

Volume LVI, Issue 4, 4<sup>th</sup> Quarter 2019

# International Journal of Physical Education

A Review Publication

Published by **MEYER & MEYER SPORT**

MEYER  
& MEYER  
SPORT

# International Journal of Physical Education

## A Review Publication

### Founding Editor:

Prof. em. Dr Dr h.c. Herbert Haag, M.S.  
University of Kiel, Institute for Sport Science  
Kiel, Germany

### Editor-in-Chief:

Martin Holzweg  
Deutscher Sportlehrerverband (DSLTV)  
Berlin, Germany  
E-mail: holzweg@dslv.de

### Associate Editors:

Dr Richard Bailey  
Berlin, Germany

Dr Konstantin Kougioumtzis  
Athens, Greece & Gothenburg, Sweden

Dr Dario Novak  
Zagreb, Croatia

### Editorial Assistant:

Natalie S. Wilcock  
Erzhausen, Germany

## Issue 4/2019 – Contributors' Addresses:

### Dr Richard P. Bailey

International Council of Sport Science and  
Physical Education  
Hanns-Braun-Straße, 14053 Berlin, Germany  
Tel.: +49 (0)30 311023210  
E-Mail: rbailey@icsspe.org

### Assoc. Prof. Dr David Barney

Brigham Young University  
249G Smith Fieldhouse, Provo, Utah 84602, USA  
Tel.: +1 0(801) 422 6477  
E-mail: david\_barney@byu.edu

### Christopher Mihajlovic

Philipps University Marburg, Faculty of Education,  
Institute for Sports Science and Motology  
Barfüßerstraße 1, 35032 Marburg, Germany  
E-mail: c.mihajlovic@jpss-fb.de


### Assoc. Prof. Dr Nevin Gündüz

Ankara University, Faculty of Sport Sciences,  
Department of Physical Education and Sports  
06830 Gölbaşı, Ankara, Turkey  
Tel.: +90 (0)312 6000100/1607  
E-mail: ngunduz@ankara.edu.tr

### Published by

Meyer & Meyer Sport  
Von-Coels-Straße 390, 52080 Aachen  
Tel.: +49 (0)241 95810-0  
Fax: +49 (0)241 95810-10  
E-mail: info@m-m-sports.com

Web: <http://www.m-m-sports.com>

 Member of the World Sport  
Publishers' Association (WSPA)

ISSN: 0341-8685

Theme ISSUE 4/2019

## Conceptual and Empirical Sports Pedagogy

## Contents

**Editorial** ..... 1

### Review Articles

R. P. Bailey, I. Glibo & K. Koenen  
Some Questions about physical literacy ..... 2

### Research Articles

D. Barney, F. T. Pleban & M. Muday  
Competition as an appropriate instructional  
practice in the physical education environment:  
Reflective experiences ..... 7

N. Gündüz & M. T. Keskin  
Evaluation of performance work on bocce,  
dart and speed stack education supported by  
peer education ..... 15

### Sport International Article

C. Mihajlovic  
Towards inclusive education? An analysis of the  
current physical education curriculum in Finland  
from the perspective of ableism ..... 29

### News of International Organisations

- AIESEP (Association Internationale des  
Ecoles Supérieures d'Education Physique) ..... 40
- ECSS (European College of Sport Science) ..... 41
- European Physical Education Association  
(EUPEA) ..... 42
- FIEP (Fédération International  
d'Education Physique) ..... 43
- ICSSPE (International Council of  
Sport Science and Physical Education) ..... 44
- ISCA (International Sport and  
Culture Association) ..... 45

**IJPE Guidelines for Contributors 2020** ..... 46

**IJPE Table of Contents 2019** ..... 47

**Upcoming Events** ..... 48

---

---

## Editorial

---

The topic of IJPE issue 4/2019 is ‘Conceptual and Empirical Sports Pedagogy’. This last issue in 2019 contains one review article, two research articles and one sport international article.

The review article of Dr Richard P. Bailey (Berlin, Germany) and his former German ICSSPE colleagues reports on some early findings from a broader study of the uses and understandings of physical literacy in scholarly and practical literature.

The first research article is a contribution of the of Assoc. Prof. Dr David Barney (Provo/Utah, USA) and US colleagues exploring gender differences of former physical education students related to reflective experiences of competition in physical education learning environment.

The second research article provided by the Turkish research team led by Assoc. Prof. Dr Nevin Gündüz (Ankara, Turkey) evaluates the performance work on bocce, dart and speed stack education supported by peer education.

This issue is rounded off with a sport international article ‘Towards inclusive education? An analysis of the current physical education curriculum in Finland from the perspective of ableism’ by the German researcher Christopher Mihajlovic (Marburg, Germany).

In addition, IJPE issue 4/2019 also contains news of the six associations: AIESEP, ECSS, EUPEA, FIEP, ICSSPE and ISCA. The Upcoming Events section provides an outlook on scientific conferences until summer 2020. IJPE 4/2019 is available either as print or online version. Access data for the online version:

wkctTsVGQ\_54 (mmurl.de/ijpe0419, user: ijpe).

<b>IJPE REVIEW TOPICS AND DATES</b>	
<b>TOPIC</b>	<b>ISSUE</b>
Instructional Theory of Sport	1/2018 1/2020
Health Foundations	2/2018 2/2020
Sports Curriculum Theory	3/2018 3/2020
Historical and Philosophical Foundations	4/2018 4/2020
Physical Education Teachers and Coach Education	1/2019 1/2021
Psychological and Sociological Foundations	2/2019 2/2021
Comparative Sports Pedagogy	3/2019 3/2021
Conceptual and Empirical Sports Pedagogy	4/2019 4/2021

### Some questions about physical literacy

R. P. Bailey<sup>1</sup>, I. Glibo<sup>2</sup>, K. Koenen<sup>1</sup> (<sup>1</sup>Berlin, <sup>2</sup>Munich, Germany)

1	Introduction
2	What is physical literacy?
3	Who invented physical literacy?
4	Conclusion

#### Abstract

The term ‘physical literacy’ (PL) is widely used in both policy and practice discourses, especially among sport, physical activity, and physical education communities. Yet, despite its popularity, interesting questions remain to be answered. For example, is PL a coherent concept, or an umbrella term for a looser collection of ideas and practices? Related this question is another, namely which competences are most commonly associated with PL? Finally, from where did the label PL originate? This short article reports on some early findings from a wide-ranging review of this intriguing field. It does so with the hope of provoking further critical discussion and, perhaps, stimulating new thinking about PL.

**Key words:** physical literacy, physical education, fundamental movement skills

#### 1 Introduction

The term physical literacy (PL) has entered both policy and practice discourses, in different countries, and many sports national and international organisations have embraced the term. It has “become a major focus of physical education, physical activity and sports promotion world-wide” (Giblin, Collins, & Button, 2014, p. 1177), with a “breath-taking rapidity” of the growth of interest (Jurbala, 2015, p. 367). PL has been proposed as a potential unifying theme in future research, and as a potent contribution to the battle against non-communicable diseases (Castelli, Centeio, Beighle, et al, 2014). Recent years have also seen PL as the focus of special issues of journal, the topic of numerous symposia and conferences, as well as the emergence of the International Physical Literacy Association (IPLA).

Despite this, many questions remain about PL. They cannot all be addressed in this article, so the intention is to discuss two sets of questions that seem fundamental to more extensive studies of PL. The questions are:

- *What is PL? Is PL a coherent concept, or just a memorable ‘brand’ for physical activities and skills? And what are the contents of PL? What competences are most commonly associated with PL?*
- *Who invented PL? From where did the label PL originate?*

This article reports on some early findings from a broader study of the uses and understandings of PL in scholarly and practical literature. There is no intention here to provide a comprehensive treatment of these questions, but rather to suggest some interesting issues.

## 2 What is physical literacy?

Definitions can take different forms, reflecting their application and confidence. The most authoritative form are descriptive definitions which outline the correct usage of a concept; when a “what is” question is asked, it is expected that a descriptive definition will state the term’s prior usage. The IPLA’s website (<https://www.physical-literacy.org.uk>), for example, states boldly that, “Physical literacy can be described as the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life”, which is a slight variation on an earlier definition from Margaret Whitehead (2010), the dominant figure in that organisation. It is widely cited by other writers (e.g., Lloyd, 2011; Wainwright, et al, 2016), typically as if it was the definitive account of PL.

So, does the IPLA provide the descriptive definition of PL? Adherents to this perspective often present it as the definition. However, in order to be credible, they must be able to demonstrate relative homogeneity among the full collection of accounts of PL, and, at this point, problems arise. The following statement is from Canada Sport for Life (2011): “Fundamental movement and sport skills are the basic building blocks of physical literacy” (cited in Lloyd, 2016, p. 108), a view summarized by Colin Higgs (2010), one of the architects of that scheme as: “A repertoire of physical skills” (p. 7). The IPLA/Whitehead account explicitly presents PL as a multi-factorial concept, made up of cognitive, behavioural and motor competences, directed towards an outcome, whereas the Canadian view is considerably more narrowly focused on basic movement skills. Matters become even more confused when a third definition is added to the list: “Physically literate individuals maintain a self-awareness that encourages moral behavior and meaningful connections with others in physical activity contexts” (Allan, et al, 2017, p. 523). So now a new dimension has been added to the mix, namely ethical/existential development, which does not feature in either of the other two definitions.

In order to preserve a sense of authority and coherence, advocates have offered some creative responses. Talking specifically about the Canadian and IPLA versions, Higgs (2010) claims that the only substantive distinction is between “academic” and “practical” (p. 6) approaches to a unitary conception of PL. Edwards, Bryant, Keegan, et al (2018) endorse this distinction, substituting the terms ‘idealist’ and ‘pragmatic’, while Green, Roberts, Sheehan, et al (2010) write: “While different approaches to physical literacy have emerged around the world ..., there remains common ground within the conceptual parameters of physical literacy that center (sic) around the notion that it is not an end state”. This is not a plausible explanation.

Digging deeper into this matter, the authors have undertaken some analyses of the language used in PL literature. This is part of a much wider study of this topic, using systematic reviewing of published sources, linguistic, inductive and deductive analyses of texts, and a survey of practitioners’ interpretations of PL. The review generated a list of more than 40 distinct definitions. The analysis focuses on what will to be the key elements within definitions, primarily nouns and verbs. Adjectives and adverbs were only included when they unambiguously referred to the descriptive content of the definition. All other words were removed as non-essential for the analysis (e.g. pronouns, prepositions, conjunctions). The words ‘physical’ and ‘literacy’ were also excluded, as they were near-universal features of the definitions. Truncation (also called stemming) was applied to include and combine various word endings and UK/US spellings. The truncation symbol ‘\*’ for this purpose (e.g., Activit\* - activity; activities). The content of identified definitions of PL were analysed to identify the terms and concepts present in these definitions. Once a term or concept was identified in at least two definitions, it was added to the list of terms, following the guidance of Frérot, et al

(2018). An online unique word calculator (<https://planetcalc.com/3205>) counted the number of unique words in a given text, was used for this task. An abbreviated (for lack of space) list resulting from this process is given below:

Table 1

*Word count in PL definitions*

Rank	Word	Frequency
1	activit*	38
2	movement*	37
3	skills	31
4	confiden*	25
5	physically	23
6	competen*	22
7	knowledge	21
8	health*	20
9	development	18
9=	motivation	18
11	abilit*	13
12	understand*	12
13	variety	11
13=	sport*	11
13=	life	11
16	active	10
16=	move*	10

As can be seen from this table, there is a preponderance of words connected with physical activity and physical skills, ahead of cognitive and behavioural terms. The elements of Whitehead’s holistic conception of PL all appear in the analysis (if the less frequent responses are included), and this would be expected, as her’s (and variations, like that from the IPLA) is the most cited definition in the literature. However, more importantly for present purposes, is the finding that the 71 key terms indicate widely varied usage of language when defining PL. This does not undermine the quality or relevance of the quoted accounts. It just undermines claims that any of them are descriptive of PL. They are, in fact, all stipulative definitions, providing a ‘local’ account. In other words, each of the definitions could (and perhaps should) be prefaced with a statement like ‘this is how we use the term ...’ of they are to be fully accurate. The conflation of descriptive and stipulative definitions is characteristic of much of the PL literature. Personal interpretations are frequently presented as is there consensus axiomatic truth. This is misleading, and it may also be unhelpful to the field. The simple truth is that PL research is in its very early days, and there is probably no “correct” answers to any of the central questions asked by researchers and practitioners. Reading the literature in the PL field suggests that there are two relatively large groups that ought to raise some concerns: those who are unaware of the contested nature of the on-going debates in this area; and those who are aware, but wish to impose their interpretation as the authoritative one. Neither seem likely to inspire new and innovative enquiry.

### 3 Who invented physical literacy?

With the space available, the article now turns to the question of the origin of the term PL. Analysis of the literature from the systematic review presented an interesting phenomenon: different writers attributed different points of origin to PL.

By far the most common view is that Margaret Whitehead, a well-known physical education professor from the United Kingdom, invented the concept. The IPLA, presumably an authority on this subject, claims that “The concept of physical literacy was first proposed in 1993 in a paper presented by Margaret Whitehead at the International Association of Physical Education and Sport for Girls and Women Congress in Melbourne, Australia.” (<https://www.physical-literacy.org.uk/about/>). Likewise, Lloyd (2016) claims that “Physical Literacy, a concept put forward by a British physical education and phenomenological scholar Margaret Whitehead ... Margaret Whitehead created the concept of physical literacy with the intention of changing the underlying philosophy of physical education” (p. 108), and presumably Lounsbury & McKenzie (2015) had Whitehead in mind when they stated that ‘the term originated in the UK and its adoption has spread to Canada’ (p. 140).

Other individuals have been proposed as originators of PL, such as Gambetta’s (2015) claim that that title belongs to “Kelvin Giles, an innovator and pioneer in athletic development” (unpaged). A consequence of this is that PL is frequently portrayed as a recent phenomenon (e.g., Spengler, & Cohen, 2015). To test such claims, records in Google Scholar (<https://scholar.google.co.uk>) were search year-by-year, with the exact phrase “physical literacy”. Generated records were then analysed by hand to ascertain whether or not they were relevant for this enquiry. The following results were produced:

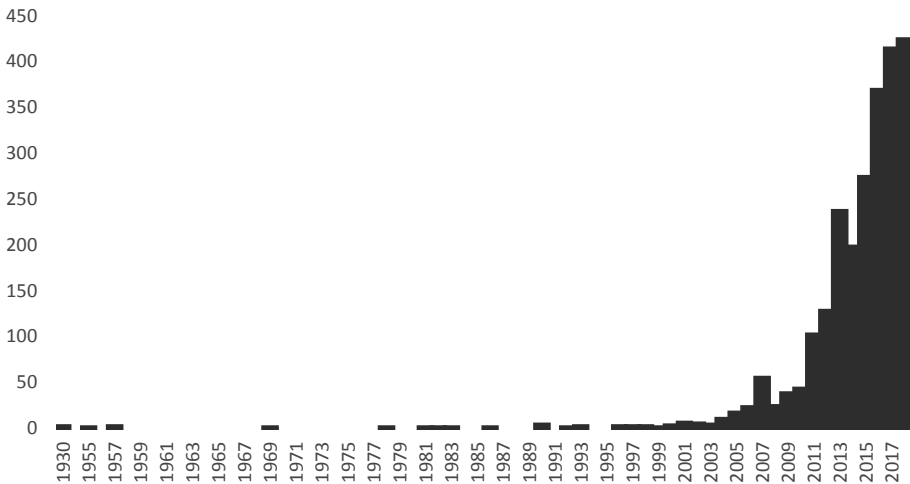


Figure 1. Citation of Physical Literacy in Google Scholar

This analysis shows that, far from being a recent idea, PL has its origin during the Early Twentieth Century. Two publications were discovered from 1930, and both came from the United States (e.g., Pennsylvania State Education Association, 1930; Rogers, 1930). In both of these early references, PL was used in a way similar to that describes above, namely to describe a sense of movement competence, and is specially of physical skills. Moreover, rather casual reference to PL in Rogers (1930) implies that the term was expected to be familiar to readers, and, consequently, that PL was somewhat familiar to people working in sport/physical education some time before that date. It is also evident

from the graph that academic engagement with PL since that time was relatively minimal. It seems reasonable to suppose that it was Whitehead's (2001) re-introduction of PL early in the Twenty-First Century that stimulated its popular usage by practitioners and academics.

