

Chapter 14

What is the future for physical education in the twenty-first century?

David Kirk

Introduction

Futures studies have become a serious business in a range of fields but have occupied the thinking of only a few researchers in physical education (e.g. Massengale, 1987; Penney and Chandler, 2000; Laker, 2003). This relative lack of interest is somewhat paradoxical given, on the one hand, the colourful and dramatic history of the field in schools and colleges (Fletcher, 1984; Kirk, 1992) and, on the other, rapid development in physical culture, including the commercialisation, commodification and technologisation of sport, exercise and

active leisure (Kirk, 1999). This lack of curiosity about the future has not been helped by developments in the academic field of sport-related studies (in which physical education is located) where the study of history, where it exists at all at undergraduate level, is dominated by sport rather than physical education. Arguably, physical educators lack a perspective on their field; they are, effectively, trapped in the present tense.

One of the symptoms of being trapped in the present tense is the tendency to be astonished by what appear to be unprecedented developments. Who could have predicted that the rapid academicisation of physical education teacher education would result in a loss of physical activity subject matter knowledge? Or that, in England, the government would spend in just over a decade around £2 billion on physical education and school sport? Or that obesity levels among children and young people would allegedly rise even though we now have degree-qualified physical education teachers in schools more or less worldwide? Or that the development of community-based sport for children under 12, supported by poorly trained volunteer coaches, would undermine the role of physical education teachers in secondary schools? Or that by 2014 four-year physical education initial teacher education (PE ITE) programmes in the UK would have been replaced completely by one-year postgraduate certificates?

QI

As one small contribution to counteracting this tendency towards being trapped in the present tense, this chapter considers whether and to what extent

physical education might be considered fit for purpose in the twenty-first century. I begin by asking whether physical education has a future in the twenty-first century and attempt to define what we might mean by ‘the future’. I then consider the relevance of today’s physical education for the twenty-first century, and in particular focus on the physical cultural legitimacy of the currently dominant form of physical education. Building on a critique of this dominant version of physical education, I propose a possible middle- to longer-term future that is based on pedagogical models. This futuristic models-based proposal is supplemented by a brief discussion of the need for pupil-centred physical education that facilitates the development of young people’s perceived physical competence and their motivation for engagement in physical activities. The chapter ends with a comment on the extent to which physical education teachers might be able and willing to participate in the radical reform of the subject in order to ensure medium- to longer-term futures, and some of the challenges that must also be met for the renovation of physical education to proceed.

Physical education futures: some scenarios

Does physical education have a future? Before we can begin to form a response to this question, we need to decide the period of time we will count as ‘the

to this question, we need to decide the period of time we will count as 'the future'. On the one hand, such has been the rate at which 'innovations' have come and gone in physical education during the last decade of Physical Education, School Sport and Club Links (PESSCL) and then Physical Education, School Sport and Young People (PESSYP) in England, for example, it is tempting to frame the future in terms of months rather than years. This timeframe is somewhat limiting, however if we wish to gain some perspective on and analytical distance from the present. On the other hand, if we frame the future as much longer than 20 years, the speed of technological innovation and the effects of forces as varied as climate change, the economy, the greying population, technology, bioscience and the so-called obesity crisis, to name just a few, we risk attempting to talk about a world that could be quite different from the present day.

With these considerations in mind, it might be more acceptable to think in terms of short-, middle- and longer-term futures, with the short term over the next three to five years, the longer term around 20 years, and the middle term somewhere in between. Working with these timeframes, we can perhaps provide some reasonably well-grounded responses to the question 'Does physical education have a future?'

If the form of physical education that currently dominates practice (to be discussed next) in many countries around the world remains as it is, my response is that physical education most certainly does have a future in the short term. With recognition of the importance of physical education to a wide-ranging agenda of social 'goods' such as citizenship, health enhancement

and obesity reduction, and growing the pool of talented sports people, there should be little to no possibility of physical education's place in the school curriculum being at risk.

In the middle term, however, as increasing scrutiny of and accountability for the use of scarce public resources begin to provide genuine evidence of physical education's current deficiencies, the possibility of a radically different but (for physical educators) unacceptable future may become more likely. Hoffman's (1987) brilliant satire of a commercialised and commodified future for physical education, in which only those who can afford to pay-to-play receive physical education and the rest are merely supervised in unstructured activity time, may be the most likely middle-term scenario. While Hoffman's 'impossible dream' was not realised within his own timeframe, Tinning's (1992; 2001) successive follow-ups showed that we could well be on our way to this kind of middle-term future.

