Journal of Theoretical Educational Science, 17(2), 404-422, April 2024

Kuramsal Eğitimbilim Dergisi, 17(2), 404-422, Nisan 2024

[Online]: <a href="http://dergipark.org.tr/akukeg">http://dergipark.org.tr/akukeg</a>

DOI number: http://doi.org/10.30831/akukeg.1322208



The Alignment between The Official Physical Education Curriculum and The Taught Curriculum\*

# Resmi Beden Eğitimi Öğretim Programı ile Öğretilen Program Arasındaki Uyum

Gonca EREN\*\* 🗓

Dilek YALIZ SOLMAZ\*\*\* 🗓



Dilruba KURUM YAPI CI OGLU\*\*\*\* 🗓

Received: 03 July 2023 Research Article Accepted: 26 December 2023

ABSTRACT: Although the written physical education curriculum is the same throughout the country, the implementation phase in schools differs from each other. Hence the purpose of this study is to examine the implementation process of the 5th-grade physical education and sports curriculum (2018) in different school contexts. Case study pattern was used. The participants of the study are two physical education teachers in Eskisehir. The data collection process consisting of observations, interviews, and field notes was completed in the fall semester of the 2018-2019 academic year. As a result of the analysis, the implementation process of the curriculum sub-theme which is related to the main theme of "taught curriculum", was reached. In conclusion, it can be said that the implementation process in schools is mostly teacher-centred, including the teaching of sports techniques and evaluating the psychomotor domain. It was observed that the game-based and student-centred structure of the updated curriculum was not sufficiently implemented by the teachers in the study. Also, it can be stated that the sufficiency of physical education course materials and the suitability of the areas used in physical education lessons are important factors in the implementation process of the curriculum.

Keywords: Case study, curriculum alignment, physical education, taught curriculum, teacher implementation.

ÖZ: Ülke genelinde geçerli tek bir resmi beden eğitimi öğretim programı olsa da bu programın okullardaki uygulama süreçleri çeşitli nedenlerle birbirinden farklılık göstermektedir. Bu çalışmanın amacı, 2018 yılında güncellenen 5. sınıf beden eğitimi ve spor dersi öğretim programının farklı okul bağlamlarında uygulanma sürecini incelemektir. Durum çalışması deseninin kullanıldığı bu çalışma, Eskişehir'de iki farklı ortaokulda ve bu ortaokullarda görev yapan gönüllü iki beden eğitimi öğretmeninin dersinde yürütülmüştür. Gözlem, görüşme ve saha notlarından oluşan veri toplama süreci 2018-2019 Eğitim-Öğretim Yılı Güz Dönemi'nde tamamlanmıştır. Yapılan analizler sonucunda "öğretilen program" ana temasına bağlı olan "öğretim programının uygulanma süreci" adlı bir alt temaya ulasılmıstır. Sonuç olarak, okullardaki uygulama sürecinin çoğunlukla öğretmen merkezli olduğu, spor tekniklerinin öğretimi ve psikomotor alanın değerlendirilmesini içerdiği söylenebilir. Güncellenen programın oyun temelli ve öğrenci merkezli yapısının, araştırmadaki beden eğitimi öğretmenleri tarafından öğretim süreçlerine yeterince yansıtılamadığı gözlemlenmiştir. Ayrıca beden eğitimi ders materyallerinin yeterliliği ve beden eğitimi derslerinde kullanılan ders alanların uygunluğunun programın uygulanma sürecinde önemli etkenler olduğu ifade edilebilir.

Anahtar kelimeler: Beden eğitimi, durum çalışması, öğretilen program, öğretim programı uyumu, öğretmen uygulaması.

#### Citation Information

Eren, G., Solmaz, G. Y., & Yapicioglu, D. K. (2024). The alignment between the official physical education curriculum and the taught curriculum. Kuramsal Eğitimbilim Dergisi [Journal of Theoretical Educational Science], 17(2), 404-422.

Copyright © 2024 by AKU

ISSN: 1308-1659

<sup>\*</sup> This article is derived from "An examination of implementation process of the 5th grade physical education and sport curriculum: example of multiple case study" thesis written in 2019 and presented as an oral presentation at the VI. International Eurasian Educational Research Congress held at Ankara University on June 19-22, 2019.

Asst., Corresponding Author: Res. Eskisehir Technical University, Türkiye, goncaeren@eskisehir.edu.tr, https://orcid.org/0000-0001-9787-9098

Assoc. Prof. Dr., Eskisehir Technical University, Eskisehir, Türkiye, dilekyaliz@eskisehir.edu.tr, https://orcid.org/0000-0003-0497-215X

<sup>\*\*\*\*</sup> Asst. Prof. Dr., Anadolu University, Eskischir, Türkiye, dilrubak@anadolu.edu.tr, https://orcid.org/0000-0002-9518-2999

Curriculums are frequently updated in order to keep up with the age and time we live in. It is important that the implementation processes of these updated curricula are quickly assimilated by teachers. The implementation process is seen as one of the key points of reforms (Tang, & Ma, 2002). Curriculum implementation can be expressed as the processes of teachers to actualize the written curriculum (Glatthorn, 2000, p. 83-84) in schools. Updated curriculums generally provide new instructional suggestions, lesson plans, and assessment alternatives to the teachers for the implementation process related to a set of objectives (Nevenglosky et al., 2019). There is a consensus in the literature that reforms in curriculums seem simple on paper but quite difficult to implement and maintain (Fullan, 2001; Jin, 2013; Macdonald, 2003; Rink & Stewart, 2003; Ward et al., 1999; Wright et al., 2006). The results of Hardman's (2008) compilation also support this consensus. After the UN declared 2005 as the International Year of Physical Education and Sports (UN, 2004), Hardman (2008) stated that the reforms could not be implemented at the desired level and speed, also he stated that the developments coexist with many adverse situations. Stating that especially underdeveloped and developing countries have a more negative picture in this process, Hardman (2008) stated that situations such as teaching time, sports facilities, teaching materials, crowded classroom sizes, unqualified teachers, equal service, and access for each student are common obstacles to reforms.

