

Specialist Seminar Future Directions in PE Assessment



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ABSTRACT BOOK



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Preface

The AIESEP Specialist Seminar ‘Future Directions in PE Assessment’ brings together international experts to share their knowledge about *‘one of the most fraught and troublesome issues physical educators have had to deal with over the past 40 years or so’*.¹

Through keynotes, original research presentations, presentations on assessment projects and initiatives, and interactive discussion sessions, the goal of the seminar is ultimately to produce an AIESEP Position Statement on PE Assessment. That statement aims to guide and inspire PE teachers and scholars all over the world, and inform and/or influence policy regarding PE assessment.

This abstract book contains summaries of all keynotes and individual contributions within the ‘International Overview’ and ‘PETE’ sessions, and 39 abstracts from the ‘mini-orals’ on original research, projects and initiatives on PE assessment.

The organising committee would like to thank everyone for their contribution, and we look forward to what promises to be an interesting and productive seminar!

Gwen Weeldenburg
Menno Slingerland
Lars Borghouts

¹ López-Pastor, V. M., Kirk, D., Lorente-Catalán, E., MacPhail, A., & Macdonald, D. (2013). Alternative assessment in physical education: a review of international literature. *Sport, Education and Society*, 18(1), 57-76.

Opening Keynote by Jacalyn Lund. Assessment in Physical Education: Time to Keep Our End of the Bargain

Georgia State University

Early in its history, physical education played a prominent role in the US educational system. In the Seven Cardinal Principles, three of the seven had direct connections to the new physical education as envisioned by Wood, Cassidy, Hetherington, and Gulick. Relevant principles were about health and fitness, worthy use of leisure time, and developing ethical characters for youth. Hetherington's four objectives of physical education published in 1910 included the following areas: psychomotor, intellectual, organic or fitness, and character. The "through the physical" model dominated decisions made about the content of physical education for many years and are clearly visible in the first standards published by the National Association for Sport and Physical Education in 1995 that were widely adopted by many US states as well as the International Council for Health, Physical Education, Recreation, and Dance. The importance of and support for physical education by the educational community has eroded over the years. Current interest by parents in the health of their children, high levels of stress for middle and high school students, and emphasis on social emotional learning are just some of the areas that physical education could use to elevate its status.

While physical education has enjoyed the seeming luxury of not being held accountable for measurable student learning with standardized tests, this lack of accountability resulted in the failure of the physical education community to define the outcomes and develop assessments to measure student learning. The closest thing to universally accepted assessments are fitness tests which many states require teachers to complete for all grade levels despite them being inappropriate for younger children. Fitness tests are flawed; the work of Cale and her associates reveals negative outcomes when fitness assessments are used.

Along with a failure to develop meaningful summative assessments, teachers do not rely on assessments to inform their day-to-day instruction of students. There are many possible reasons for the lack of an assessment culture which will be explored in the presentation. The research base on formative assessment is starting to grow and results show promise for the development an assessment culture in physical education. Formative assessments help students know teacher expectations for learning, provide students with opportunities to engage in the learning process, and inform teachers when learning is incomplete or whether students are ready for new challenges.

The presentation concludes with an explanation of a new assessment project recently launched by SHAPE America called APLUS (Assessment Physical Literacy Using Standards). The purpose of the project is to identify assessments for four grade level bands (K-2, 3-5, 6-8, and high school) that assess whether students are meeting the standards and use these results to build a data-base that shows what students are learning in physical education. Along with the assessment data, information about time available for physical education, class size, program budgets, and teacher experience will be correlated with assessment results to document impact that invested resources have on student learning.

International overview: PE Assessment Policy and Enactment

USA: Hans van der Mars

(Arizona State University)

The State of Assessment in School Physical Education - United States

The state of affairs on assessment of students in U.S. physical education will be placed in the context of how K-12 education is governed. Positive developments around assessment include the development of national and state-level content standards and the availability of various tools for assessment across students' fitness, motor skill, social, and affective development domains, including Fitnessgram, an PE Metrics. The latter is an assessment program linked directly to the national content standards. However, there is little, if any, evidence that such tools are used with any regularity. There is initial evidence that Continuing Professional Development (CPD) focused on implementing authentic formal assessment can assist in shifting teachers' formal assessment focus to students' motor skill performance.

Other concerns surrounding assessment of students' performance represent a general state of neglect as reflected in a lack of focus on assessment of motor performance among physical educators, even though they think it is an important aspect of teaching. Physical educators have reported that they feel ill-prepared to fulfill the assessment teaching function, see little value in it, and do not have enough time for formal assessment. With some exceptions, few of the available tools have been tested for validity, reliability, and practicality. Moreover, little is known about how Physical Education Teacher Education programs approach the development of sound assessment skills.

Using one state's example, I will argue that the key reason for this state of neglect lies in the absence of strong state-level policy profiles. Closing observations will be focused on a) the critical need for preparation in policy and advocacy for policy development/-change (especially in doctoral PETE programs), with a recent example of success, and b) the critical need for the field to produce credible evidence that physical education's presence in the school curriculum is justified.

Netherlands: Lars Borghouts

(Fontys University of Applied Sciences, Eindhoven)

Children in the Netherlands get 8 years of primary education, and 4, 5 or 6 years of secondary education (depending on the type of school). Primary education is intended for children in the age group 4 to 12 and is compulsory for children from the age of 5. Secondary education in the Netherlands is intended for children in the age group 12 to 18 yrs. *General secondary education* prepares for higher education and is compulsory up to the age of 16. There are two types of general education, HAVO (5 years) or VWO (6 years). *Preparatory secondary vocational education* (VMBO) is vocationally oriented and lasts 4 years. PE is an obligatory subject in primary and all types of secondary education. The general aim of PE has been described and published by the national PE-society (KVLO) in cooperation with the PETE-schools, as: ‘...developing skills and attitudes in youth in order to facilitate their participation in different sports- and movement activities, from a pedagogical perspective and as part of a healthy and physically active lifestyle’ (Brouwer et al. 2011). More specifically, PE should introduce young people within a diversity of movement activities as well as develop various other skills such as organisation, social behaviour, and knowledge and understanding of sport and movement activities.

There is no formal national or regional curriculum for PE. Instead, PE goals are expressed in a set of very broadly defined achievement goals (2 in primary education, and 5 to 9 in secondary education depending on the educational track). Examples of these are: ‘*Students are able to participate in at least two activities within the domains of gymnastics, athletics, dance and self-defence*’ and ‘*Students can make a well-informed choice from physical activity-opportunities in contemporary society, based on insights into their own possibilities and preferences*’. As a result, schools and PE teachers have considerable freedom in their design and practice of PE.

Within the framework of attainment targets and examination requirements set by central government, schools in the Netherlands govern with a high level of autonomy. This implies that schools are fully responsible for the organisation of teaching and learning, and deployment of personnel and materials. Although there are national, uniform examinations for most subjects, both PE and the Arts form a notable exception to this. Schools are free to determine how PE is assessed and whether it is taken into account for yearly grade advancement, although all students must pass PE at a ‘satisfactory’ or ‘good’ level in order to graduate. At the same time, accountability within PE can be considered low in The Netherlands. The Dutch Inspectorate of Education periodically assesses potential problems that could affect the quality of education and a school’s capacity to assure and improve quality. It performs site visits to schools and publishes national evaluations about the educational system as a whole as well as at subject level. It has been noted however, that PE receives little attention from the Inspectorate (Brouwer et al. 2015). Although there has been a recent national evaluation of primary PE, the last evaluation from secondary PE dates back to 1999.

Our research has shown that assessment in Dutch PE is of moderate quality (Borghouts et al. 2016; Borghouts et al. 2017). The findings further suggest that PE teachers consider assessment *for learning* important but that their assessment practices are not generally in line with this view. Furthermore, there seems to be a lack of alignment between intended learning outcomes and what is actually being valued and assessed.

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Spain: Victor Lopéz Pastor

(Universidad de Valladolid)

Physical Education Assessment in Spain

Víctor López-Pastor¹; Eloisa Lorente-Catalán²; Antonio Calderón³; Juan Fraile⁴

¹Universidad de Valladolid (Spain); ²INEFC-Universitat de Lleida (Spain); ³University of Limerick (Ireland);

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Spain is organised in 19 autonomous communities and has a population of 46.5 million people. The educational system is the responsibility of every autonomous community. It is organised in 6 educational stages: early childhood (ages 3-5), primary education (years 1-6 courses: ages 6-12), compulsory secondary education (years 7-10: ages 12-16), High School (years 11&12: ages 17 -18), vocational training (3 levels: VT1, VT2, VT3) and university (4 years of bachelor's degree + 1 of master degree + 3-5 of doctorate). There are access gateways between VT3 and the university. Since 2009, the official curriculum is based on the development of basic competences, but the real organisation continues around areas of knowledge (such as mathematics, language, geography, history).

Regarding assessment, regulations defend that it must be continuous and formative and that the participation of the students in assessment should be fostered. Nevertheless, in the educational reality, the culture of writing exams and grading predominates, especially in secondary schools. The current law establishes four processes for the external evaluation of students: 2 of a diagnostic nature (years 3 and 6), and 2 of a selective nature (years 10 and 12) to access to baccalaureate and university respectively.

Regarding PE assessment, the traditional assessment-grading model in PE has been predominant for 40 years. It consists of the application of physical fitness and motor skill tests, with the primary (or only) purpose of generating the official grade at the end of the term or year. In many cases, attitude (behaviour in class) is also assessed. For the last 24 years, meaningful and systematic criticisms of that PE assessment model have been highlighted, resulting in alternative assessment systems. Therefore, an increasing number of PE teachers are using formative and shared assessment practices. However, even today in many cases, there is no systematic process of AfL and PE teachers perform mere observation or test.

Nowadays the main problem in Spanish PE is not the specific assessment systems, but the general conception of the subject. The main challenge is to clarify what approach to PE we are talking about, what we want to achieve in PE, and what are its purposes. Most PE teachers who have a definite learning approach, use AfL models and encourage student participation in assessment (e.g., self-assessment, peer evaluation, shared assessment).

Belgium: Peter Iserbyt

(KU Leuven)

PE assessment policy and enactment in Flanders, Belgium

Belgium is a federal state consisting of three communities and three regions. The three communities are the Flemish community, the French community, and the German community. The three regions are Flanders, Wallonia, and Brussels-Capital. In Flanders, the Minister of Education and training is responsible for all stages of educational policy, from pre-primary education to university education. In general, the purpose of Flemish physical education (PE) is to develop basic movement skills which will enable children to successfully function within the society and to prepare them for active participation in the movement culture. As such, both the primary and secondary PE curriculum aims at facilitating the adoption of a physically active lifestyle. In both primary and post-primary PE, standards addressing motor competency, a healthy and safe lifestyle, and the development of social skills as well as a positive self-image are formulated. The provision of PE is overseen by the Department of Education and Training through inspection visits.

Research on assessment in PE in Flanders is limited and suggests teachers encounter difficulties in implementing assessment strategies in their unit plans. Student accountability is typically low, focused around participation and effort and less on quality of performance. Research will be presented on the types and content of assessment in PE in Flanders. A challenge in Flemish PE is the development of assessment procedures that facilitate and are aligned with the development of a physically active lifestyle.

Sweden: Lena Svennberg

(University of Gävle)

Lena Svennberg & Karin Redelius

School attendance is compulsory for all Swedish children and consists of nine school years. Most pupils continue to upper secondary where they can choose between several three-year programs with different orientations. In line with neoliberal ideas, the Swedish school system has been reformed in profound ways since the 1990s. It has gone from one of the most centralized in the western world to one of the most decentralised systems. The municipalities are now responsible for the organisation of the schools and independent schools are also allowed. All schools are, however, financed by the state and free of charge. Sweden has a national curriculum for both compulsory and upper secondary school. All subjects are described in the form of 1) Aims, 2) Core content, and 3) Knowledge requirements. The system is goal-driven and teachers have great freedom to choose content and methods adjusted to their local context as long as their pupils achieve the national knowledge requirements. There is supposed to be a constructive alignment between the general aims, the content and the knowledge requirements. These requirements, or grading criteria, are described for grades A, C and E. Grades are given every term from the end of year six in compulsory school. They are high-stakes since grades are used as selection instruments for access to the requested program in upper secondary school and thereafter to higher education.

Co-education is used in all subjects, including PEH. Some of the general aims for teaching in the subject of PEH are: pupils developing all-round movement capacity and an interest in being physically active and spending time outdoors in nature. Pupils should also be given the opportunity to develop knowledge about factors affecting their physical capacity, and how they can safeguard their health throughout their lives as well as knowledge about how physical activity relates to mental and physical well-being.

The core content and knowledge requirements in PEH are organized in three knowledge areas: a) Movement, b) Health and lifestyle and c) Outdoor life and activities (*friluftsliv*). The PEH syllabus calls for a wide and inclusive concept of movement, which is emphasised in the national grading criteria by using words not related to competitive sports and quantitative measurements. Instead, pupils should develop basic physical movements in the early years of compulsory school and build on combinations of basic forms of movement to be able to perform more and more complex movements. Teachers are expected to assess qualitatively how well pupils can adapt their movements to different settings. However, teachers have difficulties articulating the quality of complex movements. The tension between the demands of transparency in a high stakes grading system and the inability to articulate the quality of complex movements becomes problematic. Therefore, sport techniques and competitive sports still seem to influence teachers' interpretations of what constitutes complex movements.

Australia: Amanda Mooney & Rachel Whittle

(Deakin University & Victorian Curriculum and Assessment Authority)

Contextualising PE assessment policy and enactment in Australia: A case study of physical education in Victoria

Notwithstanding the significant profile sport and physical education plays in the social fabric of Australian society, its importance within the Australian curriculum has been somewhat more tenuous. As others have argued, declining national performance in global assessment measures (e.g., Programme for International Student Assessment (PISA)), manifested in political support for a national 'Australian' curriculum in 2012 that would be supported by 'a national standardised testing regime' (Hay and Penney, 2014, p. 2). As Hay and Penney (2014) argue, it was not accidental that the subjects selected for the primary phase of the national curriculum were those with international assessment foci – English, Mathematics, Science and History. Despite being initially overlooked by the Australian Curriculum and Assessment Authority (ACARA) as a priority area for national curriculum development, Health and Physical Education was included as part of 'Phase 3' of this project – largely due to the intense lobbying of relevant stakeholders, academics and invested health and sport-related bodies. That said, the success of any national venture in terms of curriculum and assessment relied on the commitment of state and territory Education Ministers given Australia's federated system. In this presentation we provide a brief overview of the way in which state-based variants of the national PE curriculum have emerged and briefly outline the approaches to assessment that exist across Australia's states and territories.

