

PENZ REPORT: INTERNATIONAL PHYSICAL LITERACY ASSOCIATION (IPLA) WORKSHOP JUNE 2016

The purpose of this report is to disseminate findings from the IPLA workshop and inform those interested in the work of the International Physical Literacy Association (IPLA) and physical literacy.

Report to: Physical Education New Zealand (PENZ).
Date of report: 31 July 2016.
Report compiled by: Susie Stevens, Lead subject advisor for PENZ.
Workshop: International Physical Education Association (IPLA) workshop
Date and location: 22nd June - 24th June, 2016 Liverpool, UK.
Role: Co-representing NZ with Karen Laurie¹. My role was to learn about physical literacy (PL), voice concerns or critique on behalf of PENZ and a physical education curriculum space, explore possibilities and co-deliver NZ's work to date regarding Physical Literacy²

1. Scope.

1.1. Sectors represented at the workshop.

Representatives from the health sector, national sporting organisations, practitioners in secondary and primary physical education, academics in physical education, sport, and human movement, 4 trustees of IPLA, and Margaret Whitehead.

1.2. Delegates.

Approximately 30 international participants representing England, Wales, Scotland, Malta, New Zealand, Canada, Finland, Denmark, Belgium, and India.

¹ Karen Laurie is the current early years and primary consultant for Sport NZ. She is part of the community sport team, and has been leading the work thus far on physical literacy in New Zealand.

² Sport NZ and PENZ have been working together since March 2016, co-delivering PL workshops nationally. Sport NZ & PENZ do not necessarily share all of the same views on PL, however have been actively collaborating to learn and develop our respective understandings of PL. This came about as a result of Sport NZ adopting, contextualizing and actively using PL in their new community strategies (Sport New Zealand, 2016). PENZ have been representing and advocating the importance of physical education to their approach, and have been able to provide critique and advice to Sport NZ to develop their thinking on physical literacy. This process has been reciprocal.

2. Background.

2.1. Origins of Physical Literacy (PL).

The term physical literacy has been around for over a 100 years, and the early terminology was based on a dualistic view of the mind and body. The term physical literacy has evolved and now, and more recently has been subjected to critique and debate by a group of academics, led by Margaret Whitehead³. Whitehead is a philosopher and physical educator whose core interests are embodiment, existentialism and monism. Over a period of 9 months, Whitehead and a variety of educators brainstormed and discussed the concept and refined the definition. The IPLA was formed as the concept gained traction. It is important to note here, that the IPLA's interpretation of physical literacy differs markedly to the Canadian interpretations of physical literacy (CAPL, 2016) and New Zealand's use of physical literacy does not follow the Canadian interpretations of physical literacy. The Canadian interpretation of physical literacy relies heavily on fundamental movement skills and quantitative data as a result of assessing against standardized norms. By categorizing and assessing individual dimensions of learning against standardized norms, this marginalizes any individual that does not fit within these boundaries. This does not represent the philosophical intent of PL specifically the requisite for inclusivity and holism.

Current thinking of physical literacy is based on individuals 'creating' themselves, within their surroundings, relative to their perceptions and capabilities. Human potential is viewed holistically and it is seen that we all have capabilities which can be developed. If individuals are provided with the right environments and support, then these capabilities, including physical literacy, can be developed from birth. Embodied potential, coordinated with opportunities and varied experience throughout life to engage in physical activity allow humans to further their personal physical literacy journey (IPLA, 2016).

2.2. Key references that have influenced the physical literacy approach (Whitehead, 2016a, 2016c)

Barbaras, R. (2010). *Life and Exteriority: The problem of Metabilolism*. . In J. Stewart, O. Gapenne, & E. Di Paolo (Eds.), *Enaction: towards a new paradigm for cognitive science*. Cambridge, MA: MIT Press

Burkitt, I. (1999). *Bodies of thought. Embodiment, identity and modernity*. London, U.K.: Sage.

