

2017

## Criticality in Physical Education Teacher Education: Do Graduating Standards Constrain and or Inhibit Curriculum Implementation

Ian Culpan  
*University of Canterbury, New Zealand*

Follow this and additional works at: <https://ro.ecu.edu.au/ajte>



Part of the [Health and Physical Education Commons](#), and the [Teacher Education and Professional Development Commons](#)

---

### Recommended Citation

Culpan, I. (2017). Criticality in Physical Education Teacher Education: Do Graduating Standards Constrain and or Inhibit Curriculum Implementation. *Australian Journal of Teacher Education*, 42(7).  
<http://dx.doi.org/10.14221/ajte.2017v42n7.6>

This Journal Article is posted at Research Online.  
<https://ro.ecu.edu.au/ajte/vol42/iss7/6>

## **Criticality in Physical Education Teacher Education: Do Graduating Teacher Standards Constrain and or Inhibit Curriculum Implementation?**

Ian Culpan  
University of Canterbury, New Zealand

*Abstract: Over the last decade and a half, physical education curricula in New Zealand and Australia have had a strong socio-cultural-critical orientation, providing in depth opportunities for critical inquiry. This article suggests that trying to achieve a criticality maybe impeded and or constrained by present graduating teacher standards. In the discussion, it is highlighted that neither New Zealand nor Australia graduating teacher standards overtly suggest critical inquiry as a part of beginning teachers' required knowledge, skills or dispositions. This could be a significant constraint on maximising the intent of the New Zealand and Australia physical education curricula. As a result, this article makes suggestions as to how a pedagogical constructive framework, with an emphasis on critical constructivism, might provide a way forward.*

### **Purpose**

This article highlights that the implementation of the socio-cultural-critical pedagogical orientations of the New Zealand (NZ) and Australian physical education (PE) curricula maybe constrained and inhibited by the omission of critical inquiry in each country's corresponding graduating teacher standards. Problematics with graduating teacher standards are identified and suggestions are made that a pedagogical constructivist framework in PE teacher education may provide a way forward for the PE curricula to move toward maximising their critical inquiry potential. The article also highlights dilemmas and conundrums with present graduating teacher standards in order to identify areas worthy of future discussion, interrogation and debate.

### **Introduction**

Over the last decade and a half, PE curricula in NZ and Australia have had a strong socio-cultural-critical orientation, creating opportunities and possibilities for in depth critical inquiry (Culpan & McBain, 2012; Wright, MacDonald & Burrows, 2004). The use of the terms critical inquiry and criticality in this article refer specifically to work (pedagogy) that is focused on understanding the relationship between power relations and the social, cultural and economic context of knowledge construction. It incorporates an attention to identifying inequalities and examining taken for granted assumptions that may create oppression and injustices. It has, as its central tenet, the empowerment of individuals and groups to take social action in order to achieve liberating change that has a strong social justice orientation (Apple, 2003; Breuing, 2011; McLaren, 2003). This particular understanding of critical inquiry is linked to critical pedagogy

(Tinning, 2010). As a consequence, these terms are used inter-changeably throughout the article. While this article privileges the above criticality interpretation, it acknowledges that in some academic writings the 'critical' can mean higher order thinking and inquiry. This can involve problem solving, investigative inquiry and cognitive processing, characterised by analysis and evaluation without the necessary socio-political connotation of empowerment and social change.

Advocacy for critical inquiry is not necessarily a recent innovation. It has been critiqued for its deficiency in achieving 'practical activism' (Bruce, 2013; Culpan & Bruce, 2007; Fernandez-Balboa, 1997; Tinning 2002, 2010). These scholars have argued that critical inquiry has little relevance unless there is robust engagement in praxis. Notwithstanding this critique, Culpan and McBain (2012); Gillespie and McBain (2011); and Wright et al. (2004) suggest a number of ways of how we might achieve connecting the theory/practice nexus. Their scholarly work is important in that new foresights and pathways are identified and discussed. In spite of these scholars attempting to address the practice/theory nexus, my on-going observations and reflections do create a tiny dark shadow of scepticism for the *critical* within PE teacher education contexts. Regardless of the optimism and confidence given to critical pedagogical possibilities, one could claim, in the dark moments of doubt, that the application of critical inquiry is significantly hampered by its obscure and complicated academic positioning. Furthermore, political and regulatory accountability measures, aimed at teacher education, may also provide impediments that can result in critical inquiry becoming somewhat unproductive and even redundant.