In particular we focus our conversation on a more detailed examination of PE curriculum and assessment in the primary, secondary and senior secondary contexts in the state of Victoria. While assessment practices in years foundation to ten (F-10) orient around the achievement standards of the Victorian Curriculum, variability exists in terms of how assessment is conducted, and the mechanisms (and tools) teachers draw on to 'do' assessment in the context of primary and secondary PE in Victoria. In the high-stakes senior secondary assessment of the Victorian Certificate of Education (VCE) Physical Education subject teachers not only negotiate pedagogic strategies to deliver the curriculum, but are also required to navigate decisions about school-based assessment practices given the growing availability of commercial assessment tools and packages. Collectively we raise questions about the professional skills, capacities and knowledges that Australian teachers need to draw on in order to create, enact and interpret quality assessment practices in PE.

Keynote Dawn Penney. Accountability and Assessment in PE: Aims, Expectations, Impact and Futures

Edith Cowan University (Perth, Australia)

In this presentation I will critically examine the association between accountability and assessment in physical education (PE), and explore the pressures that PE teachers and the PE professional community variously face to produce evidence of 'impact'. I will argue that we cannot usefully advance conversations about assessment before first reviewing *what* impact PE is seeking to make, and expected to make, in relation to students' learning and lives. I will therefore anchor my commentary on 'accountability and assessment' to the matters of how we conceptualise quality PE, and quality assessment. Drawing on education policy sociology I will then explore how PE teachers and teacher educators can productively engage with policy contexts and frameworks, in order to promote assessment that focuses on supporting and advancing student learning. I will explain that this action requires that we strengthen the alignment of assessment, curriculum and pedagogy in PE, and identify that a key challenge for PE is the development of assessment practices that support the intentions of 'futures oriented' curriculum and that are capable of generating *appropriate* evidence of student learning. I will argue that *all* assessment in PE can be regarded as 'high stakes' and that the future of the subject will largely be shaped by what we do in the name of assessment, what we present (and are able to present) as evidence of (what) learning, and what impact we are therefore able to demonstrate that we make within and beyond education.

Keynote Ann MacPhail. Instructional Alignment: The Guiding Principle?

University of Limerick (Ireland)

The relationship between curriculum, assessment and instruction is far more complex than is generally assumed. Any study of one without a consideration of the other is bound to produce a partial, and likely misleading, account of what is going on, and how it might be improved.

I contend that as a physical education community we still have some way to go in exploring the central importance of instructional alignment. There is still a preference in the physical education literature to present instruction, curriculum and assessment in turn with little implications for how teachers and teacher educators can be educated on how to plan for and deliver the inherently linked dimensions. There is a necessity for teachers, pre-service teachers and teacher educators to work together in understanding and preparing instructionally aligned physical education curricula, units and lessons. That is, enacting the interdependence of instruction, curriculum and assessment, in favour of research approaches that investigate one or two of the constructs without making links across the three.

Although the impact of assessments on teaching and learning is considered in the literature, there is little research on the connection between theories of learning and educational assessments (Baird et al., 2017). Further, if assessment is to serve the learning goals of education then discussion on the relationship between assessment and learning should be developed further. The richness of learning theories encourages us to consider the inextricable link between curriculum, assessment, teaching and ultimately learning. Learning theory (and in this mini keynote, constructivism and social constructivism) endeavours to describe the ways in which people learn. This is pertinent to our discussion because different theoretical stances give rise to different views of knowledge and to different types of assessment with which to evaluate acquisition of this knowledge.

Instructional alignment (Cohen, 1987; Tannehill et al., 2015) advocates that meaningful learning is achieved through teaching that reflects an alignment between learning outcomes/goals, assessments that provide evidence of students reaching those goals, and the instructional practices employed to facilitate students achieving success. As teachers / teacher educators begin to consider how to design instructionally aligned curricula, units, or daily lesson plans, starting with the end in mind, referred to as backward design (Wiggins and McTighe 1998), is the first step.

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Keynote Petter Leirhaug. Assessment for Learning: The Holy Grail?

Western Norway University of Applied Sciences (Norway)

The Holy Grail is an old mythical and Christian legend that has been popularised in movies and books like *The Da Vinci Code* and *Indiana Jones*. There are different stories behind this legend but most scholars agree that its original source is a Celtic myth of a horn of plenty, which represented the source of all things good, such as unquenchable food, victory in battle, health and eternal life. Following this, the title of this introductory presentation suggests that assessment for learning (AfL) is the source of all things good for the development of physical education (PE) in schools. We know from research that PE faces many different challenges, and AfL has in recent years been marketed across the Western world as a key to improved learning focus and goal attainment in most school subjects. Within AfL, assessment is viewed as an integrated and important part of the learning process, in contrast to traditional 'assessment of learning', which typically occurs at the end-point of a teaching unit, is summative and often about grading student achievement. Building on Black and Wiliam (1998) the practice of AfL often is described in terms of key strategies including (1) sharing learning intentions and criteria of success with students; (2) involving students in assessing their own and other students' learning; and (3) providing feedback that helps learners advance. Although research on AfL in PE so far has shown promising results for student motivation, inclusion and teacher development, it has also revealed challenges for teachers in understanding AfL, and how AfL can be transformed into different pedagogical practices. In particular, it has highlighted problems with involving students and the lack of practical examples of AfL practices. This coincides with the critique of the theory of formative assessment in general, put forward by Bennett (2011), Torrance (2012), and others. In their review of alternative assessment in PE, López-Pastor et al. (2013) called for the 'need to subject these approaches to critical scrutiny and ask whether they are successful or not'. Taking the question about the holy grail as its point of departure, this introductory keynote will present what research tell us about AfL in PE so far, and pose some question about the assessment futures in PE. Up front of this presentation you are already invited to reflect upon three questions; 'Is there enough AfL going on in PE?'; 'Should students always be involved in the assessment process? How?'; and 'Should all assessment in PE be 'for learning'?'.

PETE: How do we Prepare the Teachers of the Future?

Miriam Seyda, WWU Münster

Germany

Sarah Doolittle, Adelphi University, New York

U.S.A.

Assessment in Physical Education Teacher Education in the United States –

How we prepare teachers of the future

Assessment practice in PE and requirements for assessment teaching PE varies widely in the US; 50 states control requirements, leaving accountability for meeting assessment related requirements to local school districts.

National guidelines for best practice, national and state PETE program accreditation, and teacher licensure examinations all require evidence of teachers' understanding of assessment in PE.

New in-service teacher evaluation requirements are also driving assessment practice in some states and school districts.

These policies and accountability measures drive many PETE program instructional approaches to teaching assessment. Strategies for teaching assessment for PE at Adelphi University, for example, focus primarily on authentic assessment of motor skill, sport and fitness competencies. Future directions reflect practical constraints that are making standardized cognitive assessments more attractive than complex authentic assessments for in-service teachers. New technological approaches facilitating scoring and record keeping are also drawing attention in some schools.

The need for assessment for instructional PE is becoming more apparent in schools that are also providing comprehensive school-based physical activity programming.

Menno Slingerland & Gwen Weeldenburg, Fontys University of Applied Sciences, School of Sport Studies, Eindhoven

The Netherlands

Assessment in Physical Education Teacher Education: The Case of Fontys School of Sports Studies

Within physical education in the Netherlands there is an increasing focus on and demand for more authentic ways to assess learning (Brouwer, Van Berkel, Van Mossel & Swinkels, 2015; Bax e.a., 2017). This is reflected within the recently updated national standards that focus on PE teachers being able to design transparent, reliable and valid assessments, to involve students in the assessment process and to effectively record and communicate assessment results (Bax e.a., 2017; ALO Nederland, 2018). In order to prepare a future generation of PE teachers, as teacher educators we strive to be exemplary within our own assessment practice within the PETE curriculum. Recently, we therefore defined clear policy and procedures for assessment within our curriculum that has resulted in a well-balanced assessment system for PETE. As our PETE program is embedded within the Four Components Instructional Design model (4C/ID; Van Merriënboer & Kirschner, 2007, 2013; Van Merriënboer & Sweller, 2010) we focus on the assessment of complex tasks within the authentic context of the PE teacher. In addition, we explicitly focus on both formative and summative forms of assessment. In order to support our students to design and implement assessment themselves within PE lessons we have recently designed a 10-week thematic unit around this topic. During these 10 weeks, and by employing educational design research, students work towards a comprehensive assessment instrument. Themes within this module include critical aspects of well-designed assessment (such as instructional alignment, validity, reliability and transparency), assessment for learning and the motivational impact of assessment on pupils. As students within our PETE curriculum have two full days of school placement per week, this allows them to reflect and test their instrument with their supervisor and pupils within the school, sometimes leading to assessment that is actually implemented within the school.

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Keynote Ivo van Hilvoorde. Digital Technologies in PE: implications for assessment

Vrije Universiteit, Amsterdam & Windesheim, Zwolle (The Netherlands)

This presentation is largely based upon the content of *Digital Technology in Physical Education: Global Perspectives* (Koekoek & van Hilvoorde, Routledge 2018). This book offers comprehensive, innovative, practice-oriented, and critical perspectives on worldwide developments, potential and actual applications of digital technologies in the context of physical education. This book is primarily intended for researchers and lecturers working at schools and universities in the field of PE and sport, with an interest in implementing, integrating, or developing pedagogies of digital technology within their professional context.

In this presentation I will start with a short overview of the variety of innovative technologies that are used in the context of sport and physical education, such as the use of video-feedback to improve motor learning or tactical decision making. I will then focus on assessment to discuss new opportunities as well as risks of the urge for innovation within educational settings.

New technologies may have immediate impact on assessment, but there are still many unanswered questions, such as: How can digital technologies be used for the assessment, recording and monitoring of children's movement competence within PE? How can new technologies be used to longitudinally monitor the development of motor abilities of children? What data are needed for assessment tools? How do we guarantee protection of the data and individual's privacy?

The main question that will be addressed is: can new digital technologies change our ideas about assessment, and do they match with our ideas about the values and goals of physical education? Although the opportunities increase to monitor certain aspects of movement behavior, I will argue that it is crucial to remain critical about the claims that are being made around new technologies.

Overview mini-orals Sessions

Presentations of Research Studies, Projects and Initiatives on Assessment in PE and PETE

Session 1

Friday October 19th 2018

11:00 – 12:00

Nr.	Title of the presentation	Authors	Page
1	The 'contentious' role of assessment in the development of Leaving Certificate Physical Education in Ireland	Dylan Scanlon, Ann MacPhail & Antonio Calderon	27
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Abstracts Mini-orals Session 1

Friday October 19th 2018

11:00-12:00

1. The ‘contentious’ role of assessment in the development of Leaving Certificate Physical Education in Ireland

Dylan Scanlon, Prof. Ann MacPhail and Dr. Antonio Calderon, University of Limerick, Ireland

Background: While Leaving Certificate Physical Education (LCPE; an examination subject in Irish post-primary schools for students aged 16–18 years) was in the process of construction by a Physical Education Development Group (PEDG), there was (and still is) a “cautious climate” (MacPhail & Murphy, 2017, p.237) in Ireland surrounding teachers assessing their own students’ work. While Junior Cycle (the first three years of post-primary school for students aged 12 – 15 years) reform has introduced classroom-based assessments, formalised internal assessment is non-existent at senior cycle level (MacPhail & Murphy, 2017). Given the practical nature of LCPE, it can be argued that the physical education teacher may be best suited to assess students’ practical work. This somewhat aligns with the Department of Education and Skill’s and National Council for Curriculum and Assessment’s (NCCA) vision of having “an enhanced focus on learning and learner” (NCCA, 2009, p.6) rather than on a terminal examination. The objective of the study was to explore the patterns of comments from the PEDG in arriving at a consensus about assessment in LCPE.

Methods: Semi-structured interviews were conducted with ten stakeholders who were purposively chosen due to their membership in, or management of, the PEDG. The participants represented Development Group nominating agencies (a common practice within the NCCA in all subject Development Groups). Data was coded in three phases; initial, focused and theoretical (Charmaz, 2014). Figurational sociology (van Krieken, 1998) was used to explain the constructed data.

Results: The topic of ‘assessment’ proved to cause the most tension in the PEDG deliberations. While the NCCA originally planned to introduce formalised teacher assessment into the LCPE curriculum, political processes (i.e., the trade union stance) and social processes (i.e., Junior Cycle reform) prevented this from occurring. Interestingly, PEDG stakeholders’ patterns of comments regarding the role of assessment reflected their relationships in, and outside, the PEDG (figurations), and their personal biographies (habitus).

Conclusions: This study tracked the process of how forms of assessment, and weighting associated to such assessments, are decided on in curriculum development. Such observations exhibit the ‘cautious climate’ surrounding assessment in Ireland. The introduction of technology acted as the turning point in the PEDG assessment conversations. That is, a reliance on technology enabled 50 percent of the examination marks to be assessed in a formative manner and to be facilitated by the teacher for external assessment by the State Examinations Commission. The enactment of such assessment practices, and the role of technology within these assessments, requires further research.

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2. Competency-Based Assessment in Physical Education – A U.S. Model

Steven Wright, Ed. D.

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The Department of Education (DOE) in the state of New Hampshire, is currently leading the charge to “be the first state in the country to deliberately scale our work toward a fully integrated, competency-based PreK-20 system that works for students, families and educators” (NH Vision 2.0, 2015, p. 2). While this is the vision at the state level, the NH DOE is asking each school district to implement their own competency-based learning and assessment system. This is led by the belief that innovation in schools is most effective if it is driven from the ground up, versus from the top down (NH Story, 2014). Previously, PE assessment was typically done on an A – F scale and used traditional assessment techniques such as skill testing, written tests and subjective grading on things such as preparation, participation and sportsmanship. The current innovative approach requires specific competencies to be addressed and assessed via “I Can” statements that describe what students need to be able to do in all the content areas in a PE program. Assessment will be done on a 0-5 basis, and rubrics and checklists will become the norm for assessment.