³ Prof Margaret Whitehead holds the W.H. Duncan Chair of Public Health in the Faculty of Medicine, University of Liverpool, UK, where she is also Head of the Department of Public Health and Policy and the Head of the World Health Organisation (WHO) Collaborating Centre for Policy Research on Social Determinants of Health.

PENZ REPORT: INTERNATIONAL PHYSICAL LITERACY ASSOCIATION (IPLA) WORKSHOP JUNE 2016

- Clark, A. (1997). *Being there: Putting brain, body and world together again*. London: MIT press.
- Claxton, G. (1984). *Live and learn*. London: Harper and Row.
- Crossley, N. (2006). *Reflexive embodiment in contemporary society*. Oxford: OUP.
- Descartes, R. (1970). *Philosophical letters* (A. Kenny, Trans. A. Kenny Ed.). London: Clarendon Press.
- Edelman, G. (2006). *Second nature brain science and human knowledge*. New Haven, CT: Yale University Press
- Gibbs, R. W. J. (2006). *Embodiment and cognitive science*. Cambridge: CUP.
- Gill, J. H. (2000). *The tacit mode*. NY: State University of New York.
- Johnson, M. (1987). *The body in the mind. The bodily basis of meaning, imagination and reason*. London: University of Chicago Press.
- Johnson, M. (2008). *The meaning of the body: Aesthetics of human understanding*. London: The University of Chicago Press.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh; The embodied mind and its challenge to western thought*. London: Perseus Book Group, Routledge.
- Leder, D. (1990). *The absent body*. Chicago, IL: University of Chicago Press.
- Maiese, M. (2016). *Embodied selves and divided minds*. Oxford, UK: Oxford University Press.
- Merleau-Ponty, M. (1962). *Phenomenology of perception*. London: Routledge.
- Minsky, M. (1986). *The society of mind*. New York: Simon and Schuster.
- Moravec, H. (1998). *Mind children*. Massachusetts: Harvard University Press.
- Neitzsche, F. (1969). *Thus spake zarathustra* (R. H. Hollingdale, Trans.). London: Penguin Classics.
- Nussbaum, M. C. (2000). *Women and human development: The capabilities approach*. Cambridge: Cambridge University Press.
- Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. London: The Belknap Press of Harvard University Press.
- Ryff, C. D., & Key, C. L. M. (1995). The structure and psychology of well-being; Revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.
- Satre, J. P. (1957). *Being and nothingness* (H. Barnes, Trans.). London: Methuen.
- Sen, A. (1999). *Development as freedom*. NY: W.W.Norton.
- Standal, O. F. (2015). *Phenomenology and pedagogy in physical education*. London: Routledge.
- Thompson, E. (2007). *Mind in life*. London: The Belknap Press of Harvard University Press.
- Varela, F. J., Thompson, E., & Roshe, E. (Eds.). (1993). *The embodied mind*. Cambridge, MA: MIT Press.
- Vega, d. M., Glenberg, A. M., & Graesser, A. C. (2008). *Symbols and embodiment; Debates on meaning and cognition*. Oxford: Oxford University Press.

2.3. Key dates so far.

Jun2016	IPLA workshop held in Liverpool, UK
Jan2016	IPLA trustees and Margaret Whitehead plan workshop
Dec2015	IPLA restructure

Nov2015
2014

IPLA 1ST AGM
IPLA Official launch

3. Physical literacy and physical education

3.1. Physical education or physical literacy?

There is not one or the other. Physical literacy cannot be ‘taught’ as such, it is not a ‘curriculum’ and should not replace quality physical education. It is not in competition with physical education. Physical literacy is an outcome of quality physical education, and could already be happening with a quality physical education curriculum (IPLA, 2016).

Note: In New Zealand for example, we have a physical education curriculum that is holistic, critical and is underpinned by Hauora, the socio-ecological perspective, attitudes and values and health promotion. Therefore, if this curriculum is taught effectively in schools, then the IPLA would consider this to be an important and necessary part of a person’s physical literacy journey.