### **Critical Inquiry and Teacher Standards**

The need to, effectively and systematically, draw on critical inquiry in PE teacher education is well documented (Bain, 1990; Culpan & Bruce, 2007; Fernandez-Balboa, 1997; Gillespie & McBain, 2011; Kirk, 2010; Tinning, 2002, 2010; Wright et al., 2004). However, the task of doing so is laden with difficulty. Understanding the sociological sophistication of critical theory and then drawing on this to frame critical inquiry applicable for teacher education and schooling contexts is complex and even intimidating. The complication can result in ignoring what are essential or non-essential aspects of the theory. The import of this could be that the main nuances of the theory are not captured. Unrefined and simplistic understandings lead to broad generalisations that are often problematic. Furthermore, non sophisticated understandings may well result in ignorance around promoting the fundamental aspect of criticality, that being, the empowerment of individuals and collectives to create social change.

Leistyna and Woodrum (1996) indicate that, for critical inquiry to be effective, both teachers and students need to be knowledgeable about the inter-connecting relationship between ideology, power and culture. To understand this three way inter-play, Darder, Torres and Baltodano (2002) suggest two pedagogical principles are important: a critical understanding of dominant ideologies and the development of effective counter hegemonic discourses to address and transform oppressive practices. These two pre-requisites infer that for teacher education there is a need for criticality in PE programmes to include learning experiences that explicitly emphasise dominant socio-political ideologies and the subsequent interrogation and deconstruction of them. Young teachers would then need to situate themselves in relation to that ideology, defend that situating and confront possible existing social inequalities and injustices through practical activism (see Gillespie & McBain, 2011 for a helpful Critical Analysis Process

tool). This pedagogical arrangement is challenging, particularly when critical pedagogues need to avoid the danger of assuming social change is uniform across a range of variables. Teachers and students, in their quest to understand and implement critical inquiry, need to be mindful of the changing pace, depths, and contexts within societies. Such understandings acknowledge how these variables can unfavourably affect living conditions, labour markets, and political outcomes, particularly in terms of inequalities, injustices and abuses of power. Central to this challenge is the capability and capacity to critically analyse. A critical analysis is somewhat limiting unless teacher educators, and indeed the students they work with, “understand the interrelations between, on one hand, social actors, their actions, norms, values and ideologies connected to their actions and, on the other hand, social structures of political-legal, military, economic, and ideological character” (Kaspersen, 2000, p.170). Given these requirements, the dark cloud of pedagogical scepticism becomes very evident and serves as a reminder that present structures within teacher education can be both enabling and constraining. The critical analysis governs what is enabling and constraining. In the context of teacher education some rules and or frameworks are more important than others and some more enabling and constraining. Take for example the ‘rules/framework’ of *Graduating Teacher Standards: Aotearoa New Zealand* (Education Council of Aotearoa New Zealand, n.d.) and the *Australian Professional Standards for Teachers* (Australian Institute for Teaching and School Leadership, 2011). These standards outline graduating teachers’ knowledge skills, and understandings, their ability to action such attributes and the dispositions they have to make them effective teachers (Education Council of Aotearoa New Zealand, n.d.); Australian Institute for Teaching and School Leadership, 2011). The development of such standards in NZ and Australia is a result of political calls for quality teachers, quality outcomes and quality schools. This, Pope (2014) argues, is part of a systematised neo-liberal political agenda, backed by Western governments, international development agencies and private enterprise in their quest to reform schooling. It is part of the wider political agenda to achieve greater economic efficiencies for free market orientations. This ideological orthodoxy, drawn and adapted from the corporate world (Sahlberg, 2006), has two underpinning principles. Firstly, the standardisation of education to achieve accountable policy outcomes and, secondly, low risk, less experimental, restricted, and less expensive ways to achieve the goals of producing effective teachers and high achieving students. This is deemed necessary for the professionalism of teaching (Cumming & Jasman, 2003). Conversely, Aitken, Sinnema and Meyer (2013) suggest tightly specified standards based approaches to initial teacher education are criticised for their fragmented, reductionist, constricted view and overly prescriptive analysis of the practice of teaching. Aitken et al. state:

