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Research Does Matter: as Illustrated by the Posters at the National Annual Conference

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Introduction
Following the success of the poster presentations at last year’s afPE National Physical Education and School Sport Conference, they were included again at the Conference in July. The presentations offered an opportunity for both new and experienced researchers to share their recently completed research, or work in progress, as part of the research strand. The posters were very well received and facilitated fruitful discussions about research with colleagues in a relatively informal and relaxed setting.

In terms of process, individuals interested in presenting a poster at the conference were invited to submit a short abstract to Lorraine Cale (Chair of the afPE Research Committee) for consideration, including a brief overview of the aims, methodology, findings and conclusion(s) of their research, and identifying their work with one of the key conference strands of pedagogy, leadership and health.

Based on the submissions received, a total of 11 posters were accepted, with eight in the pedagogy category, two relating to leadership and one focusing on health. Within these, it was also great to see work from a range of educational institutions and other organisations from the United Kingdom, Ireland, and Australia. Those represented were the University of Bedfordshire; University of Brighton; Brunel University; Dublin City University; University of Edinburgh; University of Glasgow; Learn 2 Group; Leeds Metropolitan University; Liverpool John Moores University; Loughborough University; Monash University; Primary Professional Development Service, Dublin; Southampton Solent University; and the University of Sussex.

Our thanks go to the conference organising team for their support in facilitating the process, and to the volunteer judges of the poster competition who gave generously of their time during the conference itself to review the work. The judges this year were Sue Chedzoy, Jan Hickman and Jeanne Keay.

The posters once again demonstrated that they are a valuable element of the National Conference providing an excellent opportunity for researchers at all levels or career stages to share their work and expertise. The posters and research on display, and the professional dialogue that these stimulated, illustrates the interest and capacity of the profession and afPE members in continuing to develop and grow an effective research community which celebrates diversity, as well as the potential and desire for research in physical education to impact upon policy and practice. We look forward to receiving even more submissions next year!

The prize to the ‘best’ poster this year went to Laura Ward from Monash University, Australia. Her poster was entitled ‘Has health related exercise been lost in translation?’. Laura has just successfully defended her PhD at Loughborough University.
Included below is just a selection of the poster abstracts providing an illustration of the range on display at the Conference. The topics addressed by the posters this year were: youth disaffection and anti-social behaviour; assessment tools; ‘high quality’ physical education; the ‘Scottish Primary Physical Education Project’; professional development; exercise and autism; learning styles; black and minority ethnic student teachers’ experiences; student activity levels; football for peace; and health related exercise.

If you have a particular interest in any of the abstracts and the studies outlined, the authors would be delighted to hear from you and the relevant contact e-mail addresses are provided.

The Abstracts

Health

Has health related exercise been lost in translation?
Laura Ward (Monash University, Australia)
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Within the National Curriculum for Physical Education in England, health related exercise (HRE) is a statutory component that is primarily concerned with "physical activity associated with health enhancement" (Cale and Harris, 2009a: 141). As the most recent programme of study for physical education suggests, HRE is concerned with the 'Key Concept' of 'healthy, active lifestyles' and it seeks to promote the 'Key Processes' of 'making informed choices about healthy, active lifestyles' and 'developing physical and mental capacity' (Qualifications and Curriculum Authority, 2007). Located within this context, an extensive and critical review of literature revealed that there are continuing concerns over the status, organisation and delivery of HRE within the curriculum (Almond and Harris, 1997; Harris, 1995; Harris, 2009), and that questions have been raised over physical education teachers’ knowledge of HRE and the extent to which they have engaged with continuing professional development (CPD) in the area (HRE-CPD) (Armour and Harris, 2008; Castelli and Williams, 2007; Trost, 2006).

In response to the review of literature, this study was guided by two main questions:

i) What is the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD?

ii) Which wider social processes have influenced physical education teachers’ engagement with HRE and HRE-CPD?

In order to investigate the research questions, a two phase ‘mixed-method’ (Day, Sammons and Gu, 2008) research project was carried out. Phase one (n=112) involved a survey questionnaire, conducted with a sample of physical education teachers from secondary schools across England, and phase two comprised semi-structured interviews with a sample of twelve secondary school physical education teachers drawn from the original broader sample. The findings revealed that approximately half of the teachers who participated in this study had not engaged with HRE whilst at school as a pupil (57%), during their initial teacher training (ITT) (50%), or as part of their subsequent CPD (70%). This therefore raises questions about the extent to which the teachers' past experiences...
had ‘equipped’ them to teach HRE effectively. The findings also reinforced existing findings which suggest that the status, organisation and delivery of the area continues to be marred by a lack of coherence and clarity. In this respect, the findings suggest that the learning outcomes assigned to HRE have been ‘lost in translation’ and that, for many teachers, their understanding of HRE is characterised by a narrow focus upon fitness testing and ‘fitness for sport’ (Harris, 2009). Such a narrow focus, it is argued, can prove problematic in terms of achieving the relevant learning outcomes associated with HRE (Cale and Harris, 2009b; Stratton et al., 2008).

