Key competencies:
Views from the gym floor

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Abstract

The release of The New Zealand Curriculum *(2007) will inevitably yield challenges and possibilities for teachers of Physical Education in both primary and secondary schools. In this paper I describe the vision and key competencies embedded in this new curriculum and discuss their relationship to Physical Education. Drawing on the voices of secondary school students, I interrogate the opportunities that students envisage for developing key competencies in Physical Education. I propose that students can, and do, afford significant insight into how teachers may enact key competencies in curriculum learning and that it is critical thinking that will enable both students and teachers to understand and relate to the movement culture in meaningful and relevant ways.*

Key words: physical education, key competencies, student voice, critical thinking

Introduction

Curriculum change sometimes feels like the only constant in physical education teachers' lives. Since the introduction of the *Health and Physical Education in the New Zealand Curriculum* (1999), a range of curriculum models, philosophies, and pedagogies have been embraced by many New Zealand physical education teachers in their effort to align their teaching and learning programmes more closely with the philosophy of this document. Just as many were coming to grips with the conceptual underpinnings of this curriculum and beginning to understand what Hauora and socio-ecological perspectives, for example, might mean for how they work, yet another curriculum change was launched. The release of *The New Zealand Curriculum* (2007) will undoubtedly yield more challenges and potentially more possibilities for physical educators to consider and implement curriculum differently. In this paper I briefly point to the key changes embedded in this revised curriculum. First, I describe how the 'new' vision and key competencies embedded in the new curriculum relate to learning in Physical Education. Secondly, I draw on the voices of secondary school students to consider the opportunities these key competencies may present for Physical Education.

New Zealand curriculum vision and key competencies

The role of the curriculum is to set the direction for learning in formal schooling. *The New Zealand Curriculum* (NZC) outlines a vision for young people who will become "confident, connected, actively involved and lifelong learners" (Ministry of Education, 2007, p.12). It is a vision where young people will develop the necessary competencies to study, work, and live to their potential. To meet this vision, the curriculum document provides a set of principles to underpin school decision-making, values to be encouraged, modeled, and explored, and key competencies for living and life-long learning.

Rychen (2003) defined a competency as "the ability to successfully meet complex demands in a particular context through the mobilisation of knowledge, cognitive skills, but also practical skills, as well as social and behaviour components such as attitudes, emotions, and values and motivations" (p. 3). Competencies are both complex and holistic in nature. This is supported by Carr (2004a) who states that competencies are more complex than skills. She suggests that they include "the capacity to recognise their relevance on different occasions, the responsibility to reflect on their value and intent, and the motivation to exercise them" (p. 6). With the release of the NZC (2007), the key competencies of thinking, using language, symbols and texts, managing self, relating to others, and participating and contributing were listed as the competencies people use to "live, learn, work and contribute as active members of their communities" (p. 12).

The key competencies and physical education

The explicit teaching of specific competencies that are part of or relate to key competencies is not new to physical educators. The underlying concepts of the Health and Physical Education Learning Area within the *New Zealand Curriculum* (2007) provide a framework that enables physical education teaching and learning programmes to provide learning opportunities that contribute to the development of the whole person. The inter-dependent and inter-related underlying concepts of Hauora, Attitudes and Values, the Socio-ecological Perspective, and Health Promotion are well-aligned to the vision and intent of the *New Zealand Curriculum* (2007) and the key competencies. The need for teachers of Physical Education to underpin teaching and learning programmes with these concepts, while providing learning opportunities across four strands and within seven key areas of learning, while also taking account for student needs, would suggest that teachers of Physical Education have the ability to ensure that the key competencies, principles, and values of the NZC (2007) are addressed. However, while there is a good match between Physical Education and the key competencies, one of the greatest challenges for teachers will be to ensure that the key competencies are not treated as a further and separate set of achievement objectives. This would potentially risk the loss of the holistic nature of the key competencies and of Physical Education itself.