3.2. Physically educated or physically literate?

Again, there does not need to be one or the other. In New Zealand we have a physical education curriculum which provides, **when taught effectively**, opportunity for individuals to become physically educated – holistic, life-long critical participants of physical activity that understand movement’s role in well-being, personal identity and development as a human being. Internationally, many countries do not yet have this opportunity, and physical education remains heavily sport based. This has led many countries to look to physical literacy as a way of challenging this dominant discourse. Some have done this successfully, whilst others have simply reproduced the dualistic dominant discourse under a new title. In New Zealand then, there is no need to argue for one or the other, as our physical education curriculum (Ministry of Education, 1999, 2007) dictates and informs the *educational* space in which we seek our learners to become physically educated. The work done in our sporting sectors, using a physical literacy approach (after school, lunchtimes, before school, clubs, our parent involvement, elite sport, recreation spaces) would then compliment physical education. This is a reciprocal relationship.

4. Physical Literacy as an approach.

4.1. Mission.

“To enable everyone everywhere to understand and embrace physical activity as an integral part of life by developing a culture that values and promotes physical literacy” (IPLA, 2016).

4.2. The IPLA objectives (IPLA, 2016).

4.2.1. To promote the value of physical literacy world-wide.

4.2.2. To preserve the integrity of physical literacy.

4.2.3. To continue to develop the concept of physical literacy.

Note: The IPLA are quite happy for PL to be used and developed in different contexts, as long as the core components remain (what they deem the non-negotiables).

4.2.4. To provide a forum for exchange of views relating to physical literacy

4.2.5. To support and disseminate research and scholarly activity in all aspects of physical literacy

4.2.6. To encourage research activity and the application of research and scholarly activity into policy and practice.

4.3. Definition.

The IPLA now have a collective definition of physical literacy.

This is described as: "a disposition to capitalize on the human embodied capability, wherein the individual has the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life" (Whitehead, 2016b).

The shortened and common definition is "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life" (Whitehead, 2016b).

4.4. IPLA comment on the use of the definition.

The IPLA have worked over the last few years to define PL and want a shared vision of the definition. There have been discrepancies with the definition of PL, and this has led to multiple interpretations thus a varied implementation and understanding. The IPLA wish for countries to contextualize PL to meet their individual and cultural needs, however they now articulate that this must be done in respect to the global definition and philosophical intent of PL. Margaret Whitehead argues that those in PL leadership should understand the concepts of monism and embodiment (personal communication, 2016).

The IPLA recognise that the definition is contentious. They are not opposed to debate in this area, however advocate that they have now come to a working definition that reflects the essence of their mission. In other words, minor changes may be made over time as the association and the approach evolves, but there will not be a significant shift in thinking, as they believe this definition now reflects the philosophical intent.

Margaret Whitehead argues that the definition and the reasoning for 'literacy' is derived from Nussbaum's (2000, 2011) work on 'doing' and 'becoming'. Here Nussbaum is advocating capabilities. Thus, Whitehead (personal communication, 2016) argues that PL should be seen as a capability. The concept of literacy is much more than simple knowledge and competence, but derives from the way in which we view the world, create our own world and exchange worlds with others. This portrays the idea of literacy as a capability, and physical literacy as one example of a way that we interact with the

world. Therefore, the value for physical activity for human potential is important and should be of equal importance as other literacies.

The IPLA use the word physical activity, not sport. Their definition includes all forms of physical activity, sport, recreation, and play. These are personal to the individual and inclusive of the capabilities that one has. For an example, anyone with an impairment or special need would engage in physical activity to meet their needs at a level that suited. Those advocating PL would advocate the removal of any physical, mental and emotional or social barriers that could make this impairment or special need a disability (see Hallberg Disability Sport Foundation 'NET' or literature on the social and medical models of disability for more on this). The same goes for stages of learning. For example, a child learning a physical skill, should be given ample opportunity to explore that skill in relation to their stage of learning, not age or expectation of ability. Failure to promote inclusivity could impact significantly on the individual's motivation and engagement.

