms of curriculum expertise. Gillespie concluded it was important that ITE assists teachers to engage with values positions that reflect the socio-critical position of the curriculum. She suggests a variety of strategies that could be used for this purpose. These strategies include fostering specific behaviours such as self-reflection as well as more systems-level strategies such as reviewing course content to ensure different papers all reflect a coherent values orientation.
- Fyall (2012) found that PE teachers who had just completed a four-year critically-oriented PETE programme were still grappling with the philosophies and pedagogical approaches of the HPE learning area. Fyall’s findings support other literature which suggests that historical beliefs can be hard to shift. His research also supports the idea that to align teacher practice with the NZC, historical beliefs about teaching and learning need to be deliberately challenged and confronted through teacher training programmes.
- Philpot and Smith (2011) found that initial and graduate teacher education students had different views about the nature and purpose of PE. Initial trainees tended to view PE as synonymous with sport, whereas graduates had moved to a position where they saw PE as “more than sport”. Both initial and graduate teachers saw HPE as a field with multiple discourses. Philpot and Smith suggest that the socio-critical programme graduates had completed appeared to have assisted them to develop a more nuanced view of this complexity. However, they also concluded that it was difficult to tell if teachers would maintain their views once they were outside a tertiary setting and working in school PE departments.

Moving beyond critical thinking is a concern mentioned in some literature. Some writers discuss the difficulties of shifting both teacher and student practice towards a social justice framing that values critical action as well as critical thinking (Bruce, Martin, & Brown, 2010; Hill, 2011). These writers say teachers may need more support to develop the action competencies needed to take critical action (see one example below). Interestingly, the social action group in this article appeared to be run outside of core course requirements.

Evidence from the literature

Bruce et al. (2010) describe how a Critical Service Learning framework was used to support a social action group of PE ITE teachers. In weekly forums different group members took the lead to explore issues of their choice such as the link between sweatshop labour and sports sponsorship. The group then developed critical actions in relation to some issues. Bruce et al. conclude that the social action group provided a forum for socio-critical engagement and action for ITE teachers.

The need for ongoing resources and in-service PLD to support teachers to continue to build socio-critical approaches, and ensure HPE NCEA assessment practices are aligned with curriculum and pedagogy, is also discussed in a recent thesis and other papers.

Evidence from the literature

- From an analysis of NCEA achievement standard selection and interpretation, Hart (2014) suggests that further development of tools, curriculum supporting documents, and ongoing professional development that involves dialogue with the HPE sector is needed to support a socio-critical pedagogy in practice. In particular, she suggests that teachers need more access to PLD and resources that assist them to balance the dichotomies that are perceived in HPE theory and practice. Hart suggests that teacher support needs include exemplars of “authentic” assessment in action and “quality teaching and learning programmes, where curriculum, assessment and pedagogy are considered and aligned” (p. 91). These exemplars would need to: include a variety of contexts to avoid “one size fits all” approaches; and consider how to present a holistic view of practice that integrate areas such as biophysical and socio-critical perspectives in an effort to minimise dichotomous thinking.
- Gillespie (2013) suggests that support for, and use of, some NCEA assessments may not match with their socio-critical intent. She discusses the need for more processes and time for teachers to engage with new approaches that foster criticality to deepen understandings.

Becoming a critically reflective teacher

One common thread in the papers about teacher practice is that HPE teachers need to be supported to be critically reflective practitioners, so they will be better placed to engage with the socio-critical approaches promoted in the HPE learning area, and therefore will be better able to support students to engage with these approaches. Some literature discusses approaches that aim to assist teachers to be critically reflective practitioners. In most of these examples, teacher reflection is facilitated through contact with teacher educators and/or researchers.