If this middle-term future is a strong possibility, then the longer-term future indeed looks bleak, at least for the survival of physical education as it is currently understood. But then, when we begin to explore the form of physical education that dominates school practice today and its relevance to the twenty-first century, we might agree that this longer-term future, in which physical education as we know it no longer exists, may be no bad thing.

The relevance of today's physical education to the twenty-first century

We could respond to this issue with the remark that, far from being relevant to the twenty-first century, today's physical education has been scarcely relevant for at least the last 30 years of the twentieth century. Between the 1920s and the 1950s there was a seismic shift in physical education as it was transformed from a gymnastics-based field of practice to a sports-based field. Due to a complex interplay of forces, ranging from the school timetable and the subject-centred academic curriculum to the sheer number and diversity of physical activities that make up contemporary physical education programmes, a sports-based, multi-activity form of the field emerged.

In terms of the day-to-day practice of this form of physical education, we might more accurately speak about physical education-as-sport-techniques. This is because the mainstay of the standard length lesson and short units of work is the teaching and learning of the techniques of a wide range of sports. The term 'technique', rather than 'skill', is appropriate to describe this form of physical education since it is the decontextualised movements of, for example, passing, dribbling and shooting, rather than their appropriate, thoughtful application in games and sports, that form the basic stuff of lessons. And since teachers typically work with relatively large groups of 20 or more pupils, within relatively short lessons, and since they are rightly ever-mindful of safety, a directive, command style of teaching predominates. Within this context, all of the research

evidence shows that learning progression seldom occurs (e.g. Lounsbery and Coker, 2008), and so introductory units of work tend to be taught over and over again (Siedentop, 2002a).

This is the dominant form of physical education in schools currently and has been more or less since the 1960s in the UK, and is widespread in many other countries around the world (Puhse and Gerber, 2005). Despite the serious limitations of the subject suggested in the preceding paragraphs, physical educators have consistently argued that physical education can provide children and young people with a range of physical, cognitive, affective, social and health benefits (Bailey *et al.*, 2009). Moreover, preparation for lifelong physical activity is viewed as the subject's *raison d'être*. Indeed, physical educators have continued to state this aspiration despite evidence to the contrary, from over 50 years of surveys of the physical activity habits of the adult population, that only a small number are physically active and a much smaller minority continue to play the games and sports that they experienced at school (Kirk, 2002a).

This sport-technique-based form of physical education has been spectacularly resistant to change. For instance, the notion of 'teaching games for understanding' (TGfU), first developed in the 1980s by Bunker and Thorpe (1982), is still regarded in many school physical education programmes as an innovative idea some 30 years later. Indeed, this resistance to change is not

innovative idea, some 50 years later. Indeed, this resistance to change is not due to a shortage of good ideas such as TGfU (Oslin and Mitchell, 2006). There has in fact been a proliferation of genuinely innovative forms of practice, including sport education (Siedentop, 1994; Hastie, 2011), play practice (Lauder, 2001), physical literacy (Whitehead, 2010a), personal and social responsibility (Hellison and Martinek, 2006), and health-based physical education (Haerens *et al.*, 2011). In the UK, the expenditure of over £2 billion of public money on the PESSCL and PESSYP programmes has arguably done little to impact this dominant form of physical education. In the UK and elsewhere, there has been serious and sustained criticism of physical education-as-sport techniques with arguably little result in terms of radical change (e.g. Hoffman, 1987; Locke, 1992; O'Sullivan *et al.*, 1994; Almond, 1997; Penney and Chandler, 2000; Lawson, 2009).