4.5. Translation of the term Physical Literacy.

Translating the term is contentious, and the IPLA recognize this as a possible barrier. The term Physical Literacy, specifically literacy, cannot be accurately translated into several languages (for example, Finnish and Dutch) so the title of the concept must remain in English. The concepts however can be translated and understood by all of the countries who they have worked with to date.

4.6. The value of being physical literate (Whitehead, 2016c).

Physical literacy is valuable because it fosters *a fundamental human capability* that allows us to develop as human beings, has the potential to enhance and enrich the quality of lives and operates with other capabilities.

Physically literate individuals:

- Develop their physical potential and thus experience the satisfaction of progress and success in physical activity;
- Grow in self-awareness and self-assurance and thus strengthen their self-belief and self-esteem;
- Come to realise that being active can be rewarding and pleasurable and thus develop a commitment to an active lifestyle;
- Have the confidence to explore participation in a wide range of activities and thus widen their life choices;
- Enhance their all-round health and well-being thus are more likely to remain fit and healthy into old age;
- Realise the importance of taking responsibility for their own well-being and learn to make informed decisions about the kind of purposeful physical activities they want to engage in on a regular basis;
- Actively evaluate their life habits and patterns, with respect to participation in physical activities, from an informed position.

4.7. Common critiques of physical literacy.

- 4.7.1. The name itself and the translation of the name. Specifically, the use of *physical activity* instead of *movement*.
- 4.7.2. The lack of the social element of learning.
- 4.7.3. PL could be seen to be promoting healthism.
- 4.7.4. The risk of the 'monitoring' or the 'assessing' of PL separating components of the experience (such as the affective, cognitive or the physical) thus reinforcing a dualistic perspective and not the monist philosophical intent it seeks to achieve.
- 4.7.5. Previous work in PL has strongly reflected FMS and the assessment of these (for example Canadian models (CAPL, 2016).
- 4.7.6. The lack of the terms such as 'joy' used throughout the documentation despite its philosophical underpinnings drawing on existentialism, embodiment and the affective domain.
- 4.7.7. The lack of criticality of the approach regarding the socio-ecological perspective.
- 4.7.8. The lack of criticality of the approach regarding its Eurocentrism.
- 4.7.9. The lack of research that currently exists regarding PL.

4.8. Brief responses to the critiques.

- 4.8.1. Please see 3.3 for the IPLA's response. In addition to the IPLA's response, Whitehead (2016) argued that physical activity requires an action or intent, where as any 'thing' can move, and this differentiation was a primary reason for the use of the term.
- 4.8.2. Whitehead identified (personal communication, 2016) that acknowledging the social domain of the lived body was a limitation to her research and has been an ongoing critique. She is open to looking at ways to develop this aspect of her philosophy and respects New Zealand's concept of Hauora in way of contextualizing our understanding of well-being and the acknowledged the relevance for New Zealand's importance of Whenua and Whanau in learning.
- 4.8.3. The IPLA would argue that for people to develop their physical literacy, they must have access, support and opportunities to do so. Any socio-ecological factor that impacts on one's ability to engage in their journey can disadvantage them developing their capabilities and thus those that advocate physical literacy should actively attempt to identify prejudice, inequality and remove barriers. There is not an expectation that one would be able to develop their capabilities fully without the support to do so. This is congruent with Maslow's hierarchy of needs.
- 4.8.4. The IPLA have recognized there is a significant gap between the theory and practice of PL. Attempting to bridge this gap, comes with challenges, mistakes and opportunities. The IPLA argue it is crucial that those leading PL have an understanding of existentialism and embodiment, as this can be often lost in the 'simplification' or the praxis of the theory.

For example, tracking, assessment, progressions, outcomes and measurement. Firstly, the IPLA wish to disassociate the word 'measurement' with the vocabulary surrounding PL. That is not their intent and would prefer that if tools must be used, they are more qualitative in nature and refer to tracking progress, or an individual's

journey. Measurement against standardized norms or ages does not reflect the philosophical intent. Even stages can be limiting, although they may be useful for those requiring data for research or funding. This should be dealt with carefully and critically.