The physical education teachers’ engagement with HRE and HRE-CPD was explained in terms of the social processes and interdependencies which appeared to operate at personal, local and national levels. Whilst it is acknowledged that a multilayered approach to this complex issue is necessary, it is argued that effective HRE-CPD could play an important role in challenging, clarifying and broadening physical education teachers’ views and practices within HRE and thus, going some way to disturbing the persisting cycle of incoherence (see Figure 1) which has characterised HRE to date.

Figure 1. The HRE-CPD Conundrum

Dominant ideologies and practices are not challenged and status quo prevails.

HRE tends to be viewed as being synonymous with fitness testing and ‘fitness for sport’.

Physical education teachers do therefore not perceive a need to develop their knowledge via engagement with HRE-CPD.

Due to their past experiences, most PE teachers are confident in their ability to disseminate fitness and sport related knowledge.

References

Pedagogy

Youth disaffection and anti-social behaviour in education: Physical activity/sport interventions and sustainable impact.
Kathleen Armour, Rachel Sandford, Rebecca Duncombe (Institute of Youth Sport, Loughborough University)
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The issue of youth disaffection is topical (Davies, 2005) and a number of authors and policy makers have acknowledged that physical activity/sport may be an effective way of helping to address the problem (e.g. Sandford, Armour and Duncombe, 2008). As a result, a number of initiatives aimed at re-engaging disaffected or disadvantaged young people through physical activities have been developed and implemented in schools in the United Kingdom. Findings from the monitoring and evaluation of two such initiatives, the HSBC/Outward Bound project and the Youth Sport Trust/BSkyB ‘Living For Sport’ programme, were the focus here. Over a period of three years, more than 7000 pupils have been engaged in these programmes, and complete data sets have been collated for over 50% and 90% of Sky ‘Living For Sport’ and HSBC/Outward Bound participants respectively. The findings suggest that both of these projects have had a positive impact on the behaviour and attendance of large numbers of pupils, and that engagement in lessons and relationships with both teachers and peers have improved, and can be sustained. The findings also demonstrate, however, that impact is highly individualised and context-specific in many cases, and that positive impact is more likely to be sustained when some or all of the following project features are in place: effective matching of pupil needs with the specific project objectives; locating project activities outside of the ‘normal’ school context; working closely with pupils to choose activities, set targets and review
progress; establishing positive relationships between project leaders/supporters (mentors) and pupils; and giving pupils the opportunity to work with and for others.

References

Curriculum profiles: An assessment tool for physical education.
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Assessment is a central principle of the primary school curriculum (Government of Ireland, 1999) and seen as an integral part of teaching and learning. The issue of assessment and in particular, ‘assessment for learning’ has become a topic for debate in recent years (NCCA, 2008). In order to promote effective development and change towards a positive ‘assessment for learning’ model it is necessary to reflect on, debate and discuss existing practices in physical education.

In the researcher’s current role as Curriculum Advisor in Physical Education to primary schools across the south-east of Ireland, the topic of assessment in physical education emerged as an area that teachers are struggling to come to terms with. As a result, it was decided to investigate the use of curriculum profiles as an assessment tool in physical education in the primary classroom. Through a detailed case study the research sought to focus on a teacher’s attitude to, and current practice of, assessment in physical education, their experience of using a curriculum profile during a unit of work in athletics, and the children’s ability to contribute to this assessment with the use of a self-assessment technique. The qualitative research that informed this case study incorporated the use of field notes, semi-structured interview and documentary data. This research allowed for a detailed exploration of the process of designing a curriculum profile for athletics, planning and implementing a unit of work, and assessing the children using the curriculum profiles.

The findings of this research comment on a teacher’s perceived lack of confidence, competence and training in the area of assessment in physical education, the need for ‘assessment for learning’ to be manageable and to become an integral part of teaching and learning, and the consequent ability of curriculum profiles and the accompanying specific learning outcomes to focus and assist teaching and learning. This study concludes with recommendations that suggest the need for further training in assessment for all primary teachers, the establishment of curriculum profiles and accompanying specific learning outcomes, and the need for subsequent investigation in this area.