Physical culture and cultural legitimacy

One way to think about the relevance of the form of school physical education for the twenty-first century is to consider some of the changes that have occurred within the broader physical culture of society since the 1950s which legitimate (Williams, 1985) physical education's place in the curriculum. The field of sport, for example, has become increasingly professionalised, commercialised and commodified. In the 1950s, there were few professional sports, and amateurism retained a stranglehold on sport from beginner to elite levels. Sports that were professional, such as football (soccer), rugby league and

boxing, were the reserve mainly of men of the working classes who were not generously remunerated. Nowadays, in contrast, sport is a big money business, generating billions of pounds of profits for owners, investors and some sportsmen and women. Some sports have changed their rules and formats to suit the televisual media, including cricket, rugby union and field hockey. Billions of pounds more are generated from sports merchandise, including replica sportswear and other paraphernalia.

Despite these radical and far-reaching changes to sport and other forms of physical culture such as exercise and active leisure, school physical education is practised in much the same way as it was in the 1950s. So while the physical cultural forms that provide physical education with much of its public legitimacy have altered in tandem with technological advances such as television, the internet, and digitisation, the dominant practice in schools is the teaching and learning of introductory-level sports techniques. In this respect we might argue that this form of physical education is now and has been for some time culturally obsolete. The forms of physical culture that gave physical education-as-sport techniques its cultural legitimacy in the 1950s and 1960s, such as amateurism, have now disappeared.

On the basis of this argument we might reasonably ask what might be done to address this problem. Such a question becomes even more pressing when we acknowledge that public expectations for physical education have actually

acknowledge that public expectations for physical education have actually increased, rather than decreased. Advocates for physical education have been successful in persuading a once sceptical public, including governments, that physical education can make a meaningful contribution to a range of urgent social issues such as health, citizenship and elite sport. Could any of the good ideas mentioned earlier provide a means of responding to this conundrum of cultural obsolescence and raised expectations to achieve a range of important outcomes?

The role of pedagogical models in the future of physical education

The notion of pedagogical models builds on the ground-breaking work of Jewett *et al.* (1995) on curriculum models and Metzler (2005) on instructional models. Both authors argue for an approach to physical education that is ‘models-based’ (Lund and Tannehill, 2005), in which the curriculum or subject matter (physical activity experiences) and teaching strategies are brought into alignment with distinctive learning outcomes to create a design specification for the creation of school- and district-level programmes.

The term pedagogical model is preferred to ‘curriculum’ or ‘instructional’ model since these latter two use only one of the three aspects of pedagogy to describe the entire model. The term ‘pedagogical’, however, includes all three aspects of learning, curriculum (subject matter) and instruction (teaching strategies). Other pedagogical models include some of the ‘good ideas’ listed earlier

such as teaching games for understanding, play practice and health-based physical education (HBPE). In each case, a set of unique learning outcomes is identified and aligned with appropriate subject matter and teaching strategies to form the basis of programmes at local levels. This is the basic idea behind the notion of pedagogical models.

A good example of a pedagogical model is sport education, developed by Daryl Siedentop (1994) and his colleagues during the 1980s and early 1990s. The learning outcomes for sport education are the development of competent, literate and enthusiastic sportspersons. In order to achieve these learning outcomes, Siedentop argued that the subject matter of sport education is sport, which includes the key features of seasons, record-keeping, festivity, a culminating event, persisting groups, and roles in addition to player such as captain, umpire, scorekeeper, equipment officer and so on. Teacher strategies included directive teaching when appropriate, but also more pupil-centred strategies such as peer and reciprocal teaching and problem-solving. Metzler (2005) developed a series of teacher and pupil benchmarks which can be used to ensure programmes designed for specific locales such as individual schools or community sports clubs remain consistent with the key features of the sport education model.

A problem with the multi-activity, sport-technique-based ('one size fits all') approach to physical education is that a wide range of cognitive, affective

approach to physical education is that a wide range of cognitive, affective, health, social and motor skill learning outcomes are pursued using the same programmes, typically involving short units of work focused on techniques and utilising predominantly a directive teaching strategy. Since the 1950s, we have traditionally sought to achieve a range of arguably incompatible learning outcomes all through this same approach (Siedentop, 2002b).

In contrast, a models-based approach seeks to retain this range of legitimate learning outcomes for physical education but to align relevant subject matter and teaching strategies with each set of learning outcomes to create a package or a model for programme design. So instead of attempting to achieve health-related learning outcomes through a multi-activity, sport-technique-based form of physical education, we would bring together the subject matter and teaching strategies best suited to facilitate the achievement of these outcomes. Rather than leave health outcomes as a hoped-for by-product of a sport-based programme, we would seek to align subject matter and teaching strategies that aim specifically and explicitly to achieve health-related learning outcomes.