PE teachers have expressed concern to Physical Education Teacher Education university faculty about this mandate to change their way of assessing their students. This presentation will focus on the resources that PE teachers have available to them as they proceed with this task. Fortunately, the national U.S. PE association known as the Society for Health and Physical Educators (SHAPE) provides guidance for PE teachers across the country through state, regional and national conferences, as well as their website and publications. In particular, there is a book on national standards and grade level outcomes that is proving very useful for NH teachers (SHAPE America, 2014). Also, several professional development events have taken place within NH. The annual NH PE conference (NHAHPERD) has provided sessions that dealt with competency-based assessments. There have been one-day workshops that have addressed this issue as well as graduate level university courses in the summer. Given that this NH mandate has been laid out as a five-year program, schools are in various stages of its development. A valuable part of conference sessions, workshops and graduate courses has been the opportunity for PE teachers to share with their peers the successes and challenges that they have faced while implementing this innovation. These will be shared as part of this presentation - which will address the seminar theme of “Assessment for learning.” Through this presentation, attendees will have a better understanding of how an innovative assessment program can be implemented.

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3. Using Video to enable Self and Peer-Assessment of Peer-Teaching Episodes as part of a PETE Programme.

Dr Andrew Horrell, Professor John Sproule, Professor Siân Bayne, Dr Amanda Martindale, Barrie Barreto, University of Edinburgh.

University-based peer-teaching episodes were recorded and used as a resource to promote a more systematic approach to self and peer-assessment as part of a PETE programme. The recorded peer-teaching episodes provided the opportunity for students to engage in collaborative practitioner enquiry beyond the mentor-mentee relationship of school placements (Girvan, Conneely & Tangney, 2016). The study sought to engage with practices related to the development of professional judgement and decision making (PJDM) so that student teachers are aware of a research informed process which would enable them to engage in self and peer-assessment within this framework.

Previous work exploring PJDM expertise in other professional fields has ‘made thinking visible’ by accessing and capturing the thought processes of experienced practitioners (e.g., Martindale & Collins, 2017). This work using Cognitive Task Analysis (CTA) techniques can identify the cognitive demands on PJDM and the key cognitive elements required to perform proficiently.

Once peer-teaching sessions were recorded scenario responses were developed by the research team to highlight “actions”, “situational assessment”, “critical cues” and “potential errors” which students could then use as they engaged in self and peer-assessment of a section of the episode they selected. Through focus group interviews with student teachers we have sought to obtain qualitative data to explore the impact of the peer-teaching episodes and insights into how students used CTA for self and peer assessment. These findings have offered a unique window on the thought processes of student teachers and have transformed covert thinking into detailed observable information about actions taken, situation assessment, and the use of critical cues.

In the current study the preliminary findings indicate that recording peer-teaching episodes have provided students on a PETE programme with a valuable resource which they can engage with for the purposes of self and peer-assessment. Students have found CTA techniques challenging, however, exploring the processes of PJDM in the context of these peer-teaching episodes have been something they valued. The project is ongoing, however, it has highlighted that using video and web-based platforms, centrally provided by the University, does have the potential to enable students to engage in collaborative practitioner reflection as a rich social dialogic practice. The approach adopted in this study has the capability to equip student teachers with a range of self and peer-assessment strategies to enhance PJDM which has the potential to extend beyond their time on the PETE programme.

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4. Physical Education Teachers' Perceived Competence about Knowledge and Teaching on Key Qualifications: Fact or Fiction?

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Background and purpose: With the current educational reform in Turkey since the beginning of 2018, key competencies under Turkish Qualifications Framework which is the harmony with the European Qualifications Framework has been adopted as a significant national education policy goal. There are eight key qualifications determined in Turkish education system: Communication in the mother tongue, communication in foreign language, mathematical competence and basic competences in science and technology, digital competence, learning to learn, social and civic competence, sense of initiative and entrepreneurship, cultural awareness and expression. With these cross-curricular qualifications, it is expected that every individual needs these competencies for personal fulfilment and development, active citizenship, social inclusion, and employment. In the literature, one of the main concerns has been the possibility to assess or measure the degree of attainment of these qualifications. Therefore, the purpose of this study was to examine the extent to which physical education teachers' evaluate their competence on knowledge and competence to teach key qualifications on the curriculum.

Method: A mixed method research design was used in this study in two phases: (1) a survey was developed and applied to 390 middle school physical education teachers to ascertain their perceived competence on knowledge and teaching key qualifications (2) three focus group interviews were conducted with selected 6-7 physical education teachers each to determine their understanding about the key qualifications. Quantitative data were analysed descriptively while for qualitative data content analysis was applied.

Results: Results of the survey revealed that majority of the physical education teachers evaluated their competence on knowledge and teaching key qualifications high or very high (7 or above out of 10) except communication in foreign language. According to survey findings, a quarter (25%) of the participants evaluated themselves as they have moderate or low self-competence (6 or less out of 10) on the knowledge and teaching on some of the key qualifications (mathematical competence and basic competences in science and technology, digital competence). Focus group interviews indicated that teachers had misconceptions and/or their understanding of key qualifications is intangible.

Conclusions and implications: In conclusion, teachers have an intention to evaluate themselves higher about their competence on knowledge and teaching on key qualifications. However, there is a small group of physical education teachers whose awareness are more realistic about their competencies. It can be implicated from this study that future studies should focus on not only teachers' self-perceptions but also their actual practice as well to support their competence development.

This study is supported by The Scientific and Technological Research Council of Turkey (Tübitak, SOBAG Project No: 215K460)

5. State-Wide Tuning Tests in Physical Education

Nuno Ferro¹, João Costa², Ana Quitério³

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Background: State-wide standardised assessment in Physical Education (PE), aiming to monitor student learning, has warranted discussion on the purposes of accountability^{1,2} and of regulation and system-change^{3,4}. State-wide assessment often incurs in high-stakes summative orientation. Hence, it is valid to question if it is possible (or even desirable) for a low-stakes state-wide assessment process to adopt features of ‘assessment efficacy’ (Hay & Penney, 2009) and, if so, how it can be done.

Purpose: This paper shares a state-wide (Portugal) assessment practice of students’ psychomotor learning in PE that enacts the features of ‘assessment efficacy’⁵ at a systemic level.

Main Points: The Portuguese Ministry of Education established the ‘tuning tests’ (in PE and other subjects), implemented by the Educational Evaluation Institute at midpoint of Primary and Post-Primary levels, with a threefold purpose: a) monitor the curriculum development, to provide regular information on/for the educational system; b) provide detailed (qualitative) information of students learning to the school, to teachers, to the students’ legal guardians, and to the students themselves; and c) promote early pedagogical intervention, addressing each student needs.

The assessment process involves school-based teacher-teams in pairs jointly observing student performance. The assessment tasks are designed by a classified team of school teachers, focusing different subject-contents, and framed as authentic and criterion-referenced according to the national syllabus.

The tests deliver two types of reports: a) one for each school with all student learning results; and b) one sent to each student’s legal guardians flagging areas of development in PE.

Conclusions and Implications: While health-related fitness and cognitive outcomes have been targeted, learning outcomes in physical activities contents represent a different challenge towards features of ‘assessment efficacy’⁵. The exemplified tests are universally applied in all schools and compulsory for all students by the end of the school year under a formative orientation, as a mean to promote global and general improvement of the subject-discipline in curriculum, pedagogy and professional development, for a much-needed subject-wide coherence⁶.

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6. Designing PE Assessments for a large urban school district

Sarah Doolittle, Professor

Department of Health & Sport Sciences, Adelphi University, Garden City, NY, USA

Background/Problem: Unlike many nations, education in the United States is locally controlled. National goals for physical education are guidelines only. Each state and school district has the authority to decide which PE outcomes are important enough to warrant time used for assessment of students, and how to hold students, teachers, programs and schools accountable for student achievement in PE. School district policies determine whether assessment is part of the PE program, and district accountability practices drive the design, administration and reporting of results for PE assessments. Until recently assessment in PE has focused only on fitness testing, and not on learning.

Large urban school districts are particularly challenged to identify learning goals for PE that are important enough to assess, but also feasible given the disparities among schools for PE. Urban schools often allocate less time for PE, have uncertified teachers assigned to teach PE, provide poor or no PE facilities, and allow class sizes that are too large for effective teaching. School administrators have priorities that draw time and resources away from PE, and often marginalize PE and PE teachers. They may also confuse recess and physical activity programs with instructional PE.

Purpose: This presentation describes the initiation, design, development, and pilot testing of a large-scale PE assessment program for the largest US school district, which is urban, multicultural, and serves mostly low-income students. Discussion includes large-scale PE assessment design and accountability for student learning in other such school districts and local education authorities.

Process and Results: In 2017 the New York City school district with 1.1 million students, and almost 1800 schools, began to design a set of PE assessments to provide evidence of student learning based on the district's stated curriculum goals and national (SHAPE America) content standards for PE, and the teachers' union requests. Assessment results are intended to be used as part of required teacher evaluation criteria, and can be used for program evaluation, program development, and student grading. Professional development to assist teachers with administering the assessments, and with aligning instruction with assessments is planned.

Assessments for 7th, 9-10th, and 11-12th grades will be available in September 2018. A second set of assessments will be designed for elementary students (Kindergarten – 6th grade) beginning in 2018.

Conclusion/Implications: Designing a standardized assessment to be used for teacher and program evaluation requires a close consideration of PE policy and functional accountability, essential outcomes for PE instruction, consideration of the different levels of resources underpinning PE programs in a diverse sections of the city, levels of teacher expertise and access to professional development, and assumptions about the value of, and feasibility of administering assessments fairly in widely different school settings. District assessment specialists were unaware of the complexity of designing PE assessments until well into the process.

Conclusions/Implications: The initiation, development and ultimate design of assessments depends on how results are to be used. In assessment design for large school districts, many factors must be negotiated. If assessment drives instruction, accountability drives assessment.

7. A SOCIO-ECOLOGICAL APPROACH TO TURKISH PE TEACHERS' ASSESSMENT AND EVALUATION PRACTICES AND EXPERIENCES

Gökçe Erturan İlker, Pamukkale University, Turkey

Funda Akcan, Başkent University, Turkey

Background and Purpose:

Turkish national curriculum for high school physical education (PE) strongly recommends teachers to use alternative assessment methods (Ministry of Education, 2018). Existing quantitative researches tried to understand teachers' assessment and evaluation (A&E) practices by using a list of methods and techniques. But in fact, using check lists seems to have some methodological limitations. In this study we used qualitative research design and Socio-Ecological Framework in order to gain a deeper understanding on Turkish PE teachers' A&E practices and experiences. With this study we aimed to generate a Socio-Ecological Model of the factors influencing the A&E process in Turkish PE context.

Methods:

Our data gathering process had two phases. Firstly, we conducted structured interviews with 107 high school PE teachers (81 male, 26 female). In these interviews we focused on how PE teachers were assessing the psychomotor, cognitive and affective domains. In this sense we asked teachers to describe A&E methods they were using in their classes. Their answers were matched with the existing A&E conceptual schema and analyzed accordingly.

Secondly, we conducted semi-structured interviews with nine PE teachers (5 male, 4 female) in order to understand how they experienced A&E process and which factors were influential in these experiences. The findings from these interviews helped us in generating a Socio-Ecological Model of A&E process in Turkish PE context. The data gathered through semi-structured interviews were analyzed by content analysis technique.

Results:

Our findings showed that PE teachers were mostly using unwritten and non-predetermined observation for psychomotor domain. Class participation and having sports clothes on were the main criteria for assessing the affective domain. Large majority of teachers were not assessing cognitive domain.

These A&E experiences were related to several interwoven factors which also could be defined as different layers of our Socio-Ecological Model. In this model we focused on intra-individual and extra-individual level of influences on A&E practices. As an intra-individual factor, which was the inner layer of our model, the teachers themselves (e.g. experience level, motivation) were the determinants of their A&E practices. The extra-individual level consisted of several factors which formed the different layers of our Socio-Ecological Model. Intramural factors (e.g. students' perceptions about PE, school administrations' attitudes), factors related to the profession itself (e.g. curriculum, actions of the ministry) and social factors (e.g. education and sport policies of the country) respectively were the outer layers of our Socio-Ecological Model of PE teachers' A&E in Turkey.

Conclusions and Implications:

This socio-ecological approach to the A&E process in Turkish PE context enabled us to explain the factors influencing PE teachers' experiences in detail. Understanding these experiences with socio-ecological framework in its cultural context and noticing the influential factors in A&E process would help us in developing effective and equitable policies and guidelines for Turkish PE teachers.

Reference

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8. Evaluation of basic motor competencies in primary school – the MOBAK instruments

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² University of Potsdam (DE); Structure Unit Educational Sciences

Theoretical background A central aim of physical education (PE) is the promotion of basic motor competencies (in German: Motorische Basiskompetenzen; MOBAK) which are prerequisites for childrens' active participation in sports culture. While instruments for measuring motor abilities and motor skills in schoolchildren have been developed, less is known about the measurement of basic motor competencies. We introduce the newly developed MOBAK instruments for the first and second grade (MOBAK-1-2: Herrmann, Gerlach, & Seelig, 2015), the third and fourth grade (MOBAK-3-4: Herrmann, & Seelig, 2017a) as well as the fifth and sixth grade (MOBAK-5-6: Herrmann, & Seelig, 2017b). Each instrument contains eight dichotomous items. Findings from three validation studies are presented.