There are various actors and variables that have the power to affect the success of the implementation processes of the updated curriculums. While students, teaching materials and facilities, learning environment, and school context can be counted among the actors and variables that affect this process, it is stated that the most important actor in this process is teachers (Rogan & Grayson, 2003). Although the curriculum is presented to teachers as a ready-to-use program, this official program may differ due to the individual differences and working conditions of the teacher during the implementation process. At this point, it is stated that the components arising from the teacher, which are thought to have a direct impact on the implementation process, are teacher's attitudes and beliefs, teacher's past education, and teacher's ideas about the innovations in the curriculum (Roehrig et al., 2007). Besides, in the implementation process of the updated physical education (PE) curriculums the most difficult situations for teachers are lack of time, inadequate sport equipment and sport facilities, large classes, and lack of professional development (Fraser-Thomas & Beaudoin, 2002). Especially when it comes to PE lessons, it is stated that the importance of the lack of sports facilities and sports equipment used during the lesson has increased significantly and therefore it might be difficult to reflect the innovations in the program to the implementation processes (Hardman, 2008).

Parallel to the reforms at the international level, the Turkish PE curriculum at different education levels underwent some changes (MoNE, 2007; MoNE, 2013; MoNE, 2018). It can be said that the theoretical framework and the changes included in the curriculum, which was last updated in 2018, are based on the current international PE literature, and a continuation of the previous programs that were updated in 2013 and 2007. Accordingly, it is emphasized that the program, which was updated in 2007, contains radical changes with a constructivist approach towards improving health rather than teaching sports branches and sport techniques compared to the previous program (Ince & Demirhan, 2011; Ince, 2019). Program updates in 2013, embraced health-

related parameters and the concept of fitness is concentrated in this curriculum (Ince, 2019). Within the scope of the 2018 program which is still in effect, the development of fundamental movement skills in individuals was targeted, regular physical activity behavior, healthy life, and values education were highlighted (MoNE, 2018).

When the implications of the curriculum are examined in the Turkish context, it is seen that these studies are heavily shaped around stakeholder views and perceptions (Demirhan et al., 2008; Erdogdu & Ocalan, 2009; Gulum & Bilir, 2011; Havadar & Taşdan, 2015; Ozcan & Mirzeoglu, 2014). Moreover, Varol and Imamoglu (2014) stated that in the implementation of PE curricula, which have been radically changed since 2007, teachers who have been trained according to the behavioral approach may have difficulties, and these difficulties are mostly experienced in assessment and evaluation activities. Also, studies showed that health-related physical fitness information (Hunuk et al., 2013; Cengiz & Ince, 2014) and regular physical activity habits (Kin-Isler et al., 2009) could not be adequately taught in PE classes and therefore could not be transferred to daily life (Ince, 2019). It is stated that there are positive developments regarding values education, which is another focal point of the renewed program, according to the opinions of teachers (Kolukisa et al., 2015; Ince et al., 2018).

Ward and Doutis (1999) argue that curricula are a living experience that comes to life in classrooms through mutual interactions. Within the scope of this research, two of these program types described by Glatthorn, et al. (2016) are written curriculum prepared by the government and taught curriculum, as applied by teachers in schools are included in the scope. However, Ward and Doutis (1999) emphasized that there is a need for studies to reveal the application processes of the curriculum and learningteaching activities in depth. When the national literature is examined, there is no comprehensive study that reveals the practices of PE curriculum in schools. Based on the need in the literature, it is seen as an original and important research subject to put forward the practices that have been diversified by the teachers and to describe the reasons. As a result of the deeper examination of the implementation processes of the curriculum, it is thought that it might have a positive effect on the teachers and students, especially the curriculum developers. In addition, it is possible to contribute to raising healthier and physically active generations by performing the necessary interventions for the desired implementation of PE curriculum in early school ages. Hence the purpose of this study, considering the alignment of PE teachers is to examine the implementation process in the 5th-grade which is the first education step of the PE and sports curriculum (updated in 2018).

#### Method

#### **Research Design**

Since the research focuses on the implementation process of the PE and sports lesson curriculum in different school contexts, based on in-class teacher activities, case study design was used within the scope of qualitative research methods. Case studies allow for in-depth investigation of various real-world phenomena or contexts with specific boundaries and conditions to be investigated (Yin, 2013), and provide rich data about these phenomena or contexts (Recker, 2013). In this context, the implementation process of the updated PE curriculum was determined as a case to be investigated.

However, in this single case, since it was decided to examine the implementations of more than one teacher in line with the possibilities of the researcher, the research type was determined as a single case study with two embedded analysis units. These types of case studies involve a single case design with multiple units of analysis (Yin, 2013, p. 50). In our research, two embedded units of analysis were chosen: Teacher Meltem and Teacher Cigdem.

### **Participants**

The research participants are two physical education teachers working in the 5th grade of different secondary schools in Eskisehir in the fall semester of 2018-2019. Before selecting physical education teachers for the study, it was deemed important to select research schools. As stated in more detail in the research schools' section below, physical education teachers working in schools with various contexts were contacted. Participants have bachelor's degrees in PE and sports teaching. Teacher Meltem's school, where she has been working for 10 years, is the third school where she has worked in her professional experience, she taught in secondary schools for 4 years in the eastern, and 6 years in the western part of Turkey. Teacher Cigdem spent 7 years of experience in the secondary school where she still works.