#### 4 Conclusion

This article attempted to provide some brief discussion of the use of the term PL in the published literature, and to explore some of the ambiguities that currently characterise that literature. Examination of the first pair of questions, about the coherence and content of PL, found that there is no universal, descriptive definition, and that PL is discussed in a wide variety of ways, prioritising different themes, and addressing varied concerns. The final question, about the origin of the idea of PL shows conclusively that it is not a modern idea, but actually dates back many decades. It is also apparent, however, that recent years, roughly coinciding with Whitehead's contribution, have witnessed a remarkable growth of scholarly interest in the idea.

#### References

- Allan, V., Turnnidge, J., & Côté, J. (2017). Evaluating approaches to physical literacy through the lens of positive youth development. *Quest*, 69(4), 515–530.
- Castelli, D. M., Centeio, E. E., Beighle, A. E., Carson, R. L., & Nicksic, H. M. (2014). Physical literacy and comprehensive school physical activity programs." *Preventive Medicine*, 66, 95–100.
- Edwards, L. C., Bryant, A. S., Keegan, R. J., Morgan, K., Cooper, S. M., & Jones, A. M. (2018). 'Measuring' physical literacy and related constructs: A systematic review of empirical findings. *Sports Medicine*, 48(3), 659–682.
- Frérot, M., Lefebvre, A., Aho, S., Callier, P., Astruc, K., & Glele, L. S. A. (2018). What is epidemiology? Changing definitions of epidemiology 1978-2017. *PLoS one*, 13(12), e0208442.
- Gambetta, V. (2015). "The Right Route." Retrieved from [http://training-conditioning.com/2007/10/19/the\\_right\\_route\\_1/index.php/5/5](http://training-conditioning.com/2007/10/19/the_right_route_1/index.php/5/5).
- Giblin, S., Collins, D., & Button, C. (2014). Physical Literacy. *Sports Medicine*, 44(9), 1177–1184.
- Green, N. R., Roberts, W. M., Sheehan, D., & Keegan, R. J. (2018). Charting physical literacy journeys within physical education settings. *Journal of Teaching in Physical Education*, 37(3), 272–279.
- Higgs, C. (2010). Physical literacy - two approaches, one concept. *Physical & Health Education Journal*, 76(1), 6–10.
- Jurbala, P. (2015). What Is Physical Literacy, Really? *Quest*, 67(4), 367–383.
- Lloyd, R. J. (2011). Awakening movement consciousness in the physical landscapes of literacy: Leaving, reading and being moved by one's trace. *Phenomenology & Practice*, 5(2), 73–92.
- Lounsbury, M. A., & McKenzie, T. L. (2015). Physically literate and physically educated: A rose by any other name?. *Journal of Sport and Health Science*, 4(2), 139–144.
- Pennsylvania State Education Association (1930). *Pennsylvania School Journal*, 78, 12.
- Rogers, J. E. (1930). Why Physical Education? *Journal of Education*, 112(15), 367–368.
- Spengler, J. O., & Cohen, J. (2015). *Physical literacy: A global environmental scan*. Washington, DC: The Aspen Institute.
- Wainwright, N., Goodway, J., Whitehead, M., Williams, A., & Kirk, D. (2016). The Foundation phase in Wales—a play-based curriculum that supports the development of physical literacy. *Education 3-13*, 44(5), 513–524.
- Whitehead, M. (2001). The concept of physical literacy. *European Journal of Physical Education*, 6(2), 127–138.
- Whitehead, M. (Ed.) (2010). *Physical Literacy throughout the lifecourse*. London: Routledge.



## **Competition as an appropriate instructional practice in the physical education environment: Reflective experiences**

*D. Barney<sup>1</sup>, F. T. Pleban<sup>2</sup> & M. Muday<sup>2</sup> (<sup>1</sup>Provo, <sup>2</sup>Nashville, USA)*

1	Introduction
2	Appropriate instructional practices (AIP)
3	Competition in physical education and gender
4	Materials and methods
5	Results
	5.1 <i>Quantitative data analysis</i>
	5.2 <i>Follow-up qualitative data analysis</i>
6	Discussion

### **Abstract**

The purpose of this study was to explore gender differences of former physical education students related to reflective experiences of competition in physical education learning environment. In the school environment, students are positioned in competitive situations, including in the physical education context. Literature has addressed the importance of preparing future physical educators to address the role of competition in physical education. Participants for this study were 304 college-aged students and young adults ( $M = 1.53$ ,  $SD = .500$ ), from a private university and local community located in the western United States. When comparing gender, significant differences ( $p < .05$ ) were reported for four (questions 5, 7, 12, and 14) of the nine scaling questions. Follow-up quantitative findings reported that males (41%) more than females (27%) witnessed fights in physical education environment during competitive games. Qualitative findings reported fighting were along the lines of verbal confrontation. Female participants tended to experience being excluded from games, when compared to male participants. Both male and female participants (total population; 95%, males; 98%; and females 92%) were in favor of including competition in physical education for students. Finding suggest physical education teachers and physical education teacher education programs have a responsibility to develop gender neutral learning experiences that help students better appreciate the role competition plays, both in and out of the physical education classroom.

**Key words:** competition, physical education, physical education teacher education

### **1 Introduction**

On more than one occasion in a person's life they will view the outcome of a situation as a win or loss. Situational outcomes may range from applying for and gaining employment among a field of many applicants, to playing recreational horseshoes with a family member or friend. Both incorporate, at varying levels, an element of competition. Brown and Grineski (1992) stated, "It is assumed that we live in a competitive society and that student's must be educated to function in a competitive world."

In the school environment, students are positioned in competitive situations; encompassing a range of subject areas. Competition in the school environment also applies to students in a physical education context. A review of literature specific to competition in physical education identifies both positive and negative aspects affecting student development (Bernstein, Phillips, & Silverman, 2011; Drewe, 1998; Hager, 1995 & Layne, 2014). Positive aspects of competition in physical education class may come from participating in competitive activities. Traits such as courage, dedication, discipline, and perseverance may be gained for the purpose preparation for other competitive situations in life. Another positive aspect is the value and satisfaction of successfully using their skills, talents, and abilities in a given situation. Negative aspects of competition in physical education class may be the division and labeling of students into winners and losers. Another identified negative aspect of competition is the 'win at all costs' mentality, which may manifest itself in cheating. Cheating, as it relates to the physical education environment, may be described as intentionally fouling or injuring someone (Drewe, 1998).

## **2 Appropriate instructional practices (AIP)**

The National Association for Sport and Physical Education (NASPE) have published three documents for elementary, middle school, and high school physical education containing statements specific to appropriate instructional practices in k-12 physical education. Within these documents there are five subareas, which include the 1) learning environment, 2) instructional strategies, 3) curriculum, 4) assessment, and 5) professionalism. One purpose of these documents is to aid the physical education teacher in their teaching practices that are appropriate for student learning. These documents also assist physical educators in avoiding practices inappropriate for student learning. In the learning environment section of these documents, a number of statements discuss competition in k-12 physical education (NASPE, 2009a, NASPE, 2009b, & NASPE, 2009c). One statement addressing appropriate instructional practice and competition is "Teachers develop learning experiences that help all students understand the nature and the different kinds of completion" (2009c). An example of a statement of an inappropriate instructional practice of competition is, "Teachers allow some students - because of gender, skill level or cultural characteristics - to be excluded from or limited in access to participation and learning. Students are required to participate in activities that identify them publicly as winners or losers" (2009c).

## **3 Competition in physical education and gender**

Literature has been specific to competition in physical education investigating female physical education teacher's concepts of fun (O'Reilly, Tompkins, & Gallant, 2001). Data collection included physical education teacher interviews investigating their thoughts of competition, focusing on the concept of fun, in physical education class. Female physical education teachers taught games and activities that were competitive in nature, thus deciding how they would handle arguments and losing, if occurred. Investigators reasoned if female physical education teachers reduced the possibilities for winning and losing (or even eliminated) most students would find the activity fun, even in the context of competition. To further research competition in physical education setting and its effects on students, the objective of this study was to explore gender differences of former physical education students related to reflective experiences of competition in physical education learning environment.

#### **4 Materials and methods**

**Participants.** Study participants were 304 college-aged students (143 males and 161 females) from a private university and local community located in the western United States. Participant ages ranged from 18 to 28 years.

**Study question.** To what extent do gender differences exist among former physical education students related to competition in physical education learning environment?

**Instrumentation.** Through a review of the literature, investigators could not identify an instrument specific to competition in physical education. For this study, we developed a 16-question survey instrument. The survey consisted of nine yes/no questions (five of nine yes/no questions contained qualitative follow-up), five open-ended questions, and two demographic questions. To establish content validity, college-age students with a physical education knowledge base reviewed survey questions for clarity and understanding. For reliability, the instrument was pilot-tested on college-aged students who did not participate in this study.

Participants answered questions regarding competition indices: types of competitive games/activities (question 1), feelings of losing and exclusion from competitive games (question 3), experience of competitive team selection (question 4), conflict resulting from competitive game participation (question 5), emotions specific to participation in competitive games/activities (questions 6 & 8), feelings related to exclusion in competitive games (question 7), positive feelings of participation in competitive games/activities (question 9), negative feelings of participation in competitive games/activities (questions 10 & 13), class climate from competitive game participation (question 11), and attitudes specific to participation in competitive games/activities (question 14).

**Procedures.** Convenience sampling was employed to collect data for this study. Before study implementation, investigators contacted university physical education class instructors explaining both the study and survey. After obtaining instructor agreement, the researchers attended selected physical activity classes and administered the survey (approximately 10 minutes to complete). Before survey administration, investigators explained the study to participants. All participants were subsequently assured that their voluntary decision to participate or not participate in the study would not affect their grade in class or class standing. A 98% survey response rate was recorded. Prior to any survey distribution and data collection, university Institution Review Board (IRB) reviewed study protocol and granted approval to conduct the study.

#### **5 Results**

The data set has 304 participants with complete data for analysis. Participants for this study were 304 college-aged students and young adults ( $M = 1.53$ ,  $SD = .500$ ), from a private university and local community located in the western United States. Participants consisted of 143 males & 161 females. Significance was established at the  $p < .05$  level.

##### **5.1 Quantitative data analysis**

Analyses were performed on student responses to the survey instrument. Quantitative data analysis consisted of Chi-squares ( $\chi^2$ ); as well as measures of central tendency and dispersion. Pearson's Chi-Squared Test was conducted used to compare competition in the physical education environment stratified by gender and significant effects reported. Pearson's Chi-Squared Tests, levels of significance ( $p < .05$ ), and Cramer's V strength

of association were reported for all significant effects. Study sample individual question responses, also stratified by gender, were presented as percentages; with accompanying means and standard deviations. Significance was established at the  $p < .05$  level. SPSS Statistics 21 was used for analyses.

Table 1 depicts summary descriptive statistics (percentages; with means and standard deviations) for participant responses, and stratified by gender, by question response. Only observed data values were used for these summaries. Significant differences were reported for four (questions 5, 7, 12, and 14) of the nine scaling questions when compared to gender.

Table 1

*Participant responses in percentage by gender*

Question Number	Total Population (N=304)				Male (N=143)				Female (N=161)			
	Yes(%)	No (%)	M	SD	Yes(%)	No (%)	M	SD	Yes(%)	No (%)	M	SD
1. Did you participate in competitive games in your k-12 PE classes?	98.7%	1.3%	1.01	.114	99.3%	.7%	1.01	.084	98.1%	1.9%	1.02	.136
3. Did you participate in competitive games/activities where you would be eliminated if you lost (tag games, relay races, or knockout...)? How did you feel having to sit out of the activity?	91.4%	8.6%	1.09	.280	90.9%	9.1%	1.09	.288	91.9%	8.1%	1.08	.273
4. Did you experience students (captains) coming to the front of the class and pick teams for competitive games? How did this experience make you feel?	63.5%	36.5%	1.37	.482	69.2%	30.8%	1.31	.463	58.4%	41.6%	1.42	.494
5. Did you ever witness fights in your PE class during a competitive game in PE?	33.9%	66.1%	1.66	.474	41.3%	58.7%	1.59	.494	27.3%	72.7%	1.73	.447
6. Do you feel any good came from participating in competitive games in PE? Please explain your answer.	92.8%	7.2%	1.07	.260	95.8%	4.2%	1.04	.201	90.1%	9.9%	1.10	.300
7. Did you ever feel excluded during competitive games in PE? Please explain your answer.	34.2%	65.8%	1.66	.475	25.9%	74.1%	1.74	.439	41.6%	58.4%	1.58	.494
11. When competitive games were played in PE classes, did you feel the environment or class climate was negatively affected? Please explain your answer.	26.6%	73.4%	1.73	.443	22.4%	77.6	1.78	.418	30.4%	69.6%	1.70	.462
12. If you played in a competitive game in PE classes, did you feel you had the skills to be successful and have a good experience?	82.2%	17.8%	1.18	.383	92.3%	7.7%	1.08	.267	73.3%	26.7%	1.27	.444
14. In your opinion, do you think it is good or right to have students participate in competitive games/activities in PE classes? Please explain your answer	95.4%	4.6%	.105	.210	98.6%	1.4%	1.01	.118	92.5%	7.5%	1.07	.263

Note. Total population Mean and Standard Deviation for question responses (1.53±.500).

Analysis using Pearson's Chi-Squared Test for responses stratified by gender to the following question (“yes” or “no”), “*Did you ever witness fights in your PE class during a competitive game in PE?*” (question 5) indicated an association by gender, with males ( $M = 1.59, SD = .494$ ) and females ( $M = 1.73, SD = .447$ );  $\chi^2 (1, N = 304) = 6.560, p < .05$ . Cramer's V effect size was .147, representing a small effect. Responses to the following question (“yes” or “no”), “*Did you ever feel excluded during competitive games in PE? Please explain your answer?*” (question 7) indicated an association by gender, with males ( $M = 1.74, SD = .439$ ) and females ( $M = 1.58, SD = .494$ );  $\chi^2 (1, N = 304) = 8.337, p < .01$ . Associated effect size was .166, representing a small effect. From analysis using Pearson's Chi-Squared Test for responses stratified by gender to the following question (“yes” or “no”), “*If you played in a competitive game in PE classes, did you feel you had the skills to be successful and have a good experience?*” (question 12) indicated an association by gender, with males ( $M = 1.08, SD = .267$ ) and females ( $M = 1.27, SD = .444$ );  $\chi^2 (1, N = 304) = 18.747, p < .001$ . Cramer's V effect size was .248, representing a small to medium effect. Responses to the following

question (“yes” or “no”), “*In your opinion, do you think it is good or right to have students participate in competitive games/activities in PE classes? Please explain your answer?*” (question 14) indicated an association by gender, with males ( $M = 1.01$ ,  $SD = .118$ ) and females ( $M = 1.07$ ,  $SD = .263$ );  $\chi^2(1, N = 304) = 6.320$ ,  $p < .01$ . Respective effect size was .144, representing a small effect.

## **5.2 Follow-up qualitative data analysis**

Additional data results were comprised of short-answer responses from the study participants. Thematic analysis and findings reported for 12 of the 16 survey questions. Participants were asked to explain and expound their responses from the participants in this study. Thematic content analysis performed on open-ended responses. Referencing qualitative analysis, researchers read and re-read the data until common themes became evident for each survey question (Mueller & Skamp, 2003). Data were first examined using inductive content analysis (Lincoln & Guba, 1985 & Sarvela & McDermott, 1983) in order to identify emerging themes. Next, the constant comparative method (Glasser and Strauss, 1967) was employed, first to categorize then compare and contrast each unit of information with all other units of information with the intent of linking those with similar meanings (Patton, 1980).

Participants answered questions regarding competition indices: types of competitive games/activities (question 1), feelings of losing and exclusion from competitive games (question 3), experience of competitive team selection (question 4), conflict resulting from competitive game participation (question 5), emotions specific to participation in competitive games/activities (questions 6 & 8), feelings related to exclusion in competitive games (question 7), positive feelings of participation in competitive games/activities (question 9), negative feelings of participation in competitive games/activities (questions 10 & 13), class climate from competitive game participation (question 11), and attitudes specific to participation in competitive games/activities (question 14). Analysis revealed five major themes: (a) real-world learning experience, (b) social bonding, (c) negative stress, (d) exclusion, and (c) conflict (Figure 1).