References
The effect of exercise on autistic stereotyped behaviours in a school learning environment.
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Prior to commencing an MEd in Professional Studies, the author had worked in secondary physical education for four years. Throughout her fourth year, the author elected to work within the special educational needs (SEN) sector, choosing to work between two secondary level schools; one catering for a variety of SEN including Autism, the other, specifically and exclusively catering for secondary aged children with Autism or Aspergers Syndrome.

By comparing and contrasting the two SEN schools on a regular basis, the author began to observe patterns in disruptive behaviours and attempted a variety of discipline strategies to calm behaviour and increase attention levels. Through additional teaching of non-physically active children, the author saw a difference in behaviours, with calmer and more focused behaviour observed following certain activities and lesson structures. With varying and intermittent levels of success, the author attempted to structure lessons in such a way that children appeared to engage their attention for the whole of the lesson or activity. A visible difference was noted after routine and repetitive tasks, in addition to following periods of structured physical activity.

Self-stimulatory behaviours (SSBs) became one of the author’s main focus points after observing them dominating a majority of behaviourally disruptive lessons, particularly at the Autistic specialist school. Repetitive and at times extremely physical, SSBs are characteristically displayed by Autistic children and adults. It is hoped, that through analysis of this research, senior teaching staff may realise the importance and significance of physical exercise and physical education within an Autistic environment and subsequently adapt timetables to incorporate an increased number of physical exercise opportunities and sessions during the school day/week. In turn, this is hoped to lead to a manipulation of SSBs and a decrease in their observed frequency within classroom-based lessons. Similar changes might then be incorporated into daily lifestyles exposing a calmer and more relaxed existence both in the Autistic person and those around them.

The study was designed featuring twenty-minute observation periods, both pre and post a five-minute duration of aerobic physical exercise undertaken on a cycle ergometer. The exercise intensity performed by the children varied between 43% and 87% of their maximal heart rate.

The data gathered indicated that five minutes of aerobic physical exercise sufficed to bring about a decrease in post-exercise self-stimulatory behaviours. The research showed a possible link between aerobic physical exercise performed at 55% and 69% of the children’s maximal heart rates, however a significant positive relationship between heart rate intensity and self-stimulatory behaviours was not evidenced. The data also appeared to show a trend of pre-exercise self-stimulatory behaviours decreasing in frequency over the five-week duration of the study.

The Scottish Primary Physical Education Project.
The Scottish Primary Physical Education Project (SPPEP) is a Scottish Government funded project which focuses on supporting teachers in the delivery of high quality physical education experiences for young people (3-14 years) in Scotland.

Following the reports of the Physical Activity Strategy Group (Scottish Executive, 2003) and the Physical Education Review Group (Scottish Executive, 2004), the importance of primary school physical education as the foundation for lifelong involvement in physical activity has been recognised as never before. Subsequently, a key recommendation from both reports was a move towards at least two hours of quality curricular physical education for all children. However, findings from the HMIE Report ‘Improving Physical Education in Primary Schools’ (HMIE, 2001) indicated that significant change to the professional development of primary teachers and trainee teachers would be necessary if this objective was to be successfully achieved. Subsequently, in 2006, the Scottish Executive Education Department (SEED) took the decision to commission the Universities of Glasgow and Edinburgh to deliver postgraduate programmes, thus establishing the first national Postgraduate Masters Certificates in primary physical education. These programmes would enable existing non-specialist teachers the opportunity to develop a specialism in primary physical education. By 2011 over 1000 teaching staff across all 32 education authorities in Scotland will have undertaken the Postgraduate qualification.

The evaluation of the impact of the programmes on the provision of high quality physical education is seen to be an important element of the SPPEP. Therefore, a joint research project is currently being undertaken by the Universities of Glasgow and Edinburgh. One of the research aims is to examine preliminary data from the postgraduate certificate course members on the following themes: a) perceived competence in delivery of aspects of physical education; b) motivation for embarking on the programme; c) physical education experiences; d) schools’ provision of physical education; and e) perceived continuing professional development (CPD) needs.

Through the use of questionnaires, quantitative and qualitative data were gathered from the teachers who enrolled on the Postgraduate Certificates. The questionnaire was constructed in various formats to encourage completion. The questionnaire is also employed to identify participants for a follow-up interview to allow for more in-depth exploration of key issues.

The data from the questionnaires are currently being analysed, using SPSS, and the findings will soon be presented around the above mentioned themes.