Method Study 1 (N=317 first-graders ♀=55%; M=7.0 years) took place in Zurich (CH), study 2 (N=323 third-graders ♀=49%; M=9.2 years) and study 3 (N=438 fifth-graders ♀=55%; M=11.3 years) in Basel (CH). All studies focused on construct validity (e.g., the factorial validity of the instrument) and the assessment of the extent to which the instrument may be useful in detecting distinct pattern of MOBAK. Exploratory (EFA) and confirmatory factor analyses (CFA) were performed using Mplus. Also we studied differential and determining influences on basic motor competencies by integrating covariates—gender, age, and BMI as well as frequency and type of physical activity outside school.

Results We found two factors consisting of four items each for all three MOBAK-instruments in the studies. The first factor "Self-movement" represents body movements (balancing, rolling, skipping, running), the second factor "Object movement" represents ball control (throwing, catching, bouncing, dribbling). The confirmatory factor analysis (MOBAK-1-2: CFI=.96, RMSEA=.036; MOBAK-3-4: CFI=.97, RMSEA=.037; MOBAK-5-6: CFI=.95; RMSEA=.041) confirmed this two-factor structure.

In all studies boys performed better on object movement, while girls performed better on self-movement. Age showed low significant influences. BMI was inversely related to the basic motor competencies, whereas physical activity outside school had a positive effect on the basic motor competencies.

Discussion The confirmation of the two-factor structure and the correlations with external criteria provide initial evidence for the construct and criterion validity of the MOBAK-test instruments. The eight-item test instruments are suitable for the evaluation of effects of PE.

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9. Evaluation of basic motor competencies in primary school in Luxembourg

Claude Scheuer¹, Andreas Bund¹ & Christian Herrmann²

¹ *University of Luxembourg*

² *University of Basel*

Background and purpose One major objective of physical education (PE) as a school subject is supporting students' positive motor development and physical literacy. Therefore, it is indispensable for them to be in command of the necessary motor competencies to be able to participate in the culture of human movement. Basic motor competencies (in German: Motorische Basiskompetenzen; MOBAK) are the prerequisites for taking part in this important part of human culture (Herrmann et al., 2015). For the implementation of the MOBAK approach in Luxembourg (MOBAK-LUX), we developed the test instruments MOBAK-LUX-1 (Scheuer, 2016a) for first graders and MOBAK-LUX-3 (Scheuer, 2016b) for third graders. In cooperation with the Ministry of Education in Luxembourg, these motor test series are conducted on a voluntary basis by interested schools and teachers at the beginning of each school year.

The MOBAK-LUX test instruments MOBAK-LUX-1 consists of 13 items in the three test dimensions "locomotion", "object control" and "moving in water". MOBAK-LUX-3 comprises 15 test items in the four test dimensions "locomotion", "object control", "moving in water" and "object locomotion". Each test item comprises two levels of difficulty: a basic level and an advanced level.

Application purpose of MOBAK-LUX The main purpose of MOBAK-LUX is the use by teachers for *pedagogical diagnosis*. The test instruments allow to establish a motor competence profile for each student in order to draw conclusions about their strengths and weaknesses. Based on this information, teachers should be able to plan and conduct their lessons in PE with a view to internal differentiation and specific support for students. In addition, results at school level make it possible to initiate targeted measures in the sense of evidence-based school development.

In terms of *educational monitoring*, another goal of MOBAK-LUX is to regularly assess student performance against the background of educational standards set in the PE curricula, including the identification of possible effects of different variables, like e.g. gender, migration background, membership in a sports club etc., on MOBAK results.

Selected research results The results of the 2016 surveys indicate that a considerable proportion of students in grade 1 and grade 3 showed support needs in one or more areas of competence: 31.3% of the first graders and 31.1% of the third graders. Furthermore, effects of external criteria on basic motor competencies were analyzed: e.g. girls showed significantly worse results in the test area "object control" than boys (35.3% vs. 12.4%).

Conclusion and implications In recent years, many school classes in Luxembourg have participated on a voluntary base in the MOBAK-LUX surveys. The increasing interest shows that the implementation of competence-oriented test tasks has found acceptance amongst teachers. Currently, two further MOBAK test instruments for pre-school children (MOBAK-LUX-0) and fourth graders (MOBAK-LUX-4) are in a validation process and will be implemented at the beginning of the school year 2018/2019.

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10. Introducing the concept of “Collective Assessment Processes”

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Background: Contemporary perspectives in assessment advocate for a formative rather than merely summative orientation (Hay & Penney, 2009; Hay, Tinning & Engstrom, 2015). Regardless of the orientation, the assessment process is commonly applied in teacher isolation. Few research shows, an emerging potential of collectively engaging teachers in the assessment process for quality pedagogical and professional learning experiences and outcomes (Comédias, 2012; Costa, 2015). Such research warrants conceptualization of “Collective Assessment Processes” beyond ‘assessment efficacy’ features of formative orientation, authenticity, validity and social justice (Hay & Penney, 2009; Hay, Tinning & Engstrom, 2015).

Purpose: This paper aims to discuss the “Collective Assessment Processes” concept and its research-informed dimensions.

Main Points: We conceptualise “Collective Assessment Processes” as *collectively designing and implementing learning assessment through criterion-referenced authentic tasks, intended to combinedly scaffold student and professional learning, sustained by a scientific-mindset on inherent quality features.*

Planning and implementing this concept involves: a) *teacher collaboration and professional learning* across the assessment process by collectively designing tasks and criteria, intentionally teaming teachers for observation and records, and collectively discussing the process and the results towards collective decision-making on the triad curriculum-pedagogy-assessment and its supporting factors; b) *authenticity* as creating tasks that capture the content’s essence, ideally in authentic and culturally relevant settings (e.g. gameplay or choreographies); c) *criterion-referenced* as developmental performance profiles; d) *assessment as pedagogy* as providing information that drives teachers and students learning in PE; and e) *quality features* as *validity* in the extent to which the learning outcomes and tasks are adequate to the curriculum and PE concept, and *objectivity* in the extent to which the assessment criteria is easily and commonly interpreted by students and different teachers, towards high levels of reliability.

Conclusions and Implications: The concept of ‘Collective Assessment Practices’ expands the current notion of assessment efficacy to include and link professional learning with student learning. Moreover, being collectively contextualised and situated in the curriculum, it contributes to research issues of directly collecting student-learning data as a potential methodological process.

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Abstracts Mini-orals Session 2

Friday October 19th 2018

12:15-13:15

1. Commonalities, Differences and Possibilities in Framing Physical Education Curriculum Assessment Internationally

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Background: Assessment in Physical Education (PE) presents difficulties for teachers and students alike^{1,2}, with scarce research on how assessment aligns to curricular priorities. Cross-national discussions of the curricular and assessment priorities are required to advocate for and support quality PE^{3,4}, and to contribute to the current shift to assessment research^{1,2}.

Purpose: This paper aims to: a) describe how PE curricula in four countries (Portugal, Brazil, Canada – Alberta and Manitoba provinces, Ireland) frame the assessment process, b) identify commonalities and differences in these assessment frames, and c) share some possibilities for better assessment practices globally.

Methods: Initially, curriculum and assessment documents are described. These are then interpreted by the contextual and research-based understanding of each national author. A cross-country qualitative analysis explores the commonalities and differences regarding curriculum framing, assessment processes and possibilities of assessment.

Results: A common theme in the national realities is the *foregrounding assessment principles* of: a) *student-centredness*, b) *comprehensiveness and eclecticism*, c) *contextual relevance and cultural significance*, and d) *formative assessment*.

Across the four countries, context provides the relevant background for differences in assessment framing as: a) *responsibility for curriculum development*, and b) *assessment prescription-flexibility binary*.

Regarding the first theme, in Canada, despite a national commitment to a 'healthy and active for life' focus⁴, each province manages its own educational system. In Brazil, a 'national curricular base' is 'interpreted' at state level in a PE syllabus. Both Portugal and Ireland have a state-wide curriculum.

On the second theme, Ireland and Portugal present specific but flexible assessment guidelines on principles, tasks, and learning outcomes. The assessment component of the Irish Leaving Certificate in PE is prescribed. Brazil and Canada curricula present highly fluid and flexible assessment possibilities, based on learning outcomes and educational principles.

Conclusions: The presentation will discuss possibilities for guiding principles aligned to current views of assessment in PE¹ regardless of contextual differences and educational systems. The discussion will include how we might influence the curriculum-assessment-pedagogy coherence at the classroom-level. An illustration will be shared of how the *assessment prescription-flexibility binary* might align with a *student-centred* and/or a *formative assessment* orientation.

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²Lorente-Catalán, E. & Kirk, D. (2016). Student teachers' understanding and application of assessment for learning during a physical education teacher education course. *European Physical Education Review*, 22(1), 65-81.

³Betti, M., Knijnik, J., Venâncio, L., & Neto, L. (2015). In search of the autonomous and critical individual: a philosophical and pedagogical analysis of the physical education curriculum of São Paulo (Brazil). *Physical Education and Sport Pedagogy*, 20(4), 427-441.

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2. Exploration of assessment practices promoted in conjunction with particular pedagogical models

Stephen Harvey, Ohio University, USA

Dawn Penney, Edith Cowan University, Australia

Background and purpose

In recent years, considerable research attention has been directed towards the role of pedagogical models in enhancing teaching and learning in physical education. This paper reflects that to date, there has been little exploration of the assessment practices that are being promoted in conjunction with particular models and what relationships are being established between assessment, curriculum and pedagogy in the context of different models.

A summary of the main points/issues to be addressed

Drawing on Hay and Penney's (2009, 2013) work, and focusing particularly on issues of *instructional alignment* and authenticity of assessment, this presentation explores a series of questions that in our view, are important for researchers, teachers and teacher educators to engage with: What types of assessment task, modes of assessment and assessment relations do different models align with and support?; What sorts of assessment can be regarded as authentic in the context of different models?; What tensions can arise between assessment and the pedagogical intentions and principles purportedly at the fore of particular models?; How can a focus on assessment (and changes to assessment) be used to extend pedagogical understandings and pedagogical practices relating to any specific model? Answers to these questions will be provided through an analysis of data generated from a preliminary review of existing 'models-based' research in physical education will be presented. The review encompasses research studies addressing multiple models (and thus, engaging broadly with models-based practice) and extended analysis by exploring research associated specifically with two selected models.

Conclusions and implications

Our analysis and discussion of the models-based literature intends to identify gaps in current research and suggest agendas for future empirical work to advance understandings of assessment in the context of research under the umbrella of 'models-based practice'.

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3. Learning water competencies: individual and environmental aspects of educational programs and water safety campaigns

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In drowning prevention four categories of strategies are distinguished: (a) education and information, (b) acquisition of survival skills, (c) denial of access, barriers and regulations, (d) provision of supervision (ILS, 2015). In a recent review, Stallman et al. (2017) describe what physical, cognitive and affective competencies make a person water competent / safe and thus less susceptible to the risk of drowning. They use the following definition of water competence as a starting point: *"sum of all personal aquatic movements that help prevent drowning, as well as the associated water safety knowledge, attitudes, and behaviors that facilitate safety in, on, and around water"* (Moran, 2013).

While elementary school children have a quite low drowning rate, adolescents show a shift in aquatic participation location from (around) home to open water places such as rivers, lakes, and beaches (Franklin et al., 2010; WHO, 2014). Therefore the transition from elementary to secondary school can be considered as a critical point in time to provide drowning prevention education as part of health education. Moreover, it is an important phase in children's life because of the increasing role of peers to stimulate safe (or danger) behavior in, on, and around water.

The purpose of this contribution is to analyze educational conditions of learning water competencies relevant for elementary and secondary school children and feasible to be realized in the local community in general and in a school context in particular.

As water competence programs can be considered as a 'product' of the public health promotion / prevention (Crawford, 2014), it is surprising authors have not yet applied the Intervention Mapping Protocol (IMP) in the context of water safety / drowning prevention. The approach of IMP is useful as framework for effective decision making at each step in intervention planning, implementation, and evaluation (Bartholomew et al., 2011). These individual and environmental factors are classified in outcomes, logic of change (such as performance objectives for at-risk groups and agents), and program inputs and outputs of learning water competencies. This framework for interventions is comparable with the instructional alignment approach in outcomes-based education. Recent educational programs and water safety programs and campaigns will be described, taking into account the individual and environmental determinants. Lots of studies have a weak study design because of the variables that are measured, the short period of intervention or lack of control group. As described by Leavy et al. (2016) there is an overreliance on education and information as a strategy to prevent drowning, despite evidence for comprehensive multi-strategy approaches. Good practices of intervention designs and studies from different countries can stimulate to work out more sustainability strategies in water safety programs and campaigns.

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4. Formative Assessment and Cooperative Learning: why some physical education teachers do it?

Miriam Molina Soria¹, Víctor M. López Pastor², Emilio José Barrientos Hernán³

¹⁻²⁻³ Facultad de Educación de Segovia (Universidad de Valladolid)

This study analyses to which extent Formative Assessment (FA) and Cooperative Learning (CL) experiences received during their Pre-service PETE can influence to put into practice this type of systems in Physical Education (PE) teachers in Primary Education. The specific objectives are: (a) analyze if the experiences of FA and CL influence during the PETE in current practice as PE teachers; (b) investigate who aspects have influenced in the teachers to use FA systems and in their classrooms.

A mixed methodology has been used with a reduced sample of 17 Primary PE teachers. The data gathering techniques are a closed questionnaire Likert-type scale and a semi-structured interview. A focus group is also held with the graduates of the faculties of education who experienced “formative and shared assessment” (F&SA) systems in their PETE. At first, three questions were asked of an intentional sample of PE teachers that we knew they use F&SA in their classrooms: (a) where have they received their PETE? (b) do they work as specialist Primary PE teachers? (c) Do you regularly use F&SA systems in your classroom?

Once the sample is selected, they have to do closed questionnaire Likert-type. After a first analysis of this data, three teachers are selected to carry out semi-structured interviews. Afterwards, we collect data from the focus group of graduates who they have experienced FA and CL in the PETE.

The results confirm a relationship between those experienced throughout the PETE regarding to CL and F&SA and that they actually accept them in their classroom practice, although in some cases have more influence in-service PETE than pre-service PETE. But the teachers state that they have had a limited PETE in these areas, and that they have subsequently been trained through conferences, lectures and courses.