Criterion sampling (Fraenkel et al., 2018), one of the purposeful sampling methods, was used when determining the participants. The criteria were that the participants were studying in the 5th grade, which is the grade level where the students first met the physical education teacher, that they were working in one of the schools where the teaching internship was carried out, and that they volunteered for the research. The criterion that the participating teachers work in the schools where the teaching internship practice was carried out was chosen because it was thought that it would naturally result in the researchers and teachers knowing each other well, thus reducing the difficulties experienced in the entry stages of qualitative research and facilitating the establishment of communication-based on mutual trust. In addition, the location of the schools where they worked (one school in the city center, the other school far from the center) was also taken into account when determining teachers. Three physical education teachers working in the 5th grade at the central secondary school were interviewed and Teacher Meltem was included in the study because she was a volunteer. Similarly, although two Physical Education teachers teach 5th grade in a suburban secondary school, only Teacher Çiğdem was included in the study voluntarily. 5th graders have a special place in Turkey in terms of Physical Education lessons. Students encounter the Physical Education teacher and the official Physical Education curriculum for the first time at the 5th-grade level. In addition, the curriculum was updated in 2018 and the data of this research were collected during the first time the curriculum was implemented.

In addition, among the 5th-grades of the teachers to be observed, care has been taken to select the equivalent classes in terms of factors such as class size and student characteristics. 5th-grades were selected by the opinions of the researcher and PE teachers. Teacher Meltem's 5-A class with 23 students was observed on Tuesdays and Teacher Cigdem's 5-B class with 22 students was observed on Fridays during the fall semester.

### Research Schools

While selecting the research schools, the administrators of six secondary schools in the city center, and three secondary schools in the in the suburban area were interviewed in line with the time and transportation facilities of the researcher who collected the data. These schools are also among the schools where pre-service physical education teacher candidates' teaching internship practices are carried out and whose context is well known and recognized by the researchers. Schools of administrators who agreed to conduct the study in their schools were included.

In addition, while selecting the two implementation schools of the study, it was considered important to diversify the main factors such as the condition of the lesson area and the richness of the lesson materials, which were thought by the researchers to be reflected in the implementation phase of the physical education lesson and thus in the adoption of the renewed curriculum. It can be said by the authors that physical education lessons have more financial needs, such as a gym, materials, and equipment for various sports branches, compared to other theoretical courses. Therefore, in a country like Turkey, which has a wide variety of public-school contexts, some variations were made in line with the research and researcher conditions that could affect the implementation of the central program.

Central secondary school: The school where Teacher Meltem works is a public school located in the central district of Eskisehir province with 978 students. Because of the location, there is no transportation problem to the school. The school has five PE teachers and physical activity areas are the school garden with concrete floors and an 18 square meter indoor, low-ceilinged multi-purpose hall that allows lessons in cold weather conditions. The sports equipment in the school is basketball, football, volleyball and handball balls, badminton rackets and nets, table tennis equipment, gymnastics mats, training funnels, and slalom bars.

Suburban secondary school: The school where Teacher Cigdem works is a public school located in the suburb of Eskisehir province with 429 students. The school is located outside the city center, in an area where urban transformation projects are carried out. Due to its remote location from the city center, there are fewer public transportation networks to reach the school. The school has two PE teachers. Physical activity areas are a school garden and also a concrete floor and a low ceiling multipurpose hall of 25 square meters where PE classes are held especially in winter. The main sports equipment at the school is a few soccer and volleyball balls, one tennis table, and a gymnastics mat.

#### **Data Collection Tools and Process**

The research process started in May 2018 with the document review of the PE curriculum. Simultaneously, the literature review process to form the basis of the research and prepare the data collection tools has begun. Necessary permissions were obtained from educational institutions. With the research permissions, interviews were started with the schools in the neighborhoods that the researcher could easily reach. The administrators and PE teachers at the schools that allowed the research were informed about the research aims and process.

Afterward, data collection tools were prepared by the first researcher and presented to the field and language experts' opinions. In line with the opinions, semi-structured interview forms and course observation forms were finalized, and pilot interviews and observations were made in another secondary school.

Document review of the teachers' annual plans and the researcher's diaries started in September 2018. The first semi-structured interviews were held with the teachers one week before the start of the fall semester. When the fall semester started, the observation process was started simultaneously. In addition to the observations every week, researcher diaries were conducted regularly by the first researcher. At the end of the fall semester, the data collection process was terminated by conducting second semi-structured interviews with the teachers. Detailed information on the data collection process is given in Table 1 below.

Table 1

Data Collection Process

		Starting Date	Due Date	Duration (week/hour)
Participant observations		17.09.2018	18.01.2019	18 weeks / 3.240 hours
Document review		01.05.2018	18.01.2019	35 weeks
Researcher diaries		11.09.2018	18.01.2019	18 weeks
1. Interviews	Teacher Meltem	20.09.2018	20.09.2018	29 mins
	Teacher Cigdem	18.09.2018	18.09.2018	31 mins
2. Interviews	Teacher Meltem	08.01.2019	08.01.2019	59 mins
	Teacher Cigdem	17.01.2019	17.01.2019	66 mins

#### **Data Analysis**

In the study, the thematic analysis approach suggested by Braun and Clarke (2006) was used. The structure of thematic analysis, which provides flexibility to researchers, has a wide range of uses, from qualitative research with many participants to case studies with 1-2 participants (Clarke & Braun, 2017). In this research, the flexible structure of thematic analysis has been utilized, since there was no code or theme predetermined by the researchers, and the themes related to the implementation process were reached through the codes assigned by the researchers from the collected data.

Firstly, verbatim transcripts of semi-structured interviews were made. After, transcripts of interviews were coded by the author. In addition to the interviews, research diaries and document review were also started to be analyzed and coded as they were collected in the process. All the coding processes were carried out under the supervision of the field experts. On the way from codes to themes, all the data obtained in the research were brought together, synthesized for research purposes, and the themes were finalized. Accordingly, the main theme reached in the research is the taught curriculum. One sub-theme related to this main theme were also revealed: the implementation process of the curriculum. In addition, sub-theme have various categories within themselves.