A models-based form of physical education might feature a school term of physical literacy, for example, followed by a term of play practice, then a term of sport education followed by a term of HBPE or personal and social responsibility. Each model provides a design specification for local versions of physical education programmes that can cater for the specific needs, interests and circumstances of pupils and teachers, schools and communities. So long as the local versions of physical education are consistent with the teacher and pupil

benchmarks for each model, we can be sure that pupils are being given opportunities to achieve worthwhile learning outcomes.

A models-based approach could offer middle- to long-term futures for physical education. There are two main reasons why. First, a models-based approach provides a means for physical education to pursue the wide range of legitimate physical, cognitive and social goals that its proponents have claimed for it for many years (Bailey *et al.*, 2009). Second, by aligning learning outcomes with relevant subject matter and teaching strategies, there is a strong chance that these learning outcomes might be achieved by a majority, if not all, pupils. In this respect, a critical mass of research on pedagogical models such as sport education (Hastie, 2011) and TGfU (Harvey *et al.*, 2010) has already produced promising results.

Q2

While pedagogical models that align learning outcomes, subject matter and teaching strategies might provide the possibility of middle- to long-term futures for physical education, this renovation in itself may not be enough to ensure a future for the field.

A focus for change: engaging pupils in physical education

Some physical educators have in the past attempted to establish pupil-centred forms of physical education, but without any profound or lasting success. Their relative failure is an indication of the power of the teacher-centred multi-activity, sport-technique-based form of physical education to resist change. But there can be no doubt, as we understand more and more about the social psychology of learning, that the ways in which we seek to engage pupils in physical education are at least as important as, and some would argue more important than, the design of pedagogical models.

There are two key concepts that must guide any efforts to change physical education to meet the challenges of the early to mid-twenty-first century: perceived competence and motivation. The phenomena they name are closely linked. Goudas and Biddle (1994) found that perceived competence explained over 60 per cent of variance in internal motivation. While actual competence forms the basis for young people's perceptions from age nine onwards (Nichols, 1989), based both on past experience and others' judgements, young people's perceptions of what they can and cannot do play a critical mediating role in both the level and the quality of their engagement in physical activity.

Motivation is probably the most studied psychological concept in the physical education literature (Lirgg, 2006). There are a range of 'mini-theories' of motivation, each stressing slightly different aspects, the emphasis often formed by the tools psychologists use to measure motivation. Irrespective of the theories we might consult, in summary terms a shared conclusion of research is that pupils are more likely to persist in learning when their motivation to do so

derives from an internal rather than an external source. In other words, if the source of motivation to learn is either anticipation of reward or fear of punishment, learning is less likely to be sustained and so is less likely to be effective. In contrast, if the source of motivation is internal, particularly if it involves participation in physical activities for their own sake or, as one philosopher expresses it, for the 'goods' internal to the activity itself (MacIntyre, 1985), learning is likely to be sustained.

If the psychologists are correct, and it would seem there is growing evidence that they are, then we must consider the pedagogical implications for physical education. It would seem that the traditional approach has not been entirely successful in facilitating internal motivation among generations of pupils of physical education and, indeed, may have had the opposite effect (Tinning, 2010). One theory suggests that in order to promote internal motivation, young people must be able to fulfil their need for autonomy. In other words, they must feel that they have a genuine say in the form of physical education they experience, that they have real choices that reflect their individual preferences (Shen *et al.*, 2007).

Sport education provides a good example of the kinds of practices that might fulfil this need (Pearlman and Goc Karp, 2010). By providing pupils with opportunities to take on roles in addition to player, sport education engages them in

practising skills such as teamwork, conflict resolution and negotiation. Some practices, such as the formation of a student sports council for the sport education season, engage pupils in authentic decision-making on behalf of their team and their competition, with appropriate levels of responsibility and accountability facilitating the development of active citizenship (O'Donovan *et al.*, 2010).