***Real-world learning experience from competition in the physical education environment.*** Numerous participant responses focused on the application of real-world learning from physical education competition: “Real life is competition. Kids need to learn that”, and “It gives real world experience. Not everyone is a winner.” One participant paralleled earlier thoughts, stating, “Life is competitive. You need to get used to it.”

One minor theme that arose from was that of social skill development. When asked if there were any positives coming from experiences with competition in PE (Question 9), statements included “I learned social skills, because I had to learn to work together with my teammates.”

***Social bonding from competition in the physical education environment.*** Referencing social bonding, responses included: “I met new friends and learned a new game and had fun,” and “We did a tournament for volleyball and I bonded with my teammates” From question 11, a response, referencing social bonding included, “I got to be active, have fun, meet new people who are interested in the same thing.”

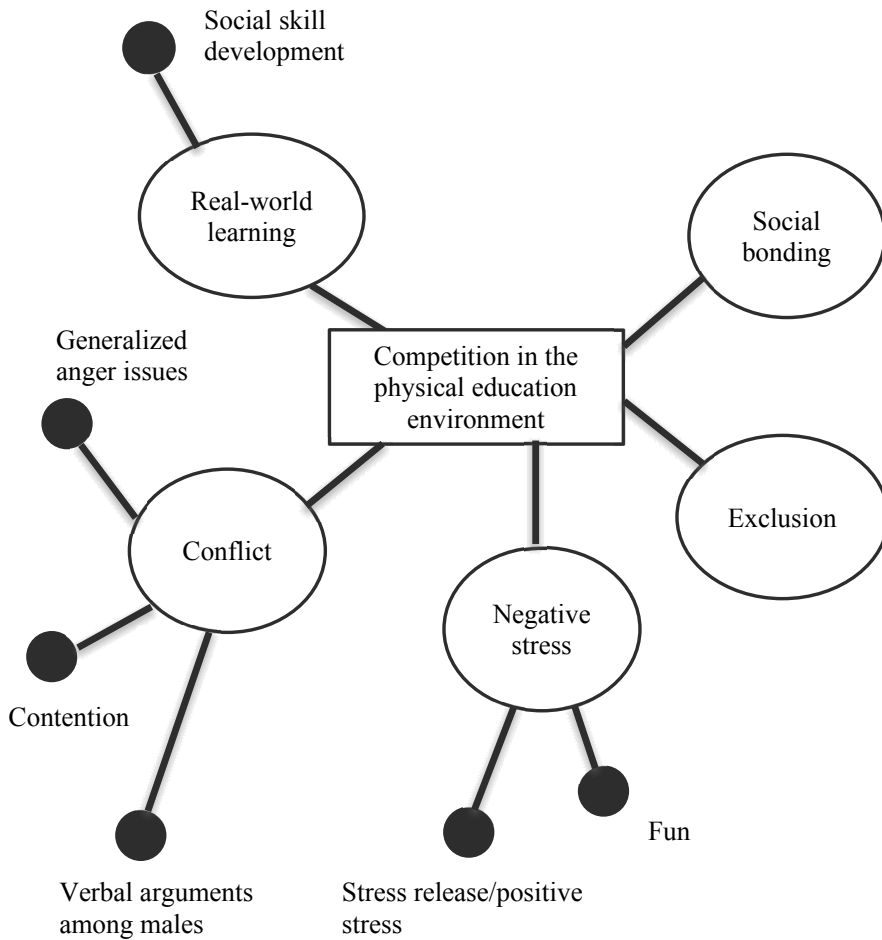


Figure 1. Competition in physical education: major and minor themes.

**Negative stress from competition in the physical education environment.** Generally, participants referenced negative stress from physical education competition. Responses included: “It gave me anxiety that you would be picked last,” “I began to associate all of PE with the rejection and humiliation of competitive games”, and “I felt horrible. I was one of those people who always was picked last... every single time.” Interestingly, other identified minor themes included benefits from competition (stress release/positive stress and fun): “I would have struggled a lot more in school because I find a release from the stress in academics. The competitive games helped me,” and “I think if done in the right way everyone can have fun.”

**Exclusion from competition in the physical education environment.** Female participant responses reflected a sense of exclusion from competition in physical education: “If I was on a team with mostly boys they wouldn’t pass the ball to me very much,” “Well there are always times when the good players always pass to each other and ignore the rest,” and “I would get annoyed if no one would pass me the ball or think I was incompetent.” Female participants also reported: “There are always times when the good players always pass to each other and ignore the rest”, and “People barely

passed it to me, because it was about winning, not helping everyone learn and develop skills.”

***Conflict from competition in the physical education environment.*** Frequent answers from male study participants reflected a general theme of conflict evolving from physical education class and conflict: “I was only negatively affected when student chose to be negative or have a bad attitude,” “It was a very charged atmosphere and some kids got very intense about it,” and “cheating can take place.” One response addressed division in the physical education environment, stating “division of jocks from everyone else.” Minor themes emerged, included: “contention”, “verbal arguments among males”, and “generalized anger issues”.

## **6 Discussion**

The purpose of this study was to explore gender differences of former physical education students related to reflective experiences of competition in physical education learning environment. Participant experiences with competition in PE were both positive and negative. A majority (98%) of the participants, both male and female, participated in competitive games in their k-12 PE classes.

Male participants (41%) witnessed fights in physical education environment during competitive games, as compared to 27% female participants witnessing fights during competitive games. Participant comments referencing fighting were along the lines of verbal confrontation. For example: “only some arguments”, “the arguments came after class”, and “heated argument, usually it being from the boys.” Drewe (1998) emphasized, “Critics of competition argue that competition lends itself to ‘violence and hooliganism’ because of the selfish nature of competitive activities” (pg. 10). Singleton (2003) stated, “moral behavior such as fighting, lying, cheating, in which students may engage when playing team games in physical education class, remain problematic for teachers” (p. 194).

Female participants tended to experience being excluded from games, when compared to male participants. Bernstein, Phillips, and Silverman (2011) studied attitudes and perceptions of middle school students towards competitive activities in PE. Study results indicated that participants found competitive games fun, yet participants who lacked specific activity for adequate participation were more often excluded competitive activity.

Both male and female participants strongly felt (total population; 95%, males; 98%; and females 92%) that competition in PE class was good for students. Many of the participant’s responses were in favor of competition in physical education (“I think competition is a part of life and you can’t avoid it,” and “Taking away competition in PE is a disservice to students. The world is competitive, gives students an environment to build skills, confidence, teamwork and tenacity”). One participant summarized competition in the physical education environment as:

“I think it is good to get students used to competition, winning and losing. Also learning to work and get along with other people, learning to channel and control emotions, learning good sportsmanship, learning to keep trying even when losing or when you think something unfair happens. I think you can learn lots of life skills from competition.”

***Implications for physical education teacher education programs.*** Current and previous research should give PE teachers opportunity for reflection on competitive games. Yet, Layne (2014) felt PE teachers need to avoid focusing on ‘winning and losing’ and not letting a students competitive passions take over their emotions; thus

minimizing student conflict during or after competitive physical education games. Physical education teachers and physical education teacher education programs have a responsibility to develop gender neutral learning experiences that help students better appreciate the role competition plays, both in and out of the physical education classroom (NASPE, 2009a, NASPE, 2009b, & NASPE, 2009c).

**Study limitations.** Investigators have noted limitations placed upon the study. For this study, participants came from one university and its surrounding community. Because the participants came from locale it may not allow a representative sampling of participants from other schools, or in other geographic regions, thus limiting the generalizing of the findings. Thus, conclusions are mostly applicable to those participant demographics. Investigators are also aware that some of the reported themes are more aligned to specific participant school environments. Research on improving physical education teacher education needs to be continued in new meaningful directions. Paralleling Hassandra, Goudas, & Chroni (2003), physical education teacher education research should continue to incorporate diverse investigation methodology in order to better examine the environmental factors in the physical education environment.

## References

- Bernstein, E., Phillips, S. R., & Silverman, S. (2011). Attitudes and perceptions of middle school students toward competitive activities in physical education. *Journal of Teaching in Physical Education, 30*, 69–83.
- Brown, L., & Grineski, S. (1992). Competition in physical education: An educational contradiction? *Journal of Physical Education, Recreation and Dance, 63*, (1), 17–19 & 77.
- Drewe, S. B. (1998). Competing conceptions of competition: Implications for physical education. *European Physical Education Review, 4*, 5–20.
- Glasser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory*. New York, NY: Aldine.
- Hager, P. F. (1995). Redefining success in competitive activities. *Journal of Physical Education, Recreation and Dance, 66*, 26–30.
- Hassandra, M., Goudas, M., & Chroni, S. (2003). Examining factors associated with intrinsic motivation in physical education: A qualitative approach. *Psychology of Sport and Exercise, 4*, 211–223.
- Layne, T. (2014). Competition within physical education: using sport education and other recommendations to create a productive, competitive environment. *Strategies: A Journal for Physical and Sport Education, 27*, 3–7.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry* (pp.339-344). Newbury Park: Sage.
- National Association for Sport and Physical Education. (2009a). *Appropriate instructional practice guidelines for elementary school physical education*. Reston, VA: Author.
- National Association for Sport and Physical Education. (2009b). *Appropriate instructional practice guidelines for middle school physical education*. Reston, VA: Author.
- National Association for Sport and Physical Education. (2009c). *Appropriate instructional practice guidelines for high school physical education*. Reston, VA: Author.
- O'Reilly, E., Tompkins, J., & Gallant, M. (2001). 'They ought to enjoy physical activity, you know?' Struggling with fun in physical education. *Sport, Education and Society, 6*, 211–221.
- Sarvela, P. D., & McDermott, R. J. (1993). *Health Education Evaluation and Measurement: A Practitioner's Perspective*. Madison, WI: WCB Brown & Benchmark.
- Singleton, E. (2003). Rules? Relationships?: A feminist analysis of competition and fair play in physical education. *Quest, 55*, 193–209.



---

---

# Evaluation of performance work on bocce, dart and speed stack education supported by peer education

---

N. Gündüz<sup>1</sup> & M. T. Keskin<sup>2</sup> (<sup>1</sup>Ankara, <sup>2</sup>Nevşehir, Turkey)

1	Introduction
2	Method
	2.1 Research group
	2.2 Data collection tool
	2.3 Data collection
	2.4 Data analysis
3	Findings
	3.1 Interview results of peer teachers
	3.2 Interview results of peer learners
4	Discussion
5	Conclusion and suggestion

## Abstract

The purpose is to evaluate performance homework on bocce, darts and speed stack education supported by peer education. In research, the performance homework, prepared by teacher, has been given to 11<sup>th</sup>-grade students, 120 of which completed. Students were requested to teach their bocce, darts and speed stack abilities to their peers and were granted four-weeks' time to complete this task. Applied courses were given twice a week for 60 minutes a day. In research, quantitative data collection tools, performance evaluation, peer evaluation and ability evaluation forms have been used. For qualitative data, half-structured interview questions were asked. As a result, between the pre and final test assessments related to darts, bocce and speed stack there was a significant increase ( $p < 0.05$ ). According to peer assessment, students learnt the abilities in a good manner from their peers and attending the implementation completed homework successfully. In qualitative data, peer teachers said that "they liked to teach the ability, took responsibility, communication and self-confidence improved." Peer learners emphasized "they liked learning from peers and communication improved and they became a team."

**Key words:** peer education model, bocce, darts, speed stack, performance evaluation

## 1 Introduction

The peer teaching model is sometimes referred to as peer-assisted teaching (Sidentop & Tannehill, 2000), or peer-coaching. The aim in this system, which supports the students' cognitive and social learning, is teaching a concept or a skill to a few students or more who are at the same level of a talented student having trained to the accompaniment of the teacher guidance (Haustell-Wilson et al. 1997, Topping et al., 1998, Lougueville et.al., 2002., Doğanay, 2007). According to NASPE (1995), it is an appropriate instructional model designed to help the student learn through peer learning. Peer Assisted Learning (PAL) is a teaching strategy used in physical education courses as well as in many other disciplines by interacting with same-age groups or cross-age peers (Haustell-Wilson et.al. 1997).

Generally, in the model which can be defined as an effective teaching method through peer, peer teachers should be trained in advance and communication skills should be taken care of (Weinder et al., 2007). It is also important that the peer is a leader, a role model and a successful communicator (Nurmi, 2015). In this model, peer teachers help their peers in small groups or one-to-one by developing their working skills, maintaining their classroom communication, helping them to solve their problems and encouraging independent learning (Falchikov, 2001). Therefore, peer-assisted learning has been accepted as an educational experience that provides benefit for both learners and teachers in theoretical and applied research (Weinder et al., 2007, Nurmi, 2015).

This model aims to improve the communication between students, social skills, and the ability to work together and to improve the sense of “us” instead of me (Iserbehyt, 2013). This model, which provides diversity in education, also gives the teacher the opportunity to get to know the students and to monitor them. Because the student who is not active enough in the classroom puts forward his / her identity and shows his / her individual and social attitude clearly through peer teaching (Gagnon, 2016). There are many positive aspects such as positive life experiences, in addition to this increasing cooperation, self-expression, taking responsibility, evaluating themselves, being flexible in learning and teaching (Mirzeoğlu, et al., 2015). In peer education, peers do not have positions to reward or punish each other; they use a similar language, and influence each other to provide a suitable learning environment (Topping, 1996). In this study, the students taught their peers bocce, darts and speed stack skills. Of these activities, darts has been accepted as a sports branch since the beginning of the 20<sup>th</sup> century. This sport which combines sport and entertainment is an activity that makes people let off steam, improves mental as well as physical activity, increases attention and concentration and improves hand-eye coordination ([www.tbddf.gov.tr](http://www.tbddf.gov.tr)). Research shows that stacking sports which in this study consists of twelve cups appeared first in the 1980s, and stacking sports which appeared first in the USA in the noughties, have become one of the most important activities in schools. The aim in this sport is to put the cups on top of each other and collect them as soon as possible. Simultaneous use of both hands in this sport, hand-eye coordination, and the use of right and left parts of the brain at the same time has proven to have positive contributions to the development of motor skills. In addition, it has become one of the important activities for physical education lessons due to creating fun for children ([www.speedstacks.com.tr](http://www.speedstacks.com.tr)). Bocce game, the last activity in the research, has its roots in Egypt and Romans; it started to be played in Turkey in the early 1990s. Bocce game is a sports branch played with synthetic bocce balls on a smooth field limited by punta, raffa and volo throwing systems. This activity, which is applied according to the level of the group with its different branches, increases the motivation and concentration of the participants (Türkmen, 2011).

In this study, the PE teacher has given the students a performance project that is themed teaching bocce, darts, and speed stack supported by peer education. One of the measurement tools used in the evaluation process and which aims to measure the different developmental characteristics of the student is the performance evaluation. Performance evaluation is defined as the status and assignments that will enable the students to convert them into action by considering their individual characteristics such as learning styles. The aim of performance evaluation is to show how the student will solve the problems of daily life and use the knowledge and skills he/she has to solve the problem. Thanks to performance evaluation, students can have the opportunity to work, repeat and control over a long period of time without being limited to exam hours, and to present their own proficiency levels according to the created measurements (Ministry of National Education, 2007). It is important to evaluate the assessment in a learner-

centred manner so that the physical education course can achieve its goal. In order to measure and evaluate the gains in the physical, motivational, cognitive, emotional and social development areas in the targeted teaching process in the physical education curriculum, teachers need to know, develop, use and evaluate the different types of measurement tools as there are gains in the learning areas from different fields (MNE, 2009). In light of this information, this research aims at evaluating the performance homework on the teaching of peer supported darts, bocce and speed stack to increase the students' learning through this practice, to make them more permanent and to introduce them to different activities and to gain the ability to teach the activities they have learned to their peers.

For this purpose, we look for answers to the following questions:

1. Does the skill level of peer students change in four weeks?
2. What are the challenges and solutions of peer teachers in practice?
3. What are the views of peer teachers on the application of peer-supported skills?
4. What are the challenges and solutions of peer learners in practice?
5. What are the views of peer learners on the peer-assisted application?