### **Credibility and Ethics**

First of all, expert opinions were sought at every stage to ensure credibility in the research. Triangulation was made in data collection methods. Also, the researcher has developed safe and positive relationships with the participants by staying in research areas for a long time. In order to ensure transferability, the research process, and the collected data were tried to be described in detail. The participants were informed about the research purposes, process, and their rights. Their voluntary approvals were obtained. All names in the study have been replaced by nicknames. Before the data collection process, ethic approval was obtained from Anadolu University Scientific Research and Publication Ethics Committee.

#### Results

The findings obtained as a result of the analysis of the data are themed as given in Figure 1 below.

Figure 1

Research Theme

Preparation for teaching

Implementation Process of the Curriculum

Implementation of the learning outcomes

Teaching and learning

Assessment and evaluation

### The Implementation Process of the Curriculum

#### Preparation for Teaching

In the implementation process, the preparations of the teachers before and during the semester were examined. It has been observed that the preparations before the semester consisted of the compulsory seminars offered by the Ministry of National Education (MoNE) during the summer term and the preparation of annual lesson plans. Teachers stated that they did not make any individual preparations for their teaching apart from these preparations: "As preparation for the semester, I only attended the mandatory seminars given by the ministry in the summer months." (Teacher Meltem – 1. Interview) and "I did not have any extra preparation for the semester, I followed the compulsory seminars in the summer months." (Teacher Cigdem – 1. Interview).

In the preparation of the annual lesson plans, it can be said that teachers made some changes specific to their schools by downloading the annual plan samples, which are mostly available on the Internet: "While preparing the annual plans, I choose a plan from the Web according to our school's facilities and materials are." (Teacher Meltem – 1. Interview).

It can be said that the preparations during the semester are similar: "Sometimes downloaded plans have some techniques that I don't have much knowledge such as table tennis, so I search the teaching techniques on the internet before the class." (Teacher Cigdem – 2. Interview).

### Learning Outcomes

Achieving the aims of the curriculum is related to how much the learning outcomes in the curriculum can be implemented in the lessons. In Table 2 and Table 3 below, 12 weeks are presented during the 18 weeks, selected among the outcomes that were not realized in the lessons, although they were included in the teaching plans of the teachers.

Table 2

Teacher Meltem's Learning Outcomes, Subjects of Annual Plan and Taught Curriculum

Learning Outcomes	Subjects of Annual Plan	Taught Curriculum
Measures the level of physical activity in the activities.	Physical fitness test measurements should be done.	Introduction, informing about the course and rules.
Measures the level of physical activity in the activities.	Physical fitness test measurements should be done.	Practicing for parades on national holidays.
Explains the fundamental movement concepts used in games and activities.	Concepts of body and area awareness, effort, and movement relations used in fundamental movement skills should be addressed.	Practicing for parades on national holidays.
Applies displacement movements by showing awareness of area and effort.	Walking, running, jumping, jumping- leaping, step-taking, gallop-slip, etc. movements.	Physical fitness measurements were done.
Realizes strengths and needs to be improved in participating in games and events.	In the activities, by making self- assessment, they become aware of strengths and aspects that need to be developed and self-esteem is emphasized.	Practicing for parades on national holidays.
Applies the movements that require balancing by showing body-area awareness.	Bending, stretching, rotation-oscillation, weight transfer, jump-landing, start-stop, dynamic-static balance, stance-sit, pushpull, etc. movements.	Practicing for parades on national holidays.
Applies movements that require object control by showing body awareness and movement relations.	Ball-handling; throwing-holding, catching, kicking, rolling, stop-control, dribbling, racket hitting, long-handled hitting, etc. movements.	National holiday: October 29 Republic Day
Does basic gymnastic movements.	Postures, rolls, body transfer and change of direction, transitions, and connections, etc. in gymnastics.	Chest pass practice was done in basketball.
Knows the general aims and applications of first aid in physical activities.	The definition, importance, general purposes, basic rules of first aid, and the first aid kit materials discussed.	Fundamental gymnastic postures were practiced.
Knows the Olympic concepts.	Concepts and symbols related to the Modern Olympic Games (Paralympic, Olympic, etc.) are emphasized.	The topic of the week was not taught.
Measures the level of physical activity in the	Assessment-evaluation (mid-term): pre- prepared fundamental movement skills	Instead of fundamental movement skills, students took

activities.	tests are applied to the students. After the skill test, the mistakes made by the students are indicated.	an exam on layout exercises (turning right-left, marching in review, etc.).
Measures the level of physical activity in the activities and explain the effects of physical activities on physical fitness.	Assessment-evaluation (end of term): pre-prepared fundamental movement skills tests are applied to the students. After the skill test, the mistakes made by the students are indicated.	Students took an exam on basic gymnastic poses.

Table 3

Teacher Cigdem's Learning Outcomes, Subjects of Annual Plan and Taught Curriculum

Learning Outcomes	Subjects of Annual Plan	Taught Curriculum
Demonstrates combined movement skills in a variety of games and activities.	Service in volleyball should be explained to the students and practice with activities.	The topic of the week was not taught.
Demonstrates appropriate behaviors regarding losing and winning in games and activities.	A mini volleyball tournament should be organized in the class.	The topic of the week was not taught.
Aware of individual differences in games and activities.	Fundamental gymnastic postures should be practiced.	Forehand and backhand hit, service shots skills, and game rules were measured and evaluated in table tennis.
Understands the importance of cooperation in games and activities.	Exercises should be done about backhand shot in table tennis.	The topic of the week was not taught.
Evaluates the performances of herself/himself and her/his friends.	Physical fitness test measurements should be applied.	Physical fitness test measurements were done.
Applies the movements that require balancing by showing body-area awareness.	Overhand passes in volleyball should be explained to the students and practice with activities.	Overhead pass practices were done in volleyball.
Applies movements that require object control by showing body awareness and movement relations.	Bump pass in volleyball should be explained to the students and practice with activities.	Bump pass practices were done in volleyball.
Assessment-evaluation	Assessments-evaluation should be done (mid-term)	Evaluation on practices about parades on national holidays and exercises of turning right, left, and back in parades.
Realizes strengths and needs to be improved in participating in games and events.	Basic posture position and racket handling exercises should be done in table tennis.	Racket handling exercises were done in table tennis.
Does basic gymnastic movements.	The forward and backward rolling techniques should be explained and shown to the students.	The topic of the week was not taught.