The socio-critical nature of the *Health and Physical Education in the New Zealand Curriculum* (1999) enables the development of holistic learning programmes where

competencies, skills, attitudes, and values can be developed in authentic and social learning environments. The theoretical framework most suggested for learning and developing key competencies reflects the socio-cultural perspective on learning, where learning is socially-situated, where people, the natural world, and the built world are integral in making learning meaningful (Burrows, 2005; Carr, 2004b). Within a socio-cultural perspective, teachers can enable students' understanding of the social contexts in which learning takes place and the transferability of learning to other contexts (Brewerton, 2004; Burrows 2005; Culpan, 1997).

Physical Education provides learning in, through, and about movement (Arnold, 1979). In learning *in* and *through* movement, Physical Education provides opportunities to explicitly learn about, apply, develop, and reflect on the key competencies. Discussions with teachers at recent Physical Education New Zealand conferences and meetings reflect a growing agreement amongst teachers that, not only is Physical Education well-placed to provide learning in relation to the key competencies, but that existing teaching and learning programmes are, in many cases, already doing so. Within Physical Education, the strands and achievement objectives invite opportunities to *explicitly teach* skills and attitudes that contribute to a number of the key competencies. For example, within the curriculum strand, *Relationships with Other People*, explicit teaching is necessary in order for students to "develop understandings, skills and attitudes that enhance their interactions and relationships with others" (Ministry of Education, 2007, p. 22). In addition to this, there are opportunities to *apply, support*, and *enable* the key competencies. In these cases, the competency can be developed, supported, or even challenged through the learning process, leading to a related, but different, learning outcome. For example, in a learning opportunity where the intended learning relates to analysing beliefs about exercise, fitness, and health, then the key competency of thinking is a necessary competency within this learning, but not necessarily the planned or assessed learning.

In considering the enactment of key competencies in relation to Physical Education, Burrows (2005) cautions physical educators about the potential 'pitfalls' of viewing key competencies in particular ways. In particular, she suggests that it will be important to differentiate managing self from 'individualism' and 'healthism.' Within healthism, physical activity and health are linked in an unquestioning way and health is viewed as principally the responsibility of the 'individual,' neglecting wider societal factors (Gillespie, 2003; Kirk & Colquhoun, 1989; Sparkes, 1989). Managing self, viewed through the lens of the underlying concepts of the *Health and Physical Education in the New Zealand Curriculum* (1999), will enable students to understand the way managing self is located within broader socio-cultural contexts. That is, managing self will 'look' and 'feel' different for different people.

Further, mind-body dichotomies have plagued Physical Education over time (Burrows, 2005; Culpan, 1996/1997; Ross, 2004). Physical educators have embraced 'learning in, through, and about movement,' and have developed programmes that embed thinking within movement experiences. A return to any dualistic approach, where the mind and body are separated, would be detrimental to the potential that Physical Education has

within the education of the whole person. That the NZC (2007) has not addressed the concept of human embodiment within the key competencies remains a concern.

The competency of "using language, symbols, and texts" provides Physical Education with an opportunity to celebrate and highlight the importance of the language of movement. Not only is movement the vehicle for understanding the body of knowledge of Physical Education, it has the potential to facilitate understanding of cultural and social values and practices. Through relevant and meaningful learning contexts, students can be provided with the opportunity to critically examine the society of which they are part and critique notions of body, identity, and health. Relating to others, and Participating and Contributing are also key competencies that Physical Education has been instrumental in developing through the implementation of the *Health in the New Zealand Curriculum* (1999) and previous curricula. These are competencies inherent in learning in Physical Education and are explicit within the Health and Physical Education Learning Area statement, strands, and achievement objectives of the New Zealand Curriculum (2007).

What do students say about the key competencies?
Critically reflecting on one's practice as a teacher includes close examination of underlying assumptions that constrain and shape practice. Reflection also means considering why particular choices of curriculum implementation are made and examining how different contexts influence teaching and learning (Gore, 1987; Hellison & Templin, 1991; Moallem, 1987; Smythe 1989). Brookfield (1995) suggests one of the useful critically reflective lenses through which we can view our own teaching is that of our students' eyes.