## **2 Method**

### **2.1 Research group**

The quantitative group of this study consisted of 11<sup>th</sup> grade students studying at Hazim Kulak Anatolian High School (five classes, a total of 150 students). A total of 120 students completed the performance assignment, including students who voluntarily taught six peers from each class and 18 peer learners, 30 peer teachers and 90 peer learners from five classes. In total, 15 students voluntarily participated in the qualitative group of the study, two participants for each skill from the peer teachers group, and three participants from the peer learners group.

### **2.2 Data collection tool**

In the study, peer teachers studied with their peers the performance works of bocce, darts and speed stack for four weeks, with two days a week and 60 minutes a day, for a total of eight hours. Peer learners also took part in the practice and learned a different skill from their friends. Students, who were peer teachers, were among the students who had previously participated in bocce, darts and speed stack applications within the framework of extracurricular activities. These were also volunteers, and had intensive communication with their friends, social and leadership skills. In order to improve both the learning and teaching skills of peer teachers, they worked the application they choose, with the physical education teacher for a total of eight hours, over four hours a week and two hours a week. Peer teachers' experience, interest and abilities were considered in determining skill groups. However, peer learners applied these three skills for the first time and did not know each other before. The teacher formed the peer learners' group and the students who did not know each other were distributed homogeneously according to gender. From these applications, darts was played in the school's gym, bocce in the school's garden and speed stack in the physical education teacher's room. The points to be discussed in this research were not so intense and difficult for peer learners to learn, and peer learners were taught to learn bocce, darts and speed stack skills with basic rules. In addition, the rules of activity were changed according to the level of the students. In the study, peer evaluation and performance evaluation forms were used at the end of four weeks as a quantitative data collection tool. In performance work, peer teachers were asked to teach bocce, darts and speed stack skills to peer learners. A skill evaluation form was used for the skills development of the students before and after the study in the related branch. The bocce, darts and

speed stack skills evaluation form used in the research, and the peers' task cards and performance evaluation form were prepared by the physical education teacher. In the evaluation of the skills, the students were evaluated by scoring 100 points for the activity they participated in (Bkz. Table 1). The peer evaluation form was taken from the Ministry of National Education Physical Education Program Book (2007). The alpha coefficient was calculated as  $\alpha = .84$  by calculating the validity and reliability of the peer evaluation form.

In the study, a semi-structured face-to-face interview technique was applied to the students for qualitative data. Interview questions were used with six questions for peer teachers, and four questions for peer learners. The interview questions which were formed by scanning the research on this subject were finalized by taking experts' opinions into account. Content analysis technique was used from qualitative analysis techniques for comprehensible analysis of the data obtained from the students who contributed to the research's answers to the questions in the interviews which were included in the research (Yıldırım & Şimşek, 2013). Before the research was carried out, school management and parents were informed of the study and their parents' permission was obtained.

Table 1

*Evaluation of performance work*

Evaluation Criteria for Performance Project	Score	Student's score
Performing the application within the specified period (four weeks, two days a week)	70	
Follow the instruction	10	
Full participants to the applications	10	
Delivering the work on time (Research-based presentation)	10	
Total	100	

**2.3 Data collection**

The pre-test including the skills of the students who constituted the quantitative data of the study was recorded three days before the start of the application, and the final test results were recorded by the teacher three days after the last application. In addition, for the performance project, students were evaluated individually by the physical education teacher and completed their performance tasks successfully. A semi-structured interview technique was used as a qualitative data collection technique. Interviews were conducted in a closed room using a voice recorder after informing the students thereof. Interviews were made on a specific day by appointment. The interviews were completed in 15 minutes at least, and in 30 minutes at most. The data obtained was set down in writing on a computer. The data was then coded in short sentences by the researcher with the statements that were expressed. In the findings of the study, student expressions related to themes are coded as B1, B2, D1, D2, S1, S2 according to skill groups.

## ***Interview Questions***

### ***Peer teachers***

1. What are the gains of teaching bocce, darts and speed stack to your peers for you?
2. Did you have any problem while teaching to your peers?
3. How did you overcome these problems?
4. Did you like teaching something to your peers?
5. Do you have any recommendations?
6. Do you want to use peer teaching again?

### ***Peer learners***

7. Did you like learning bocce, darts and speed stack from your peers?
8. Did you have any problem while learning from your peers?
9. How did you overcome these problems?
10. Do you want to learn from your peers again?

***Validity.*** In the study, it was paid attention that the qualitative findings were consistent and meaningful. A detailed description technique was used to ensure validity for internal validity of the study. Findings were obtained as a whole, and were observed by the researcher and the coding expert. For the external validity of this research, the characteristics of the research group, the sample selection were clearly stated and direct quotations were included in the text.

***Reliability.*** The researcher clearly defined the methods and stages of the research. For internal reliability, the expressions obtained from qualitative data were read and coded separately with the researcher and expert instructor and then themes were formed in the research. The reliability analysis of the qualitative data was calculated by the formula developed by Miles & Huberman (1994) and reliability was 92%.

$$P (\text{reliability per cent}) = \frac{Na (\text{Agreement})}{Na (\text{Agreement}) + Nd (\text{Disagreement})} \times 100$$

The sources of data in the research are described in detail in order to ensure the researcher's confirmability for external reliability. This will guide people doing similar research to identify the data sources. The raw data obtained from the research is kept and stored by the researcher for further examination.

## ***2.4 Data analysis***

In the research, descriptive statistics were used in the analysis of the quantitative data and the results were interpreted in the tables by frequency and averages. The t-test was applied to determine the pre-test/post-test difference of bocce, darts and speed stack skills of peer learners. In the analysis of qualitative data, content analysis technique was used in the evaluation of interview forms of peer teachers and learners. The interviews were coded separately by the researchers first and it constituted six themes, three of which were peer teacher and three of were peer learner.

Table 2

*Sample quotations, theme and codes from peer teachers' qualitative interviews*

Code	Theme
Motivate	The gains of teaching bocce, darts and speed stack to my peers
Take responsibility	
Feeling like a leader	
Self-reliance	
My confidence came	
I am shy	Challenges and solutions
I could not tell	
I couldn't, so I worked and fixed my shots	
They had fun as they hit the balls	
Talking, telling	
Effort	
Affect	
Attention collection	
Long time needed	
Time	
The topic they want	
More excess material	

**Themes**

**Peer teachers**

1. The gains of teaching bocce, darts and speed stack to my peers
2. Experienced difficulties and solutions
3. Views/recommendations about the application

**Peer learner**

1. Gains of bocce, dart and speed stack learning from my peers
2. Challenges and solutions

**Data encoding.** After the interview, texts were read line-by-line, the code found to be important was underlined by the researcher.

**Finding themes.** After the coding process was completed, appropriate themes were formed by putting related codes together. Thematic coding is the categorization (theme) of previously identified codes by identifying common aspects.

Table 3

*Sample quotations, theme and codes from peer learners' qualitative interviews*

Code	Theme
Nice, Help, Being a team Enjoy Exited Like driving fast cars, Trying to be careful is exciting	The gains of learning bocce, darts and speed stack from my peers
Attention, More try More activities Equipments	Challenges and solutions

### 3 Findings

The aim of this study is to evaluate performance homework on the subject of peer-assisted bocce, darts and speed stack teaching. The students were taught the skills by applying the peer teaching model and also the experiences they gained with the practice were evaluated as performance homework.

Table 4

*Numerical distribution of research group*

Activity	N	Girl	Boy
Bocce	40	22	18
Darts	40	24	16
Speed stack	40	23	17
Total	120	69	51

The total number of students completing peer-assisted performance homework was 120 (Table 4). 30 of these students were peer teachers, and 90 were peer learners.

Table 5

*Numerical distribution of peer teachers*

Activity	N	Girl	Boy
Bocce	10	7	3
Darts	10	9	1
Speed stack	10	8	2
Total	30	24	6

In the peer-assisted performance homework research, the number of the students teaching is 30, 24 girls and six boys (see Table 5).

Table 6

*Pre-test and post-test on bocce skills of peer learners (paired sample t-test)*

Activities	n	Mean	Std. Dev.	Std. Error	T	df	Sig. (2 tailed)
Bocce pre-test	30	15.000	4.54	0.83	-34.16	29	0.000
Bocce post-test	30	80.000	11.14	2.03			

In this study, there was a statistically significant difference after the t-test applied to see the difference between the pre-test and post-test values for the bocce skills of peer learners ( $p < .000$ ), (see Table 6).

Table 7

*Pre-test and post-test on darts skills of peer learners (paired sample t-test)*

Activities	n	Mean	Std. Dev.	Std. Error	T	df	Sig. (2 tailed)
Darts pre-test	30	25.000	7.31	1.33	-41.19	29	0.000
Darts post-test	30	79.000	6.95	1.27			

In this study, there was a statistically significant difference after the t-test was applied, showing the difference between the pre-test and post-test values for the darts skills of peer learners ( $p < .000$ ), (see Table 7).

Table 8

*Pre-test and post-test on speed stack skills of peer learners (paired sample t-test)*

Activities	n	Mean	Std. Dev.	Std. Error	T	df	Sig. (2 tailed)
Speed stack pre-test	30	0.000	0.00	0.00	-66.20	29	0.000
Speed stack post-test	30	79.66	6.34	1.15			

In this study, there was a statistically significant difference after the t-test was applied, showing the difference between the pre-test and post-test values for the speed stack ability of peer learners ( $p < .000$ ), (see Table 8).



Table 9

*Peer evaluation (N= 120 students)*

	Yes	No	Sometimes
	n	n	n
Voluntarily participation in the studies	120	-	-
Sharing the knowledge with friends	98	13	9
Helping friends when necessary	93	9	18
Carrying out the task on time	94	14	12
Respecting the opinions of friends	99	12	9
Speaking kindly in the discussions	81	21	18

In the study, according to the results of peer evaluation by peer students, they stated that their peers performed their duties in a timely manner, they were helpful, sharing and respectful (see Table 9).

### 3.1 Interview results of peer teachers

**Theme 1 - Gains of teaching bocce, darts and speed stack to my peers.** Peer teachers stated that they were first shy and then gained responsibility, experienced positive communication and gained self-confidence.

“I studied bocce like my normal lessons. Taking responsibility sounded good. I was teaching something for the first time. I wanted someone of my own team to win. I learned to motivate them. I even agreed and reunited with friends with whom I wasn’t on speaking terms.” (B1)

“I was a little timid. I couldn’t act the way I wanted. Willingness of my friends made me very relieved. I explained my knowledge without hesitation, my self-confidence came.” (D1)

“I was barely talking, I was just pointing. After a while I saw that it was boring. I was in any case timid, but then I explained more by speaking. I was relieved when I started having fun. We started to do long and good work when I relaxed.” (D2)

“I am now on good terms with girls. I learned to have fun while learning. I felt like a leader. I learned how to plan.” (D3)

“I was excited when the student started to do something that I thought as boring and meaningless. At first I didn’t think I could teach because I didn’t like it. I’ve learned that what I started with prejudice wasn’t really like that.” (S1)

**Theme 2 - Challenges and solutions.** Peer teachers stated that their friends were having difficulty in exhibiting their skills, paying attention, and they were talking less and showing more about the movement. For this reason, they stated that their friends increased their attention and concentration as they started to do the skill, they showed the skill better by working and they talked more as they did.

“It was difficult for me to constantly get my friends’ attention. I had to learn how to teach well. I worked like a lesson. When they started learning a bit, they enjoyed it and their participation increased.” (B1)

“I know how to shoot arrows, but I couldn’t get to the target. That’s why I’m in a lot of trouble. But I corrected my shots, working on my own. As I improved, I was more confident.” (D1)

“I was talking a little but mostly just showing. That’s why I’m in a lot of trouble. I needed to show them by talking more.” (D2)

“In my group, some people gave up early. As the time and scores of the other three friends improved, the other friends who saw their friends working with caution and ambition again entered the activity. Those friends reached a certain level by working in during the break.” (S1)

“When my friends made a mistake, they gave up immediately. Only Seda worked hard and did well. I asked Seda for help. Friends with good scores began to support their friends with bad scores.” (S2)

**Theme 3 - Opinions about application.** All of the peer teachers said that they liked the activity, and that they enjoyed it more towards the end of the study. They stated that they wanted to teach their peers “what they wanted to teach”. They stated that they needed more time and more materials for teaching these skills.

### 3.2 Interview results of peer learners

**Theme 1- Gains of learning bocce, darts and speed stack from my peers.** During the education of peer learners, the fact that the students can ask questions without any hesitation, the existence of a stress-free educational environment, and academic success of the students parallel with the support of peers increased student satisfaction. Therefore, most of the students stated that they enjoyed and supported the learning environment.

“It was a pleasure to learn bocce from my peers; I didn’t take it seriously at first. I later saw that my friend, who taught, worked hard. Then I paid more attention.” (B1)

“I liked learning darts from my peers. We helped each other, we became friendly and like a team. We competed among ourselves.” (D1)

“It was fun learning speed stack from my peers. Lining up the glasses rapidly made me feel like I’m driving fast. Being very careful made me very excited.” (S1)

**Theme 2 - Challenges and solutions.** In challenges and solutions during the education and training of peer learners, it was stated that peer learning disturbs their concentration by relaxing them and they also get away from school during the exam week.

“I had no problem learning from my peer. At first it sounded like a game. Then when I realized that attention and concentration were effective, I settled down to the activity. Learning from peers is both easy and difficult. You can’t throw it anytime, but on the other hand, you work harder to not disgrace your friend and help him/her.” (B1)

“You’re a little relaxed when learning from your peer, this caused loss of concentration a bit, but then I realized that it was our duty to pay more attention.” (D1)

“Materials were not enough in the first week; we had the chance to do more in the second week.” (D2)

“I didn’t have any problems, but I took a little offence when it was exam week. My fellow teachers tried to motivate us again. To do this, they let us run around during break and idle classes, and we got back into the flow of the activity.” (S1)

## 4 Discussion

This study aims at evaluating performance homework on the teaching of peer-supported bocce, darts and speed stack. As a result of the research, peer teachers have taught bocce, darts and speed stack skills to their friends under the guidance of a teacher and dependent on task cards. Many study results on this issue have shown that peer-assisted learning is effective in various educational settings (Falchikov et al., 2000; Ayvazo et al., 2009; Wallhead et al., 2007).

As a result, 120 students completed the performance homework according to the directive and graded scoring switch was used. While The Ministry of National Education recommended that all performance homework be evaluated with a graded scoring switch to perform a successful performance assessment, a similar assessment scale was used in this study (MNE, 2007). In this research, students gained the knowledge and skills related to a sports branch with the performance homework given, while on the other hand they learned how to teach their peers the basic skills of the sports branch under guidance of their teachers (Güllü et al., 2007 and Gürkay et al., 2008). Teachers stated that they give importance to measurement and evaluation in physical education and sports courses in general and they give importance to practice exams, performance and project assignments in practice. When we examined the studies about the performance task of teachers in the research and while cognitive and affective gain is predominant, it is important to have cognitive, affective and social gains with the performance task in this study. With this study, the preparation of the environments in which students can apply and share what they learn can make learning more permanent. Although teachers stated that the measurement and evaluation approaches applied are more important by also stating they use traditional approaches in practice, teachers think that the level of realization is lower (Ahmet et al., 2009, Balyan, 2003, Gürkay et al., 2008).

In this study, peer learners developed bocce, darts and speed stack skills as a result of four weeks of practice. Studies that examine the effects of peer education usually focus on psychomotor and cognitive learning outcomes of peer education (Field et al. 2004, Gök, 2013, Umut et al., 2014). Here, the students evaluated their peers and stated that their peers performed their duties in a timely manner and they were helpful, sharing and respectful. When we look at the results of the studies on peer teaching, we may have similar results with peer evaluation (Umut et al., 2014, Nevin et al., 2017). Peer evaluation puts students directly in the learning process. In this way, the responsibility and motivation of the students is increased (Falchilov, 1995).

As a result of the research, the peer teachers said that they were shy at first, then they practised and enjoyed this application in time by taking on responsibility, with cooperation and positive communication with their friends. Peer learners stated that they did not take learning from their peers seriously at first but when they saw the efforts of their friends, they paid attention to the practice, their communication increased, they became a team, they had fun, enjoyed it and they wanted to learn again from their peers. During peer education, student satisfaction and academic success increased parallel with the fact that students were able to ask their peers without any hesitation, the existence of a stress-free educational environment and the support of peers (Hurley et al., 2012, McKenna et al., 2010). Besides, a comfortable and stress-free learning environment is an important factor for effective learning and teaching (Field et al., 2004).