All teachers consider it's essential to use F&SA systems to assess CL activities during their sessions; it's applicable to all primary education courses and to any subject. The engagement of students is usually through self-assessment, co-assessment, self-assessment and dialogue grade. The teachers agree on the necessity of using F&SA for the classification of CL.

This work may be important for PE teachers interested in using CL and FA processes in their classrooms, as well as for people who investigate on these topics. On the other hand, it's relevant for the PETE teachers. These teachers can be more aware of the importance that has for their students to live and experience the CL and FA systems during the PETE. The main limitation of the study is that the sample is very small and local. So it would be advisable to conduct similar studies with larger samples, or in other geographical contexts.

5. Student engagement and high quality teaching in Physical Education (PE)

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‘Being there’ is a prerequisite for gaining the benefits of school-based PE, but does not guarantee feeling included (Imms et al., 2017). Environmental, contextual and individual preferences need be considered when organizing PE teaching. In addition, modifications and alternative activities may be required to accommodate the special needs of students with disabilities (Haegele & Sutherland, 2015). Quality indicators of the provided learning environment may be to observe teaching behavior and level of student engagement in PE lessons. The quality of teaching was defined by communication of syllabus content, feed-back and emotional tone, when instructing. Research questions: What characterize PE lessons 1. with high teaching quality? 2. in which students show high/low engagement? 3. and how do and levels of engagement vary between the groups of students examined?

PE lessons were studied using structured observations. Participants were 94 students, aged 14, and their PE teachers (n=22), targeting three groups of students; students with 1. disabilities (n=23), 2. low grades (D-F, n=27) and 3. high grades (A-C, n=44) in PE. ‘Snapshots’ of individuals’ situational activity in three-second intervals were registered. Observers scored multiple aspects e.g. type of context, proximity to whom, on/off-task behavior and activity, and level of engagement.

In high quality teaching students were more highly engaged, and more frequently observed

- a) in whole group activities
- b) in proximity to the teacher
- c) practicing skills or being instructed.

Highly engaged students were also more on-task in scheduled activity. Students with lower levels of engagement were more in small group activities and closer to peers, they socialize and do other activities than planned more than highly engaged students.

Compared to students with high grades, the groups with disabilities and low grades are significantly more frequently observed off-task. Students with disabilities are significantly closer to teachers and non-significantly more observed in whole group activities, alone doing different, instructed and less practicing skills than their peers.

Conclusion and implications:

Differences between low and high student engagement are larger than between the targeted groups. Whole group activities make the groups with disabilities and low grades more engaged, and when engaged they are more on-task practicing skills. Small group contexts engage students in the high-grade group more. Our findings imply that teacher proximity seem to be an aspect to consider when studying student engagement. Being closer to their students enable individualized instructions and feed-back. Seen in an outcome perspective of student learning to be assessed, it is probable that high quality teaching includes and communicates future achievements.

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6. Group Contingency: An Assessment Tool in Physical Education

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Background: Dependent group contingency is a classroom management strategy in which an unidentified student is randomly selected, and contingent upon the performance of positive behavior(s) of this student, a reward/reinforcement is provided her/his entire group/team¹. The purpose of this presentation is to describe how a dependent group contingency strategy can be used as an assessment tool.

Summary of Main Points: Empirical research suggests five steps to consider when implementing a dependent group contingency strategy².

Step 1: Define the behaviors/skills to be assessed. These behaviors/skills can be related to number of correct trials, skill performance, number of steps, heart rate, time on task, or supportive behaviors.

Step 2: Identify the types of rewards that are attractive to the class. For example, come to the gym during recess to play in an obstacle course, or to play preferred games at the end of the class.

Step 3: Explicitly teach behaviors by explaining, what, how, and when to perform the desirable behaviors, using examples and demonstrations.

Step 4: Select one unidentifiable student per each group (persisting groups). Inform the class that one student from each group will be assessed on whether she or he demonstrate the behaviors/skills taught. Students must be aware that the identity of the selected student will never be revealed to anyone. Therefore, all of the group participants will need to think that they are being assessed. If the unidentified student achieves the goal established for the day, the entire group will receive the reward. The teacher has an assessment checklist to record the behaviors.

Step 5: Reward. Create point system chart to post group achievements for each group. Design one column for goals to be achieved and the other with goals met at the end of the day. All groups will start with one goal to be achieved. In the next lessons, one behavior will be added to the previous day. If those goals are achieved, they are increased by one for the next day's goals. If the goals are not achieved, the next day's goals will remain same. Every time a group achieves its established goals, it will receive a point. After being rewarded with a specified number of points, the group will exchange those points for a reward that its members had already considered to be attractive. There is no competition among groups.

Conclusion: Dependent group contingency strategies should be well designed before being implemented. Potential problems may arise and will be discussed². Advantages are: students benefit from peer influence towards accomplishment of a goal. It is also economical for teachers to formative assess few rather than all students in the class.

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7. Teacher-, student- and expert-perception of teaching quality - The QUALLIS evaluation instrument in practice

Wälti Marina¹, Stefanie Gall¹, Ivan Müller¹, Herrmann Christian¹ & Pühse Uwe¹

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Theoretical background Educational research shows that teaching quality influences student achievement and acquisition of competencies stronger than the use of specific teaching methods. To describe the processes of teaching and learning, the following three superordinate dimensions of teaching quality were established; (1) *classroom management* includes classic attributes of comprehensible instruction to enhance learning and to maximize learning time, (2) *student orientation* comprises active consideration of individual learning potential and individual student needs, and (3) *activation* indicates methods which should encourage in-depth reflection and exploration of learning contents. With the QUALLIS (Quality of teaching and learning in sports) test instrument, a practicable and economically viable test instrument was developed. It enables formative evaluation of teaching quality in sports and physical education in order to systematically optimize teaching and learning processes. It provides not only a student point of view, but also a teacher and an observer perspective.

Method The assessment took place in a sport camp for high school students. To provide a formative evaluation, nine sport instructors filled in the QUALLIS self-perception questionnaire and were assessed by external experts (observer-perception; N=3) at the beginning of the week. Two days later the same procedure was performed and additionally the students filled in the student-perception questionnaire (in total N=127 students; $M=16.4$ years, $SD=0.8$). The surveys focused on a 60 min sports lesson and were conducted subsequently by smartphone or Ipad using the *EvaSys*-software. After the first assessment, the comparison of the two perceptions (self and observer) were discussed between expert and sport instructor. After the second assessment, another feedback discussion was held between the expert and the instructor, this time, including the student's perspective on the teaching quality.

Results The completion of the questionnaire took about 5-8 minutes. The online survey and the small amount of items proved that the instrument is feasible in practice.

The evaluation of the questionnaires showed that most instructors improved their teaching quality from the first assessment to the second one. Clear improvements were especially visible in the focus attributes, which were discussed with the experts. The data of the observers show some ceiling or ground effects with an overall higher perception of the teaching quality than the instructors or the students.

Discussion The QUALLIS instrument showed good practicability in a complex and vivid setting. By assessing the student's perception only in the second lesson, the students were already used to the presence of an external observer. The fast analyses and the graphical display of the perceptions facilitated not only the feedback conversations, but also the self-reflection of the instructors and their potential to improve their teaching in the following sport sessions.

The sport instructors acknowledged the QUALLIS instrument as a helpful tool to get feedback, especially from the students. For future use of the QUALLIS instrument, a preceding observer-training would be recommended.

8. Evaluation of the quality of teaching and learning in sports – the QUALLIS evaluation instrument

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Theoretical background Educational research shows that student achievement and acquisition of competencies are strongly influenced by the quality of teaching. Quality shows even greater impact than the variation of specific teaching methods. Criteria of quality focus processes of teaching and learning. Three superordinate dimensions of teaching quality may be used to identify relevant teaching processes: (1) *classroom management* includes attributes of comprehensible instruction to enhance learning and intensify learning time, (2) *student orientation* comprises active consideration of individual learning potential and individual student needs, and (3) *activation* comprises methods that should encourage in-depth reflection and exploration of learning contents. This general model of teaching quality can be theoretically differentiated and modified for specific aspects of physical education (PE). In the case of PE, this model is expanded by interpreting *activation* two-fold: *cognitive-reflective* and *motor-behavioral activation*. All of those four dimensions are divided in three sub-dimensions each, which describe twelve observable aspects of teaching reality in total. The aim was to develop a test instrument (QUALLIS) for the assessment of teaching and learning quality in PE, which offers results for formative evaluations of PE.

Method To assess students perspective on the four quality dimensions the QUALLIS-questionnaire were developed, which contained twelve teaching sub-dimensions. Each of these was represented by three items. Main purpose of the present study was to test the psychometric properties of this questionnaire. The study sample comprised 40 classes ranging from seventh to ninth grades ($N=634$ students; $M=13.9$ years, $SD=1.1$). By means of structural equation models, the structure of the twelve teaching sub-dimensions were tested and whether the teaching sub-dimensions could be assigned to superordinate teaching dimensions. Factorial validity was examined in two steps: First aim was to confirm structure with twelve distinct sub-dimensions (based on the items). The second analysis was used to check whether those twelve sub-dimensions represent the four dimensions of teaching quality.

Results A structural equation model revealed that the twelve sub-dimension showed factorial validity ($CFI=.97$, $RMSEA=.029$) and good internal consistencies ($.72 \leq \alpha \leq .87$). That means differentiated assessment of PE attributes relying on student's perception is possible.

In the second step, the sub-dimensions *discipline*, *use of time* and *goal clarity* were assigned to the concept *classroom management* ($CFI=.95$, $RMSEA=.078$); the sub-dimensions *feedback*, *solicitude* and *support* were assigned to *student orientation* ($CFI=.99$, $RMSEA=.037$). *Activation* showed a two-factorial sub-structure with a high correlation between the two resulting factors ($CFI=.92$, $RMSEA=.057$). The teaching sub-dimensions *focusing*, *processing* and *comprehensibility* formed one factor, which we identify as *cognitive-reflective activation*. The sub-dimensions *requirement level*, *structuring* and *response* were identified as *motor-behavioral activation*.

Discussion This validation study confirmed the psychometric quality and construct validity of the QUALLIS-instrument for the formative evaluation of the quality of teaching and learning in sports. 36 test items cover twelve teaching sub-dimensions of four superordinate dimensions of teaching quality. In addition, the QUALLIS-instrument is available in a teacher version and a version for external observers.

9. CREATEing Assessment Approaches through Research with Children and Young People: Values, Voice and Ethics

Fiona Chambers

Introduction

There should be a distinction between *research on youth* and *research with youth*. While research on youth positions the researcher as expert, research for youth takes into account broader academic debates around the need for researchers to reflect on 'ethically important moments' (McEvoy et al., 2016) and show a greater 'ethic of care' (Heath et al., 2007). Funded by the European Educational Research Association (EERA), this project comprised three pan-European *design thinking* symposia where early career researchers, experienced academics and youth co-developed a set of "Principles of Research *with, for and by* Youth;" that offer exciting methodological implications.

Methods

Using the BERA Ethical Guidelines (2018) as a framework, each of the three symposia employed a four stage *design thinking* approach [Clarify, Ideate, Develop and Implement] (Goligorsky, 2012), focusing on distinct youth populations (1) Research for Youth: General principles (Ireland) (2) Research for Looked After Children (UK) (3) Research for Indigenous Youth (Canada). Data from 90 participants were analysed using a thematic, inductive form of grounded theory (Charmaz, 2006) using both Nvivo and Voyant.

Results

While acknowledging challenges in the process e.g. the 'fragility' of youth voice (Cook-Sather, 2002), findings revealed six broad, interconnecting guiding principles for conducting meaningful research with, for and by young people: The CREATE Principles [Connections; Reflexivity; Empathy; Adherence; Transparency; Empowerment].

Conclusions and implications

The methodological implications of using *design thinking* as a form of both study design and method offers new ways forward in research with youth e.g. in how to develop new assessment approaches. CREATE (i) enhances the ethic of care and positions youth as knowledge holders (ii) affords researchers flexibility to use the principles in varied research contexts and with diverse youth populations, and (iii) offers imagined possibilities (Greene, 1995) for research *with* youth, as opposed to *on* them.

10. SPORTS IN ELEMENTARY SCHOOL: national assessment of PE in the Netherlands

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Introduction:

Children have to learn fundamental motor skills and (self)regulation to ensure a lifetime participation in sports. An essential part of this learning process is organized in physical education. The quantity and quality of these lessons play a crucial role in sport participation. The last decade there seems to be a decline in motor-skills.

Purpose/Aim

To examine differences in motor skills, sport participation and physical activity of children in the final grade of Dutch primary education ($N_{\text{schools}} = 89$; $N_{\text{students}} = 2475$) in relation with individual and environmental factors.

Method & Materials:

In 2016-2017 the motor skills, motivation, participation and physical activity of the children were measured. To measure the motor skills a circuit with seven essential PE-exercises (e.g. tennis) and three subtests of BOT-2 and KTK (Bruininks & Bruininks, 2005; Kiphart & Schilling, 2007) were used. In addition strength and fitness were measured with subtests from Eurofit-test (1993) and gameplay was observed with a ball-game (eindvakbal).

A combination of three questionnaires was used to measure self-competence (CBSK, Swennhuis & Veerman), motivation (Adapted- BRPEQ: Van Aart et al., 2017) and sport participation and physical activity (Dutch Standard of Healthy Exercise Questionnaire). Background-characteristics (amount of lessons, content, teacher background) were collected with a teachers-questionnaire.

Results:

Skills:

Compared with a similar nation-wide study in 2006, children scored less on five of the eight retested skills. Especially tennis-skills dropped dramatically (2006: $M=45,7$; 2016: $M=26,9$).

Compared with norm-referenced test ball-skills and balance skills are within a normal range. However, the scores on the shuttle-runtest and long-jump were significantly lower than the norm population.

Motivation:

Overall children are motivated for PE, feeling themselves competent and related towards classmates and teachers. The lowest scores were found on perceived autonomy in the PE-lessons. The intrinsic motivation (.26), competence (.30) and relatedness teacher (.09), peers (.16) are positively correlated with motor skills.