Even then, the IPLA are still debating whether it is appropriate at all to track ones PL journey. However, the main consensus remains that the monitoring and tracking is predominantly for those in research and funding where data can greatly assist both. Qualitative approaches are privileged and encouraged, namely ethnographic studies, narratives, self-studies, hermeneutics and case studies to name a few. If quantitative research is being conducted, mixed methodology would be encouraged to capture rich experiences, and the quantitative research should not categorise individuals or promote dualism by measuring separate domains.

To assist with the understanding of how PL looks in practice, the IPLA articulate that to capture the essence of one's journey on their individual physical literacy journey, they will be able to demonstrate the following attributes or behaviours:

A. The motivation and confidence to capitalize on innate movement/physical potential to make a significant contribution to the quality of life.

Physical literacy is an inclusive concept. All humans exhibit this potential, however its specific expression depends on individual endowment in relation to all capabilities, significantly movement potential, and is particular to cultural and environment contexts.

B. Movement with poise, economy and confidence in a wide range of physically challenging situations.

C. Sensitive perception in 'reading' all aspects of the physical environment, anticipating movement needs or possibilities and responding appropriately to these, with intelligence and imagination.

D. A well-established sense of self as embodied in the world which, together with an articulate interaction with the environment, engenders positive self-esteem and self-confidence.

E. Sensitivity to and awareness of embodied capability leading to fluent self-expression through non-verbal communication and to perceptive and empathetic interaction with others.

F. The ability to identify and articulate the essential qualities that influence the effectiveness of movement performance.

G. An understanding of the principles of holistic embodied health, with respect to fundamental aspects such as a rich and balanced lifestyle, exercise, sleep and nutrition.

H. A life pattern, that, as appropriate, demonstrates the valuing of and commitment to, participation in physical activity

4.8.5. Fundamental movement skills (FMS) and measurement of these is **not** what the IPLA are wanting to achieve and furthermore does **not** meet the philosophical underpinnings of the approach, specifically inclusivity of individual journeys of progress, no matter what their 'level of ability', 'baseline,' or age. Stages of

development and (FMS) can be used as a guide to learning, however there must be consideration that these may be totally inappropriate to the individual's journey and comparison against any stages/levels or ages could be limiting or discriminatory.

- 4.8.6. Whitehead (2016, personal communication) articulated that the word joy or similar terms expressing movement pleasure had not been omitted on purpose, and perhaps this warranted further thinking and development.
- 4.8.7. The IPLA encourage a critical lens be placed upon this approach, they articulate that any barriers that prevent an individual from progressing their physical literacy need to be addressed. This is where they would consider the socio-ecological perspective to be addressed. For example, one's culture and history shape their understanding and being and thus their physical literacy journey will reflect this. Although the words *critical* or *criticality* do not currently feature in the approach, this does not mean a critical physical literacy cannot be explored. This could be a future research topic.
- 4.8.8. This approach is European. Whitehead (2016, personal communication) articulated that she could not be more English if she tried. The IPLA and Whitehead are aware of this, and consequently would like people to contextualize the approach to fit their own cultural contexts. They argue that as long as the non-negotiables are present and the philosophical intent is being respected, then contextually physical literacy can be shaped and molded for relevance or appropriateness in a variety of settings. It may be helpful to view the approach as an umbrella concept.
- 4.8.9. Yes, physical literacy is in its infancy, thus research is sparse. There is also a lack of international research, or research that explores the cultural contextualization of PL. There are active and emerging researchers in this space and critique and debate about PL will increase with time (Capel & Whitehead, 2010, 2012; Lounsbery & Mckenzie, 2015; Lundvall, 2014; Wright & Burrows, 2006).

5. Sport New Zealand's use of physical literacy, and physical literacy in New Zealand.

5.1. Use of the international definition.

Sport NZ community sport are using the IPLA's definition of PL and are committed to the monist philosophical underpinnings. There have been considerable efforts to contextualize PL with respect New Zealand's unique culture, history and its people (this is ongoing and developing consistently).

