Editors
General Issue: Bill Ussher and Kirsten Petrie

Editorial Board
Marilyn Blakeney-Williams, Nigel Calder, Bronwen Cowie, Kerry Earl, Pip Hunter, Clive McGee, Dawn Penney, Kirsten Petrie, Merilyn Taylor, and Bill Ussher

Correspondence and articles for review should be sent electronically to Teachers and Curriculum Administrator, Wilf Malcolm Institute of Educational Research, Faculty of Education. Email: wmier@waikato.ac.nz

Contact details
Teachers and Curriculum Administrator
Wilf Malcolm Institute of Educational Research
Faculty of Education
Private Bag 3105
Hamilton 3240
New Zealand
Phone +64 7 858 5171
Fax +64 7 838 4712
Email: wmier@waikato.ac.nz
Website: http://tandc.ac.nz

About the Journal
Teachers and Curriculum is an online peer-reviewed publication supported by Wilf Malcolm Institute of Educational Research (WMIER), Faculty of Education, The University of Waikato, Hamilton 3240, New Zealand. It is directed towards a professional audience and focuses on contemporary issues and research relating to curriculum pedagogy and assessment.
ISSN 2382-0349

Notes for Contributors
Teachers and Curriculum welcomes
• innovative practice papers with a maximum of 3,500 words, plus an abstract or professional summary of 150 words, and up to five keywords;
• research informed papers with a maximum of 3,500 words, plus an abstract or professional summary of 150 words, and up to five keywords;
• thinkpieces with a maximum of 1500 words; and
• book or resource reviews with a maximum of 1000 words.

Focus
Teachers and Curriculum provides an avenue for the publication of papers that
• raise important issues to do with the curriculum, pedagogy and assessment;
• reports on research in the areas of curriculum, pedagogy and assessment;
• provides examples of innovative curriculum, pedagogy and assessment practice; and
• review books and other resources that have a curriculum, pedagogy and assessment focus.
Submitting articles for publication

Please consult with colleagues prior to submission so that papers are well presented. Email articles to T&C Administrator, Wilf Malcolm Institute of Educational Research, wmier@waikato.ac.nz.

Layout and number of copies

All submissions must be submitted online as word documents. Text should be one and a half spaced on one side of A4 paper with 20mm margins on all edges. Font = Times New Roman, 11 point for all text and all headings must be clearly defined. Only the first page of the article should bear the title, the name(s) of the author(s) and the address to which reviews should be sent. In order to enable ‘blind’ refereeing, please do not include author(s) names on running heads. All illustrations, figures, and tables are placed within the text at the appropriate points, rather than at the end.

Foot/End Notes

These should be avoided where possible; the journal preference is for footnotes rather than endnotes.

Referencing

References must be useful, targeted and appropriate. The Editorial preference is APA style; see Publication Manual of the American Psychological Association (Sixth Edition). Please check all citations in the article are included in your references list, if in reference list they are cited in document, and formatted in the correct APA style. All doi numbers must be added to all references where required. Refer: http://www.crossref.org/

Copyright

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

Acknowledgement of Reviewers

The Editors would like to acknowledge the contribution of the reviewers.
# TABLE OF CONTENTS

## General Edition

**Editorial**  
Bill Ussher and Kirsten Petrie  
1

**Wellbeing and the curriculum: One school’s story post-earthquake**  
Sally Ormandy  
3

**How can the secondary school learning model be adapted to provide for more meaningful curriculum integration?**  
Caroline Gill and Anthony Fisher  
13

**Curriculum rhythm and HPE practice: Making sense of a complex relationship**  
Margot Bowes and Alan Ovens  
21

**Thinkpiece: Outsourcing: The hidden privatisation of education in New Zealand**  
Darren Powell  
29

**Students’ beliefs about learning mathematics: Some findings from the Solomon Islands**  
Andriane Kele and Sashi Sharma  
33

**Thinkpiece: Assessment as a literacy**  
Bill Ussher and Kerry Earl  
45

**Secondary school technology education in New Zealand: Does it do what it says on the box?**  
Elizabeth Reinsfield  
47