As a result of this research, students stated that their self-confidence and communication skills increased and they felt like leaders. The peer teaching process increases the self-confidence and communication skills of the students through cognitive, temporal, affective gains, and provides the opportunity to develop their leadership skills and learn to teach (Field et al., 2004, Kwon, 2007).

## **5 Conclusion and suggestion**

In the study, peer teachers taught bocce, darts and speed stack skills to their friends under the guidance of a teacher and dependent on task cards. These different activities, which require target attention and hand-eye coordination, were very interesting for students. These and other similar activities taking place in physical education and

extracurricular activities is very important for students to gain a movement and physical activity habit. In order for these applications to be carried out in schools, the relevant materials must be provided by the school authorities.

At the end of the study, 120 students completed the performance assignment in accordance with the directive. Physical education teachers should use this and similar different measurement techniques to ensure that their students take responsibility, enter the learning process directly, and gain experience while practicing. For this reason, it is important for teachers to acquire the skills of using student-centred measurement techniques with regard to providing permanency of students' learning. According to the results of the research, the students increased their communication with each other, stating that they became a team, enjoyed having fun and helped each other. Therefore, a teacher's use of different student-centred models and approaches is important for students to increase their interest and motivation. In addition, it will not only affect students' psychomotor cognitive, affective and social learning outcomes, but students will have a positive impact on the course as well.

***Strong and weak aspects of the research.*** One of the strong aspects of the research is that the physical education teacher is the second writer of the research and has experience in bocce, darts and speed stack. All peer teachers knew at least one of these skills because of their extracurricular activities. However, they both did repetitions and learned to teach skills with the training before beginning with the practice. However, at the beginning of the practice, some students found it difficult to explain and demonstrate their peers' movement, but then they demonstrated better by working during breaks.

Another strong aspect of this research is that peer learners during the practice stated that they wanted to learn again from their peers. In the selection of peer teachers, physical education teachers, responsible, dignified, who have advanced level of skill in sports and academic development at advanced level, and volunteers were included in the research, informing the students about the study. The most important factor limiting this study is its duration (four weeks) and the fact that there was material for only one team at a time for each skill. In this study, students were able to organize a contest with each other in the framework of the festival with the participation of other students and school administrators who wanted to join in.

## **References**

- Ayvazo, S., & Ward, P. (2009). Effects of Classwide Peer Tutoring on the Performance of Sixth Grade Students during a Volleyball Unit. *Physical Educator*, 66(1), 12–22.
- Balyan, M. (2003). "Beden Eğitimi Derslerinde Başarı Notu Değerlendirmesi Üzerine Bir Yaklaşım, Yayınlanmamış Yüksek Lisans Tezi, Ege Üniversitesi, İzmir.
- Doğanay A. (2007). Öğretim İlke ve Yöntemleri, Ankara: Pegem Yayıncılık.
- Falchikov, N. (1995). Peer Feedback Marking: Developing Peer Assessment. *Innovations in Education and Training International*, 32, 175–187.
- Field, M., Burke, J., & Lyold, D., (2004). Peer Assisted Learning in Clinical Examination, *The Lancet*, 363(9407), 490–491.
- Falchikov, N. (2001). *Learning Together: Peer Tutoring in Higher Education*. London; New York: Routledge Falmer.
- Gagnon, A. G. (2016). Developmental Physical Education: How to Implement a Peer-Assistance Program to Help Low Performers. *Journal of Physical Education, Recreation & Dance*, 87(9), 28–36.
- Gök, T. (2013). A Comparison of Students' Performance Skills and Confidence With Peer Instruction and Formal Education. *Journal of Baltic Science Education*, 12(6), 747–758.

- Güllü, M., Güçlü, M., & Kafkas, E. (2007). "Beden Eğitimi Öğretmenlerinin 4.5. Ve 6. Sınıf Beden Eğitimi Dersi Yeni Öğretim Programı Uygulamalarının İncelenmesi", Uluslararası Akdeniz Spor Bilimleri Kongresi, Antalya.
- Gündüz, N., & Acar, Z. (2013). Beden Eğitimi Ve Fen Ve Teknoloji Dersinde Doğa Yürüyüşü Konulu Performans Ödevinin Değerlendirilmesi, *A.Ü. Spor Bilimleri Fakültesi, Spormetre Dergisi*, 12, 2, 2014, Sayfa:81.
- Gürkay Y., & Gündüz, N. (2008). Ankara merkez İlköğretim Okullarında Görevli Beden Eğitimi ve Spor Öğretmenlerinin Ölçme ve Değerlendirme Tekniklerinin Uygulanışına İlişkin Görüşleri, *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 6(3), 103–111.
- Houston-Wilson, C., Lieberman, L., Horton, M., & Kasser, S. (1997). Peer Tutoring: A Plan for Instructing Students of all Abilities. *Journal of Physical Education, Recreation & Dance*, 39–44.
- Hurley, F. K., Mckay, W. D., Scott, M. D., & James M. B. (2012). Peer Assisted Learning in Research Methods and Statistics. Proceedings of the HEA STEM Learning and Teaching Conference.
- Iserbyt, P. (2013). Reciprocal Peer Learning with Task Cards: Analysis of Behaviour and Verbal Interactions in Structured and Unstructured Dyads. *Physical Education and Sport Pedagogy*, 2(20), 174–185.
- Longueville, F. A., Gernigon, C., Hue, M. L., Calopi, M., & Winnykamen, F. (2002). Peer Tutoring in A Physical Educatin Setting: Influence of Tutor Skill Level on Novice Learners' motivation and Performance. *Journal of Teaching in Physical Education*, 22, 105–123.
- Kwon, M.-H. (2007). The Analysis of Peer Conflict in Physical Education Classes of an Elementary School. *International Journal of Applied Sports Science*, 19(2), 80–107.
- McKenna, L., & French, J. (2010). A Step Ahead: Teaching Undergraduate Students to be Peer Teachers. *Nurse Education in Practice*, 11(2), 141–145.
- Milli Eğitim Bakanlığı (MEB) (2007). Ortaöğretim Beden Eğitimi Dersi Öğretim Program ve Kılavuzu, (1-8 Sınıf), Ankara: Devlet Kitap Müdürlüğü.
- Milli Eğitim Bakanlığı (MEB) (2009). Ortaöğretim Beden Eğitimi Dersi Öğretim Programı (9-12 Sınıf), Ankara: Devlet Kitap Müdürlüğü,
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis* (2nd ed.). Newbury Park, CA: Sage.
- NASPE (1995). *Moving into the Future: National Standarts for Physical Education*. St. Louis: Mosby.
- Nurmi, A. M, & Kokkonen, M. (2015). Peers as Teachers in Physical Education Hip Hop Classes in Finnish High School. *Journal of Education and Training Studies*, 3(3). 23–32
- Topping, K., (1998). Peer Assessment Between Students İn Colleges and Universities. *Review of Educational Research*, 68, 249–276.
- Topping, K. J., (1996). The Effectiveness of Peer Tutoring in Further and Higher Education: A Typology and Review of the Literature. *Higher Education*, 32(3), 321–345.
- Türkiye bocce Bowling Dart. Dart Fedarasyonu, tbbdf.gov.tr
- Türkiye dizilim sporu temsilciliği, www.speedstacks.com.tr
- Siedentop, D., & Tannehill, D. (2000). *Developing Teaching Skills İn Physical Education* (4th ed.). Mountain View, Calif.: Mayfield Pub. Co.
- Şirinkan, A., & Erdiş, S. (2009). İlköğretim Okullarındaki Beden Eğitimi Ve Spor Derslerinde Uygulanan Öğretim Yöntemleri Ve Ölçme–Değerlendirme Kriterlerinin Araştırılması, *Niğde Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, Cilt 3, Sayı 3.
- Üner, U., & Gündüz, N. (2014). Satranç Öğretiminde Akran Eğitimi Modelinin Uygulanması ve Değerlendirilmesi, 13. Spor Bilimleri Kongresi, Konya.
- Wallhead, T., & O'Sullivan, M. (2007). A Didactic Analysis of Content Development During the Peer Teaching Tasks of a Sport Education Season. *Physical Education and Sport Pedagogy*, 12(3), 225–243.
- Weidner, T. G., & Popp, J. K. (2007). Peer-Assisted Learning and Orthopaedic Evaluation Psychomotor Skills, *Journal of Athletic Training*, 42(1), 113–119.
- Yıldırım, A., & Şimşek, H. (2013). Sosyal Bilimlerde Nitel Araştırma Yöntemleri, Genişletilmiş 9. Baskı, Ankara: Seçkin Yayıncılık.

- Mirzeođlu, A. D, & Özcan G. (2015). Akran Öğretimiyle İşlenen Okul Deneyimi Dersi Hakkında Öğrenci Görüşleri ve Kazanımları, *Sport Sciences (NWSASPS)*, 10(4), 16–33.
- Turkmen, M. (2011). Bocce: Bowls, Petanque, Raff a and Boules, Defi nitions, History, and Rules, Ankara: Neyir Publication (in Turkish).

## **Towards inclusive education? An analysis of the current physical education curriculum in Finland from the perspective of ableism**

*C. Mihajlovic (Marburg, Germany)*

1	Introduction
2	Introduction to the Finnish school system
3	Conceptual framework
4	Method
5	PE in Finland – Results of the curriculum analysis
	5.1 <i>Conceptualisation of Finnish PE</i>
	5.2 <i>Content</i>
	5.3 <i>Objectives and assessment criteria</i>
	5.4 <i>The role of self-reflection</i>
6	Conclusion

### **Abstract**

While in many countries education reforms have recently focused on increased standardization of education, Finnish reforms have emphasized school autonomy and the empowerment of teachers through school curriculum development. The purpose of this article is to analyse the current national curriculum in Finland through the lens of (inclusive) physical education (PE). The paper draws attention to the mandated aims and contents of the subject, and guidelines for dealing with diversity by employing qualitative content analysis. Although the Finnish PE curriculum is open to teaching different movement forms (apart from traditional sports), it also contains some exclusionary potential for those students who are not able to participate in physical activities that focus on certain normative performances, or who do not have the ability to reflect on themselves and their learning experiences. This article therefore recommends that curricula should provide a holistic understanding of the body and performance to deal with the increasing diversity in the context of inclusion.

**Key words:** inclusion, physical education, ableism, curriculum

### **1 Introduction**

Although the United Nation's Convention on the Rights of Persons with Disabilities has nowadays been ratified by over 100 countries, including Finland, the extent to which these rights are implemented in reality remains open (Mittler, 2012). Inclusive education requires – alongside the important inclusive policies – an accessible curriculum, positive attitudes towards diversity, as well as teachers whose professional training has prepared them to meet the needs of all children, including those with disabilities (Tant & Watelein, 2016; Qi & Ha, 2012).

In Finland, the high quality of teacher education is considered by several Finnish authors as one of the main reasons for the successful performance in the recent international comparative studies on academic performance (Malinen, Väisänen &

Savolainen, 2012; Sahlberg, 2011). At the same time, Finnish education policy has done well to ensure that all citizens of Finland, regardless of their ethnic origin, gender and financial situation have free access to education (Kansanen & Meri, 2006). In the current Finnish national curriculum, diversity is explicitly regarded as a strength and asset, while former curriculum versions rather referred to the acceptance of diversity (Finnish National Board of Education, 2016).

What is of interest for this paper is the way the Finnish curriculum approaches the increasingly diverse student population in physical education (PE) classes. Particularly, this paper draws attention to the implementation of the new core curriculum in Finland which has been progressively introduced at school level since August 2016. The recent curriculum reform in Finland was drawn up by the Finnish National Board of Education (FNBE) in 2014 and focuses on transversal competences and collaborative classroom practices, where pupils may work simultaneously during periods of phenomenon-based project studies (FNBE, 2016). To support the development of transversal competencies, an emphasis lies on a student-based view of teaching and the support of collaborative learning methods. PE, as an important part of the national curriculum, potentially contributes to this new learning approach.

***Research niche and purpose of this paper.*** Internationally, previous research has shown that teachers were extrinsically motivated to follow inclusive educational policies (Sato & Hodge, 2009). However, several articles revealed a discrepancy between the ideology of inclusive education policies and the curriculum content and assessment in PE. The criteria in the PE curriculum referred to a certain performance in PE and were only reachable by a limited number of pupils (Haycock & Smith, 2010). The study by Ruin & Meier (2017) also reveals that a standardized understanding of performance (and a kind of traditional assessment) still exists – for example when a certain distance is to be run in a given time. For teachers with this traditional perception of performance, homogeneity would be the real ideal.

Teachers with experience of inclusive teaching, however, seem to have a more differentiated and reflected understanding regarding body and performance (Ruin & Meier, 2017). The literature review by Tant & Watelein (2016) demonstrates that curricula requirements and certifications are often inadequate with regard to the principles of inclusion. In the past, students with disabilities were often excluded from the class's sports activities because the curriculum was dominated by competitive activities with an emphasis on performance and technical skills (Smith & Green, 2004; Morley et al., 2005). These studies showed that the curriculum contents seemed to have reduced the opportunities for students with disabilities to participate in the same activities as their peers without disabilities (Tant & Watelein, 2016).

Consequently, having a flexible curriculum that is open to teaching different content types and adapted physical activities seems necessary to ensure every student is provided with opportunities to meaningfully participate in PE.

For a small country like Finland, the curriculum is an important tool which guides the nation's entire education system by defining the values and objectives for all Finnish schools. During the process of curriculum development which lasted two and a half years, 30 working groups and steering groups from each municipality in Finland contributed to the final version of the document (Lähdemäki, 2019). The main objectives and principles for Finnish basic education (grades 1-9) in general and for each specific subject are defined in this document, consisting of 500+ pages. It is not my intention here to present a detailed analysis of the Finnish National Curriculum of PE. Rather, I draw attention to the mandated aims and contents of the subject, and guidelines for dealing with diversity through quotes from the national Finnish PE



syllabus. Previous research on the current Finnish curriculum mainly focused on exploring the phenomenon-based approaches in teaching and learning (Symeonidis & Schwarz, 2016), the factors behind the curriculum process (Lähdemäki, 2019) and more general goals and guidelines of the extensive curriculum reform (Halinen, 2018). To my knowledge, the current Finnish national curriculum has not been analysed through the lens of (inclusive) PE.

In order to fill this gap, the main purpose of this analysis is to investigate-how the PE curriculum responds to the different needs of all learners, including those with disabilities. In other words, this paper aims at revealing how the national curriculum frames the PE teachers' possibilities to work inclusive in their schools regarding the mandated aims, contents and assessment criteria of the subject.

In this paper, the author will first give a short introduction to the Finnish school system by reviewing the general values defined in the Finnish national curriculum (FNBE, 2016) and the organization of educational support by drawing on recent literature.

To understand the importance of local school autonomy in Finland, this brief overview finally addresses the role of Finnish teachers in curriculum development and implementation.

The author will then draw upon the conceptual framework that was used for the interpretation of the key themes identified in the area of interest. The theoretical perspective of ableism was used to explore whether current curricular approaches contain exclusionary potential and hidden barriers to inclusion (Giese & Ruin, 2018). The paper concludes with a discussion of the findings and the future vision of curriculum development in Finland and internationally.

## **2 Introduction to the Finnish school system**

The compulsory education in Finland consists of a nine-year comprehensive school from 1<sup>st</sup> to 9<sup>th</sup> grade. Education is regarded as a fundamental right for all citizens and is free at all levels: During pre-primary education and compulsory education ("basic education") teaching materials, the transportation to school and the daily lunch are free of charge for all pupils. Children in Finland usually start "basic education" in the year they turn seven. The Finnish compulsory education consists of a six-year primary school education followed by a three-year middle school education. The National Core Curriculum for Basic Education is responsible for the arrangement of education for all children from seven to 16 years (Halinen, Harmainen & Mattila, 2015). During the first six years (primary school), instruction is normally given by the same class teacher in most subjects, while subject teachers are usually responsible for teaching their subjects in the last three years.