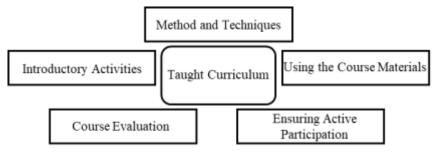
Assessment-evaluation	Assessments-evaluation should be done (end of term)	An exam was held on bump and overhead pass technical skills in volleyball.
Measures the level of physical activity in the activities.	Explain the effects of physical activity on healthy life.	The topic of the week was not taught.

It can be said that most of the period, teachers did not teach their lessons in line with the outcomes in their plans.

### Teaching and Learning

Topics within the scope of the sub-theme of learning-teaching practices are presented in Figure 2 below.

Figure 2
Teaching and Learning Sub-theme and Related Topics



Introductory Activities. In the introduction activities, it was observed that the data of the teachers differed from each other: "Teacher Meltem checked the sportswear at the beginning of the lesson and wished good lessons with the command of 'be ready' by taking attendance." (Observation diary) and "Teacher Cigdem came to the lesson and told the students to play by themselves by giving the materials. Later, she took attendance by identifying the students with her eyes." (Observation diary).

Teacher Cigdem said that "The lesson time ends before the children can get enough of the game, if we lose time by taking attendance or something else, there is no time left to play or teach." (2. Interview).

In addition, it can be said that both teachers didn't include motivational activities in their lessons. Teacher Meltem said that "Students come to class highly motivated, we usually don't even need to do introductory activities, we spend more of our time on games." (2. Interview).

Method and Techniques. While it is seen that Meltem Teacher preferred two methods (command and game-based) throughout the term: "After setting up the running station for the flag run, she trained the skill to each partner by commanding the whistle." (Observation diary) and "She brought two pieces of blue cloth to the class, she said they would play the tail grabbing." (Observation diary), Teacher Meltem said about her methods and techniques: "In this age group, we can teach them with the best command method. They both have fun and learn when we give the commands in the games." (2. Interview).

It has been observed that Teacher Cigdem teaches her lessons only with the demonstration technique throughout the semester: "She asked the students to form a

circle. Then she moved to the middle of this circle, showed with her arms how the bump pass should be, and wanted everyone to do it as they showed them." (Observation diary). Teacher Cigdem has used the following expressions about the demonstration technique: "I think it is much more rational to present the subject with the demonstration method to the 5th-graders and to explain what will happen and how. This is the most suitable for their age levels." (2. Interview).

Using the Course Material. It has been observed that Teacher Meltem does not have any problems in terms of the number and variety of course materials. On the contrary, it is seen that Teacher Cigdem has problems in terms of the number and variety of materials due to the disadvantages of financial inadequacy of the school budget.

Ensuring Active Participation. It can be said that teachers prefer different ways to ensure active participation in the lesson: "Teacher Meltem determined the playgrounds for everyone, distributed materials, and stated that everyone has to participate in the games." (Observation diary) and Teacher Meltem also said: "We already have enough equipment, when we give equipment to all class, they already actively participate in the lesson." (2. Interview).

On the other hand, Teacher Cigdem has been observed to work with students one-to-one on technical skills to ensure active participation in her lessons: "Students enjoy playing and competing with the teacher rather than playing with their friends, so they participate enthusiastically in the lesson." (2. Interview).

Course Evaluation. According to the lesson plan guidelines prepared by the MoNE, it was observed that Teacher Meltem had a course evaluation in only one week of the 18-week observation period, while Teacher Cigdem didn't include any. The observation data of Teacher Meltem is as follows: "She put the students in line at the end of the lesson and asked them to make self-evaluation about their mistakes in the lesson today." (Observation diary).

When Teacher Meltem was asked about her opinions on a course evaluation, she said: "I watch all students in each lesson and evaluate each one separately, I don't just waste time putting it down on paper in each lesson." (2. Interview).

When asked why Teacher Cigdem was not evaluating the course, she said: "We don't understand when the lesson is over while playing the game, I evaluate them in my mind during the lesson anyway." (2. Interview).

## Assessment and Evaluation

In the assessment process both teachers consider similar factors in the process. When the teachers' assessment-evaluation practices were examined, it was seen that both teachers similarly made evaluations on a single physical skill test for all students: "Teacher Cigdem called students one by one to the exam. Each student demonstrated their table tennis technical skills in front of her. After the psychomotor skills, each student was asked a verbal question about the table tennis rules." (Observation diary) and "During the assessment week, Teacher Meltem had the students individually complete a psycho-motor skills test on gymnastics and asked them one verbal question" (Observation diary).

After the exams, both teachers completed the evaluation processes by giving all students a minimum score of 95 out of 100 in the E-School system. As seen in the assessment-evaluation activities given above, it can be said that teachers don't include student-centred and process-based assessment-evaluation activities recommended in the curriculum during the semester. Both teachers were asked their opinions about these approaches and the reasons for not choosing them in their lessons. Teacher Meltem's answer on this subject is as follows: "This is the European system, but I think there is no infrastructure for this in Turkiye. As a teacher, I can see that in the process, the students were not like they did in the first weeks, they learned something." (2. Interview).