Examples from the literature

- Self-study methodology, based on critical pedagogy, is suggested as one approach for building PE teacher educators and teachers' ability to engage in critical reflection (Bruce, 2012; Ovens & Fletcher, 2014).
- A Critical Analysis Process (CAP) is designed to support student teachers and senior secondary students to work through a nine-step process. This process aims to assist teachers and students to question taken-for-granted beliefs and practices and adopt a socio-critical stance (Gillespie & McBain, 2011, 2014).
- A professional learning community (PLC) approach is designed to improve teachers' understandings of, and capability to teach, critical evaluation (critical thinking) in senior school physical education (Bowes & Tinning, 2015). The PLCs in this study used an action research process and the Productive Pedagogies framework as a "pedagogical language" to assist teachers to plan and reflect. Bowes and Tinning note that, by the end of the study, teachers' views had become more similar and more aligned with a socio-critical framing.
- Use of "teaching as inquiry" approaches. For example a team of primary teachers and researchers took part in a TLRI study which used teacher inquiry and reflection methodologies to challenge and re-imagine current HPE practice. This study also functioned as a form of PLD which supported the teachers to engage with socio-critical approaches (Cosgriff et al., 2013).

Other areas of support suggested from literature

The themes that have emerged from this overview, and from the RAMP HPE hui, also suggest that teachers could benefit from more support in the form of:

- Resources that combine the key concepts underpinning the HPE learning areas and the essence of a socio-critical approach. On TKI, teachers are still being directed to the support resources designed for the 1999 HPE curriculum such as the *Curriculum in Action* series. For senior secondary subjects, one key resource is: *Making Meaning: Making a Difference* (Ministry of Education, 2004). Discussions with the HPE teachers and teacher educators at the RAMP HPE hui confirmed that the *Curriculum in Action* series and the 1999 HPE curriculum document are still being used by teachers and teacher educators to provide an overview of the core concepts of the HPE learning area. The *Curriculum in Action* resources are currently being updated.

- Sharing of models of practice that support students and teachers to further develop assessment capabilities.
- Models of practice and support to develop contextually focused cross-curricula courses such as the recent innovations in outdoor education and pathways or academies noted in this overview.

8. Concluding comments

A clear theme in the literature we found is related to clarifying what socio-critical curriculum, pedagogy, and assessment practices look like in HPE in the light of the multiple tensions in this learning area. This predominant focus suggests that the HPE community is still building a body of knowledge about what the changes in the 1999 and 2007 HPE learning area mean for practice. The complexity inherent in joining three different subject areas by four underpinning concepts, four strands, and seven key areas of learning, and locating these all within the one HPE learning area, undoubtedly contributes to the need for this discussion given the potential for different interpretations (Ovens, 2010). The number of possible starting places in this learning area, in combination with the existence of long traditions of sport-focused PE practices in some schools, is likely to pose some challenges for teachers in designing programmes that align with the socio-critical pedagogy that underpins the current HPE learning area.

Overall, the big picture question the HPE community is exploring is: What does the shift from a 20th century “technocratic” curriculum (skills and content knowledge-focused) towards a 21st century “socio-critical” curriculum mean for curriculum, pedagogy, and assessment practice?

Within this bigger question, a number of sub-questions are a focus for knowledge building, including:

- What are the main perspectives and ideas that are important in a 21st century socio-critical curriculum?
- What does a 21st century socio-critical HPE curriculum, that aims to develop students who are socially critical citizens, look like in practice?
- What does HPE practice look like when it is honouring the Treaty of Waitangi, cultural diversity, and inclusion principles of the NZC?
- How can curriculum, pedagogy, and assessment practices in HPE be better aligned, both within this learning area and also in a way that is coherent with the overall intent of the NZC?
- In what ways can the competing tensions that are surfaced by a socio-critical approach, and within the HPE learning area, be balanced?
- What support or models might teachers need to enact a socio-critical curriculum in practice in ways that enable them to balance the identified tensions?
- What do NCEA assessment practices look like if they aim to support a wide range of learners to document their learning including when aspects of this learning are active and/or performance-based?
- What are the implications of the unique place of the HPE learning area, and its focus on health promotion and the literacies of movement, in contributing to wider well-being and school goals?