***System of educational support.*** Finland has a high number of students receiving special educational services (OSF, 2016), but it also has a well-functioning system for educational support (Kivirauma & Ruoho, 2007). A multi-tiered framework of educational support was introduced in 2010 which resembles the Response to Intervention (RTI) model in the U.S. (Björn et al., 2016). Nowadays, special educational support is mainly integrated into mainstream schools. The Finnish school system seems to be at least partly inclusive: "This is because the child has easy access to special education, no formal decisions are needed, no special status is given to the child, and the child attends special education for a limited period of time," (Takala, Pirttimaa & Törmänen 2009, p. 169).

According to Malinen et al. (2012), on the other hand, inclusive education in Finland has been generally regarded more as a pedagogical than an ideological question and it

usually refers only to educating students with special educational needs in mainstream settings.

***Finnish teachers as curriculum specialists.*** Teacher education in Finland is among the most desired academic programs at universities and based on a strong research orientation (Niemi, 2015; Sahlberg, 2011). As university-based teacher education emphasizes the development of a research-oriented attitude among students, there is a focus on knowledge creation and scientific critical thinking in all teacher study programs and phases. During their phases of practical teacher training, for instance, experienced teachers supervise pre-service teachers in university teacher training schools. The objective is to encourage pre-service teachers to be reflective and critical practitioners (Niemi, 2015).

This approach to reflective and critical knowledge creation is also considered important for in-service training. Due to their research-related initial teacher education, in-service teachers are expected to be able to critically reflect on their own work and act as curriculum specialists (Niemi, 2015). Teachers are trusted educational professionals who play a key role in curriculum development (Vitikka et al., 2012; Sahlberg, 2011). The educational institutions of the country have - at all levels - a high degree of autonomy. Although the municipalities have the formal responsibility for teaching objectives and (PE) activities in local educational institutions, the municipalities usually delegate these tasks to the respective schools or institutions (Heikinaro-Johansson et al., 2014). The local authorities decide how much autonomy they want to cede to the schools, in most cases the schools are autonomous for administrative tasks such as employing school staff, and school management is mainly responsible for the school budget (FNBE, 2016). Finnish teachers and their principals are usually responsible for designing the school-based curriculum in their local schools. Another example of the high level of confidence in the Finnish education system lies in the fact that school inspections were abolished nationwide in the early 1990s (FNBE, 2016).

### **3 Conceptual framework**

The concept of ableism as one of the pillars in the field of disability studies was used as a conceptual framework for this article. Ableism has been proven to be a useful tool to reflect and deconstruct hidden barriers to inclusion (Giese & Ruin, 2018; Giese & Buchner, 2019). From the perspective of ableism, people are assigned certain abilities, skills, or other character traits. Often, these stereotypes associated with certain disabilities serve as a justification for ableist practices and underpin negative attitudes towards people with disabilities. In professional sports, ableism is evident. Athletes with disabilities are frequently portrayed (in the media) to be inferior (DePauw, 1997).

The main focus of this analysis was the area of PE in Finnish basic education. The concept of ableism has been frequently used in the field of PE in informing people for mistaken attributions of ability. In Germany, previous research in PE focused on revealing hidden ability attributions concerning the body and performance (Giese & Ruin, 2018; Ruin & Giese, 2018) and curriculum recommendations in regard to the contents of PE, which are often based on unquestioned societal assumptions about body ideals (Giese & Buchner, 2019). Imperfect bodies seem to be ignored in these curricular considerations. This is problematic for students whose bodies deviate from the norm. Those students often do not possess the expected normative skills and they consequently will be denied the chance to succeed in such educational settings (Giese & Ruin, 2018). This analysis draws attention to discriminatory potential in the current Finnish curriculum of PE. In PE, students are often expected to achieve certain normative performances that may exclude individuals due to their physical or cognitive

dispositions. Drawing on the concept of ableism, the mandated aims and assessment criteria of the subject will be discussed and reflected in this paper.

#### **4 Methods**

The main research questions explored in this study were:

- What are the mandated objectives, contents and assessment criteria of PE according to the syllabus?
- How does the Finnish national curriculum respond to dealing with diversity in PE?

Drawing on the research questions, the current Finnish National Curriculum of PE was qualitatively content-analysed adopting an inductive approach of category formation (Mayring, 2014). According to Mayring (2014), the aim of inductive category formation is to arrive at summarizing categories directly, which result from the material itself, not from theoretical considerations. Inductive content analysis of documents was used to identify how the PE curricula responds to the individual abilities and needs of all children, particularly regarding the objectives of PE, understanding of the body and performance, possible adaptations of physical activities and methods of student assessment. The material was worked through line by line taking in account the typical steps of inductive category development (Mayring, 2014). A revision of categories and rules took place after having analysed 50% of the documents. Once all the data had been grouped, final themes were developed until saturation was reached.

The Finnish National Curriculum was retrieved from the official FNBE website and consists of more than 500 pages. As suggested by Mayring (2014), not all material has been regarded for analysis. Only those parts relevant for the specific research questions have been considered. The official documents that served the main source of this analysis were the first chapters of the curriculum that consist of values and general goals and principles of Finnish basic education and the subject syllabus of PE concerning grades 1-2, 3-6 and 7-9. In addition, recent literature has been reviewed that has examined Finnish physical education programs in the past.

The results of this analysis from the perspective of ableism will be presented in the next chapter.

#### **5 PE in Finland - Results of the curriculum analysis**

##### **5.1 Conceptualisation of Finnish PE**

Finnish PE goes back to a health-related concept that remains a fundamental factor legitimizing the place of PE in the school curriculum (Heikinaro-Johansson et al., 2014; Richter, 2007). In the current version of the curriculum, physical and health education are divided into separate subjects. The focus of PE lies in the development of a wide variety of motor skills, health education is founded on a multidisciplinary foundation of knowledge.

As stated in the Finnish curriculum, PE nowadays has two main goals: Guiding the pupils in adopting a physically active lifestyle and educating them through physical activities (FNBE, 2016). Internationally, this view is also shared by most educators regarding the purposes of PE in schools (McEvoy, Heikinaro-Johansson & MacPhail, 2015). In Germany, for instance, the concept of “Educational” PE has the double mission of educating for and educating by sports and physical activity (McEvoy et al., 2015; Giese & Ruin, 2018). In achieving a lifelong participation in physical activity, equal importance is afforded to the various goal areas of PE. The goal areas of PE outlined in the national core curriculum are made up of physical, social and psychological functional capacities, which should contribute to the holistic physical education of the child (FNBE, 2016). The physical functional capacity for basic

education level (grades 1–9) emphasizes that PE should develop pupils' basic motor skills, sport-specific and movement skills, and should also offer pupils a variety of experiences in fundamental indoor and outdoor activities (Heikinaro-Johansson et al., 2014). The social functional capacities refer to enjoyment, responsible behaviour, cooperation, self-respect and respect for others. The psychological functional capacity emphasizes that pupils should learn how to be physically active in a safe way, to understand the connection between exercise and health, and to be familiar with a variety of physical activities and opportunities for leisure-time activity (FNBE, 2016; Heikinaro-Johansson et al., 2014).

## 5.2 *Content*

Traditionally, the Finnish national core curriculum in PE is rather short on content (Yli-Piipari, 2014). In comparison to the previous version of the curriculum, the content in the current curriculum explicitly refers to the following three areas: physical, social and psychological functional capacity.

The curriculum recommends that PE should consist of a broad range of different physical activities which are related to the three key content areas of PE in grades 1-2, 3-6 and 7–9. In all grades, PE should include safe assignments (e.g. playful exercises and ball games), aesthetic exercises (music, gymnastic and dance) as well as swimming and water sports. The syllabus refers to a broad content area and also includes culturally-based physical activities. Typical physical activities representative of the Nordic culture, such as exercise on ice, in snow or in nature are emphasized in the PE programs (FNBE, 2016; Yli-Piipari, 2014).

In order to develop the students' social functional capacity, teaching and learning contains different kinds of pair and group assignments and games where the students learn to take others into consideration as well as to help and assist others (FNBE, 2016). It is noticeable that the national curriculum in Finland leaves decisions on activity selections and forms of instructions to individual teachers and schools, at least in lower grades. On secondary school level (7<sup>th</sup>-9<sup>th</sup> grade) when numerical grades are mandatory, however, it is expected that PE also includes more standardized assignments that help the pupils evaluate, maintain, and develop their physical functional capacity:

“Teaching and learning includes assignments that aim at supporting the pupils in improving their strength, speed, endurance, and flexibility,”  
(FNBE, 2016, p. 693).

Drawing on the concept of ableism, students with health issues might be excluded from these activities as they are possibly not able to improve their physical functional capacity due to physical restrictions.

As previous research from Germany has shown, PE curricula often emphasize the dominance of certain movement forms and desired corporeality (Giese & Ruin, 2018). It seems clear that a functional view of the body and performance leads to problems when dealing with the individual needs of all children, including those with disabilities (Ruin, 2017). In general, a holistic understanding of the body is supported by the Finnish curriculum, as the pupils are encouraged to appreciate and use “their whole body to express emotions, opinions, thoughts, and ideas” (FNBE, 2016, p. 270). A holistic understanding of the body is further characterized in the curriculum recommendations for grades 7-9. PE has to “ensure that the pupils have enough positive experiences of their own body, self-efficacy, and togetherness,” (FNBE, 2016, p. 450).

Although the Finnish PE curriculum seems open to teaching different movement forms (apart from traditional sports), it also contains some exclusionary potential for those students who are not able to participate in physical activities that focus on improving

their motor skills due to unquestioned societal assumptions about body ideals (Giese & Buchner, 2019).

### 5.3 Objectives and assessment criteria

The national curriculum explains the criteria for determining performance levels in the final assessments of basic education. Each student's progress is reported at the end of a school year. In the first seven years of basic education, the assessment report can be either a written description of the student's progress or a numerical grade (Yli-Piipari, 2014; FNBE, 2016). After 7<sup>th</sup> grade, the report must include a numerical grade that is accompanied by written comments. It is expected that students should be able to master the assessment criteria for physical education at the end of the school year and score an 8 (numerical grade describing good knowledge/skills).

In general, PE aims at influencing the pupils' well-being by supporting their physical, social and psychological functional capacity and a positive body image (FNBE, 2016). The assessment of physical education is based on the objectives of physical, social, and psychological functional capacity. An example for the assessment criteria for PE at the end of grade 9 (conclusion of the syllabus) is presented in Table 1.

Table 1

*Excerpt from final assessment criteria for good knowledge and skills in physical education (numerical grade 8) at the conclusion of the syllabus (FNBE, 2016, p. 696)*

Objective of instruction	Content areas	Assessment targets in the subject	Knowledge and skills for the grade 8
<b>Physical functional capacity</b>			
To encourage the pupil in being physically active, trying different forms of exercise, and practising while giving his or her best effort.	C1	Working and making an effort	The pupil usually tries and practises actively different types of exercise assignments when participating in physical education lessons.
<b>Social functional capacity</b>			
To guide the pupil to work together with everyone and to regulate his or her actions and emotional expression in exercise situations, taking others into account	C2	Interaction and working skills	The pupil knows how to act in different situations of physical activity according to agreed rules.
<b>Psychological functional capacity</b>			
To encourage the pupil to take responsibility for his or her actions and to support the pupil's skills in working independently	C3	Working skills	The pupil is usually able to work responsibly and independently.

In regard to the students' physical functional capacity, the objectives for good knowledge and skills in PE (numerical grade 8) at the conclusion of the syllabus highlight the students' willingness to "try out" different forms of physical activities. The priority of students enjoying physical activities while giving his or her best effort is regarded as more important than learning certain sport techniques. The objectives for instruction and assessment criteria are mostly defined in an open manner which leaves

space for interpretation and modification. Assessment of student learning is based on the pupil's state of health and individual needs rather than on standardized tests (FNBE, 2016). According to Yli-Piipari (2014) it is not unusual for teachers to view fitness tests as opportunities for learning and not as a traditional form of assessing student achievement.

However, as the following quotation reveals, a standardized understanding of performance also exists in the current PE curriculum in Finland. The assessment criteria for good knowledge and skills in PE with regard to swimming skills at the end of grade 6 (FNBE, 2016, p. 453) refer to the following standardized abilities:

“The pupil has basic swimming skills (The pupil is able to swim 50 metres using two different strokes).”

As this quotation shows, the pupils are expected to swim a certain distance using at least two techniques (different strokes). From the perspective of ableism, this may exclude those pupils who are not able to achieve these normative performance expectations due to their physical restrictions.

#### **5.4 The role of self-reflection**

The current national curriculum regards learning as a guided process in which students have an active and self-regulatory role (Symeonidis & Schwarz, 2016). From the perspective of ableism, however, educational achievement is linked to a highly developed capacity for abstraction and reflection (Giese & Ruin, 2018).

As the following quotation shows, methods of assessing student performance should also foster self-assessment and self-reflection:

“Versatile methods are used in the assessment to provide the pupils with an opportunity to demonstrate their best skills. The pupils are guided to self-assessment,” (FNBE, 2016, p. 649).

According to the curriculum, pupils are guided to self-assessment which implies the ability to reflect on one's own learning which can be understood as a hidden barrier to inclusion. The following quotation highlights the ability to reflect as a precondition to acquire new knowledge and skills:

“While acquiring new knowledge and skills, the pupils learn to reflect on their learning, experiences and emotions,” (FNBE, 2016, p. 28).

Drawing on the concept of ableism, the ability to be educated seems to be connected with the ability to reflect. Because of this, persons with more severe disabilities might be excluded as they are possibly not able to reflect on themselves and their learning experiences.

The FNBE (2016) therefore suggests that the instructions of students who are unable to study according to the individual syllabi of subjects should be arranged by activity areas. The instruction by activity areas instead of subjects is prescribed in a decision of special support, which means that the pupil receives the strongest form of support and follows an individual educational plan (FNBE 2016, p. 126). The objectives of instruction arranged by activity areas is to provide the pupils with knowledge and skills that allow them to cope in their lives as independently as possible as described in their individual educational plan (FNBE, 2016). The activity areas focus on motor skills, language and communication, social skills, skills in activities of daily living, and cognitive skills which do not follow the curricular standards (FNBE, 2016).

## 6 Conclusion

“A national curriculum is a deeply national and cultural interpretation of knowledge, learning and education and as such cannot be transferred to another cultural context,” (Vitikka et al., 2012, p. 93).

As this quote shows, curricula are founded on the country’s national educational policy, cultural identity and traditions and thus cannot be taken out of the national context it is applied to. The purpose of this article was to analyse the current national curriculum in Finland through the lens of (inclusive) physical education (PE). The paper reviewed the mandated aims, assessment criteria and contents of the subject, and how the national curriculum frames the PE teachers’ possibilities for dealing with diversity.

Although standardized competencies exist in the Finnish curricular approaches, these performance expectations have a less normative character than in other countries. While in Germany, for instance, education reforms have focused at increased standardization of education, Finnish reforms have emphasized school autonomy and the empowerment of teachers through school curriculum development (Erss, Kalmus & Autio, 2016).

The theoretical perspective of ableism was used to reveal that current curricular approaches in Finland also harbour some exclusionary potential. On the surface, the Finnish curricular approaches seem to be suitable to support inclusion due to their emphasis on diversity and inclusive values (FNBE, 2016; Mihajlovic, 2018). However, as stated by Giese & Ruin (2018), these approaches are – similar to the German case – based on the fundamental anthropological assumptions that all individuals have the capacity to reflect on themselves, which also may exclude those people who are not able to do so (due to psychological or cognitive dispositions). Other individuals may not be able to achieve the intended level of basic motor skills according to standardized assessment criteria in regard to certain swimming skills (FNBE, 2016, p. 453) due to their physical restrictions. A holistic understanding of the body and performance (in PE curricula) is crucial, as curricular approaches may influence processes of inclusion and exclusion produced through the daily interactions of students and teachers in schools.

In order to deal with the individual abilities of children with more severe developmental disabilities, the FNBE (2016) proposes alternative and more flexible pedagogical approaches. Decisions on special support and the formulation of an individual educational plan (IEP) is justified by considering the pupil’s state of health and specific pedagogical needs (FNBE, 2016). As stated in the Finnish Curriculum (2016), instruction for children with severe disabilities may also be organised by activity areas rather than by subjects.