Teacher Cigdem's comments on student-centred and process-based approaches are as follows:

I didn't reflect anything on their grades by making student-centred assessments, but while I was teaching, I tried to evaluate the students in my mind and discover their abilities throughout the process. The curriculum wants alternative assessments, such as portfolios, peer, or group assessments. I mean, these are good things, but if some students don't like or are angry with their classmates, they may give a low score, I think that some emotions can come into play here. (2. Interview)

#### **Discussion and Conclusion**

The research focused on how the curriculum is implemented in the selected schools. At the beginning of the implementation phase, teaching preparation activities were examined. Chatoupis (2016) argued that a systematic preparation and planning process before the lesson is the key to effective teaching. In addition, Chatoupis (2016) also stated that the process of preparation for teaching increased confidence in the course content by reducing the anxiety of teachers, facilitating the organization of the course materials, and preparing a draft for assessment-evaluation. It can be said that the teachers apart from attending the compulsory seminars organized by the MoNE, didn't have a specific preparation activity at the beginning of the semester and they only conducted research on some subjects in the annual plans during the semester. Therefore, it can be stated that teachers don't have a planned and systematic preparation process as stated in the literature. It can be emphasized that this situation may create an obstacle in achieving the aims of the curriculum by negatively affecting the teachers to carry out an effective learning-teaching process.

McNeill et al. (2018) explain that teachers create teaching plans compatible with the curriculum with the concept of "fidelity." In other words, the concept of fidelity indicates the harmony between the official curriculum and the taught curriculum on paper and in practices. When the teaching plans and outcomes of the teachers are examined, it is seen that they are mostly compatible with the curriculum on paper. Therefore, it can be stated that teachers are committed to the outcomes of the program. On the other hand, it is also important to implement these outcomes in the lessons and to integrate them into daily life. To this end, it was emphasized that teachers teaching in line with the program's outcomes and engaging in activities aimed at realizing the outcomes is a factor that supports students' achievement with their active participation (McNeill et al., 2018). When the status of the teachers to achieve the outcomes is examined, the findings show that both teachers didn't depend on the outcomes in the plans in their lessons to a large extent. In light of the information presented in Table 2

and 3, it can be said that teachers perform activities that don't comply with the outcomes in many weeks of the semester. It can be stated that it is difficult for students to develop behavior in line with the curriculum, especially since teachers don't teach her lessons for many weeks. Glatthorn et al. (2016) also emphasize that teachers usually use the curriculum at the beginning of the semester to look at what they will teach while preparing their plans, but they don't pay much attention to the official curriculum and outcomes in the rest of the year. Similarly, Ozturk (2012) stated that the outcomes in the curriculum and plans are basically binding, but teachers mostly use their powers in following these instructions and make many changes in practice. The findings also parallel to the literature.

It is seen that introductory activities increase students' interest and motivation levels toward the subject to be learned and remind them of pre-learning (Fink, 2005). It's possible to say that the introductory activities of teachers are not compatible with the literature. It was observed that the teachers didn't include any motivational and preparational activities within the scope of introductory activities. The fact that teachers don't include introductory activities in their lessons is seen as an obstacle to effective and permanent learning (Ozturk, 2001). Providing PE teachers with current information in terms of issues to be considered effective lesson planning may play a key role at this point.

According to the PE curriculum, the learning-teaching process should be modelbased and technology-based, which includes student-centred methods specific to the school, associated with daily life, in cooperation with stakeholders, affecting all learning areas, flexible, innovative, sensitive to individual differences with special needs, paying attention to the participation of each student and inclusive for all students equally (MoNE, 2018). Considering these principles, it is seen that the teachers' teaching methods and techniques are teacher-centred and insensitive to individual differences that make students passive. Studies in Turkey reveal that PE teachers mostly use the "command" and "practice" methods in their lessons, and they highly value teachercentred methods (Demirhan et al., 2008; Ertan & Cicek, 2003; Ince & Hunuk, 2010). The findings regarding the methods and techniques used by the teachers parallel the literature. From this point of view, it can be said that the implementation principles offered by the curriculum and the learning-teaching processes carried out by the teachers are not aligned. Besides, the curriculum emphasizes that the most appropriate models among individualized, cooperation, sports education, peer education, tactical games, and individual and social responsibility models should be used (MoNE, 2018). Unfortunately, in the learning-teaching processes, it was seen that teachers didn't perform a model-based education as suggested by the curriculum. Lack of theoretical and practical knowledge about models can be shown as the underlying reason for this situation. In addition, Mirzeoglu (2017) stated that teaching models are not well-known both in teacher education institutions and PE teachers in Turkey.

The curriculum recommends that students be as active as possible and interact intensely with various course materials in PE classes (MoNE, 2018). When the student participation and the material interaction were examined, it was seen that they were limited in both teachers. In both classes, students were waiting in line to participate in the activities in their lessons, and they talked or lost interest in the subject during the waiting period. Practices such as teachers setting rules for active participation or

participating in activities one-to-one with students didn't change this result. It can be said that the main factors that reveal this situation are teacher-centred teaching methods and teaching through a single activity during the lesson. As teachers didn't include more than one activity simultaneously during the lesson, active participation, and material interaction were limited for many weeks throughout the semester. Moreover, although there was no deficiency of course materials in Meltem Teacher's school, it is obvious that the active participation and interaction of the students remained limited. Similar to this result, Powell et al. (2018) reported that school-age children were at a level lower than the physical activity and material interaction level recommended by the curriculum in PE classes. The results are thought to be due to a lack of the teacher's professional knowledge and skills in the field of PE. Based on this, there is a need to update the theoretical and practical knowledge of teachers on related subjects.