Curriculum development and perhaps, to a lesser extent, teaching and learning programmes are ordinarily the preserve of adults. Hayes, Mills, Christie, and Lingard (2006) suggest that in order to make a positive difference in the lives of young people, we need to listen to the voices of students in matters that concern them, including curriculum. The Youth Development Strategy Aotearoa (Ministry of Youth Affairs, 2002) supports this sentiment in outlining the need for young people to have input into decisions that affect them.

Acknowledging the importance of student voice in the classroom means acknowledging students' active roles in the learning process. Teaching practices that engage student voices can enhance and enable learning by acknowledging the classroom as a learning community. The consideration of student voice may better prepare students to meet the challenges of assessment, while also providing an important source of challenge to the legitimacy of those standards. Further, students can make critical contributions to co-constructing the curriculum alongside teachers (Brooker & Macdonald, 1999; Burrows & Wright, 2004; Hamilton, 2006; Kane, Maw & Chimwayange, 2006; Kordalewski, 1999).

The development of the New Zealand curriculum (2007) has been a collaborative process and specific attempts have been made to draw young people into this process (School

Stories, New Zealand Curriculum Online, 2008). Given these kinds of opportunities, young people are constructing their own meanings for questions relating to curriculum, school visions, and key competencies. They have important knowledge to contribute and they can help us re-envision what we do, how we do it, and why. The small contribution of the following work aims to move towards further foregrounding voices of young people and taking seriously what they have to offer.

In order to further understand what students in one school might consider important learning opportunities for them to develop the key competencies, I undertook conversations with nineteen secondary school students during 2008. While I make no claim as to the scientific rigor of these conversations, I do suggest that these informal teacher-student conversations afford important understandings regarding teaching practice.

Specifically, I asked a group of school physical education students to consider the competencies from their perspective as Year 13 students and to identify what they felt teachers might be doing, saying, and providing to enable the development of the competencies. They were also asked to consider what learning opportunities they felt would enable students to develop the competencies and to identify examples from their own experiences, where appropriate. Given that these students have been taught by a range of teachers throughout their secondary schooling, it was of interest to examine the diversity of their responses.

Considering the key competencies as holistic, complex, and interrelated, rather than reporting responses in a way that may suggest a linear process of developing the key competencies, five general themes relating to their responses in relation to pedagogy and learning environments were identified. These five identified themes were:
- authentic learning in and through movement
- learning environment and a community of learning
- teaching and learning approaches
- autonomy and action
- challenge.

The key competencies are:
- Thinking (T)
- Relating to others (R)
- Using language, symbols, and texts (U)
- Managing self (M)
- Participating and contributing (P)

For ease of identification the letters in brackets following individual student's statements relate to the emerging acronym of TRUMP which symbolizes the collection of five key competencies (e.g. T = thinking etc.). Comments are displayed verbatim, with relatively little attempt to analyse these. Rather, they are offered in the hope that students' perspectives may inform our practice, affording a set of unique insights into what works and what does not work for them.

Authentic learning in and through movement
Students identified learning in and through movement and being provided with learning opportunities and activities that provided authentic learning as integral to the development of a range of key competencies.

"Being able to see or do, not just have the words is important and makes it real (e.g. learn anatomy in action)" (U)

"Visual aids such as pictures and video clips helps the understanding of concepts (e.g. about the body and its portrayals)" (U)

"Ensure activities include fun so people want to participate" (P/R)

"Keep providing competition some of the time, in the classroom as well as in practical lessons – it motivates some of us" (P)

"Give students the opportunity to lead a task as well as being lead by their peers" (P/R)

"Set challenges that seem difficult but are achievable to boost confidence and self belief" (M)

Learning environment and a community of learning
The identification of the learning environment as a learning community and the provision of co-operative learning, the importance of social settings and groupings, and aspects of pedagogy were identified as particularly significant for the competency of relating to each other and thinking.