Macdonald (2013) describes how a similar shift in the HPE curriculum is under way in Australia. She is the lead writer of a recent position paper which outlines a new “futures-oriented” approach for HPE in Australia. As with the shift in the New Zealand HPE learning area in 1999, this paper represents a change in practice that, for some, will represent a radical shift. Given this, Macdonald considers change in HPE is likely to be a form of “gradualism” rather than a curriculum revolution. Macdonald presents a number of definitions of “gradualism”. Of these, the philosophical perspective seems particularly pertinent to the New Zealand situation. This philosophical perspective is that gradualism is about, over time, developing understandings that seemingly conflicting notions are not radically opposed but are in fact part of a gradually altering continuity. For New Zealand this view seems apt given the many seemingly competing tensions that the HPE community are balancing to build HPE practice that aligns with the NZC.

The HPE community is building knowledge about how to identify and balance the multiple goals and tensions that exist within HPE practice, and in the connections this learning area makes with other learning areas and wider school practice. Discussions from the RAMP hui, and the literature in this overview, suggest that teachers and teacher educators are working to provide more examples of what both/and thinking might look like in regard to HPE. Looking to the future, a clear theme that emerges from this overview is that teachers require support and resources that assist them to clearly identify the competing tensions in the HPE learning area and show them ways of bringing together aspects of practice that may at first glance appear incompatible. The competing tensions the community are attempting to address are listed below. They are presented as “*and*’s” rather than “*versus*” to illustrate the need for balance:

- Physical Education *and* Health *and* home economics
- HPE *and* other learning areas
- practical learning and experience *and* theoretical learning
- mind *and* body
- critical thinking *and* critical action
- biophysical, scientific, or healthism perspectives *and* socio-critical approaches
- honouring the Treaty of Waitangi, cultural diversity, and inclusion principles of the NZC *and* mainstream education
- HPE learning *and* school-wide practice that promotes health, well-being and student agency.

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Appendix 1: Methodology for searching and constructing the Endnote file

In this section, the method for the literature review to support the Review and Maintenance Programme (RAMP) for the Health and PE learning area is described.

An Endnote file has been created to provide summaries of research and commentaries of national research and data, to gather evidence about current curriculum content, pedagogical and assessment practices, and student achievement, in the context of the Health and Physical Education learning area in the New Zealand Curriculum (NZC) at Levels 6–8. If writers are located overseas, but writing from a New Zealand perspective, their work has been included. A small amount of international (mostly Australian) literature has been included, where this work is considered important to the topic. Some commentary about the learning of younger students is also included when it signals a theme that is of continuing relevance as students go through their schooling.

Search terms and keywords

First tier search terms were derived from the description of the review of NCEA that this work informs. Second tier search terms were derived from a future-focused analysis (Bolstad et al., 2012), and the core concepts and focuses of the Health and Physical Education learning area of NZC.

Secondary school education

Physical education OR Health OR Home economics AND the keywords of:

1. NZC alignment

- Teachers' professional learning/teacher inquiry
- Body of knowledge/perspectives on HPE
- HPE processes (e.g., critical thinking, health promotion)
- Curriculum integration
- Dispositions (motivation, engagement, agency)

2. Innovative programmes

- Non-traditional outcomes (well-being, hauora, citizenship, identity, systems thinking, action competence, key competencies, community partnerships, and so on)
- Future focused

3. Assessment

- NCEA
- Digital assessment

4. Priority learners

- Equity (Māori, Pasifika, students with special education needs)
- Diversity

5. Pathways

- Vocational
- Academies

Three other keywords (labels) further categorise collected sources as:

- Research
- Evaluation or
- Commentary.

Search parameters

Resources were limited to those published from 2010 or later, unless it is a substantive and relevant piece of work completed before then, or a gap in the literature. Sources included the New Zealand Educational Theses Database, the publications web pages of key researchers, ResearchGate, Teaching and Learning Research Initiative reports, Ministry of Education research reports, Health and PE Online, relevant conference proceedings and various journals that health and PE teachers and researchers contribute to or read (e.g., *New Zealand Physical Educator*; *New Zealand Education Gazette*; *Asia-Pacific Journal of Health, Sport and Physical Education*; *Physical Education and Sport Pedagogy*; *Sport, Education and Society*; *Curriculum Matters*; *set: Research information for teachers*; and *the New Zealand Journal of Educational Studies*).