The course evaluation activities also were examined, and it was observed that Teacher Meltem had only one lesson evaluation, Teacher Cigdem didn't evaluate any lesson during the semester. While Chng and Lund (2018) emphasized the importance of end-of-course evaluation, they state that the observational evaluations made by PE teachers without keeping any records and without giving feedback don't contribute to learning.

Afterward, assessment-evaluation activities were observed and the teachers made teacher-centred and summative assessments instead of the student-centred and formative assessment approach suggested in the curriculum. In addition, it can be said that assessment-evaluation activities were mostly aimed at psychomotor goals. Accordingly, it can be stated that the practices of the teachers were not aligned with the curriculum. On the other hand, when the opinions of the teachers about the process-based approach were examined, they expressed their negative opinions about the process-based approach. These negative opinions may be due to their insufficient theoretical and practical knowledge, learning experiences in the past, and personal characteristics for process-based assessment. In recent years, it has been frequently emphasized in the literature that the concept of "assessment for learning" has increased in importance in PE with current and alternative methods and that teachers and teacher training institutions should address these issues (Hay et al., 2015; Leirhaug & MacPhail, 2015; Moura et al., 2020).

In the research, although the teaching experiences are different from each other, the procedures for implementing the curriculum, teaching methods and techniques of teachers' use, the forms of assessment, and in-class activities are mostly similar. Among the reasons for this, it can be said that the fact that the teachers completed their undergraduate education in the period before the updated curricula in the framework of the constructivist approach (MoNE, 2007) in the field of PE may have an effect. Even though teachers graduated from different universities, the education they receive in the field of teaching may be based on similar ecoles.

The findings show that the alignment of the participating teachers with the updated secondary school PE curriculum could not be achieved sufficiently. In particular, there are some points that don't align with the curriculum within the scope of learning-teaching and assessment and evaluation practices. Regarding learning outcomes, it has been observed that the teachers' annual plans are aligned with the curriculum on paper. But it can be emphasized that there are some problems with

transferring learning outcomes from paper to life. In addition, it can be said that the teachers didn't read the new curriculum and didn't have sufficient information about the curriculum concept. Similar to this research, studies conducted after curriculum updates in the United States and Ireland report that teachers' curriculum alignment could not be achieved at the desired levels (Chen, 2006; Coulter et al., 2020; Rink, 2013). Chen (2006) mentions that there is a disturbing gap between the standards in the United States K-12 PE curriculum and the taught curriculum. In addition, Bulger et al. (2008) state that although learning outcomes and instructional practices are clearly stated in accordance with the PE curriculum, neither expectations from teachers are clearly defined nor there is evidence of what students learn. This situation is interpreted in the literature as teachers don't sufficiently integrate curriculum updates and requirements into their practices (Oh & Graber, 2017). Bulger et al. (2008) also attributed this misalignment to teachers' low proficiency in the field and emphasized that becoming a physically educated student and living a healthy active lifestyle requires more than a collection of teaching sports techniques with short team-sport units designed to keep students busy and happy. Thus, supporting PE teachers with in-service training on the scope of the PE curriculum and how it can be used effectively is important for the success of the curriculum. Also, this research was carried out in two different school settings. It can be suggested that similar studies with both qualitative and quantitative data can be carried out in different provinces and school contexts with different teachers.

### Acknowledgements

This research was not funded by any institution or organization.

#### **Conflicts of Interest**

The authors declare no conflict of interest.

## **Statement of Responsibility**

All authors contributed to the study. Firstly, Eren contributed to the identification of the idea and need for research. Initial conceptualization and drafting of the original manuscript were carried out by Eren, Solmaz, and Yapicioglu. Methodological design and analysis were carried out by Eren and Yapicioglu. Solmaz interpreted the data and helped with the manuscript's editing, and reviewing processes. Writing, revision, and editing were performed by Eren, Solmaz, and Yapicioglu.

#### **Author Bios:**

Gonca Eren is a research assistant at Eskisehir Technical University, Department of Physical Education and Sports Teaching. She focused her studies on physical education curricula during her master's degree and continues her doctorate on the professional development of teachers. Her research interests are physical literacy, professional development, and physical education pedagogy.

Dilek Yaliz Solmaz is an associate professor at Eskisehir Technical University. She received her Ph.D. degree in educational sciences from Anadolu University. Her research interests include physical education curriculum, physical education teacher training, and values education.

Dilruba Kurum Yapicioglu is an assistant professor at Anadolu University. She completed her doctorate in the field of curriculum and instruction. In her studies, she frequently uses qualitative research methods to produce studies on curricula and professional development.