Although the Finnish curricular approaches harbour some hidden barriers to inclusion, efforts are made to achieve an inclusive environment by providing equal access to education for everyone and supporting every student’s learning and well-being (Halinen, 2018). In terms of PE, the Finnish national curriculum highlights the importance of promoting gender equality and considering the pupil’s state of health and special needs in the instruction and assessment. In the process of planning lessons and setting learning objectives, pupils should actively take part in developing suitable learning environments. This indicates that justice, equity and inclusion involve an “interplay of pedagogical practices and curriculum,” (Overton et al., 2016). Having a flexible curriculum that is open to teaching different movement forms (apart from traditional sports) and adapted physical activities can be regarded as an important precondition for helping teachers in dealing with the increasingly diverse student population in PE.

## Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

## References

- Björn, P., Aaro, M. T., Koponen, T. K., Fuchs, L. S., & Fuchs, D. H. (2016). The many Faces of Special Education Within RTI Frameworks in the United States and Finland. *Learning Disability Quarterly*, 39(1), 58–66
- DePauw, K. P. (1997). The (in)visibility of disability: Cultural contexts and ‘sporting bodies’. *Quest*, 49, 416–430.
- Erss, M., Kalmus, V., & Autio, T.H. (2016). ‘Walking a fine line’: teachers’ perception of curricular autonomy in Estonia, Finland and Germany. *Journal of Curriculum Studies*, 48(5), 589–609, DOI: 10.1080/00220272.2016.1167960
- Finnish National Board of Education (FNBE) (2016). *National Core Curriculum for Basic Education 2014. National core curriculum for basic education intended for pupils in compulsory education*. Helsinki: Finnish National Board of Education
- Giese, M., & Ruin, S. (2018). Forgotten bodies – an examination of physical education from the perspective of ableism. *Sport in Society*, 21(1), 152–165. <https://doi.org/10.1080/17430437.2016.1225857>
- Giese, M., & Buchner, T. (2019). Ableism als sensibilisierende Folie zur (Selbst-) Reflexion sportunterrichtlicher Angebote. *sportunterricht*, 68(4), 153–158
- Halinen, I., Harmainen, M., & Mattila, P. (2015) Making Sense of the Complexity of the World Today: Why Finland is Introducing Multiliteracy in teaching and learning. CIDREE Yearbook 2015 - Improving Literacy Skills Across Europe 136–153. Retrieved from: [www.oph.fi/download/173262\\_cidree\\_yb\\_2015\\_halinen\\_harmanen\\_mattila.pdf](http://www.oph.fi/download/173262_cidree_yb_2015_halinen_harmanen_mattila.pdf)
- Halinen, I. (2018). The New Educational Curriculum in Finland. In: M. Matthes, L. Pulkkinen, C. Clouder, & B. Heys (Eds.), *Improving the Quality of Childhood in Europe* (Vol. 7pp. 75-89). Alliance for Childhood European Network Foundation, Brussels, Belgium
- Haycock, D., & Smith, A. (2010). Inadequate and inappropriate? the assessment of young disabled people and pupils with special educational needs in National Curriculum Physical Education. *European Physical Education Review*, 16(3), 283e300. <http://dx.doi.org/10.1177/1356336X10382975>.
- Heikinaro-Johansson, P., Palomäki, S., & McEvoy, E. (2014). Embracing change and increasing physical activity in Finland. In M. K. Chin & C. R. Edginton (Eds.), *Physical education and health. Global perspectives and best practice* (pp. 163–175). Urbana, IL: Sagamore Publishing.
- Kansanen, P., & Meri, M. (2006). Finland. In W. Hörner, H. Döbert, L. R. Reuter, & B. von Kopp (Eds.), *The Education Systems of Europe* (pp. 251-262). New York: Springer Verlag
- Kivirauma, J., & Ruoho, K. (2007). ‘Excellence through special education? Lessons from the Finnish School Reform’. *International Review of Education*, 53(3), 283–302.
- Lähdemäki J. (2019). Case Study: The Finnish National Curriculum 2016 – A Co-created National Education Policy. In: Cook J. (Ed.), *Sustainability, Human Well-Being, and the Future of Education*. Palgrave Macmillan, Cham.: Springer.
- Malinen, O-P., Väisänen, P., & Savolainen, H. (2012). Teacher education in Finland: a review of a national effort for preparing teachers for the future. *Curriculum Journal*, 23(4), 567–584. DOI:10.1080/09585176.2012.731011
- Mayring, P. (2014). Qualitative content analysis: theoretical foundation, basic procedures and software solution. Klagenfurt. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173>
- McEvoy, E., Heikinaro-Johansson, P., & MacPhail, A. (2015). Physical education teacher educators’ views regarding the purpose(s) of school physical education. *Sport, Education and Society*, <http://dx.doi.org/10.1080/13573322.2015.1075971>
- Mihajlovic, C. (2018). Ansprüche an ein inklusives Kerncurriculum: Umsetzungsmöglichkeiten am Beispiel Finnlands. *Schweizerische Zeitschrift für Heilpädagogik* (4), 46–53.
- Mittler, P. (2012). *Overcoming exclusion. Social justice through education*. London: Routledge.



- Morley, D., Bailey, R., Tan, J., & Cooke, B. (2005). Inclusive physical education: teachers' views of including pupils with special educational needs and/or disabilities in physical education. *European Physical Education Review*, 11(1), 84–107.
- Niemi, H. (2012). The Societal Factors Contributing to Education and Schooling in Finland. In H. Niemi, A. Toom, & A. Kallioniemi (Eds.), *Miracle of Education: The Principles and Practices of Teaching and Learning in Finnish Schools* (pp. 19-38). Rotterdam: Sense Publishers.
- Niemi, H. (2015). Teacher professional development in Finland: Towards a more holistic approach. *Psychology, Society and Education*, 7(3), 278–294.
- Official Statistics of Finland (OSF) (2016). *Special education. Appendix table 1. Comprehensive school pupils having received intensified or special support in 2015*. Helsinki: Statistics Finland.
- Overton, H., Wrench, A., & Garrett, R. (2016). Pedagogies for inclusion of junior primary students with disabilities in PE. *Physical Education and Sport Pedagogy*, DOI: 10.1080/17408989.2016.1176134
- Qi, J. & Ha, A. (2012): Inclusion in Physical Education: A review of literature. *International Journal of Disability, Development and Education*, 59(3), 257–281.
- Richter, C. (2007). Concepts of physical education in Europe: movement, sport and health. *International Journal of Physical Education*, 44(3), 101–105.
- Ruin, S., & Meier, S. (2017). Body and Performance in (Inclusive) PE Settings – An Examination of Teacher Attitudes. *International Journal of Physical Education*, 54(3), 11–23.
- Sahlberg, P. (2011). *Finnish Lessons: What can the world learn from educational change in Finland?* New York: Teachers College Press.
- Sato, T., & Hodge, S. R. (2009). Japanese physical educators' beliefs on teaching students with disabilities at urban high schools. *Asia Pacific Journal of Education*, 29(2), 159e177. <http://dx.doi.org/10.1080/02188790902857164>.
- Slee, R. & Allan, J. (2001). Excluding the included: A reconsideration of inclusive education. *International Studies in Sociology of Education*, 11, 173–192. DOI: 10.1080/09620210100200073.
- Smith, A., & Green, K. (2004). Including pupils with special educational needs in secondary school physical education: a sociological analysis of teachers' views. *British Journal of Sociology of Education*, 25(5), 593–607.
- Symeonidis, V., & Schwarz, J. F. (2016). Phenomenon-Based Teaching and Learning through the Pedagogical Lenses of Phenomenology: The Recent Curriculum Reform in Finland. *Forum Oświatowe*, 28(2), 31–47.
- Tant, M., & Watelain, E. (2016). Forty years later, a systematic literature review on inclusion in physical education (1975–2015): A teacher perspective. *Educational Research Review*, 19(2016), 1–17.
- Takala, M., Pirttimaa, R. & Törmänen, M. (2009). Inclusive special education: The role of special education teachers in Finland. *British Journal of Special Education, British Journal of Special Education*, 36(3), 162–173.
- Vitikka, E., Krokfors, L., & Hurmerinta, E. (2012). The Finnish National Core Curriculum: Structure and Development. In: Niemi, H., Toom, A., & Kallioniemi, A. (Eds.), *Miracle of Education: The Principles and Practices of Teaching and Learning in Finnish Schools* (pp. 83-96). Rotterdam: Sense Publishers.
- Yli-Piipari, S. (2014). Physical Education Curriculum Reform in Finland. *Quest*, 66(4), 468–484.

---

---

## News of International Organisations

---

### AIESEP News

[www.aiesep.org](http://www.aiesep.org) / [f.chambers@ucc.ie](mailto:f.chambers@ucc.ie)



*Compiled by Fiona C. Chambers<sup>1</sup> (Cork, Ireland)*

#### **Development of AIESEP Strategy 2019-22 - Update**

For over 40 years AIESEP has been an influential research-informed voice in the development, implementation and evaluation of policy and praxis in physical education, physical activity and sport. AIESEP wishes to remain agile in this important work. For this reason, the AIESEP Board are currently developing the AIESEP strategy for the next three years.

Our three core strategic committees, (a) Leadership, (b) Inclusion and Diversity and (c) Quality Research have been convened and terms of reference are being finalized. Each strategy committee will report on progress in AIESEP Hong Kong 2020. We very much look forward to continuing to shape AIESEP Strategy 2019 – 2022 together.

#### **New AIESEP Website**

Thank you to Cassandra Iannucci leading the development of our new website. Please go to [www.aiesep.org](http://www.aiesep.org) to see our ‘new look’ website.

#### **AIESEP Symposium – University of Liège, Belgium (25th February 2020)**

Focus: Physical Literacy: A Design Thinking Approach

Clearly, physical literacy is a broad concept. Whilst the original term had strong philosophical orientations towards the concepts of phenomenology and existentialism, recent developments of the concept have largely focused on a more pragmatic interpretation. From our vast experience educating professionals in the area of physical literacy in physical education, physical activity and sport, it appears that the application of the concept of physical literacy has led to a focus on more rudimentary skills which has moved physical literacy away from its original and more holistic focus intended by Whitehead (2007; 2010). AIESEP now wonder if it might be timely to pause and reflect on the nature and purpose of current interpretations of physical literacy and to examine how other newer and related ideas might provide an understanding of the complex interplay between the individual and his/her ecological environment in the physical education, sport and physical activity contexts. This symposium will follow on from our recent Physical Literacy roundtable in AIESEP 2019 in Adelphi University, Garden City, New York, giving us the opportunity to continue this important conversation. For further details please visit: [events.uliege.be/sepaps2020/en/aiesep-symposium](http://events.uliege.be/sepaps2020/en/aiesep-symposium)

For further information please contact:

Association Internationale des Ecoles Supérieures d’Education Physique (AIESEP)  
[www.aiesep.org](http://www.aiesep.org) [f.chambers@ucc.ie](mailto:f.chambers@ucc.ie) (AIESEP General Secretary).

---

<sup>1</sup> Dr Fiona C. Chambers is Head of the School of Education at University College Cork (Ireland) and AIESEP General Secretary.

*Compiled by ECSS (Cologne, Germany)*

The 24<sup>th</sup> annual congress of the European College of Sport Science (ECSS) was a great success on many levels. The excellent scientific programme together with a rich social programme allowed participants from all around the world to enjoy the hospitality of Prague Congress Centre as well as the organizing committee from Charles University and all ECSS boards and committees. We thank all delegates for being part of yet another congress. We look forward to welcoming you to Seville next summer!

**Congress Statistics:** Total number of...

Participants	2,722	Plenary sessions	4
Participating countries	76	Invited sessions	41
Volunteers	57	Oral sessions	138
Abstracts presented	76	Conventional sessions	138
		print poster	479
		E-posters	

### **ECSS Young Investigators Award 2019**

Total number of YIA applicants: 368 Total number of YIA finalists: 110

1<sup>st</sup> oral presentation: Yves-Alain Kuhn, University of Fribourg, Switzerland.

1<sup>st</sup> poster presentation: Michael Wheeler, University of Western Australia, Australia.

### **EJSS Best Paper Award 2018**

Winner: Bessem et al. The electrocardiographic manifestations of athlete's heart and their association with exercise exposure.

### **GSSI Sports Nutrition Award 2019**

Winner: Laura Blancquaert, University Ghent, Belgium.

We thank all 44 exhibitors for showcasing their state-of-the-art products and services during the congress. Participants had the opportunity to engage with a wide range of new businesses and organisations, learning about their scientific solutions and thus increasing their knowledge of the latest developments and trends available in the market.

For further information please contact:

European College of Sport Science (ECSS)

Tel.: +49 (0)221 9626 2771

pr@sport-science.org / www.sport-science.org / www.ecss-congress.eu/2021

*Compiled by C. Scheuer<sup>2</sup>(Luxembourg, Luxembourg)*

EUPEA and PENELFA (Panhellenic Association of Physical Education Teachers) organised the 30<sup>th</sup> EUPEA Forum Meeting in Malia, Crete (Greece) from Thursday, 10 October to Sunday, 13 October 2019. The Forum included the usual constitutional agenda, as well as a seminar on the topic *Physical Education in Primary and Secondary schools* hosted by EUPEA and PENELFA.

During the Forum meetings, a change of the EUPEA constitution was adopted and Lucas Janemalm (Sweden) was co-opted in the Executive Committee in the new treasurer position. Furthermore, Dr Sandra Heck (University of Luxembourg) was co-opted in the EUPEA Board as vice-representative for institution members.

The seminar included several presentations on current EUPEA projects and initiatives: *IMPACT – Identification and Motivation of inactive youth who mostly need Physical Activity*: Prof. Athanasios Papaioannou and Dr Nikolaos Digelidis (University of Thessaly, UTH) presented the Erasmus+ funded project IMPACT ([www.impactpe.eu](http://www.impactpe.eu)), where EUPEA as well as the EUPEA members DSLV (Germany) and CAPDI-LSM (Italy) are involved as partners.

*DIPPE - Disentangling Inclusion in Primary Physical Education*: Susan Marron (Ireland) and Dr Claude Scheuer (Luxembourg) presented first outcomes of the Erasmus+ funded DIPPE project, consisting of a literature review on inclusion in primary physical education as well as the outcomes of a questionnaire on this topic answered by primary teachers across Europe. EUPEA is a partner in this project, together with its institution members University of Luxembourg (Luxembourg) and The Hague University of Applied Sciences (The Netherlands).

*BMC-EU – Basic Motor Competencies in Europe*: Dr Tamás Csányi PhD (Hungary), Dr Jana Vašíčková PhD (Czech Republic), Dr Sandra Heck (University of Luxembourg) and Dr Claude Scheuer (Luxembourg) presented the Erasmus+ funded project BMC-EU ([www.mobak.info/bmc-eu/](http://www.mobak.info/bmc-eu/)). Results from a survey on basic motor competencies based on the MOBAK concept in twelve European countries were presented together with a support framework for teachers to promote the motor competence of their students.

More information can be found on [www.eupea.com](http://www.eupea.com) under “Meetings”.

### **EUPEA Meetings in 2020**

- 5-8 March 2020: Board Meeting #1 in Helsinki (Finland), hosted by LIITO,
- 4-7 June 2020: Board Meeting #2 in Stockholm (Sweden), hosted by il Svenska, November/December 2020 (exact date tbc): 31<sup>st</sup> EUPEA Forum Meeting in Lisbon (Portugal), hosted by SPEF.

For further information please contact:

European Physical Education Association (EUPEA)

Tel.: +41 55 640 75 46 [www.eupea.com](http://www.eupea.com) / [info@eupea.com](mailto:info@eupea.com)

---

<sup>2</sup> Dr Claude Scheuer is researcher at the University of Luxembourg and EUPEA President.



*Compiled by B. Antala<sup>3</sup> & D. Novak<sup>4</sup> (Bratislava, Slovakia / Zagreb, Croatia)*

**FIEP publication 2020 “Physical Education in Universities: Researches - Best Practices - Situation”**

FIEP is planning on publishing the book **“Physical Education in Universities: Researches - Best Practices - Situation”** in 2020 with the following subtopics:

- Study / Review of the effects (benefits) of physical education and sport in Universities.
- Presentation of the main projects and best practices.
- Review: Physical education in the faculties’ and universities’ curriculum indifferent countries.