References

The impact of a pedagogical intervention on student activity levels, teacher behaviour and lesson context during a key stage 3 physical education unit.
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The primary purpose of this pilot study was to examine the impact of a pedagogical intervention on the engagement of lower ability boys in health-promoting physical activity during a Key Stage 3 physical education badminton unit. The intervention, which took the form of a learning objective, aimed to maximise opportunities for moderate-to-vigorous physical activity (MVPA), without compromising other planned lesson objectives. Consequently, the key research questions to be addressed were:

1. Did the pedagogical intervention increase students’ MVPA levels, without compromising other learning outcomes?
2. What effect did the intervention have on teacher behaviour and how did this impact on student activity levels?
3. To what extent did the intervention affect lesson context and result in enhanced physical activity?

The subject population for this investigation was a class of 32 year 8 boys (aged 12–13 years) and their male physical education teacher in a large, comprehensive secondary school in the United Kingdom. Student activity levels, lesson contexts and teacher behaviours were quantified over a four-lesson badminton unit using SOFIT, a validated direct observation instrument (McKenzie, 2002). Immediately following each lesson, the class teacher completed evaluations highlighting the extent to which lesson objectives had been met.

The research design involved the class teacher planning and teaching the initial two observed lessons as normal, which allowed baseline data to be gathered. A pedagogical intervention, incorporating an additional lesson objective alongside existing objectives from the school’s badminton unit of work, was then introduced for the remaining two lessons. This specifically aimed to enhance students’ physical activity levels. In an attempt to examine the true effect of the intervention, the need to view this modified learning objective as a primary focus for lessons was stressed to the teacher (Martin and Fairclough, 2008).

The results highlighted that lessons contributed 48% (29 minutes) on average to students’ daily physical activity goals. Students were engaged in MVPA for 62.6% of the overall available class time, with mean levels displaying a marked increase during intervention lessons. Specifically, MVPA rose from 52.1% (25.3 minutes) to 73.1% (32 minutes). Quite substantial improvements in VPA were especially noted, almost doubling from 18.4% (8.9 minutes) to 34.5% (15.1 minutes). In contrast, the intervention resulted in considerable declines in the lesson time students spent sitting down from 30.3% (14.7 minutes) to 10.9% (5.1 minutes). Time spent standing still only decreased slightly from 17.7% (8.6 minutes) to 16.1% (7.0 minutes).

Mean physical activity levels were highest when the teacher was observing learning and lowest when either providing whole class explanation or general instruction. In terms of
lesson context, there was increased time engaged in game play during intervention lessons from 35.8% to 50.4%, with subsequent reductions in time devoted to skill practice (20.5% to 10.2%), and general knowledge dissemination (25.4% to 13.8%). Teacher evaluations indicated that incorporating enhanced MVPA as a learning objective helped to improve students’ behaviour, concentration and overall engagement in lessons.

It was concluded that integrating increased opportunities for MVPA as a lesson objective can positively boost the active participation of lower ability boys during physical education lessons (Hastie and Trost, 2002). Furthermore, this can lead to noticeable improvements in behaviour and concentration levels. A general reduction in whole class teacher input and more time spent in observing student learning may also considerably enhance MVPA levels, whilst free play activities and game play contexts appear conducive to promoting opportunities for MVPA during lessons (Senne et al, 2006). Interestingly, class size did not negatively affect students’ physical activity levels.

Findings from this research will, therefore, provide both guidelines and encouragement for other teachers to effectively engage young people in sufficient, yet purposeful physical activity during physical education lessons.

**Football for peace – promoting fair play and tolerance between Jewish and Arabic children in northern Israel.**

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Football for Peace (F4P) is a sport-based co-existence project which seeks to promote fair play and tolerance between Jewish and Arab boys and girls in the Galilee region. The primary aim of the project is to provide an opportunity, through football and outdoor education, for children from Arab and Jewish communities to meet and participate together in teams and groups so that cultural bridges can be built between neighbouring communities that are socially segregated.

The project is run by student volunteers from the University of Brighton, England working alongside their partners, the Israel Sports Authority and the British Council Israel, as well as Israeli communities, the German Sport University Cologne, and the English Football Association.

Beginning in 2001 with one project for sixty children in one community, F4P has developed and become increasingly sophisticated in both scale and scope. During summer 2008, there were 12 projects including one exclusively for girls, serving 24 Arab and Jewish communities. These projects involved more than 100 local volunteer coaches and community leaders who, alongside fifty University volunteer coaches, catered for the needs of almost 1200 children.

In addition to football, the programme involves a range of outdoor and adventurous activities in order to facilitate and accelerate the team building process between Arab and Jewish children.

Specifically, the aims of the project are to:

- Provide opportunities for social contact across community boundaries
• Promote mutual understanding
• Engender in participants a commitment to peaceful coexistence
• Enhance community relations.