**Thinkpiece: Observations of ‘good’ tertiary teaching**  
Ursula Edgington  
55
CURRICULUM RHYTHM AND HPE PRACTICE: MAKING SENSE OF A COMPLEX RELATIONSHIP

MARGOT BOWES AND ALAN OVENS
Faculty of Education
The University of Auckland

Abstract

In this paper we suggest that official curriculum statements provide a relatively modest influence on the emergence of Health and Physical Education (HPE) in school settings and that not enough attention is paid to the other factors that influence curriculum practice in schools. We argue that while the perspectives of teachers may reflect the conceptions and philosophies of particular national curriculum documents, there are a variety of agents and discursive elements operating at the level of curriculum practice that influence how teachers in secondary school situations perform in the subject area of Physical Education. The metaphor of music is used as the basis for conceptualising curriculum as a complex emergent practice resulting from the interplay of many different elements operating at multiple levels of the education system. In particular, we identify four ‘rhythms’, that of health, criticality, biculturalism, and technology, that contribute to giving New Zealand Physical Education and performance of HPE in schools a unique style and character.

Key Words

Curriculum, emergent practices, performance, complexity, criticality, HPE.

Introduction

Macdonald (2004) likens curriculum reform to the effect a stone has hitting the iron roof of a chook-house, suggesting that there is an initial flurry of activity after which the chickens eventually settle again with little significant long-term change occurring. While this may be a little cynical, there is increasing evidence that what happens in Health and Physical Education (HPE) classrooms reflects teachers’ entrenched knowledge, practices and recent professional learning more than the impact of curriculum policy documents (Armour & Yelling, 2004; Betchel & O’Sullivan, 2006; Petrie, 2008). This is not to suggest that curriculum policy does not influence curriculum practice, but rather an acknowledgement that curriculum practice emerges and is enacted with students as a result of a broad range of factors and forces operating at various levels of the education system. Unfortunately, when curriculum is conceptualised as a linear process linking policy to practice, the diversity of these factors and the mechanisms by which they operate, tend to be overlooked. We suggest there is a need to use alternative ways of viewing curriculum, ones that can better conceptualise the relational, networked and dynamic nature of how curriculum is enacted in schools. In this way, the complexity of teachers’ work and diversity of practices that come to represent subject areas like HPE in school settings can better account for the activity, or lack of it, around curriculum change.

At the outset it is important for us to state that how Physical Education is conceptualised as a subject within the official New Zealand Curriculum (Ministry of Education, 2007) has changed significantly over the past three decades. These changes are not the focus of this paper; suffice to say that they provide an aspirational framework for rethinking the subject within contemporary ideas about human movement culture and health (Cassidy & Ovens, 2009). In its current iteration, the curriculum document includes Health and Physical Education as one of eight specified learning areas contributing to the vision of creating “confident, connected, actively involved, life-long learners” (Ministry of Education, 2007, p. 7). However, unlike most other learning areas in this document that outline their learning area in relatively straightforward terms, the way the Health and Physical Education area is framed is considerably less straightforward. For example, four underlying concepts (Hauora, Socio-ecological Perspective, Health Promotion and Attitudes & Values) are identified that provide an underpinning orientation to the learning area. In addition, four strands are named to...
provide the main aims and way of sequencing individual objectives across eight levels of achievement, and seven key areas of learning are named as well as three subject areas (Physical Education, Health and Home Economics). We suggest that while this is somewhat confusing, the intent is to provide guidance in implementing a contemporary version of the subject area in New Zealand schools.

The focus in this paper is to better understand how such policy change outlined above provides a relatively modest influence on the emergence of HPE in school settings. This modest influence cannot necessarily be attributed to either resistance on the behalf of teachers (suggesting a linear relationship between policy and practice) or confusion around the framing of the learning area within the curriculum documents (suggesting a lack of understanding or rational application on the behalf of teachers). Rather, we suggest that curriculum practice in schools is complex and requires an understanding of factors that work in non-linear ways. These factors are best thought of as multiple, recursive, and dynamic; each operating at different levels and scales in the education system to create the constraints, and enabling elements that shape a set of practices called HPE being enacted in a school. By suggesting this process is complex, we are suggesting that there is no stable identity or ‘essence’ to the area of HPE. The way it emerges and takes form is unique to each school, although it draws a lineage to the New Zealand Curriculum document (Ministry of Education, 2007).