Just how these two concepts of perceived competence and motivation might be applied will depend to a large extent on the form physical education might take. Clearly, on the basis of the discussion so far in this chapter, it might be argued that the teacher-centred, multi-activity, sport-technique-based form of physical education cannot easily facilitate the development of these key psychological characteristics in young people. Some pedagogical models, such as sport education for example, which are explicitly designed for inclusiveness, to reward particular kinds of behaviour, and to offer opportunities for choice and responsibility, might prove more likely to foster perceived competence and motivation. An already substantial and still growing literature suggests that genuinely pupil-centred approaches promoting perceived competence and motivation are vital to the future prosperity of physical education.

Q3

The role of physical education teachers in the radical renovation of physical education

Physical education teachers in post at the end of the first decade of the twenty-first century are heir to a struggle for recognition and status by their predecessors

throughout most of the previous century (Kirk, 1992). Recognition of the subject as a core curriculum topic in schools and a very popular examination-based subject in senior secondary schools where this option is available, a profession of degree-qualified teachers, opportunities to undertake postgraduate studies, parity of remuneration with teachers of other school subjects, and a thriving research field in the university sector all represent major achievements of physical educators over this period. In this context, of apparent success, why would physical education teachers as a professional group choose to radically reform their subject? Indeed, the fact that it is widely understood that there is little agreement about the nature and purposes of physical education (Green, 2008), even though there has been genuine progress, might suggest it would be risky to do anything more than defend the status quo.

Even though physical education teachers clearly understand that motivation and perceived competence (or in their terms 'enjoyment' and 'self-confidence', Green, 2000a) are of central importance to physical education, and even though they might recognise that the currently dominant form of the field does not deliver the benefits it aspires to, there may nevertheless be little taste for radical reform. When we appreciate just *how* radical reform would have to be to bring about genuine change for the future survival of physical education, we can begin to better understand teachers' reluctance to jeopardise their achievements to date.

Reform is not simply a matter of teachers agreeing to take a model-based

Reform is not simply a matter of teachers agreeing to take a models-based approach to physical education. We would also require reform of what Lawson (2009) has described as the 'Industrial-Age school', with its attendant lack of organic connection with many young people's everyday lives. At secondary school level, where most specialist physical education teachers practise, physical education is shoehorned into a timetable 'just like any other subject', even when this arrangement clearly does not suit the requirements of many of the physical activities that constitute programmes. We would also require the reform of PE ITE. It is clear that we have achieved universal degree-level qualifications to teach physical education at the expense of our knowledge of the core subject matter of our field, which is physical activity, or as Siedentop (2002a) puts it rather more precisely, sport. The challenge here would be to develop what Shulman (1987) describes as teachers' content knowledge alongside their pedagogical content knowledge and still maintain 'degree-worthiness' of PE ITE programmes.

As if reform of the Industrial Age school and PE ITE programmes were not enough, the radical reform of physical education would also need to account for a range of other challenging developments. For example, in the past 20 to 30 years it has become commonplace for children in many economically advanced countries to have their first experiences of sport in a community rather than a school context. Children as young as five or six can be found playing a range of sports in community clubs, often taught by volunteer coaches who have little or no professional education as sports teachers or coaches. Meanwhile, the majority of specialist teachers of physical education do not meet these children until they

enter secondary schools around ages 11 or 12. As I have argued elsewhere (Kirk, 2005), while this arrangement might have made some sense prior to the 1980s when opportunities to play sport in the community were rare for the majority of children, it now represents an untenable misdirection of valuable resource. There is strong evidence from a variety of sources to suggest that physical education specialists need to be working in both primary schools and secondary schools. If, however, there is resource available for teachers to work in only one of these sites, then I would strongly vote in favour of the primary school option. This is because by the time most children reach secondary schools their perceived competence and motivation, and hence their likely engagement in physical activity, have already been formed and there is little that physical educators can do to change these dispositions.

Q4

Teachers have some very difficult decisions to make about physical education's future. On the one hand, in order to support radical reform of their subject, they could put at risk the substantial achievements of the past 50 to 100 years. On the other hand, if they do not support radical reform, the middle- to longer-term future of the field looks bleak, at least in relation to many of the achievements listed earlier. To make matters even more difficult, the short-term future looks very favourable, as physical education enjoys the confidence of politicians and policy-makers, if not the public at large (see Chapter 6). It would be entirely reasonable to expect that physical education will continue to be a popular subject in schools for the foreseeable future. However, the question remains: what can be done to ensure that physical education is not just a popular subject, but a subject that is taken seriously by teachers and students alike?

policy-makers, if not the public at large (see Chapter 6). It would be entirely reasonable for physical education teachers to ask complacently, ‘Crisis? What crisis?’