Participation:

Most children (66%) participate in sports in clubs, on school or in the neighborhood for at least three times a week. On the other hand there is also an astonishing 20% of children who do absolute nothing. The same pattern can be found for physical activity. Whereas most children bike towards school (85 %), especially in special education there is a big group (%) who go by car/bus towards the school.

Relation with individual and school-characteristics:

Skilled children are mostly boys with lower BMI have a higher perception of their skills, have more risk-oriented behavior, are more active and motivated (ES, skilled children are being taught by a PE-specialist, go to regular schools

Conclusions and implications:

A decline of motor skills and physical fitness is evident and do constitute an enormous risk for the future health of this children. Whereas skills are related with motivation and physical activity, it is logical to put more time and effort in PE. Considering the limited influence of the PE-lessons (90 minutes a week), the physical activity of children should become a school effort. To prevent the children from an inactive future, daily PE and/or PA is essential.

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Abstracts Mini-orals Session 3

Saturday October 20th 2018

09:00-10:00

1. Goal clarification, process feedback and physical education students' need-based functioning from lesson to lesson

Christa Krijgsman^{1,2}, Tim Mainhard¹, Jan van Tartwijk¹, Lars Borghouts³, Maarten Vansteenkiste⁴, Nathalie Aelterman⁴ & Leen Haerens²

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Providing goals and process feedback to improve learning are key principles of PE assessment that moves learning forward (Macphail and Halbert, 2010). According to self-determination theory (Deci and Ryan, 2000), when teachers provide goals and process feedback, students will be more likely to experience need satisfaction (e.g. feel competent), and less likely to experience need frustration (e.g. feel like a failure). Indeed, goal clarification (GC), process feedback (PF) and students' needs have been linked positively (Mouratidis et al., 2013). Yet, GC and PF are best provided simultaneously, however, no research to date empirically examined to which extent GC and PF *jointly* foster PE students' needs. Moreover, most studies relied on data measuring one occasion, although teaching strategies and need-based functioning may vary substantially from lesson to lesson. Therefore, the present study investigated to what degree lesson-to-lesson variability in teachers' GC and PF can explain lesson-to-lesson variability in PE students' need-based functioning.

Twenty-four classes with 570 secondary school PE students completed six repeated measurements, which tapped into the extent of GC and PF (SAFL-Q) and students' need-based functioning (BPNSNF). Multilevel analyses were employed.

Students' perceived GC, PF and need-based functioning fluctuated substantially from lesson to lesson. When goals and PF were provided, students felt more in charge of their learning trajectory, more mutual care and more effectiveness (i.e. need satisfaction). When both GC and PF were higher, students experienced more need satisfaction. Only when one of both was extremely high, it buffered the absence of the other. Furthermore, in lessons in which students were more familiar with the goals, they experienced less feelings of pressure, alienation and failure (i.e. need frustration). No associations were found between PF and need frustration.

Findings imply that, to stimulate need-based functioning, more of both (GC and PF), or at least one of both to a very high extent, is better. This is important as students' need-based functioning in PE affects their motivation, and in turn contributes to desirable outcomes as engagement and performance.

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2. Assessment for learning – revisiting the development of theory from a physical education perspective

Leirhaug, Petter E¹., Tolgfors, Björn²

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Although there was a growing focus on assessment and how it was related to student experiences and learning from the mid-1980s on, it was the 1998 review article by Black and Wiliam (1998) that lifted assessment for learning (AfL) into the contemporary educational debate. Building upon several projects with the aim of implementing or improving the practice of formative assessment and AfL in schools, Black and Wiliam (2009) successively developed a theory of AfL. This has led to five often-cited key strategies of AfL: (1) Clarifying learning intentions and criteria for success; (2) Engineering effective classroom discussions and other learning tasks that elicit evidence of student understanding; (3) Providing feedback that moves learners forward; (4) Activating students as instructional resources for one another; and (5) Activating students as the owners of their own learning. However, both the theory and benefits attributed to AfL have been criticized, and Bennett (2011) pointed to the need for in-depth subject-domain understanding in furthering the development of AfL. The aim of this paper is to use the results and experiences from two PhD research projects focusing on AfL in physical education, conducted in Norway and Sweden, to revisit the key strategies of AfL and discuss the contributions from research on physical education. Both Leirhaug (2016) and Tolgfors (2017) have identified problems for teachers in understanding and rethinking their roles in 'the spirit of AfL'. Leirhaug (2016) highlighted the challenge of involving students in the assessment process, as well as the lack of practical examples of feed-forward practices in physical education. Tolgfors (2017) revealed how AfL can be transformed into different versions in teaching practice and identified five, here named after their most prominent functions: empowerment, physical activation, constructive alignment, grade generation, and negotiation. The results from our PhD research indicate that 'the spirit of AfL' might be more important than the key principles, and in closing, we share critical thoughts on the next steps for developing the theory of AfL.

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3. Student voices on blogging as assessment in blended (and not-blended) environments

Antonio Calderón, Dylan Scanlon, Brigitte Moody and Ann MacPhail. University of Limerick, Ireland

Background

The pedagogical benefits of blogs in higher education tends to centre on two areas: blogs as reflective devices and blogs as interactive devices (Deng & Yuen, 2009). Deng and Yuen (2011) developed an empirically grounded framework for educational blogging in the context of teacher education. Their initial framework highlighted four educational affordances of blogs in teacher education: self-expression, self-reflection, social interaction, and reflective dialogue. Given a lack of studies researching such affordances, in this study we explored student voices on blogging as assessment in two different pedagogy environments.

Methods

From the same teacher education programme, a total of 45 undergraduate students (from year three or year four) and three lecturers (from two different modules) volunteered to participate. Students in the non-blended environment were asked to blog every one to three weeks about the content being taught (four blogs in total). Students in the blended environment were asked to blog about a specific topic every three weeks. The discussions from a live-chat and a weekly reading prompted blog entries. The final blog titled 'Learning journey, reflection and feedback' (non-blended) and one focus group (blended) was used as the data source for this study. Content analysis was done independently in three phases; initial, focused and theoretical (Charmaz, 2014) by the first three authors. Constructed themes were then discussed considering Deng and Yuen's (2011) framework.

Results

Similarly to Deng and Yuen (2011) framework, in this study students in both approaches (blended and non-blended) considered blogging valuable (1) to promote reflective and critical thinking (making sense of content from lectures and tutorials); (2) to express views in a creative manner (they felt liberated from the traditional essay style); (3) to emphasise assessment for learning (because of the continuous general and individual feedback); and (4) to think more and be more thoughtful with a new and enjoyable way of assessment. In addition, some students from the non-blended approach considered (5) the blog style of writing difficult and would have welcomed more direction with the task.

Conclusions

Although some students were sceptical about blogging at the beginning of the academic year, on completion of the semester most recognised its value for learning and to create an engagement with the module content and their peers. The 'new-fashioned and less traditionally academic' assessment (the blog) and their perception of blogging as genuinely allowing them to express themselves were some of the core reasons for their appreciation of the blogs. It should be noted that students' blog entries were not anonymously written and were graded and so students' level of honesty in responding to the study focus could be affected.

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4. Psychometric properties of the SEEQ Scale in Physical Education Teacher Education

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Introduction: Within the field of physical education (PE) teacher education, instructional evaluation has become a professional priority for educators preparing future teachers to work in the field. The SEEQ (Student Evaluation of Educational Quality) Scale is one of the most widely used standardized measures for evaluating instructional effectiveness (Marsh, 1982). SEEQ is a nine-factor scale and comprises 35 items for measuring educational quality: Learning/Value, Instructor Enthusiasm, Organization, Group Interaction, Individual Rapport, Breadth of Coverage, Examinations, Assignments, and Workload. The SEEQ Scale has been used in numerous studies in higher education, both in English and non-English speaking countries, showing high validity, stability and generalizability indices. Recognizing the multidimensionality of the teaching construct, the present study examined the psychometric properties of the SEEQ scale in a sample of Greek preservice PE teachers attending pedagogical courses as part of their school practicum curriculum.

Methods: Data were obtained from 159 PE students, men and women, from the Department of Physical Education and Sport Science, University of Athens, Greece. The Greek-language version of SEEQ was used, with an Overall Evaluation as the scale's ninth factor, since Workload is often considered as a potential bias (Grammatikopoulos, Linardakis, Gregoriadis, & Oikonomidis, 2015). A CFA was employed to examine the factorial structure of SEEQ, while Cronbach's alpha indices were used to assess the internal consistency of the Scale. Statistical analyses were conducted with the SPSS 20 computer program.

Results: Results showed that the model with the nine correlated factors ($\chi^2 (429) = 722.87$, RMSEA = .066, NNFI = .885, and CFI = .900) represented the best fit when compared to an uncorrelated nine factor model ($\chi^2 (465) = 1469.81$, RMSEA = .117, NNFI = .637, and CFI = .660). Furthermore, reliability analysis indicated that the nine subscales of SEEQ were internally consistent. Specifically, the Cronbach's alpha coefficients of the nine subscales ranged from .74 to .86.

Discussion: Results of the study confirmed the factorial validity and internal consistency of the SEEQ Scale in PE teacher education. Although additional research is needed to further confirm its psychometric properties, the SEEQ Scale is considered as a useful tool for researchers interested in evaluating instructional quality in PE teacher education.

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5. Feeding back and feeding forward: Building a culture of reflection amongst pre-service teachers using online reflective journals

Richard Bowles¹ & David Moloney²

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Background & Purpose

Existing research suggests providing higher education students with meaningful feedback can be challenging (Nicol et al., 2014). Prompted by these findings, this study explored the use of online reflective journals to provide ongoing feedback during an undergraduate physical education (PE) teaching placement. It examined students' engagement with a cyclical process of student reflection and lecturer feedback that fed forward to an end of semester summative assessment. The students, responding to weekly prompts within the *Moodle* platform, reflected on the development of their own pedagogical skills while teaching and observing in primary school PE settings.

Methods

The online reflective journals of a class of thirty Bachelor of Education PE elective students were analyzed thematically. Focus group interviews were conducted with two groups, each containing six students, after the reflection process had been completed. Guided by Rolfe et al. (2011), the data analysis sought to uncover if students reflected more deeply as the process went on.

Results

The students responded positively to the online nature of the reflective process, and welcomed the opportunity to receive frequent, relevant feedback. They believed it had enhanced their teaching of PE. We suggest their reflections displayed increasing depth and complexity during the course of their teaching placement.

Conclusions & Implications

This research highlights the potential of online platforms to nurture a culture of student reflection. By providing timely, focused feedback, teacher educators can guide reflective practice and embed formative assessment into their teaching. In addition, these strategies can feed forward within reflective cycles thereby deepening the students' learning experiences. This research has increased our understanding of how tutor feedback can support students' learning.

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6. From assessment for ranking toward assessment for learning: An action-research study in preservice physical education teacher education during a year-long school placement

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² Limerick University

Physical Education (PE) assessment practices have been faced as ranking of performances, non-educative approaches, and secluded from teaching-learning process (MacPhail & Murphy, 2017). Nevertheless, nowadays, there is a growing consensus on the chief role of assessment to promote learning. This presentation is a PhD project which intends to examine how preservice teachers (PSTs) learn to use Assessment for Learning (AfL) and how it impacts on students' learning over a year-long school placement. This action-research project also plans to i) explore the value and meanings the participants (PSTs, teachers and students) ascribe to the use of AfL in PE teaching; ii) analyse the learning problems and dilemmas to implement AfL principles in PE teaching in the context of preservice school placement; and iii) examine the impact of the use of AfL on students' perceptions, patterns of participation, learning involvement, and achievement. The study will take place during the school placement (nine-months) in four main cycles of action-research which focus will change to progressively increase students' learning and autonomy. Firstly, seminars will be used to engage PSTs and cooperating teachers (CTs) with key AfL principles and concepts, and to support PSTs' planning on their first practices assessment experiences. Second, gathering will be chiefly concerned with AfL adoption on PSTs classes. Then, the focus will be on students. It is expected that students take part of assessment tasks jointly with PSTs. Last cycle will be used to an in-depth view of all process involving AfL. A purposive sample of six PSTs from the Master on Teaching PE of Faculty of Sport, Porto University, two CTs, and one university supervisor will be involved. During their school placement, PSTs will be asked to integrate AfL principles in their classes, with about 25 students per class. Participants will be recruited according to their personal profile, availability, commitment and interest in joining the pedagogical project. Participant observation, focus group, interviews, artefacts and documents data will be qualitatively analysed using a constant-comparison approach and interpreted in light of

AfL principles (Leirhaug & Annerstedt, 2016). Questionnaires data (Crick, Broadfoot, & Claxton, 2004) will assess changes in students' perceptions of learning. Two underlying purposes are to provide new insights into teacher education curricula and learning concern in PE classes. This presentation intends to contribute to the research in Instructional Alignment and AfL, bringing the action-research to the field.

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7. Formative Assessment in Level 7-10 Physical Education

Dr Rachael Whittle, *Victorian Curriculum and Assessment Authority (VCAA)*, Victoria, Australia

Background and purpose of the presentation:

Assessment in physical education has been plagued with subjective judgements often based on participation and effort, with the task bearing little connection to curriculum. Assessment, as part of the teaching and learning process, must align with curriculum and pedagogy. The formative assessment project involved practicing teachers in the co-construction of formative assessment tasks with the Victorian Curriculum and Assessment Authority (VCAA). Secondary physical education teachers (n=4) from across Victoria participated in two initial workshops to develop a formative assessment task (including rubrics). The assessment task was trialled within school settings and student work samples were collected. A third workshop collected and incorporated teacher feedback and experiences to refine the assessment materials. The purpose of the presentation is to share the experiences of the teachers involved in the project and the findings of the formative assessment task implementation to inform future directions of formative assessment work in physical education.

Key points:

- Formative assessment is needed for improving student outcomes
- Formative assessment assists teachers to progress student learning by identifying 'next steps' for student learning
- Teachers need practical support to develop formative assessment tasks and rubrics

How the proposed presentation addresses one or more of the seminar themes

The formative assessment project relates specifically to the seminar theme *Assessment for learning: The holy grail?* The project assisted teachers in the development of a formative assessment task that identified learning goals for each student and collect evidence used to plan for student progression along the learning continuum.