FIEP is offering the opportunity to contribute a “chapter” article for publication to FIEP delegates, members and friends.

- Project coordinators: **Miroslav Bobřík, Robin Pělucha** – Slovak University of Technology, Bratislava, Slovakia, **Branislav Antala** - Comenius University, Bratislava, Slovakia
- Send articles electronically by e-mail: [robinpelucha@gmail.com](mailto:robinpelucha@gmail.com) with c/c to [branislav.antala@uniba.sk](mailto:branislav.antala@uniba.sk)
- Language: **English or French**
- Deadline for sending articles: **31 December 2019**
- Planning edition – **April 2020**
- Article requirements: range - *max. 10 pages; structure of the article – title, author/authors (first name and surname), workplace, country; abstract; key words; text; photos; font: Times New Roman, font size: 10, line feed: 1.5; references – APA 6*

**7<sup>th</sup> International Conference “Anthropological and theo-anthropological views on physical activity from the time of Constantine the Great to modern times**

7<sup>th</sup> International Conference “Anthropological and theo-anthropological views on physical activity from the time of Constantine the Great to modern times” will be held in Kopaonik, Serbia, from 19-20 March 2020.

**Application deadline:**

Registration is open until 10 March 2020.

Abstracts in Serbian and English should be sent by 10 March 2020.

The guidelines for authors can be found at: <http://konferencija.dif.pr.ac.rs/guideliness-for-authors/>

Please send your submissions to the following e-mail: [fsfv.congress@pr.ac.rs](mailto:fsfv.congress@pr.ac.rs)

For further information on FIEP please contact:

Fédération Internationale d’Education physique (FIEP)

[www.fiepeurope.eu](http://www.fiepeurope.eu) [antala@fsport.uniba.sk](mailto:antala@fsport.uniba.sk)

---

<sup>3</sup> Dr Branislav Antala is professor at the Comenius University in Bratislava (Slovakia) and FIEP Europe President.

<sup>4</sup> Dr Dario Novak is researcher at the University of Zagreb (Croatia).



*Compiled by K. Koenen<sup>5</sup> (Berlin, Germany)*

### **Sport Policy Conference in Madagascar**

Africa's response to MINEPS VI

Over 30 ministers and senior officials responsible for physical education and sport identified the promotion of inclusiveness, gender equality, youth participation, traditional sports and games, as well as multi-stakeholder partnerships as crucial for human, social and economic development in Africa. Upon invitation of the Government of Madagascar and with the support of UNESCO, ICSSPE and other stakeholders, governmental and non-governmental experts met from 10-13 September 2019 in the capital of Madagascar, Antananarivo, to identify priority measures for fostering physical education, physical activity and sport policies at national, sub-regional, regional and international level. Furthermore, they recognised the important role of schools to create healthy, active and competent citizens, and the need to strengthen cooperation between public authorities in charge of sport, education, health and urban planning. At the end of this First Regional Conference of African Ministers on the Implementation of the Kazan Action Plan, the Ministers adopted the Antananarivo Recommendations, which can be found here: <https://unesdoc.unesco.org/ark:/48223/pf0000370641>

### **SPIRIT, WIN-DOP, DITEAM12**

ICSSPE partners in three new ERASMUS+ projects

ICSSPE was recently informed that three ERASMUS+ applications, in which ICSSPE partners, were successfully evaluated by the European Commission. The project period for *Sport and Psycho-social Initiative for Inclusive Training; Understanding and Promoting Whistleblowing on Doping Irregularities in the EU; and Diverse and Inclusive Teams for Children under 12* will start in January 2020 and will run for two and a half, respectively three years.

ICSSPE's responsibilities will range from a research review about the connections between mental health and sport, across the development of key recommendations for coaches' education, which will provide policy guidelines to promote whistleblowing in doping for NADOs, sporting federations and policy makers through to the provision of online pedagogical tools for coaches and club directors.

ICSSPE will provide regular information in the monthly news.

For further information please contact:

International Council of Sport Science and Physical Education (ICSSPE)

Tel.: +49 (0)30 3110232 10

[www.icsspe.org](http://www.icsspe.org) [icsspe@icsspe.org](mailto:icsspe@icsspe.org)

---

<sup>5</sup> Katrin Koenen is director of scientific affairs at the ICSSPE Executive office (Berlin/Germany).

*Compiled by Rachel Payne<sup>6</sup> (Copenhagen, Denmark)*

### **New perspectives on promoting physical activity to children**

Extract of coverage from the MOVE Congress 2019 at [www.movecongress.com](http://www.movecongress.com)

The last day of the MOVE Congress 2019 in Budapest (16-18 October) was dedicated to finding out how to keep children moving for their health and wellbeing. LazyTown Entertainment star Magnús Scheving and the founder of the Primal Play method, Darryl Edwards, gave participants a spectacular launch into the day in the plenary session. The track “Discovering new perspectives on physical activity promotion among school children” followed, unveiling a new Moving Schools Award scheme and sharing experiences from 3 continents, with speakers travelling to Budapest from Canada, the US, Hong Kong, Luxembourg, the UK and Poland to be part of the track.

The Moving Schools Award was launched during the track as an outcome of the EU-supported European Physical Activity Label for Schools project, led by the Hungarian School Sport Federation.

Project partner representatives Claude Scheuer, President of the European Physical Education Association, Luxembourg, and Viv Holt and Helen Vost from Youth Sport Trust International, UK, joined moderator Zoltán Boronyai in presenting the new initiative, which will first be open to schools in Europe to assess the opportunities they provide for school children to be active and apply for awards that recognise their efforts to become more active schools. Bronze, silver and gold awards will be presented to schools that can demonstrate that they deliver high quality physical activity, physical education and school sport.

Providing the right setting and opportunities for children to play freely is an important role for schools in this context, Holt said. “They just need the opportunity; it can be a piece of paper or a rock. No matter what, kids will play.” She also noted the barriers to children’s participation, which are increasingly becoming influenced by appearance, and that this applies to both genders. There are a lot of body image insecurities among boys and girls, which un-motivates them to become more physically active.”

Ultimately, turning physical activity into a game could be the most effective way of helping children forget their insecurities and just play, V4Sport Foundation President Jakub Kalinowski from Poland said. His organisation has created a whole “Galaxy of Physical Activity” including monsters who the children have to defeat with “physical inactivity busters”. Building simple cut-outs of the monsters and creating physical inactivity buster characters has become a mobile show that V4Sport has introduced to schools and outdoor events to motivate children to get involved and play.

The message tied in seamlessly with the keynote speeches from the morning and the overall theme of the Congress – which can mean than changing the game could be as simple as creating a game, or even more simply allowing children to create their own.

For further information on ISCA please contact:  
International Sport and Culture Association (ISCA)  
Tel.: +45 (0)2 9485551  
[www.isca-web.org](http://www.isca-web.org) [info@isca-web.org](mailto:info@isca-web.org)

---

<sup>6</sup> Rachel Payne is ISCA's Communications Manager.

---

## IJPE Guidelines for Contributors 2020

---

The International Journal of Physical Education (IJPE) is concerned with research and scholarship in the social sciences and humanities that focus upon different aspects of physical education, including the eight IJPE review topics ‘instructional theory of sport’, ‘health foundations’, ‘sports curriculum theory’, ‘historical and philosophical foundations’, ‘physical education teachers and coach education’, ‘psychological and sociological foundations’, ‘comparative sports pedagogy’ and ‘conceptual and empirical sports pedagogy’.

All work submitted should be original, unpublished work, not under consideration elsewhere. All papers submitted for the sections ‘research articles’ as well as ‘sport international’ undergo a thorough double-blind peer-review process. Accepted papers come under the copyright of the Journal.

Articles should be submitted by e-mail as an attachment preferably in Microsoft Word. Manuscripts should be in English. Contributors whose native language is not English are encouraged to consult an English language specialist to ensure that the manuscript is suitable for publication.

- Manuscripts (up to a maximum of 5500 words, including tables, figures and references) should include an abstract of 150-200 words on a separate sheet, and have three to five keywords placed at the beginning of the article. Should the manuscript contain tables and/or figures the amount of words is respectively less.
- The format of the article (including tables, figures and references) should conform to the American Psychological Association format (see APA Publication Manual, 2009, 6th Edition).
- As far as possible, any information that would lead to identification of the authors should be removed from the manuscript itself.
- A second file should be provided as a title page which includes the names of all authors in the appropriate order for publication and with details of their institutional affiliation(s). The lead or corresponding author must be clearly identified with full contact details.
- Articles not conforming to the above specifications will be returned to the authors for correction prior to the review.
- The editors retain the right to make limited editorial changes to manuscripts that have successfully completed the initial review process. Such changes will be returned to the author for approval prior to publication.

Submissions should:

1. be headed attention: *International Journal of Physical Education* in the subject line of e-mail
2. have attachments clearly labelled as a) title page b) manuscript, both with the name of the lead author
3. be e-mailed directly to: [holzweg@dslv.de](mailto:holzweg@dslv.de)



### Review Articles

- Bailey, R. P., Glibo, I., & Koenen, K. (2019). Some Questions about physical literacy. *International Journal of Physical Education*, 56(4), 2–6.
- Scheuer, C. (2019). A review of selected physical education teacher education texts in German (2017–2018). *International Journal of Physical Education*, 56(1), 2–10.
- Wulff, H., Glienke, M., & Wagner, P. (2019). Physical activity and media usage behaviour of children and adolescents: A review. *International Journal of Physical Education*, 56(2), 2–12.

### Research Articles

- Barney, D., Pleban, F. T., & Dodd, A. (2019). Favoritism in the physical education classroom: Selected reflective experiences. *International Journal of Physical Education*, 56(3), 2–9.
- Barney, D., Pleban, F. T., & M. Muday, M. (2019). Competition as an appropriate instructional practice in the physical education environment: Reflective experiences. *International Journal of Physical Education*, 56(4), 7–14.
- Gündüz, N., & M. T. Keskin, M. T. (2019). Evaluation of performance work on Bocce, Dart and Speed Stack education supported by peer education. *International Journal of Physical Education*, 56(4), 15–28.
- Kirkham-King, M., Brusseau, T. A., Burns, R. D., Castelli, D. M., Hilton, K., & James C., & Hannon, C. (2019). Effects goal setting has on children's cardiorespiratory fitness levels and enjoyment. *International Journal of Physical Education*, 56(3), 9–20.
- Lautenbach, F. (2019). The main predictor of preservice physical education teachers' attitude toward inclusion is stress appraisal. *International Journal of Physical Education*, 56(1), 11–20.
- Meier, S., & S. Ruin, S. (2019). Creation and validation of the Pre-service PE teachers' Attitudes Towards Inclusive Physical Education scale (ATIPE). *International Journal of Physical Education*, 56(1), 21–32.
- Ryan, T. D. G., & E. Sinay, E. (2019). Black student achievement, engagement and inclusion in physical education. *International Journal of Physical Education*, 56(2), 20–29.
- Ryan, T. G., & Sinay, E. (2019). What a health and physical educator needs to know about children and youth sleep problems that impact learning, behaviour and well-being. *International Journal of Physical Education*, 56(3), 20–30.
- Zerai, Z., & Gréhaigne, J.-F. (2019). Learning to teach through understanding – An operational model in physical education. *International Journal of Physical Education*, 56(2), 12–19.

### Sport International Articles

- Al Salim, Z. A., Lirgg, C. D., & Gorman, D. R. (2019). Attitudes of Saudi adolescents with and without disabilities toward physical education. *International Journal of Physical Education*, 56(2), 30–42.
- Deiry, A., Al-horani, R. A., & al luwaici, N. (2019). An evaluation of the developed physical education curriculum from the viewpoint of teachers at the governorate of Irbid, Jordan. *International Journal of Physical Education*, 56(1), 33–39.
- Hofmann, A. R. (2019). eSport or the disembodiment of sports – A threat to PE classes? *International Journal of Physical Education*, 56(3), 31–42.
- Mihajlovic, C. (2019). Towards inclusive education? An analysis of the current physical education curriculum in Finland from the perspective of ableism. *International Journal of Physical Education*, 56(4), 29–39.

---

---

## Upcoming Events

---

*Compiled by M. Holzweg (Berlin/Germany)*

AIESEP Symposium

Physical Literacy: A Design Thinking Approach

Liege, Belgium

25 February 2020

<https://events.uliege.be/sepaps2020/en/aiesep-symposium>

Research to practice 2020

Perth, Australia

2-4 April 2020

[www.researchtopractice2020.com.au](http://www.researchtopractice2020.com.au)

AERA Annual Meeting 2020

‘The power and possibilities for the public good when researchers and organizational stakeholders collaborate’

San Francisco, USA

17-21 April 2020

[www.aera.net/events-meetings/annual-meeting](http://www.aera.net/events-meetings/annual-meeting)

AIESEP International Conference 2020

Hong Kong, China

17-20 June 2020

<https://aiesep.spe.cuhk.edu.hk>

25<sup>th</sup> ECSS Congress Sevilla 2020

Sevilla, Spain

1-3 July 2020

[www.ecss-congress.eu/2020](http://www.ecss-congress.eu/2020)

15th FIEP European Congress

‘Promoting physical activity including adapted activity’

Vierumaki, Finland

5-8 August 2020

ECER 2020

‘Educational Research (Re)connecting Communities’

Glasgow, Scotland

25-28 August

<https://eera-ecer.de/ecer-2020-glasgow>

7th TAFISA World Sport for all Games

Lisbon, Portugal

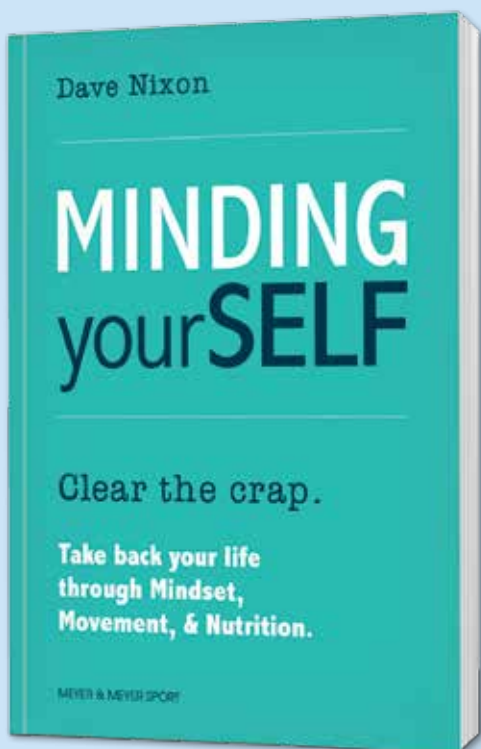
1-7 October 2020

[www.tafisaworldgames2020.org](http://www.tafisaworldgames2020.org)

# LIVE A HEALTHIER AND HAPPIER LIFE!

## MINDING YOURSELF

Clear the Crap. Take back your life through Mindset, Movement, & Nutrition



328 pages, Paperback, 5 Illustrations, b/w

Paperback, 5 ½" x 8 ¼"

ISBN: 978-1-78255-188-1

€ [D] 14.95

All information subject to change!

*Minding Yourself* challenges the traditional approach to fitness and reframes the positive psychological approach to training, nutrition, and “self-love.” For decades, trends in the fitness industry had created long-term psychological issues and provided short-term, unsustainable physical solutions to draw people in. This book breaks the reader free from the unhealthy pattern of yo-yo diets and impractical fitness routines by providing practical, healthy, and sustainable strategies for long-term change. This book will show the reader how to attach true meaning to losing weight, getting strong, building confidence, and eating healthily. It bases its approach on the methods of people who have made healthy changes to their lifestyles and maintained them. It examines their why, what, and how. The nutrition information is provided by expert, Nick Shaw, co-founder and CEO of Renaissance Periodization, a training and diet services company for world-class athletes. *Minding Yourself* revolutionizes how the reader approaches training, nutrition, and their overall outlook on the life–family–work balance. After applying the strategies in this book, the reader will start living a life that’s healthier and happier.

# The Sports Publisher

MEYER & MEYER Sport | [www.thesportspublisher.com](http://www.thesportspublisher.com) | [sales@m-m-sports.com](mailto:sales@m-m-sports.com)

MEYER  
& MEYER  
SPORT

**ISSN: 0341-8685**