To help clarify the complexity of the link between curriculum policy and practice, we use music as a metaphor to help illustrate the relational, creative, emergent and performative nature of curriculum. We suggest that the performance of a curriculum learning area like HPE in a school can be likened to a musical arrangement being performed by a set of musicians. Music is a creative act, where each performance has its unique qualities reflecting the performance setting and interpretation of the original musical score. Music depends on the interplay of melody, harmony and rhythm as much as it does the instruments and abilities of the practitioners. In music, melody and harmony refer to the relational qualities between musical notes and between musicians involved in a particular ensemble producing those notes, while rhythm captures the underlying beat of the music and how this provides a structure that gives music a particular character or style. Using these ideas in a generative way, we suggest that the melody and harmony of the curriculum can be seen as the patterning of ideas that constitute the text of the New Zealand Curriculum (Ministry of Education, 2007) and highlights the practitioner relationships inherent to the setting in which the performance takes place. The rhythm of the curriculum, on the other hand, is shaped by particular discourses that work to provide a particular character or style to the practice enacted.

While we acknowledge that there are limitations in using metaphor analytically, it does provide a means for acknowledging how the New Zealand Curriculum (Ministry of Education, 2007), as the ‘official text’ for framing HPE in schools [the official music score], is ‘enabled, constrained and rendered’ (Ovens, 2010, p. 29) in a form that is unique to the New Zealand setting. We suggest this uniqueness is evident in a variety of ways, from the choice of professional development foci over the past five years, the themes for physical education conferences programmes, keynote speaker topics and academic journal articles. In teasing out this uniqueness, and acknowledging the complexity of the factors and forces in shaping how curriculum becomes enacted, we focus in this paper on what we suggest are some of the rhythms of New Zealand curriculum practice. In particular, we focus on the discourses of health, criticality, biculturalism and digital technology that individually and collectively help shape and give character to HPE in New Zealand. In the following discussion we explore these rhythms and consider how each influence the production of secondary school HPE as an emergent school subject.

**The rhythm of health**

The relationship of physical education to the health and health education of young people is perhaps one of the most enduring rhythms in New Zealand curriculum debates (Sinkinson & Burrows, 2011). The result has led to a variety of different manifestations of school-based practices, ranging from a specific focus on health promotion to the development of Health Education as a separate subject area. Since the early 1990’s, this rhythm has lent increasing weight to the importance of conceptualising health in broad terms and on the importance of wellbeing to the education and lives of young people. The result has been to position Physical Education as being in partnership with Health Education, and
place both in their own unique learning area within the *New Zealand Curriculum* (Ministry of Education, 2007).

One effect of the coalescence of Health with Physical Education is that it changes how the teachers working in this learning area identify themselves. Certainly in both Australia and New Zealand, where Health and Physical Education are combined as one learning area, teachers see themselves as teachers of HPE rather than just physical educators (Sinkinson & Burrows, 2011). Changed identities also shift traditional agencies supporting teachers to rethink their practices. Recognising this within New Zealand, the national professional bodies of Health Education (Health Teachers Association) and Physical Education (PENZ) have held, for the first time in many years, combined National Conferences, and are exploring the possibility of joint membership.

Positioning Health alongside Physical Education does more than just shift how the learning area is identified. Bowes and Bruce (2011) maintain that, “a result of combining health with physical education in curriculum documents is now acknowledged by the senior school PE community to be a significant contributor to the introduction of a socio-critical orientation in physical education teaching” (p. 18). In other words, this partnership is driving changes to both what and how students are taught. HPE teachers can explore these influences and challenge hegemonies that equate physical fitness with health and that may describe good health as slimness. They can also critique the messages conveyed in the persuasive advertising of sport, clothing or the commodification of bodies in contemporary culture. Indeed, Tinning and Fitzclarence, (1992) argued as early as the 1990s, that physical education should explore influences such as these to remain relevant to young people. In this sense, the rhythm of health moves physical education beyond practices focussed on encouraging young people to be physically active as a way to improve their health, to one where young people are encouraged to develop the intellectual, physical, emotional and social resources to take increased responsibility for, and critique the influences on, their own health behaviours.