*where standards are said to reflect research on teaching and learning, the claim is usually based on the flawed assumption that a particular teaching approach necessarily improves student learning and that teachers should therefore be held accountable for using it (p. 6).*

In the NZ context, Thrupp (2006), has argued against prescriptive standards as they tend to place controls on teachers, limit pedagogical choice, create an additional administrative burden, and generally, ignore the complexities of teaching. Aitken et al. (2013) in their synthesis of the literature on teacher standards have identified a number of inadequacies with the present NZ standards. In their view they have: a non-active and non-applied nature; a focus on knowledge acquisition; knowledge separated from the act of teaching; disconnected value orientations; glib treatment of diversity and culture and a lack of ethical considerations (Aitken et al., 2013). To these short comings I would also add there is no specific mention of equity, social

justice, the examination of social power relations and a corresponding need for criticality. In identifying these inadequacies, Aitken et al. suggest that a way forward might be to develop teacher standards that emphasise an inquiry based model of teaching, informed by the discourse of international literature on standards and the analysis of present *Graduating Teacher Standards Aotearoa New Zealand*. In proposing this, they draw heavily on official Ministry of Education documents relating to *The New Zealand Curriculum* (Ministry of Education, 2007).

Aitken et al. propose a set of standards characterised by graduating teachers: defending decisions on learning priorities and teaching strategies, using teaching strategies that are most likely to be successful, evaluating the impact of teaching, and developing priorities for professional learning. Their standards emphasise the need to know about education's body of knowledge, cultural knowledge, dispositions that lend themselves to open-mindedness and flexibility, ethical principles, commitment to learners and their communities; and, finally, a commitment to social justice through criticality. While international and national critiques of present standards exist and alternatives proposed, it would seem that few centrally controlled decisions have been forthcoming to address the issues identified above (Aitken et al., 2013).

The minimisation of teaching to specific descriptors in the NZ and Australian graduating teacher standards seems to be counter intuitive to the recognition that teaching is a complex undertaking. The descriptors require graduating teachers to draw on an array of pedagogical approaches conjoined with inter-related considerations. The lack of inter-relatedness between the components of each standard seems to negate the importance of developing a knowledge of, and drawing on, education's body of knowledge to fully understand the broader context of education, teaching and the schooling contexts. By education's broader context, I refer to such foundational studies that draw on historical, political, economic, socio-cultural and psychological awareness to develop an understanding of the political contexts of policy debates and the social issues within education and society. It is argued here such foundational knowledge can facilitate the analysis and deconstruction of dominant ideologies and discourses associated with social power relations, equity and social justice. Stephenson and Rio (2009) posit that, despite the expectation that graduating teachers need in depth knowledge on educational contexts to address bi-cultural standards, realistically this knowledge is, somewhat, marginalised. Such bicultural standards, "having knowledge of tikanga and te reo Maori to work effectively within the bicultural contexts of Aotearoa New Zealand" (Education Council of Aotearoa New Zealand, n.d, Std.3b) or "understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between indigenous and non-indigenous Australians" (Australian Institute for Teaching and School Leadership, 2011, p.2, 2.4) are at best given fleeting attention or conveniently overlooked by teacher education programmes. Furthermore, in NZ the "espoused focus on reflective practice, a major concern must be the lack of opportunity for student engagement in critical inquiry, or more specifically to inform reflection and practice through the application of historical and sociological perspectives" (Stephenson & Rio, 2009, p.162). Indeed, this lack of criticality in teacher education is hardly surprising, given the explicit tension between technocratic expectations of meeting externally prescribed assessment criteria (standards) and the arguable theoretical luxury of critical pedagogy. On analysis, Stephenson and Rio's concerns are not without substance given that, in both NZ and Australian, standards lack any specific and overt reference to 'becoming critical'.