"Working in collaborative and co-operative groups to add onto other peoples understanding helps improve understanding and language of a concept" (U/R)

"Provide problem solving games, and games where we have to develop strategies" (T)

"Keep the fast responders from answering while the rest of us have more time to think for ourselves" (T)

"Provide tasks where students have to work together as a group to achieve goals - activities where all the students in a group have to interact" (R)

"Have students always work in different groups to mix with those from different backgrounds and cultures – but for some things stay in that group so they have to achieve together over time" (R)

"Problem solving tasks mean we have to communicate and work together(R)
"Tasks that require full involvement from everyone – tasks that need co-operation ensure participation and contribution" (P)

Teaching and learning approaches

Related to the previous theme and with some relationship to establishing the learning environment area, students went as far as identifying some specific learning approaches that they felt would develop competencies.

"Tasks and activities that ask us to incorporate terminology and new language into material we already know so we really understand the terms. It helps bring understanding and confidence" (U)

"Keep encouraging and expecting self-motivation and self-direction" (M)

"Expect us to take responsibility for our own learning" (M)

"Talk to individual's one-one about their past experiences which might help them relate to current context/problem/issue" (T)

"Provide step by step example of processing concepts" (T)

"Rather than tell us how to improve, ask how we can improve themselves" (T)

"Provide even more exemplars of what deep and critical thinking looks like" (T)

"Use different ways to start us thinking – pictures, activity" (T)

"Being taught the skills of e.g. giving feedback and being supportive means we understand how to and can relate better" (R)

"Use activities that people have different strengths and weaknesses in – e.g. dance showed different peoples' strengths and so we can check our own assumptions!" (R)

"Provide situations where participation with friends can happen (e.g. school teams based on groups of friends, not just a level of ability)" (P/R)

Autonomy and action

Autonomy, choice, and taking action, within curriculum and within schooling as a whole, emerged as important in the development of a range of competencies.

"Having a chance to help other / younger students encourages involvement of all" (P)

"Having the chance to provide activities (for younger students) gives a feeling of 'giving' to the school and to others" (P)

"Discussion and being questioned helps gain new understanding" (U)

"Provide in-school opportunities for activity that are about just choosing to turn up and join in on the day" (P)

"Let students choose activities for learning (P)

"Use team activities to show students that they need to do things for others as well as for themselves e.g. Sport Ed Model" (M)

"Encourage students to be involved in planning of activities, programmes, learning tasks" (M)

"Problem solving tasks mean we need to each manage ourselves (M)

"Allowing us to be responsible for our learning" (T)

Challenge

While this theme of 'challenging our thinking' could be seen as a subset of the above themes, there was sufficient comment to highlight it as a clear teacher strategy that students saw as beneficial in their learning and development of competencies.

"Don't give answers, but provide a process or framework for thinking through issues (like the critical thinking model and process)" (T)

"It is great when teachers ask heaps of questions, and keep asking" (T)

"Challenge us to make links to the rest of our lives – to understand the world more" (T)

"Debriefing – asking questions before and after an activity...makes us think about what we need to do to support and involve others" (T/R)

Implications for teachers

Several key implications for teachers emerge from the above student testimony. First, the responses suggest that students themselves are aware of the inter-related nature of key competencies - the fact that more than one might be drawn on at any particular time. This is supported within the literature (Brewerton, 2004; Burrows, 2005; Rychen, 2002) and suggests that it is important that teachers are not tempted to treat the key competencies as a set of stand-alone skills. A recognition of how, when, and where key competencies can be explicitly taught, enabled, supported and developed will assist teachers of Physical Education in providing appropriate learning opportunities for students to gain the knowledge, skills, attitudes, and values of their physical education programme and to develop the key competencies on their pathway to becoming "confident, connected, actively-involved, lifelong learners" (Ministry of Education, 2007, p.12).