**The rhythm of criticality**

A strong socially critical orientation is a feature of New Zealand Physical Education. This is acknowledged by the writers of the 1997 Health and Physical Education Statement (Ministry of Education, 1997), who deliberately set out to introduce this theme into the subject area, and to be explicit about grounding social justice and action into teaching practices (Gillespie & Culpan, 2000). With respect to physical education, the curriculum writers were, “focused on shifting [or unlearning] physical education from a very technocratic imperative to a position that favoured a more socio-critical pedagogy to the whole movement culture’ (Culpan, 2000, p. 73).

While this critical rhythm explicitly frames the official text of HPE learning area, it has also been observed that this aspiration is not always rendered as forms of social justice pedagogy at the point of enaction (Ovens 2010). An example of this is how the concept of how ‘critical thinking’ is taught in physical education with the suggestion that the concept may be constructed in one of two possible ways (Ovens, 2010). One way defines critical thinking to be about a set of meta-cognitive skills to promote higher order thinking. In this form, students are taught a variety of methods to help promote different ways of problematising an issue and thinking about it from different perspectives (for example, De Bono’s thinking hats). The other way defines critical thinking as developing a critical consciousness to the influences of power and stresses the need to question taken-for-granted assumptions (see also Gillespie & Culpan, 2000). In this form, students are encouraged to take action to address issues and forms of injustice.

Culpan and Bruce (2007) suggest that both the teacher’s professional knowledge and disposition play an influential role in how the rhythm of criticality is rendered in practice. In line with the approach of this paper, we suggest that the development of an ability to both understand and practice a critical pedagogy is not straightforward. While a socially critical orientation does not translate unproblematically from policy to practice, the intent to employ critical pedagogy and critical orientations remain a significant driving beat in New Zealand Physical Education.
The rhythm of biculturalism

The issue of biculturalism and acknowledging the spirit and principles of the Treaty of Waitangi resonate broadly in New Zealand society and provide a strong rhythm in curriculum development in particular. We suggest that this rhythm gives rise to three trends or *beats (ia in Māori)* that are influencing HPE classrooms. These include a growing appreciation of the bicultural partnership inherent in the parallel curriculum document, *Te Marautanga o Aotearoa,* (Ministry of Education, 2008) with widespread adoption of culturally responsive pedagogies in mainstream schools; the growth of Nga Taonga Tākaro (traditional Māori games); and a conceptual shift from Te Reo Kori (the language of movement) and /Te Ao Kori (the world of movement) to the broader concept of Te Ao Māori (the world of Māori) in physical education.

Culturally Responsive Pedagogy - *ia (beat)*

*Te Marautanga o Aotearoa* (Ministry of Education, 2008) is a statement of official curriculum policy that sets the direction for student learning in Māori medium schools. The document presents a Māori perspective of curriculum intentions. While *Te Marautanga o Aotearoa* (Ministry of Education, 2008) and The New Zealand Curriculum (Ministry of Education, 2007) come from different perspectives, they both begin by articulating a similar vision of “young people who will develop competencies they need for study, work, and lifelong learning” (Ministry of Education, 2007, p. 6) and who will go on to reach their potential. The two documents are seen as a way of giving education voice to the partnership inherent in New Zealand’s founding document the Treaty of Waitangi/Te Tiriti o Waitangi. Perhaps more than the Māori-medium curriculum document, the professional learning for teachers around culturally responsive pedagogies has been a strong emergent practice in HPE.

Specifically Te Kotahiitanga (Bishop, Berryman, Cavanagh, & Teddy, 2007) has had a strong focus on Physical Education and is viewed by many HPE teachers as having effective pedagogies for culturally diverse students, not just Māori students.