The strong orientation to a socio-cultural-critical approach in NZ and Australian PE curricula (Culpan & Bruce, 2014; Tinning, 2010; Wright et al., 2004) seems somewhat dichotomous. New Zealand and Australian standards specify the importance of graduating

teachers having professional knowledge of their respective curriculum areas. However, they are not specifically required to demonstrate any knowledge or attribute to understand, from a critical perspective, the socio-political and cultural contexts in which the implementation of these standards are to take place. For example a NZ standard states:

*Professional Knowledge Standard: Know what to teach:*

*Standard Descriptor: Have knowledge of the relevant curriculum documents of Aotearoa NZ (Education Council of Aotearoa New Zealand, n.d., Std.1.c)*

And an Australian Standard states:

*Professional Knowledge Standard: Know the content and how to teach it.*

*Focus Statement: Content and teaching strategies of the teaching area.*

*Descriptor Statement: Demonstrate knowledge and understanding of the concepts, substance and structure of the content and teaching strategies of the teaching area (Australian Institute for Teaching and Leadership, 2011, Std.2.1)*

The NZ and Australia standards “are descriptive and prescriptive in that they describe what teachers, at the point of graduating, will know, understand and be able to do, and prescriptive in that they provide a basis for ... approval of initial teacher education programmes” (Aitken et al., 2013, p.15). Because of this descriptive and prescriptive mix, it is acknowledged that a number of standards in both cases may, seemingly, give opportunities for critical inquiry. Arguably, these are:

NZ standards

*Professional Knowledge Standard: Graduating teachers know about learners and how they learn.*

*Standard Descriptor: Have knowledge of a range of relevant theories and research about pedagogy, human development and learning. (Education Council of Aotearoa New Zealand, n.d., Std.2.a) and*

*Professional Knowledge Standard: Graduating teachers understand how contextual factors influence teaching and learning.*

*Standard Descriptor: Have an understanding of the complex influences that personal, social and cultural factors may have on teachers and learners.*

*Standard Descriptor: Have an understanding of education within the bi-cultural, multi-cultural, social, political, economic and historical, contexts of Aotearoa NZ (Education Council of Aotearoa New Zealand, n.d. Std.2. a&c).*

And Australian standards

*Professional Knowledge Standard: Know students and how they learn.*

*Focus Statement: Students with diverse linguistic, cultural, religious and socio-economic backgrounds.*

*Standard Descriptor: Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistic, cultural, religious and socio-economic backgrounds (Australian Institute for Teaching and Leadership, 2011, Std.1.3).*

However, any focus on criticality in both the above examples is seemingly intermittent at best and arguably, somewhat unreliable and erratic (Stephenson & Rio, 2009). What is needed, is clear, coherent statements for critiquing the education system, structures and policies influencing the effectiveness of teaching and learning (Aitken et al., 2013; Stephenson & Rio, 2009). The critique could also include how the system could be transformed, improved and become more socially just. In PE’s case it would be contextualised by examining and holistically critiquing the

movement culture. It would encourage the facilitation of the development of a critical consciousness that may inspire graduating teachers to take social actions against injustices, inequalities, rampant consumerism and non-ethical and non-virtuous behaviours, both within the movement culture and beyond (Culpan & Bruce, 2007).

The provision of clear guidance in frameworks such as the NZ and or Australian standards can be problematic as such guidance runs the risk of being inauthentic, overly prescriptive and de-professionalises learning programmes. The authenticity of such frameworks depends on contextual arrangements. Giddens (1991) argues that, in social constructions, (both PE curricula and teacher standards are such) there can be no universal laws but simple generalisations. These are only useful when their spatial and temporal contexts are shared in a common form of consciousness and understanding. However, can simple generalisation about teaching be synthesised into a coherent framework when the literature alludes to the complex nature of education, schooling and learners? The realisation that people act on the basis of values, intentions, beliefs and reflect on actions to change behaviours in diverse and unanticipated ways, means that a methodology of interpretation needs to be incorporated into the standards. Such an inclusion would make clear that hard and fast regulations and laws cannot apply. A mechanism of interpretation requires some broad agreements on a thin conceptual veneer of universal teaching 'laws' and that the interpretation of the concept i.e. the conception of the concept becomes entirely context specific (Parry, 2007). Without agreement on the conceptual universal veneer of teaching, settled upon ideological understandings, acceptance that degrees of freedom are needed to alter the actual framework, and the license to be transformative, the standards may act as impediments to student teacher learning. They may act as constraints for the development of criticality in PE contexts. Indeed, present standards arguably suggest there is a particular certitude or Holy Grail to teaching that is simply an illusion in contemporary times. Tinning (2002) reminds us such certainty conveys the impression of 'purity'. As a consequence, it is argued here that present *Graduating Teacher Standards* in NZ and *Australian Professional Standards for Teachers* in Australia may serve to imprison teacher education in general and PE in particular.