Conclusions and implications for practice

The formative assessment project focussed specifically on developing a tool to assess student ability to perform movement skills, use movement strategies and solve movement challenges in invasion games. Teachers worked collaboratively to develop a formative assessment task that described student progression at a granular level in terms of what students can do, say, make or write in levels of increasing competence, allowed evidence to be collected and conclusions to be drawn about where students were in their progress. The information was used to identify the steps needed to progress student learning, to inform the learning and teaching program and to provide an evidentiary basis for providing feedback to students. Future projects that expand on the formative assessment tasks developed are required to cover a wider range of contexts in physical education.

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8. The practical teaching examination: Assessing pre-service teachers' readiness to progress to full-time student teaching.

Peter A. Hastie

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Background and purpose of the proposed presentation

The edTPA (formerly the Teacher Performance Assessment) is a performance-based preservice assessment process designed to help determine if student teachers are adequately prepared to enter the teaching profession and to support state and national teacher education program accreditation. This assessment is completed during the student-teaching semester/year of a student's PETE program.

The edTPA comprises three tasks that document planning, instruction, and assessment over the course of a "learning segment" consisting of three to five lessons within the same learning unit. This presentation will focus on strategies for helping students achieve passing scores on Task 2 (instruction): in which candidates submit two ten-minute videos of instruction along with a written instructional commentary. The rubrics for Task 2 include the learning environment, engaging students in learning, deepening student learning, subject-specific pedagogy, and analyzing teaching effectiveness.

A summary of the main points of the presentation

The purpose of this presentation is to outline details of "teaching examination" that asks students to teach a 20 minute lesson to a group of students with whom they have not previously exposed. The examination focuses on the students' ability to demonstrate a 10 key instructional strategies that they have practiced in weekly teaching episodes across the semester. These are listed as: activity time, feedback, goal statements, questioning, demonstrations, pinpointing, active supervision, management protocols, equipment protocols and task presentation. Students are expected to clearly demonstrate at least 7 of these to pass this exam, with each category being scored as "all-or-none".

During the presentation, the specific requirements of each of the components will be presented, with sample scoresheets being made available.

How the proposed presentation addresses one or more of the seminar themes

The presentation is linked to the "Assessment in PETE" theme of the seminar.

Conclusions from and implications of your presentation for practice, policy, or subsequent research

This assessment has been used as a quality control aspect of a teacher preparation program. Students' performance on these examination do not contribute to their final grade per se, but are used to generate specific strategies for them to incorporate during their next teaching assignment, which is student teaching. In many cases, students are asked to repeat the teaching examination if their performance is particularly problematic.

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9. The transfer of knowledge of formative assessment into student teachers' first professional experiences

Eloisa Lorente-Catalán¹; Víctor López-Pastor², David Kirk³

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A challenge for physical education teachers is moving from physical fitness testing and motor skills grading to formative assessment (FA) focused on improving learning (López-Pastor et al, 2013). If pre-service teachers (PST) are to learn to use FA it needs to be present in Teacher Education (TE) programmes not only as content knowledge but experiencing these practices themselves as part of their professional and academic preparation (Lorente-Catalán & Kirk, 2016). We have some evidence that students who have applied these strategies in their first experiences in Physical Education Teacher Education (PETE) programmes are willing to continue using them in their future professional practice (Lorente-Catalán & Kirk, 2016). This is not, however, a straightforward process (Hay & Penney, 2009). Our purpose is to investigate whether the experience of FA in PETE transferred to the first professional practices in school and analyse what problems arise from it.

The study was carry out with 24 students of a Master's degree for future physical educators on secondary school. They experienced FA during the degree. The school practice was for seven weeks.

Data were collected through:

- Documentary analysis: lessons planning and student's diaries.
- An *ad hoc* questionnaire.
- A focus group with 9 students who had applied these strategies.

Most of the PST (21/24) said they applied FA. They recognised the need for further training, especially in the practical aspects. All PST consider that they are capable and motivated to apply these strategies in their future, although the general tendency was to speak of the difficulties and some PST continue to show a concern to grade their pupils, instead focusing on their learning. They highlight some difficulties with pupils in the use of these strategies and some resistance; lack of sincerity or the pupils' tendency to not to be objective, and the difficulty of managing the time involved in reviewing pupils' learning.

PST consider that they have a good training on FA, but think they need to continue to be trained, especially in the most practical aspects. They need to experience FA for themselves to realise the potential of these practices. They also need to reflect on them with peers and tutors. Many of the university students are still thinking about grading, not assessing for learning.

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10. The experience of primary pre-service teachers' enacting assessment for learning in their teaching of physical education

Suzy Macken, Professor Ann MacPhail, Dr. Antonio Calderón

Background and purpose

Assessment for learning has been widely researched and defended within policy documents and literature yet such recognition of the effectiveness of using assessment strategies does not guarantee that a transfer of theory into pre-service teacher's school placement will occur (Lorente-Catalán & Kirk, 2016). Ogan-Bekiroglu & Suzuk (2014) found that although pre-service teachers identified key elements of assessment literacy in theory, they had difficulty in implementing this into practice. Furthermore Lopez-Pastor et al (2013) highlight that embedding assessment within the teaching of physical education is considered 'as one of the most troublesome topics' (p. 57).

The purpose of this study was to 1) examine primary PSTs' use of assessment for learning (AfL) strategies while teaching primary physical education on school placement, and 2) identify potential opportunities for use of assessment for learning strategies within their teaching of primary physical education. The findings report on the assessment application component within the assessment literacy framework proposed by Hay and Penney (2013)

Methods:

Using a longitudinal action research approach the teacher educator engaged in participant observation with five primary PSTs. Data was generated using researcher field notes, primary PST reflective journals and individual primary PST interviews. A theoretical framework of social constructivism and cognitive apprenticeship guided this study.

Results:

Initial findings indicated low levels of assessment literacy in relation to PST assessment application of AfL in their teaching of primary physical education. The use of teacher educator modelling, mentoring and scaffolding within a cognitive apprenticeship framework, the PSTs enacted AfL as an embedded element in their teaching, where a collaborative approach in the enactment of AfL provided focus for PST teaching and autonomy for students over learning. Peer and self-assessment were demonstrated to a lesser extent and were impacted by a number of factors, e.g. social dynamics.

Conclusions and implications:

The findings indicate the impact of teacher educator modelling, mentoring and scaffolding in improving PSTs assessment application. This study highlights the need for PSTs to practice enacting AfL in authentic setting prior to engaging in their school placement component. The use of a cognitive apprenticeship framework to develop PSTs assessment literacy in teaching primary physical education is worthy of further investigation.

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Abstracts Mini-orals Session 4

Saturday October 20th 2018

10:00-11:00

1. Initial evidence of face validity for basketball and volleyball game performance assessment scoring guides for use in physical education

Stephen Harvey, Ohio University, USA

Hans van der Mars, Arizona State University, USA

Background and purpose: This presentation will highlight results from the third of a five-stage process for the development of contextually valid Game Performance Scoring Guides for utilization by physical education teachers (Brewer & Jones, 2002; Cushion, Harvey, Muir, & Nelson, 2012) in the sports of basketball and volleyball. The first two stages of the process were a literature review and initial development of the scoring guides (see Harvey, 2016 for previous details) based on the Game Performance Assessment Instrument (Oslin, Mitchell, & Griffin, 1998). The aim of the rubric development project as a whole is twofold: a) to offer teachers a basis for teaching games content in Physical Education and providing feedback to learners, and b) to provide a means for teachers to formally and formatively assess students' progress in becoming more skillful players throughout the learning process.

Methods: For the third stage of the five-stage development process we gained ethical approval to recruit licensed Physical Educators (N=29 basketball, N=20 volleyball) to respond to an online survey where they had to drag and drop narrative descriptions of game play behaviors and match these to three performance levels (1 = developing, 2 = meets, and, 3 = exceeds) to establish initial face validity for the instruments. There were nine game play behaviors on each rubric. Participants were recruited from two U.S.-based master's degree programs, and from two professional development conferences the lead author presented at in North America and Asia. Data were analyzed by calculating the number of responses that matched the 'correct' answers for that game play behavior on the scoring guides-constructed by the authors. One point was awarded for each item dropped into the correct location. Participants therefore yielded a maximum score of three (3) for each game play behavior and a maximum score of 27 if they matched all items correctly. These were translated into a percentage score.

Results: A large majority of teachers correctly aligned the descriptors to the correct performance levels, and across the nine game play behaviors on the scoring guides. Average scores ranged from 56 (n=1) to 100% (n=19; average 95%) and 71 (n=1) to 100% (n=14; average 96%) for basketball and volleyball, respectively.

Discussion/conclusions/implications: The ability of teachers to correctly identify which items matched each rating scale demonstrates the initial face validity of the two game performance rubrics for assessment for learning purposes. However, further examination of the rubrics is required from content experts and game-based academics to further validate the rubrics. Moreover, field testing of these scoring guides is needed to establish their reliability, and the ability for teachers to distinguish between students of differing levels of game performance. That said, the development of the scoring guides is a positive step since many teachers report a drawback to using alternative approaches to teaching games is a lack of knowledge about assessing student learning. Such scoring guides are a more authentic means of assessment for and of learning, as they can be used to assess players in authentic game play conditions.

References:

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2. How does the Physical Education Teacher Education influence to carry out Formative Assessment or/and Assessment for Learning Systems?

Emilio José Barrientos-Hernán¹; Víctor M. López-Pastor¹; Miriam Molina Soria¹

¹Faculty of Education, Segovia (University of Valladolid, Spain).

This study analyses if an intentional sample of Physical Education (PE) teachers uses Formative and Shared Assessment (F&SA) and/or Assessment for Learning (AFL) and how important is their Teacher Education (TE) to implement this type of PE assessment. The literature on this subject seems to indicate that PE teachers usually implement the same kind of assessment that they have received in their Physical Education Teacher Education (PETE) (Fullan, 1991).

A multiple case study has been carried out using qualitative methodology (in-depth interviews) with an intentional sample of four PE teachers: three from Primary Education and one from Secondary Education. The four interviewees meet the following criteria: (a) share the learning objectives and assessment criteria with the students; (b) involve the students in the assessment of their learning; (c) give regular feedback to the students.

All the interviewees are using F&SA and AFL in PE. However, in most of the cases, this type of assessment is far from the assessment received during their PETE; only one of the interviewees had F&SA and AFL experiences in its PETE. For this, we have study in depth the reasons why they have changed the assessment received in their PETE. In all the cases, they have reasons during their teacher career that have moved them to look for different assessment practices, most of those reasons are related to In-Service Teacher Education (IS-TE) processes in which they have been involved, apart from their educational beliefs and convictions. The types of IS-TE that have influenced most are: the participation in teacher working groups, attend to courses/congresses and read bibliography related to F&SA and AFL practices. Moreover, they are convinced that their PE discourse (Tinning, 1996) has powerfully influenced when they were looking for alternative PE assessment methods (López-Pastor et al, 2013). Furthermore, they explain the advantages that have found while they were using F&SA and AFL systems in PE: (1) The students are more aware of the assessment and the goals they have to achieve in their learning process, (2) the students participation in their assessment helps their learning process involvement, (3) regular feedback helps students to improve their learning process.

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3. Formative and Shared Assessment in Physical Education Teacher Education in Spain: A research overview

Eloisa Lorente-Catalán¹; Víctor López-Pastor²; Antonio Fraile-Aranda²; Juan Fraile³; Antonio Calderón⁴

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Formative and shared assessment (F&SA) methods have rarely been used within the Spanish higher education system. The aim of this study was to explore the research about the topic of Physical Education Teacher Education (PETE) conducted by Spanish scholars around F&SA in the last decade.

After performing a non-exhaustive research review on WOS, *Scopus* and *Sport Discus* research data bases and conducting a thematic coding, the main research trends found were: (1) effects of the use of F&SA in PETE on students' performance and teachers' and students' work load; (2) the different assessment experiences and perspectives of students, teachers and graduate students; (3) perception of students and teachers with the use of F&SA; (4) teachers typologies regarding their assessment system and use of assessment tools; (5) the relationship between F&SA and students' self-efficacy of competences; and (6) the importance of experience F&SA and the later transference in their professional development of PE Primary and Secondary Education.

This presentation is directly linked to three research areas of the seminar "International overview: "PE assessment policy and enactment", "Assessment for learning" & "Assessment in PETE".

Spanish research on F&SA in PETE is a growing field. Some of the main findings of the last decade included (a) positive relationship between the use of F&SA and students' performance (López et al., 2013; Romero et al., 2015); (b) students and teachers high level of satisfaction of F&SA practices (Gutiérrez et al., 2011; López, 2008); and (c) evolution towards a higher use of F&SA in PETE. Some of the challenges reported were need for more research on its effects, further conceptual clarification, the intersubjectivity of the process, recognition of the divergent processes and ethical principles, students' involvement not only in assessment but also in determining academic grades, and broadening learning goals and objectives in F&SA (López-Pastor & Sicilia, 2017).

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4. Cross-University Network of Formative & Shared Assessment in Higher Education: Spreading quality PETE assessment practices

Víctor López-Pastor¹; Eloisa Lorente-Catalán²; Antonio Calderón³; Juan Fraile⁴

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Background and purpose

The Cross-University Network for Formative & Shared Assessment in Higher Education (CUNFSA) was founded in 2005 by a small group of Physical Education Teacher Education (PETE) scholars from different universities and representing a range of academic areas. (López et al., 2011). CUNFSA core missions are research and teaching. Firstly, to develop sustainable and innovative assessment pedagogies in PETE and other subject areas. Second, to stimulate a wider debate and more extensive research within the higher education sector in Spain. Currently, the group comprises a community of 90 academics from 20 universities, and more than a 50% are PETE scholars. The present study aims to explain the main features and procedures of the Network, alongside with its main research lines and challenges for the future.