Within the theme of authentic learning in and though movement, many of the students' responses point to their valuing of movement as a learning context. They recognise

how this can ensure greater authenticity of tasks that supports the development of competencies, as well as their learning. This reflects Hay (2006) who suggests that authentic assessment in Physical Education should occur in physical activity contexts and consider relevant bio-physical and socio-cultural movement concepts. Movement is a fundamental aspect of young people's lives. As student testimony shows, it is a known and familiar context and therefore provides an excellent vehicle for contributing to the broader education and development of students. Using movement as a learning context can inspire a focus on the students' real interests and relate learning to their own experiences; it can provide teachers with many 'teachable moments' when individuals or groups of students are ready to learn through observation, questioning, listening, and modelling. By valuing movement as a learning context in its broadest sense, teachers can provide learning opportunities that can enable student understanding of the social significance of movement in their own and others' lives (Arnold, 1979; Culpan, 1997; Macdonald, 2004).

Through their responses within the theme of learning environment, the students show that they value working co-operatively and collaboratively and recognise that the learning environment itself can support the development of a range of competencies. However, they also suggest that for this learning to occur, opportunities need to be explicitly planned to achieve particular outcomes. The students' responses highlighted their awareness of how they themselves learned and the possible approaches and strategies that teachers use to support the development of competencies. Interestingly, they also identified the need to be explicitly taught specific skills or competencies that lead to the development of a key competency such as relating to others. These responses suggest that, as teachers, we need to utilise an inquiry-based style of teaching which enables student-centred activities and learning opportunities and explicitly plan for learning and share learning intentions with students (Alton-Lee, 2003; Timperley, Wilson, Barrar & Fung, 2007). Students can be encouraged to teach others in informal contexts. This helps them to integrate what they have learned and to develop the social skills needed to help others learn.

Students identified strongly that by having autonomy and choice within their learning and input into this, they were enabled to develop a range of competencies. They identify that having chances to take action and contribute appears to evoke feelings of autonomy and, in turn, supports key competencies. While it is not the topic of this paper, recent literature on student motivation and engagement (e.g. Meyer, McClure, Walkey, McKenzie & Weir, 2006) suggests that secondary school students will be more motivated when given the opportunity to make choices and have an influence on their own learning and school participation. Autonomy and choice suggests that teachers can allow students to set individual learning goals and become more reflective about their own learning.

A number of student responses indicate that they welcome being challenged within their learning and that being challenged is a significant factor in the key competency of thinking. Perhaps more significant was that the responses suggest that students are aware that being questioned and challenged is a crucial precursor to them becoming more critical as thinkers.

In order to challenge students, teachers need to encourage students to take risks - with their knowledge as well as within movement contexts. Managing risks and meeting challenges will undoubtedly enable students to develop a range of competencies within their physical education learning. Students becoming critical thinkers and discerning consumers of the movement culture is part of Physical Education's contribution to the NZC's (2007) vision and development of the key competencies. The adoption of critical pedagogy and critical thinking (based on critical theory, not simply higher order thinking skills) in the exploration and understanding of the movement culture allows for new visions and intellectual curiosities (Bain, 1990; Sage, 1993; Sparkes, 1996). The student responses remind us of the need to provide opportunities for the development of creative and critical thinking and the use of thinking processes within Physical Education.

The inclusion of learning experiences that prompt critical thinking will enhance the provision of relevant, meaningful, and stimulating physical education programmes (Culpan & Bruce, 2007; Gillespie & Culpan, 2000; Sparkes, 1996; Wright, 2004). The identification of thinking, but not moving, as key competencies has been a cause for concern for physical educators in that it risks implying a dualism where the mind and body are considered separate. Of note, however, students do not appear to talk about thinking in a dualistic way and they seem to recognise that thinking and doing can happen all at once in particular contexts. Hipkins (2005) reminds us, as do these students, that knowing is indeed embodied. Physical educators would do well to continue to reinforce the notion that it is our thinking and moving bodies that connect us to our world (Ross, 2004).