### **Possible Pedagogical Orientation to Teacher Standards**

Heeding the critiques of present standards and the need to achieve the flexibility and degrees of freedom in order to have a license to be transformative (Parry, (2007); Bentley (2003) advocates for a constructivist pedagogical orientation. He argues that such an orientation provides a flexibility that assists in developing in student teachers "an understanding and disposition about knowledge that furthers democratic living" (p.1). Bentley argues that the more specific form of critical constructivism drawing on social constructivism emphasises the pluralistic nature of knowledge. It has the capacity to promote a "pluralistic epistemological democracy which favours the enrichment of the field of possibilities for *student teachers* through their participation in different knowledge games" (Bentley, 2003, p.5 *Author's emphasis*). This he argues is the role of pedagogy. That is to develop an epistemology of pluralism that not only provides an entry to social power relations but also allows individuals to connect with their own subjectivities. Bentley's argument is consistent with Desautels, Garrison and Fleury (1998) who argued that critical constructivism calls into question 'three idols of thinking' in today's ubiquitous teacher education's standards based educational environment:

1. Reification- whereby socially constructed knowledge is presented as unalterable, immutable and necessary.
2. De-contextualisation - whereby knowledge and its complexities are separated, alienated and even hidden from the situation in which it arose.
3. Technocratisation- where knowledge is utilised to serve the commitment to bureaucratic or scientised purposes.

The three idols are simply regulated and distributed in a manner that hides issues of power, control and injustice. Desautels et al. (1998) and Bentley (2003) address these shortcomings by advocating for critical constructivism because of its potentialities for education. The constructivism that Bentley (2003) advocates needs to play a central role in teacher education “in pre-service education, critical constructivism has to be put at the center of discussions about the nature of learning, teaching, content and schooling as a socio-political process” (p.10-11). However, Bentley cautions there is no claim that critical constructivism is a ‘method of finality’ but rather an approach for larger educational purposes that highlight the political, social and economic factors that have created issues of power, inequality and control. He allies his carefulness with the literature and adapts to what Tinning (2002) reasoned was a partisan approach that is “not talking about unthinking, unreasoned adherence to a dogma” (p.225). Instead, Bentley (2003) gives a “commitment to a social constructivist position” (p.225) for the betterment of teacher standards in the desire to produce quality teachers.

In acknowledging Bentley’s (2003) argument for critical constructivism within teacher education standards, it is noteworthy that other forms of constructivism may also have value in the ‘standards’ debate. Cobb (1996) suggests it is possible for the other independent components of constructivism (psychological and social) to be aligned and not be dialectically separated. He argued that each is involved with processes, through which particular information is constructed, examined for merit, contextually authenticated, and or dismissed. Synthesising psychological, social and critical constructivist components into a coherent framework may present a more flexible pragmatism to graduating teacher standards that acknowledge Tinning’s (2002) concern for not promoting a certainty or Holy Grail of teaching. The synthesis may also provide the ‘inquiry’ and ‘flexibility’ that Aitken et al. (2013) suggest are necessary. Indeed, the fusion of constructivist components for teacher standards may provide more applicability to the line and object of inquiry that teacher education could take. Kincheloe (2005) is in support of rational and reasoned approaches to teaching and intimates that critical constructivism is advantageous when united with other constructivist conceptions of learning. Culpan and McBain (2012) suggest there is a natural progression from the social to critical constructivism. They posit that the social construction of knowledge lends itself to the critical examination of hegemonic social relations in order to construct and develop understandings of how power relations influence and manage the production of knowledge. Kincheloe (2005) sees the critical perspective as a mechanism whereby individuals extend their personal consciousness as “critical constructivism...promotes reflection on the production of self” (p.10).