In order to promote fair play and tolerance between all leaders, coaches and children a set of 5 common values has been established:

• Neutrality - F4P is a politics-free zone. Those who participate in F4P leave their political views and ideological positions outside including participants, coaches and parents.
• Equity and Inclusion - Within F4P all participants are treated equally and the commitment to equality is recognised in the way that activities are organised and run. Those who want to participate can take part regardless of ethnicity, race, religion, gender, and ability.
• Trust - The appreciation of one’s own individuality and the value of others in a context of social diversity.
• Respect - Respect, for oneself, respect for team members and opponents, respect for coaches and parents
• Responsibility - Working with and for others, requiring mutual aid and self-sacrifice.

Since 2004, sports leaders from the various Arab and Jewish communities in Israel have attended a United Kingdom-based training week which has focused on the teaching of the 5 core values. The programme has consisted of a range of activities that could be transferred within the Israeli setting and has included activities that encourage collaborative group work. Since 2008, the training of the Israeli leaders has taken place at the German Sports University in Cologne.

In a small, but nonetheless significant way, the cascading effect of these experiences upon the extended families of these children may have contributed towards an understanding of the significance of these types of activities from their own and other cultures. Subsequently the experiences may have helped them to recognise how activities and public performance give a sense of cultural identity, and how sport can transcend cultural boundaries.

Of particular note is the ongoing process of establishing a partnership with the Jerusalem Foundation in order to pilot a new project venue in East Jerusalem and possibly another one on the border to Jordan. Moreover, the management team plan to build upon the experiences of Israel and intend to make grass-roots interventions into the cultures of Northern Ireland, Cyprus and South Africa. Another important aspect is the development of research methods which will help to explore the impact of the project on the children who take part.

Leadership

Black and minority ethnic students’ experiences of physical education teacher education.
Anne Flintoff, Julia Lawrence, Sarah Squires (Leeds Metropolitan University); Anne Chappell, Cathy Gower (Brunel University); Saul Keyworth (Bedford University); Julie Money (Liverpool John Moores University); Louisa Webb (Loughborough University)
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This research was funded by the Training and Development Agency (TDA) and aimed to explore Black and Minority Ethnic (BME) students’ experiences on physical education teacher education (PETE) courses across a number of universities in England. The project was set amidst a wider policy agency concerned with increasing the diversity of teacher education cohorts and links with other studies that have addressed BME students and teachers’ experiences of schooling, and career progression (e.g. Carrington, et al, undated; Carrington and Tomlin, 2000; Davidson, et al, 2005; TDA, 2006).

The focus on physical education as a specific subject area reflects that it is one of three subject areas (alongside English and History) where BME students are significantly under-represented (Turner, 2007). Whilst the TDA provide generic funding to support universities’ initiatives to recruit and retain more BME students, and have funded research that has explored their experiences of teacher education, none of these studies specifically address the impact of the subject culture. It is the centrality of the body within physical education that makes a specific focus on this subject area interesting. There has been more extensive work exploring students’ gendered identities within PETE (e.g. Brown and Rich, 2002), but little focus on race, or indeed, the complexity of students’ multiple identities. Benn’s (1996; 2002) and Benn and Dakgas’ (2006) work are exceptions and are particularly important for exploring the inter-relationship between religion and ethnicity in Muslim women’s experiences of primary initial teacher education (ITE), and the institutional challenges of offering an educative environment compatible with the requirements of Islam. The physical education element of the training posed particular problems, with many of the traditional practices and policies linked to the body, such as traditional clothing, and working in mixed groups, having to be changed or adapted. Her research also shows the varied experiences of the Muslim women on teaching placement. Whilst some were on the receiving end of religious prejudice and discrimination, others were welcomed and seen as an important asset in schools characterised themselves by diverse populations.

The research aimed to extend the insights of Benn’s work to secondary physical education students from BME backgrounds. The study used semi-structured interviews and questionnaires with BME students from five participating universities, from undergraduate and post graduate courses. Twenty five participants were involved, mainly PETE students but also a small number of former students now in teaching posts. Interviews explored different aspects of PETE experiences, including their early aspirations to choose teaching as a career, the application and interview process, their early weeks at university, and their experiences of teaching practice and the university based aspects of their courses. Findings highlight the significance of the heterogeneity of students and their experiences, and the importance of individual university or school teachers. In conclusion, the researchers argue for a shift in university focus from a concern with ‘meeting recruitment targets’, to taking seriously the qualitative experiences of BME students, as well as the ways in which issues of race are addressed explicitly and experienced in the education of all PETE students.

References