At the national level, an example of culturally responsive pedagogies *beating* loudly for physical education teachers includes: the Ka Hikitia strategy—a strategy to improve education in school for and with Māori; Tātaiko, a pedagogy to raise participation, engagement and achievement of students and to support teachers to develop culturally responsive contexts; and specifically for learning in HPE, Te Kotahiitanga (Bishop, Berryman, Cavanagh, & Teddy, 2007; McDowell, 2013). At the professional level, keynoting as one of the first Māori woman at the PENZ National Conference, Hemara (2013) explored an analysis of Māori education policy documents and the use of culturally responsive pedagogies in HPE, challenging teachers to look at the productiveness of their partnerships with Māori students in their HPE programmes. At the school level she argued for increased understanding of the concepts of Ako (teaching and learning) and Culture in HPE practice as part of in-acting culturally responsive pedagogy. Exploring Bishop’s (2011) notion of ‘Culture Counts’, Hemara (2013) challenged HPE teachers to consider if they offer experiences in physical education from Māori perspectives, consider whānau (extended family) priorities for student learning and, if they explore the diversity of Māori communities from which their Māori students are drawn. The latest national conference saw *Te Ao Māori* as the conference theme, reflecting both acknowledgement of the bicultural intent of the *New Zealand Curriculum* and reflecting the increased focus placed on this discourse as a strong emergent of teacher practice in HPE.

*Te Ao Māori me Nga Taonga Takaro—ia (beat)*

In addition to the increased focus by HPE teachers on adopting culturally responsive pedagogies and prioritizing bi-cultural practices, the growth of Te Ao Māori (the world of Māori) and Nga Taonga Takaro (traditional Māori games) are strong emergent practices in HPE classrooms (Brown, 2013). McDowell (2013) describes Te Ao Māori as ‘keeping our traditional Māori stories alive, respecting Māori (customs, values, protocols) and treasuring the use of Te Reo Māori’ (Māori language) (p. 14). Te Ao Māori is consequently a much broader conceptualisation for HPE than Te Reo Kori (the language of movement) or Te Ao Kori (the world of movement). Te Ao Māori is gaining increased focus in physical education because of the emphasis in this learning on movement and expression, identity and relationships and the adoption of more critical pedagogies in HPE that problematise and value social justice and biculturalism.
A part of Te Ao Māori growing in significance in HPE includes the introduction of Nga Taonga Tākaro (or traditional Māori games). According to Brown (2013), traditional Māori games have never been more prominent in PE than at present. He suggests that teaching Nga Taonga Tākaro includes much more than playing the games. Teachers and students are learning about the importance of the beliefs, rites and protocol of the Māori people who practiced these games. Teachers are teaching around the stories and purposes behind the games such as poi action for wrist dexterity. The game and cultural significance of Ki-o-Rahi is an authentic example of Nga Taonga Tākaro (traditional Māori games). Ki-o-Rahi is played on a circular field divided into zones. Two teams use a small round ball made of flax called a kī. A point is scored by touching the pou (boundary markers) and by hitting a central tupu, (target). It is clearly evident to see the passion with which this traditional Māori game is played and valued by New Zealand youth in PE today and why Nga Taonga Tākaro (traditional Maori Games) are increasingly becoming an emergent and normalised practice in New Zealand physical education classes.

The rhythm of technology

The vision in the New Zealand Curriculum (Ministry of Education 2007) suggests that the aim of education is for young people to be “creative, energetic and enterprising”, citizens “who will seize the opportunities offered by new knowledge and technologies to secure a sustainable … future for our country” (p. 8). As an extension of the vision, teachers must aim to ensure students are “effective users of communication tools”, “international citizens” and “users and creators of knowledge” (p. 8). Information and Communications Technology (ICT) and creating technological texts are privileged as part of the key competency ‘using language symbols and text’. Coinciding with the New Zealand Curriculum implementation in schools in 2007, smart phones, tablet and mobile technologies have arrived in physical education lessons.