The evocation of drawing on a framework that embraces psychological, social and critical constructivism would seemingly enhance the concept and conception of teaching that can allow attending to many of the wide ranging shortcomings of teacher standards highlighted earlier. It is suitable for individual and collective meaning-making, the educative and social nature of teaching, the critical humanist positioning of learning and systematically addresses the lack of a critically reflective tradition. As Richardson (2003) argues, this “represents a process, in the best

of all possible worlds, that is dialogical and rational, and that creates a shared and warranted set of understandings” (p.1625).

Given these arguments and the seemingly lack of criticality within NZ and Australia teacher standards, I return to the question as to whether present standards enable critical inquiry in PE teacher education or are they constraining it? The answer cannot be categorical but one that is arguably characterised by chance. The chance being the lack of any systematised approach and the particular pedagogical orientation of the actual teacher educator. By systematised, I am not arguing for certainty but rather a pedagogical orientation to teacher standards as suggested by Bentley (2003) and to a lesser extent Aitken et al. (2013). It is proposed here that the orientation be characterised by mechanisms of interpretation where broad agreements on the conceptual nature of teaching be attained but the conception of such is open for *degrees of freedom* through contextual interpretations. However, in advocating for *degrees of freedom*, I am mindful of the suggestion of North, Sinnema, & Meyer, (In Press) that assumptions underpinning any teacher standards model are made explicit for those responsible for implementing them. By systematised, I refer to the seemingly agreed upon position that graduating teachers need to know the content and critical pedagogical implications and requirements of any given curriculum statement. At present, such a systematised approach would seem to be left to chance, especially in PE’s case when there is a clear critical inquiry curriculum orientation.

### **Caution in Moving On**

Developing pedagogical capability and capacity with student teachers is often facilitated by the provision of tentative and discrete frameworks/rules/models. These frameworks seem to provide useful road maps from which student teachers can primarily exploit when endeavouring to realise erudite pedagogies. However, drawing on similar arguments that are outlined earlier in this article, a cautious approach is urged. Such frameworks for criticality may indeed, create the same impediment as do the teacher standards – that is they may inhibit the thinking to explore sociological and educative imaginations for alternative visions and pathways. Such considerations seem fundamental to critical inquiry. Mindfulness needs to be given to the possibility that perhaps some of our frameworks actually create an ‘iron cage’ that prohibits such thinking.

As indicated earlier, a dark cloud of scepticism can engulf the pursuit of a criticality. Such cynicism needs to be mitigated with the recognition that the substitute of passivity and powerlessness for PE teacher education professionals is not an option. It is not an option that we would want our student teachers to endorse either. It is not an advancement. It is not a reasoned and responsible answer in seeking to develop teachers who are critical intellectuals, who are key agents in the development of, and transformation to, just and equitable societies. It is not a forthright way to capture the power and potential of PE. As physical educators we need to be mindful that we create ourselves and the creation of our identity is a process we participate in, and that our decisions, behaviours and actions actually engender many of the assemblies that constrain us (Giddens, 1991). In other words, we may be the architects of our own bondage, our own prison, our own ‘iron cage. To encourage, promote and advocate for critical inquiry we might be well advised to critically analyse existing frameworks used in teacher education – after all they might be imprisoning us. As a consequence, this article raises the question as to whether

the present teacher standards framework is one such constraint in our endeavours to work towards a criticality of PE.?

### Concluding Remarks

Becoming a 'critical educator' is a complex undertaking that requires sophisticated sociological understandings around the relationship of ideology, power and culture. In that becoming, two key pedagogical principles have been highlighted – a critical understanding of dominant ideologies and the development of effective counter hegemonic discourses to address and transform oppressive practices. Other complexities have been identified as regulatory requirements such as present graduating teacher standards in NZ and Australia. The graduating teacher standards in NZ and Australia are, arguably, problematic in that they may create a constraint or inhibit a critical approach to the teaching of PE. Indeed, they may create the same problem with other curriculum areas. Physical education in NZ and Australia have curriculum documentation that mandate a criticality commensurate with critical inquiry (Culpan & Bruce, 2014 & 2007; Wright, MacDonald, & Burrows, 2004). However, developing a criticality in PE teacher education seems at best a chance occurrence. Arguably, attempts at criticality lack a systematised approach. It is important to highlight that aspects of a systemisation have been outlined earlier and could also include an in depth analysis that addresses such questions as:

1. What is the generally accepted meaning of a standard?
2. What does the text of the standard mean in diverse socio-cultural and pedagogic contexts?
3. What are the socio-political and pedagogical assumptions, beliefs and ideology behind the text of the standard?
4. How are the standards used to assess student teacher competence in context?
5. Does any particular standard lend itself to, or resonate with, a pedagogic interrogation, particularly of a critical type?

By addressing such questions, and undertaking a critical analysis of standards, more coherent pathways for critical inquiry might be opened.

In summary, the article has attempted to highlight that, maybe, one of the central problems to ensuring the development of a critical inquiry tradition in teacher education, is that such a focus is not overtly embedded in graduating teacher standards. This is particularly problematic for PE teacher education, given curricula mandates (NZ and Australia). In highlighting this problem, this article suggests that a pedagogical constructive framework, drawing significantly on critical constructivism, might provide a better orientation by which a criticality can be achieved.

### References

- Aitken, G., Sinnema, C., & Meyer, F. (2013). *Initial teacher education outcomes: Standards for graduating teachers: A paper for discussion*. Wellington, NZ: Ministry of Education.
- Apple, M. (2003). Creating difference: Neo-liberalism, neo-conservatism and the politics of educational reform. In J. Freeman-Moir & A. Scott (Eds.), *Yesterday's dreams* (pp. 180-213). Christchurch, New Zealand: Canterbury University Press.

- Australian Institute for Teaching and School Leadership, (2011). *National professional standards for teachers*. Australian Institute for Teaching and School Leadership. Queensland College of Teachers. Retrieved from <http://www.aitsl.edu.au/australian-professional-standards-for-teachers/standards/list>
- Bain, L. (1990). A critical analysis of the hidden curriculum in physical education. In D. Kirk & R. Tinning (Eds.), *Physical education curriculum and culture: Critical issues in the contemporary crisis*. London: The Falmer Press.
- Bentley, M. (2003). *Introducing critical constructivism*. American Educational Studies Association. Mexico: 1-14.
- Breuing, M. (2011). Problematizing critical pedagogy. *International Journal of Critical Pedagogy*, 3(3), 2-23.
- Bruce, J. (2013). Dancing on the edge: A self-study exploring postcritical possibilities in physical education. *Sport Education and Society*, 18(6), 807-824. <https://doi.org/10.1080/13573322.2011.613457>
- Cobb, P. (1996). Where's the mind? A coordination of sociocultural and cognitive perspectives. In C. T. Fosnot (Ed.), *Constructivism: theory, perspectives and practice* (pp. 103-119). London: Teachers College, Columbia University.
- Culpan, I., & Bruce, J. (2014) Mandate and liberate: Physical education and health in Aotearoa/New Zealand. In M-K. Chin & C. Edginton (Ed.), *Physical education and health: Global perspectives and best practice*, 341-353. Urbana, IL: Sagamore Publishing.
- Culpan, I., & Bruce, J. (2007). New Zealand physical education and critical pedagogy: refocusing the curriculum. *International Journal of Sport and Health Science*, 5, 1-11. <https://doi.org/10.5432/ijshs.5.1>
- Culpan, I., & McBain, S. (2012). Constructivist pedagogies for Olympism education. *Asia-Pacific Journal of Health, Sport and Physical Education*, 3(2), 95-108. <https://doi.org/10.1080/18377122.2012.700690>
- Cumming, J., & Jasman, A. (2003). *Professional teaching standards and quality education*. UNESCO; Teacher Status and Qualifications for Education Quality Project. UNESCO.
- Dardner, A., Torres, R., & Baltodano, M. (2002). *The critical pedagogy reader*. New York: Routledge Falmer.
- Desautels, J., Garrison, J., & Fleury, S. (1998). Critical constructivism and the socio-political agenda. In M. Larochelle, N. Bednarz & J. Garrion (Eds.), *Constructivism and education* (pp 254-278). New York: Cambridge University Press. <https://doi.org/10.1017/CBO9780511752865.016>
- Education Council of Aotearoa New Zealand, (n.d.). *Graduating Teacher Standards: Aotearoa New Zealand*. Retrieved from <https://educationcouncil.org.nz/content/graduating-teacher-standards>.
- Fernandez-Balboa, J. M. (1997). The human movement profession: From modernism to postmodernism. In J. M. Fernandez-Balboa (Ed.), *Critical postmodernism in human movement, physical education, and sport* (pp. 3–10). New York: State University of New York Press.
- Giddens, A. (1991). Structuration theory: Past, present and future. In C. Bryant & D. Jary (Eds.), *Giddens' theory of structuration*. London: Routledge.
- Gillespie, L., & McBain, S. (2011). A Critical Analysis Process - bridging the theory to practice gap in senior physical education. *Waikato Journal of Education*, 16(2), 65-72 <https://doi.org/10.1017/CBO9780511752865.016>