In considering the students' responses and finding commonalities, there is much for teachers to consider. Many currently used teaching models and processes (e.g. Hellison's Responsibility Model (Hellison, 2003), Sports Education Model (Siedentop, 1994), Teaching Games for Understanding (Thorpe, Bunker & Almond, 1986), Experiential Learning Model (Luckner & Nadler, 1997), Action Competency Cycle (Tasker, 2000), Adapted Critical Thinking Models and Critical Analysis Process (Gillespie & McBain, 2006) are well placed to provide learning environments and approaches that will both enable the explicit teaching of the key competencies, but also support, develop, and enable their use. However, it appears that in the development of the key competencies, it is not so much which teaching model teachers chose, but how teachers chose to use these that matters.

Feedback from students suggests that they seek opportunities to think critically about real life situations to reflect on their own views and how these views are formed. The commonality that emerges from the students' responses is that the adoption of critical pedagogy will enhance the provision of relevant, meaningful, and holistic physical education programmes as well as contribute significantly to the development of the key competencies of the NZC (2007).

Students can clearly articulate the ways in which their physical education experiences have a future-focus in that they provide an education that supports and develops competencies,

knowledge, skills, and attitudes for life in the future. While NZC (2007) is seen as a future-focused document, balance is needed within physical education programmes to ensure that a focus on the future does not detract from the 'here and now' and that education is viewed as life, not simply as preparation for life.

An observation of concern

At the time of writing this, it has become increasingly evident (anecdotally) that out of *The New Zealand Curriculum's* (2007) vision, principles, values, key competencies, and outline for effective pedagogy, it is the key competencies that are seemingly gaining the most attention from both schools and teachers. Discussion about whether to assess or not to assess, to teach as themes per term, or to integrate into existing programmes and achievement objectives is on-going, and there appears to be a risk of not heeding the wide range of material available which encourages the view that the key competencies provide a framework for teaching and learning rather than presenting a 'one size fits all' set of outcomes. For teachers of Physical Education it is more a matter of recognising the ways in which the key competencies align with physical education curriculum statements and programmes, and utilising the necessary pedagogy to support the learning. Burrows (2005) sums this up in her statement:

> In some ways the key competencies seem like they were written for Health and Physical Education. Describing the key competencies is like describing the kinds of dispositions an HPE curriculum is designed to procure – that is, a young person who can think critically and creatively to solve movement tasks or analyze health practices, relate to others in a range of contexts, experience opportunities to belong, participate and contribute to communities within and outside of school, can take action to increasingly manage their health and physical well-being and make meaning using the range of tools afforded them in health and physical education contexts (pp.10-11)

Conclusion

The very fact that students can identify how their learning seems to contribute to the key competencies and can give their perspective on how it happens best for them highlights that student voices can provide insight into our teaching and learning programmes and be a valuable resource for planning and reflecting on our teaching.

The analysis of students' views on learning opportunities in relation to the key competencies highlights that the key competencies offer further potential for learning within physical education programmes. The provision of authentic learning experiences and a learning environment in which students can collaborate, challenge, and be challenged are central to the development of the competencies. A greater understanding of and use of pedagogy that will support this development and enhance learning in Physical Education emerges from the examination of the students' responses. In particular, the adoption of critical pedagogy and inquiry teaching are seen as strategies for teachers to utilise within their teaching of Physical Education in order to maximise the learning potential offered by the NZC (2007), supported by the *Health and Physical Education in the*

New Zealand Curriculum (1999). Students report their acceptance and even enjoyment of being challenged in their thinking. It is the disposition and skills of being a critical thinker that will enable students to make most sense of their world and come to understand the broad meanings and social and cultural significance of the movement culture.

The key competencies, along with the implementation of the *NZC* (2007), offer physical educators an opportunity to review and revise teaching and learning programmes. This group of students has given some insight into the learning opportunities that they see as leading to the development of key competencies, and it is evident that this is not at the expense of physical education curriculum learning. Indeed, if teachers view themselves as 'teachers of students in physical education' rather than 'teachers of physical education' then the seemingly overwhelming task of addressing student needs, NZC vision, principles, values, key competencies, physical education underlying concepts, strands, key areas of learning, and achievement objectives may be more easily united into relevant and meaningful programmes of Physical Education.

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