While all learning areas of the curriculum and institutions are embracing digital technology to some extent, secondary physical education appears to be a leader in the early adoption of technology-rich-classrooms. As e-learning has transformed what, how and from where we learn, create and communicate knowledge, digital technology seems well suited to learning in socio-critical movement contexts. Specifically though, the aims for secondary physical education are enhanced by what Haythornthwaite and Andrews (2011) describe as a ‘socio-technical’ interface or a way of “framing the interconnection between the ‘desired social outcome’ and technical choice” (p. 141). Haythornthwaite and Andrews (2011) further suggest that learning requires a socio-technical literacy that encourages students to critically evaluate the affordances of technology with consequential effects on social interaction and society. Knobel and Lankshear (2007) argue that there are social, ethical, legal and human issues associated with technology, and we argue that these issues can be explored in a curriculum area that has a strong focus through its achievement objectives on: identity; safety; relationships with other people; societal attitudes and values; rights, responsibilities and laws; and healthy communities and environments. The socio-critical orientation of HPE and the collaborative and participatory nature of physical education make this learning area an ideal space to critique ‘socio-technicality’ and challenge the assumption that technological advances are always positive for individuals and society.

In New Zealand physical education, teachers of HPE are exploring the affordances of flipping the classroom, using online forums and verbal feedback for assessment, as they seek to find authentic ways to increase student engagement and achievement in this learning area. Socially-based learning is increasing through blogs, wikis, Google hangouts and other digital applications to increase collaboration and contribute to digitally-rich learning and assessment opportunities in secondary PE. What is evident in New Zealand is that, as secondary HPE teachers prioritise the purposes and pedagogy of using technology in collaborative active learning spaces, the boundaries for creating innovative pedagogy and learning may become more transformative than augmentation or substitution.

While our current research into making feedback more visible using mobile technologies is in its early stages, the data is indicating there are three key reasons that may explain why physical educators have been early adopters of digital technologies. Specifically in movement contexts, the highly visual, the highly mobile and the highly collaborative nature of learning in Physical Education are fast tracking the uptake of digital technology in this learning area.
Expanding on the advances of technology rich classrooms in physical education, with what Haythornthwaite and Andrews (2011) describe as the affordances of what the anonymous (anybody), the asynchronous (anytime), the mobile (anywhere), the connected (anyone), the global (everywhere), and the multi-media (every way) of computer mediated communication can transform, and it becomes clear to see why new and emerging digital technologies are a strong pedagogical resource in secondary physical education in New Zealand.

Recognising the significance of these influences on teacher practice in New Zealand HPE leads the authors to ponder that, however and whenever the next curriculum for physical education is developed, consideration of technology will be equally important in future curriculum design as achievement objectives, underlying concepts and strands; not assuming that those three will also remain in new curriculum iterations. While there is a strong possibility that digital technology will remain as a ubiquitous resource in secondary physical education, critical pedagogy, combining Health with Physical Education, and the significance of biculturalism, may be superseded by other emergent practices not yet imagined.

Concluding thoughts

Understanding how curriculum is enacted in school settings involves more than assuming that policy determines practice. Such linear and hierarchical notions tend to focus too much on the factors that influence the implementation of policy. Instead, we argue that curriculum practices are embedded in the conceptions and philosophies of particular national curriculum contexts. In this sense, it is possible to treat curriculum as a specific epistemological field, both in relation to the object of study (as it is enacted through policy and practice) and methodology (the interdisciplinary nature of making curriculum practice ‘knowable’). In other words, curriculum becomes an intersection of the political interests and economic forces that move around the work of teachers and policy makers. By investigating the diversity of agents and ideas circulating at each layer of the education system, we argue it is possible to better appreciate each context’s idiosyncrasies as well as their similarities.

In order to do this, we have used the metaphor of music to illustrate the creative, emergent and performative notion of curriculum practice. In this way we can move to focus on the relational qualities and circulating ideas that perform as more influential enablers and constraints on curriculum practice in the daily lives of New Zealand teachers. In particular we focused on how concepts, such as criticality, Te Ao Māori (the world of Māori), the inclusion of health with physical education (HPE) and, the growing influence of technology, shape the work of secondary physical education teachers, and become normalised, as emergent practices and significant drivers of the curriculum in school settings. Such a focus, we suggest, better acknowledges the influences on teachers’ practices in physical education in New Zealand. Such influences will continue to set the ‘genre’ of the curriculum and influence the complex performance that is teaching.

REFERENCES


Curriculum rhythm and HPE practice: Making sense of a complex relationship