- Kaspersen, L. (2000). *Anthony Giddens: An introduction to a social theorist*. Massachusetts: Blackwell Publishers.
- Kincheloe, J. (2005). *Critical constructivism primer*. New York: Peter Lang Publishing.
- Kirk, D. (2010). *Physical education futures*. London: Routledge.
- Leistyna, P., & Woodrum A. (1996). Context and culture: What is critical pedagogy? In P. Leistyna, A. Woodrum & S. Sherblom (Eds.). *Breaking free: The transformative power of critical pedagogy*. Cambridge, MA: Harvard Education Publishing Group.
- McLaren, P. (2003). Critical pedagogy: A look at the major concepts. In A. Darder, M. Baltodano & R. D. Torres (Eds.). *The critical pedagogy reader* (pp. 69-97). New York: Routledge Falmer.
- Ministry of Education, (2007). *The New Zealand curriculum*. Wellington, New Zealand: Learning Media.
- North, C., Sinnema, C., & Meyer, F. (In Press). Revealing the challenges of inquiry oriented teacher standards through self-study. *Studying Teacher Education*.
- Parry, J. (2007). The religio-athletae, Olympism and peace. In J. Parry, S. Robinson, N. Watson & M. Nesti (Eds.), *Sport and spirituality: An introduction* (pp. 201-214). London: Routledge.
- Pope, C. (2014). The jagged edge and the changing shape of health and physical education in Aotearoa New Zealand. *Physical Education and Sport pedagogy*, 19(5), 500-511. <https://doi.org/10.1080/17408989.2013.837440>
- Richardson, V. (2003). Constructivist pedagogy. *Teachers College Record*, 105(9), 1623-1640. <https://doi.org/10.1046/j.1467-9620.2003.00303.x>
- Sahlberg, P. (2006). Education reform for raising economic competitiveness. *Journal of Educational Change*, 7(4), 259-287. <https://doi.org/10.1007/s10833-005-4884-6>
- Stephenson, M., & Rio, N. (2009). Signing off the standards: Making the discipline mandatory. *New Zealand Journal of Teachers' Work*, 6(2), 159-169.
- Thrupp, M. (2006). *Professional standards for teachers and teacher education: Avoiding the pitfalls*. Wellington: Post Primary Association and New Zealand Educational Institute. Retrieved from [http://img.scoop.co.nz/media/pdfs/0604/avoiding\\_pitfalls.pdf](http://img.scoop.co.nz/media/pdfs/0604/avoiding_pitfalls.pdf)
- Tinning, R. (2010). *Pedagogy and human movement: Theory, practice, research*. London: Routledge.
- Tinning, R. (2002). Toward a “modest pedagogy”: Reflections on the problematics of critical pedagogy. *Quest*, 54(3), 224–240. <https://doi.org/10.1080/00336297.2002.10491776>
- Wright, J., MacDonald, D., & Burrows, L. (Eds.), (2004). *Critical inquiry and problem solving in physical education*. London: Routledge.

### Acknowledgement

This paper has been developed as a result of an invited presentation to a criticality symposium hosted by the University of Auckland 27-29 June 2012 and a corresponding 'think piece'. Physical Education New Zealand (PENZ) has consented to the development of the 'think piece' into a full paper.