5.2. Critique and debate.

Sport NZ are aware of and actively encourage critique and debate of PL.

5.3. Research.

Sport NZ advocate research on PL and would encourage universities to actively engage with this space.

5.4. Links to other sectors.

This approach is not limited to educational sectors. The IPLA have identified that this approach should be thought of from 'cradle to grave.' This means it is most effective when all sectors are able to see the benefits of PL. The primary reason that it has been associated with education, is the influence on school age children curriculum and the impact this age can have on their capabilities, growth and potential. Sport NZ have aligned with the 'cradle to grave' approach and are looking at physical literacy wider than school aged individuals.

5.5. Myths or common questions.

5.5.1. *"This is Sport NZ's new 'curriculum' for physical education"*

As you read from the IPLA, this is not a curriculum, a programme or a replacement for physical education. Sport NZ do not intend on replacing anything and are advocates of our national curriculum, teachers getting the support they need to deliver this effectively and the work of PENZ.

Furthermore, Sport NZ openly acknowledge that actions in the past relating to a blurred line of sport and P.E. (predominantly in the primary space) has not been effective for sustainability. Both Sport NZ and PENZ agree that this leads to the de-skilling of teachers and is not a wise or respectful move.

5.5.2. *"This is a short term incentive"*

Sport NZ have embraced this as their new strategy. Meaning this will remain a significant player in NZ for the future. Sport NZ acknowledge the importance of physical education as a part of the bigger system build. This is a significant shift in Sport NZ's thinking and previous incentives that were more numbers and outcomes focused.

5.5.3. *"The process lacks rigour, and very little research has been done on physical literacy"*

Sport NZ spent a year developing and consulting prior to their launch of PL in New Zealand. It is continually evolving and is an organic process. Due to PL being relatively new concept, with limited research there will be an equal amount of issues as opportunities. Several steps, such as reflective practice and consultation are being taken to ensure PL in New Zealand is culturally relevant, responsive and respectful.

5.5.4. *"Physical literacy does not need to be tied to an educational space or the Sporting sector"*

This is true. The IPLA have been working with people in differing educational, sporting and health sectors to explore how physical literacy could look within these spaces. There are of course both risks and advantages to increasing the scope of PL in New Zealand across multiple sectors.

6. Possibilities and opportunities for physical literacy in New Zealand.

6.1. Relationship build.

With a changing environment, physical education in New Zealand may soon be subject

PENZ REPORT: INTERNATIONAL PHYSICAL LITERACY ASSOCIATION (IPLA) WORKSHOP JUNE 2016

to many challenges. By working with other groups outside of the education sector we open up new possibilities, partnerships and strengthen the voice of physical education in New Zealand.

6.2. Research.

There will be opportunities to conduct research in varying forms as physical literacy in New Zealand develops. Interesting areas of study could include; ethnographies, personal narratives, social justice and post-structural work, critical research, hermeneutical interpretations, or self-studies.

6.3. Physical Education New Zealand involvement.

There is an opportunity for PENZ to be present, guide and support the development of physical literacy in New Zealand. This ensures that the physical education curriculum is considered and respected when future decisions regarding physical literacy are made.