Informed opinion within the research community, however, is that the current dominant form of the subject makes more enemies than friends of children, does not progress their learning and thus fails to develop their perceived competence and motivation for physical activity, and ultimately fails to achieve the ubiquitous aspiration, common to programmes around the world, of a long-term active lifestyle. How long can this state of affairs continue before this truth about physical education in its current form, that it is in Locke’s (1992) colourful prose a ‘programmatic lemon’, is finally out?

Q5

Summary

Chapter 14 offers a possible antidote to being trapped in the present tense and draws on an analysis of the present and the past in order to consider the extent to which physical education in its current form may be fit for the twenty-first century. The author argues that in order to secure middle- to longer-term futures for some form of physical education in schools, a radical reform is needed. A models-based approach to physical education that is pupil-centred, inclusive and motivating is proposed as key to securing a future for the subject. It is concluded that teachers have some difficult decisions to make in terms of risking hard-won achievements for their subject by engaging in radical reform, while failure to reform may lead to demise in the longer term.

Questions for consideration

- Q1 What does it mean to say that physical educators are trapped in the present tense?
- Q2 What forms of physical education might more accurately reflect and be legitimised by developments in the wider physical culture of society?
- Q3 How can physical education best facilitate the development of physical competence, perceived competence and motivation?
- Q4 What are the arguments for and against specialist physical education teachers in the primary school?
- Q5 What should teachers' role be in the radical reform of their subject?

Further reading

Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I. and Sandford, R. (2009) The educational benefits claimed for physical education and school sport: an academic review. *Research Papers in Education* 24(1): 1–27.

This review critically examines the theoretical and empirical bases of claims made for the educational benefits of physical education and school sport (PESS). It concludes that many of the educational benefits claimed for PESS are highly dependent on con-

textual and pedagogic variables, which leads the authors to question any simple equations of participation and beneficial outcomes for young people.

Fernandez-Balboa, J.-M. (2003) Physical education in the digital (postmodern) era, in A. Laker (ed.), *The Future of Physical Education: Building a New Pedagogy*. London: Routledge, pp. 137–52.

Fernandez-Balboa frames physical education's future within Toffler's three waves of civilisation. He predicts physical education will be delivered remotely in a digital age, university study of sport will be undertaken from the comfort of the student's living-room with an increasing privatisation of educational programmes in which the profit motive dominates.

Hoffman, S.J. (1987) Dreaming the impossible dream: the decline and fall of physical education, in J.A. Massengale (ed.), *Trends Toward the Future in Physical Education*, Champaign, IL: Human Kinetics, pp. 121–35.

Hoffman's future involves the commercialisation of provision in which parents who could afford to pay for their children's participation, while others who couldn't went without. Only a few of the physical education teachers made redundant were re-employed since pupils chose their teacher, and teachers were paid only if they were in demand. He tells a satirical tale of grim decline and fall.

Kirk, D. (2010) *Physical Education Futures*. London: Routledge.

Kirk draws on extensive historical analysis to consider three future scenarios for physical education, 'more of the same', 'radical reform' and 'extinction'. He argues that the future survival of physical education depends on the field's alignment with four relational issues of physical culture, transfer of learning, excellence and ability, and cultural reproduction and renewal.

Penney, D. and Chandler, T. (2000) Physical education: what future(s)? *Sport, Education and Society* 5: 71–87.

The authors' concern is to connect with and impact on social issues by considering future physical education as a 'connective specialism'. Their vision is shaped by questions about the type of citizen physical education can nurture, and how the subject can become more connected across its own subject matter, across the school curriculum, and to society beyond the school.

The following physical education journals should support further reading. There are also many education journals which contain articles related to relevant topics across education more generally, which are useful to extend debate further. They may also contain physical education specific articles.

- *European Physical Education Review*
- *Journal of Teaching in Physical Education*
- *Quest*
- *Physical Education Matters*
- *Physical Education and Sport Pedagogy*
- *Sport, Education and Society*.