Main points

The Network is organized into small groups that act as action-research ongoing seminars. The coordination between groups is digitally supported (i.e. email and telephone contact). The running structure is at the same time solid to enact rigorous longitudinal action-research processes, but flexible to accommodate its complexity and sustainability (i.e. to incorporate scholars from different programs and universities). This collegiate aspect of the Network is seen as key in order to stimulate meaningful conversations. Accordingly, the main lines of research of the Network are: (1) analysis of the pedagogic opportunities, advantages and disadvantages of formative and shared assessment within higher education, particularly with regard to initial PETE; (2) viability and sustainability of longitudinal action-research processes in PETE; (3) reliability and development of students-centered assessment for learning processes; (4) analysis of good practices on formative, shared, alternative and authentic assessment.

Alignment with the seminar themes

This presentation is directly linked to three research areas of the seminar “International overview: “PE assessment policy and enactment”, “Assessment for learning” & “Assessment in PETE”. Some of the initial findings and implications for practice may be applicable to similar situations in other countries and communities.

Conclusions and implications for practice

The practical implications and impact of the Network research and developments are visible in many PETE areas. Especially in improving (1) the quality of teaching and assessment PETE practices; and (2) students’ engagement in teaching, learning and assessment. Finally, the Network has some important challenges, for example, to stimulate a national debate on the topic of assessment in higher education, to extent and make connections to similar Networks from other countries, to deal with a growing number of members and institutions, and to impact the policy and curriculum design.

References

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5. Reflecting upon images: Using photo essays to promote and assess *subject-specific* pedagogy in PETE

Peter A. Hastie

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Background and purpose of the proposed presentation

Given the advent of high-stakes testing for teacher certification within much of the United States, it is important for PETE faculty to provide students with opportunities to better understand educational theory and subject matter content (Darling-Hammond, Newton, & Wei, 2013).

The purpose of this presentation is to outline details of a series of essays that students provide commentary upon a number of images of children and teachers in action in physical education lessons. The idea of this task is to assist students in citing evidence to support their claims and referencing research or theory. These elements are central to the commentaries that must accompany evidence of planning, teaching and assessment (SCALE, nd).

A summary of the main points of the presentation

This presentation will provide the full details of a formative assessment task that asks students to study a series of photographs from all perspectives; teacher, students, activity, purpose. Specifically, students are asked to examine if there is anything in the picture that strikes them as either important, innovative, or maybe odd. Students then use the key words accompanying the picture to act as a guide for their responses. However, within each photograph, there are 4 or 5 aspects of teaching/learning you should be discussed. It is these aspects that serve as measures of the extent of students' understanding of key pedagogical principles in physical education teaching. In specific cases, students are expected to link their responses to educational theory.

How the proposed presentation addresses one or more of the seminar themes

The presentation is aligned with the "Assessment in PETE" section of the seminar. It is meant to be part of an ideas exchange, where practical examples of ways to promote reflection are presented. The images used and the topics discussed will be presented.

Conclusions from and implications of your presentation for practice, policy, or subsequent research

One of the key aspects of the high stakes testing is the ability of PETE students to include descriptive and analytical writing within their portfolios. Experience with these photo essays has shown that the descriptive elements are easier to achieve for students than the more analytical elements. However, with specific practice (often involving students using their own photographs) can serve to develop these skills.

References

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6. Do goal clarification and process feedback foster physical education students' motivational functioning?

Krijgsman Christa^{1,2}, Mainhard Tim¹, Van Tartwijk Jan¹, Borghouts Lars³, & Haerens Leen²

¹Department of Education, Utrecht University, The Netherlands, ²Department of Movement and Sport Sciences, Ghent University, Belgium, ³School of Sport Studies, Fontys University of Applied Sciences, Eindhoven, The Netherlands

Assessment is a challenging part of physical education (PE) teachers' pedagogy (Hay and Penney, 2013). Communicating goals and providing feedback to improve learning are key principles of assessment that moves learning forward (Macphail and Halbert, 2010). According to self-determination theory (Deci and Ryan, 2000), goal clarification (GC) and process feedback (PF) aim at improving learning through fostering volitional types of motivation. Yet, previous research examining the motivational benefits of GC and PF mainly relied on cross-sectional or longitudinal data (e.g. Haerens et al., in revision). The present study relied on an experimental design to examine whether GC and PF enhance students' motivation.

Twenty classes with 493 7th grade PE students ($n=236$ boys, $n=257$ girls) were randomly assigned to one of four conditions ($n=128$, $n=117$, $n=125$ and $n=123$) in a 2x2 factorial design, in which GC (presence vs. absence) and PF (presence vs. absence) were manipulated in a real life lesson taught by one and the same PE teacher. During this lesson, all students engaged in their first lesson on a new motor skill. The teacher either started the lesson explaining the goals, or refrained from explaining the goals. Throughout the exercises the teacher either provided process feedback, or refrained from providing process feedback. To be able to standardise across conditions, all other instructions were given by means of a series of videos, in which exercises of differential levels of difficulty were shown. By means of questionnaires, students' motivational functioning was measured prior to the lesson. Similarly, students' perceptions of GC and PF and motivational functioning were measured again post-lesson. Simultaneously, all classes were observed by a research-assistant to discern whether manipulations were done according to a condition-specific script (manipulation check).

Results are currently being analysed through multilevel regression analyses, and will be presented at the conference. It is expected that students' motivation was enhanced when both GC and PF were present, while poor motivational functioning occurred in case neither goals nor process feedback were provided.

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7. Physical Education and Assessment within Initial Education of Primary Teachers in one University

Murphy, Frances; Coulter, Maura; Marron, Susan; McGrane, Bronagh
School of Arts Education and Movement, Institute of Education, Dublin City University, Ireland

Background

‘Primary physical education will always have a variety of stakeholders and policy actors, and new and emerging public and political discourses will continue to create a mix of challenges and opportunities for assessment in this sector’ (Dinan Thompson and Penney, 2018, p. 82). Assessment has been embedded in the Irish Primary Curriculum (Government of Ireland, 1999) with some guidance provided on using teacher observation for example to enhance learning. Work within initial teacher education is now focussed on ensuring that primary generalist teachers, some with a specialism in physical education, are confident to begin to assess children’s achievements in physical education and record outcomes of their assessments.

Summary of the main points of the presentation

The presentation will focus on how initial teacher educators collaborate to

1. Raise awareness of students of the importance of assessment for quality teaching and learning in Physical Education
2. Support students to probe learning outcomes as a starting point towards quality assessment
3. Support students to investigate the contribution of teacher observation and teacher questioning to enhance children’s learning
4. Prompt students to explore how they might plan to lead children to engage in self- and peer-assessment in physical education lessons
5. Explore with students how they might record the outcomes of assessments of children in a manageable way.

How the proposed presentation addresses one or more of the seminar themes

The presentation will address how we mediate **assessment for learning** with groups of generalist primary teachers within **Physical Education Teacher Education** in the Institute of Education, Dublin City University. Use of **technology** is embedded in particular aspects of the work with a particular emphasis on use of I-pads to enhance teacher observation.

Conclusions from and implications of your presentation for practice, policy, or subsequent research.

Where assessment is introduced within teacher education courses we can build on this work ensuring that students’ assessment of children’s learning in physical education is closely aligned to their work across all subjects. This emphasis on assessment for learning within physical education must be embedded in all physical education core courses and studied in more depth within specialist modules.

Theory related to assessment can only be translated into meaningful practice where students have opportunities to be supported as they teach physical education.

Assessment for learning must be embedded in practice and in policy for primary physical education.

Research related to assessment in physical education has already been undertaken by final year students. Currently a particular cohort of students are investigating enhancing quality PE through assessment as they compare Irish PE classes and classes in Switzerland as they engage in a PEERS project.

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8. Good practices in initial physical education teacher education developed by members of the Cross University Network for Formative and Shared Assessment

Carlos GUTIÉRREZ-GARCÍA¹¹, David HORTIGÜELA-ALCALÁ², Ángel Luis PÉREZ-PUEYO¹, Víctor Manuel LÓPEZ-PASTOR³, & Juan FRAILE⁴

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Background and purpose

The *Cross University Network for Formative and Shared Assessment* (REFYCES in Spanish) was created in 2005 as a means for providing mutual support for academics wanting to develop “more innovative and effective assessment strategies (...) and at the same time provide a focus to stimulate a wider debate and more extensive research within the HE [Higher Education] sector in Spain” (López-Pastor et al., 2011, p. 79). It is opened to academics from any field of knowledge, having those related to physical education teacher education (PETE) a core presence within the network. The basic commitment for being member of the REFYCES is to elaborate a mixed quantitative/qualitative annual report related to one subject. For some years, these reports have been composed of three main sections: (a) *Context*; (b) *Description and assessment of one selected good practice developed within the subject*; and (c) *General data on the assessment of the whole subject*. The main aim of this study was to describe the “good practices” selected by REFYCES members in the context of initial PETE.

Methods

This was a retrospective, descriptive study, based on the analysis of 65 annual reports written by 39 university teachers from 16 Spanish universities between the 2013-14 and 2015-16 academic years. They referred 39 subjects related to initial PETE. For this study we mostly used information of section (b), by categorizing some qualitative data (*name of the good practice* and *evaluation of the good practice*) and calculating the mean and standard deviation for the question “4.2.4.a - Was this experience useful for your learning?”

Results

Reports showed a wide variety of good practices, including the design and/or development PE didactic units, PE activities, PE lessons, learning assessment tools, learning projects, oral presentations, debates, essays, edublogs or portfolios, to name a few, many of them developed by tutored students' working teams. Most teachers used rubrics and scales for students' assessments. These assessments were formative and included co-, self- and/or peer-assessments. The students globally recognized these good practices as useful, with scores ranging from three and five points on a one-to-five (*Not at all* to *Very much*) Likert scale ($M=4.58$, $SD=0.55$).

Conclusions and implications

Teachers involved in the analyzed good practices were engaged in trying to make learning activities and assessment processes more authentic, transparent, formative and shared. As a whole, these experiences are a valuable practical contribution to transformative teaching practices in higher education.

References

López-Pastor, V.M., Castejón, J., Sicilia-Camacho, A., Navarro-Adelantado, V., & Webb, G. (2011). The process of creating a cross-university network for formative and shared assessment in higher education in Spain and its potential applications. *Innovations in Education and Teaching International*, 48(1), 79-90. doi: <https://doi.org/10.1080/14703297.2010.543768>

9. Is Peer Assessment, as an Assessment for Learning (AfL) tool, reliable at primary school? Example of a dance project implemented by Generalist teachers VS PE teachers in Switzerland

Yoann Buyck – University of Geneva

We know Peer-Assessment for having lots of interest in the learning process in several disciplines (Hwang et al., 2014). Despite the work of Nadeau et al. (2008) showing that secondary students can assess each other with reliability, we know little about this in physical education (PE) at primary school.

Leirhaug & MacPhail (2015, p.626) define AfL as “the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there”. We assume that tracing the activity by involving the pupils in the process of observation as counsellor/trainer (Mascret & Rey, 2011) is one of the keys of achievement of AfL in PE. In artistic disciplines such as dance, asking pupils to observe/assess their peers may be seen as a learning outcome in itself. Indeed, artwork reception is nowadays coupled to artwork production, forming a pair of complementary activities when teaching and learning arts at school (Mili & Rickenmann, 2005).

This paper presents our ongoing doctoral study investigating the following issues:

1. How to elaborate a “scholastic form of practice” (Mascret & Dhellemmes, 2011) for teaching dance at primary school, including valid indicators of pupils’ dance skills.
2. How PE teachers can teach pupils to observe/assess with reliability their dancing peers.

Following the socio-constructivist paradigm, we suggest that observing the following dimensions would bring consistent information explaining the reliability:

- Top-down interactions. Key success factors of teaching conducting to a reliable peer assessment.
- Co-construction of the indicators. How pupils understand/verbalize the knowledge issues to take ownership of what would become the assessment indicators.

Through this research, we expect to provide PETE programs and PE teachers with guidelines in how successfully implement reliable Peer-Assessment in dance at primary school.

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10. A new method to assess motivational profiles toward physical activity as a function of projected pleasure

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Background and purpose

Recent research has outlined the importance of pleasure to engage individuals in regular physical activity (PA) (Brand & Ekkekakis, 2017). Hence, the better characterization of the physical activities proposed in high schools is crucial to optimize pleasurable experiences in young teenagers. The idea in the present research project is to adapt the physical sessions so that scholars will live positive affective experiences in physical education (PE) class, which may drive them towards a more active lifestyle.

Methods

In this study, we asked 210 senior high school students to answer a series of general questions: (1) preferred PA; (2) overall level of PA – using the IPAQ, (3) the type of motivation that gears them to engage in PA – using the PALMS questionnaire. Most importantly, all pupils used a touch pad to answer as fast as possible the MOTUS questionnaire, which is a numerical tool that we developed to address unconscious preferences to type, intensity and rhythmic physical activities.

The MOTUS tool consists in a series of 72 words selected specifically to induce different representations that a person may have on a given PA experience (e.g., sweat; pleasure; endurance; repetitions). Once comfortably installed with the tablet held with both hands, the pupils were instructed to answer YES or NO as fast as possible whether the word corresponded or not their idea of PA. A total of 190 pupils answered to the MOTUS questionnaire ; the importance of each word in characterizing PA representations was determined by classifying the words according to the time taken to respond.

Results

Results revealed that three different profiles could be characterized using MOTUS and PALMS questionnaire: 1. unengaged students; 2 free energy (active, power, strength, performance); 3. feel good (relaxing, beauty, pleasure). Each of these profiles are characterized by their own level of activity, with profiles 1 having lower activity than profile 3 and profile 2 being the most active. Each profile were also associated with specific goals for engaging in practice. The feel—strong pupils declared searching for physical condition, appearance and mastery whereas the be active pupils engaged for affiliation, psychological condition, appearance.

Conclusion

Two conclusions can be drawn from these first results. First, the MOTUS tool can be used in schools as a fun way to evaluate the motivational profiles of a group of pupils. Second, this information can be used to propose adapted physical sessions to promote adapted PE classes. Future research will now target the better characterization of the motivational keys to assess how PE teachers can use this informational content of PA representations in order to shape PE activities in such a way to trigger pleasurable experiences and trigger engagement.

References

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