7. References:

- Barbaras, R. (2010). Life and Exteriority: The problem of Metabilolism. . In J. Stewart, O. Gapenne, & E. Di Paolo (Eds.), *Enaction: towards a new paradigm for cognitive science*. Cambridge, MA: MIT Press
- Burkitt, I. (1999). *Bodies of thought. Embodiment, identity and modernity*. London, U.K.: Sage.
- Capel, S., & Whitehead, M. (2010). *Learning to teach physical education in the secondary school: A companion to school experience*. London: Routledge.
- Capel, S., & Whitehead, M. (2012). *Debates in physical education*. London: Routledge.
- CAPL. (2016). *The Canadian Assessment of Physical Literacy*. Retrieved from <https://www.caplecsfp.ca/>
- Clark, A. (1997). *Being there: Putting brain, body and world together again*. London: MIT press.
- Claxton, G. (1984). *Live and learn*. London: Harper and Row.
- Crossley, N. (2006). *Reflexive embodiment in contemporary society*. Oxford: OUP.
- Descartes, R. (1970). *Philosophical letters* (A. Kenny, Trans. A. Kenny Ed.). London: Clarendon Press.
- Edelman, G. (2006). *Second nature brain science and human knowledge*. New Haven, CT: Yale University Press
- Gibbs, R. W. J. (2006). *Embodiment and cognitive science*. Cambridge: CUP. Gill, J. H. (2000). *The tacit mode*. NY: State University of New York.
- IPLA. (2016, 22nd - 24th June). *Physical literacy guide*. Paper presented at the International Physical Literacy Association Workshop, Liverpool.
- Johnson, M. (1987). *The body in the mind. The bodily basis of meaning, imagination and reason*. London: University of Chicago Press.
- Johnson, M. (2008). *The meaning of the body: Aesthetics of human understanding*. London: The University of Chicago Press.

PENZ REPORT: INTERNATIONAL PHYSICAL LITERACY ASSOCIATION (IPLA) WORKSHOP JUNE 2016

- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh; The embodied mind and its challenge to western thought*. London: Perseus Book Group, Routledge.
- Leder, D. (1990). *The absent body*. Chicago, IL: University of Chicago Press.
- Lounsbury, M., & McKenzie, T. (2015). Physically literate and physically educated: A rose by any other name? *Journal of Sport and Health Science*, 4, 139-144.
- Lundvall, S. (2014). Physical Literacy in the field of physical education - A challenge and a possibility. *Journal of Sport and Health Science*, 4, 113-118.
- Maiese, M. (2016). *Embodied selves and divided minds*. Oxford, UK: Oxford University Press.
- Merleau-Ponty, M. (1962). *Phenomenology of perception*. London: Routledge.
- Ministry of Education. (1999). *Health and physical education in the New Zealand curriculum*. Wellington: Ministry of Education Learning Media.
- Ministry of Education. (2007). *The New Zealand curriculum*. Wellington: Ministry of Education Learning Media.
- Minsky, M. (1986). *The society of mind*. New York: Simon and Schuster.
- Moravec, H. (1998). *Mind children*. Massachusetts: Harvard University Press.
- Neitzsche, F. (1969). *Thus spake zarathustra* (R. H. Hollingdale, Trans.). London: Penguin Classics.
- Nussbaum, M. C. (2000). *Women and human development: The capabilities approach*. Cambridge: Cambridge University Press.
- Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. London: The Belknap Press of Harvard University Press.
- Ryff, C. D., & Key, C. L. M. (1995). The structure and psychology of well-being; Revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.
- Satre, J. P. (1957). *Being and nothingness* (H. Barnes, Trans.). London: Methuen.
- Sen, A. (1999). *Development as freedom*. NY: W.W.Norton.
- Sport New Zealand. (2016). Physical literacy approach. Retrieved from <http://www.sportnz/about-us/who-are-we/what-were-working-towards/physical-literacy-approach>
- Standal, O. F. (2015). *Phenomenology and pedagogy in physical education*. London: Routledge.
- Thompson, E. (2007). *Mind in life*. London: The Belknap Press of Harvard University Press.
- Varela, F. J., Thompson, E., & Roshe, E. (Eds.). (1993). *The embodied mind*. Cambridge, MA: MIT Press.
- Vega, d. M., Glenberg, A. M., & Graesser, A. C. (2008). *Symbols and embodiment; Debates on meaning and cognition*. Oxford: Oxford University Press.
- Whitehead, M. (2016a). *Keynote reference list*. Liverpool.
- Whitehead, M. (2016b). Physical literacy definition. Retrieved from <http://www/physical-literacy.org.nz>
- Whitehead, M. (2016c). *What is the value of being physically literate?* Paper presented at the IPLA workshop, Liverpool.
- Wright, J., & Burrows, L. (2006). Re-conceiving ability in physical education: a social analysis. *Sport, Education and Society*, 11(3), 275-291.