#### References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Bulger, S. M., Housner, L. D., & Lee, A. M. (2008). Curriculum alignment: A view from physical education teacher education. *Journal of Physical Education, Recreation* & *Dance*, 79(7), 44-49. http://dx.doi.org/10.1080/07303084.2008.10598215
- Cengiz, C., & Ince, M. L. (2014). Impact of social-ecologic intervention on physical activity knowledge and behaviors of rural students. *Journal of Physical Activity and Health*, 11, 1565–1572. https://doi.org/10.1123/jpah.2013-0080
- Chatoupis, C. (2016). Planning Physical Education Lessons as Teaching "Episodes". *Strategies*, 29(2), 20-26. https://doi.org/10.1080/08924562.2015.1133355
- Chen, W. (2006). Teachers' knowledge about and views of the national standards for physical education. *Journal of Teaching in Physical Education*, *25*, 120-142. https://doi.org/10.1123/jtpe.25.1.120
- Chng, L. S., & Lund, J. (2018). Assessment for learning in physical education: The what, why, and how. *Journal of Physical Education, Recreation & Dance*, 89(8), 29-34. https://doi.org/10.1080/07303084.2018.1503119
- Clarke, V., & Braun, V. (2017). Commentary: Thematic analysis. *Journal of Positive Psychology*, *12*(3), 297-298. https://doi.org/10.1080/17439760.2016.1262613
- Coulter, M., Scanlon, D., MacPhail, A., O'Brien, W., Belton, S., & Woods, C. (2020). The (mis) alignment between young people's collective physical activity experience and physical education curriculum development in Ireland. *Curriculum Studies in Health and Physical Education*, 11(3), 204-221. https://doi.org/10.1080/25742981.2020.1808493
- Demirhan, G., Bulca, Y., Altay, F., Sahin, R., Guvenc, A., Aslan, A. & Acikada, C. (2008). Comparison of the views of partners regarding the physical education curriculum and it's delivery. *Hacettepe Spor Bilimleri Dergisi*, 19(3), 157-180.
- Erdogdu, M., & Ocalan, M. (2009). The opinions of physical education teachers on evaluating the second level primary school physical education lesson program. *Sportmetre The Journal of Physical Education and Sports Sciences*, 8(4), 151-162.
- Ertan, H. & Cicek, S. (2003). Student achievement evaluation approaches in elementary physical education courses in Turkey. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 25(25), 76-83.
- Fink, D. L. (2005). *Integrated course design*. Idea Paper 42. Manhattan, KS: The IDEA Center. https://ideacontent.blob.core.windows.net/content/sites/2/2020/01/Idea Paper 42.p

df

- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2018). *How to Design and Evaluate Research in Education* (10th ed). New York: McGraw-Hill.
- Fraser-Thomas, J. L., & Beaudoin, C. (2002). Implementing a physical education curriculum: Two teachers' experiences. *Canadian Journal of Education*, 27(2), 249-268.
- Fullan, M. (2001). *The New Meaning of Educational Change* (3rd Ed.), New York and London.
- Glatthorn, A. A., Jailall, J. M., & Jailall, J. K. (2016). *The principal as curriculum leader: Shaping what is taught and tested* (4th Ed.). Thousand Oaks, California: Corwin Press.
- Glatthorn, A.A. (2000). The principals as curriculum leader: shaping what is taught and tested (2nd Edition). Thousand Oaks, California: Corwin.
- Gulum, V., & Bilir, P. (2011). Opinions of physical education teachers, physical education curricula programs related to the conditions of applicability. *Spormetre The Journal of Physical Education and Sports Sciences*, *9*(2), 57-64. https://doi.org/10.1501/Sporm\_0000000200
- Hardman, K. (2008). Physical education in schools: a global perspective. *Kinesiology: International journal of fundamental and applied kinesiology*, 40(1.), 5-28.
- Havadar, T., & Tasdan, M. (2015). The views of physical education teachers about the physical education curriculum in the 4th and 5th grades of primary schools. *Inonu University, Journal of Physical Education and Sport Sciences*, 2(1), 29-46.
- Hay, P., R. Tinning, & C. Engstrom (2015). Assessment as pedagogy: A consideration of pedagogical work and the preparation of kinesiology professionals. *Physical Education and Sport Pedagogy* 20(1), 31–44. https://doi.org/10.1080/17408989.2013.788145
- Hunuk, D., Ince, M. L., & Tannehill, D. (2013). Developing teachers' health-related fitness knowledge through a community of practice: Impact on student learning. *European Physical Education Review*, 19, 3–20. https://doi.org/10.1177/1356336X12450769
- Ince, M. L. & Hunuk, D. (2010). Experienced physical education teachers' use and perceptions of teaching styles during the educational reform period. *Eğitim ve Bilim*, 35(157), 128-139.
- Ince, M. L. (2019). Supporting learning of practitioners and early career scholars in physical education and sports pedagogy. *Sport, Education and Society*, 24(6), 584-596. https://doi.org/10.1080/13573322.2019.1598966
- Ince, M. L., & Demirhan, G. (2011). Integration of health and active living perspective in a skill oriented physical education curriculum: A report from Turkey. *Healthy Active Life Style and Physical Education*, 26-31.
- Ince, M. L., Hunuk, D., Ozturk, M. A., Yanık, M., & Savucu, Y. (2018). *PE teacher professional development project needs analysis report*. The Scientific and Technological Research Council of Turkey.
- Jin, A. (2013). Physical education curriculum reform in China: a perspective from physical education teachers. *Physical Education and Sport Pedagogy*, *18*(1), 15-27. https://doi.org/10.1080/17408989.2011.623231

- Kin-Isler, A., Asci, F. H., Altintas, A., & Guven-Karahan, B. (2009). Physical activity levels and patterns of 11-14-year-old Turkish adolescents. *Adolescence*, 44(176), 1005–1015.
- Kolukisa, S., Donmez, B., & Donmez, K. H. (2015). A study on secondary school students' expectations of physical and motoric development in the course of physical education [In Turkish]. *Karadeniz Sosyal Bilimler Dergisi*, 1, 1–9.
- Leirhaug, P. E., & MacPhail, A. (2015). 'It's the other assessment that is the key': three Norwegian physical education teachers' engagement (or not) with assessment for learning. *Sport, Education & Society*, 20(5), 624–640. https://doi.org/10.1080/13573322.2014.975113
- Macdonald, D. (2003). Curriculum change and the post-modern world: Is the school curriculum-reform movement an anachronism? *Journal of Curriculum Studies*, 35(2), 139-149. https://doi.org/10.1080/00220270210157605
- McNeill, K. L., Marco-Bujosa, L. M., Gonzalez-Howard, M. & Loper, S. (2018). Teachers' enactments of curriculum: Fidelity to Procedure versus Fidelity to Goal for scientific argumentation. *International Journal of Science Education*, 40(12), 1455-1475. https://doi.org/10.1080/09500693.2018.1482508
- Mirzeoglu, D. A. (2017). *Akran Öğretim Modeli*. D. A. Mirzeoğlu (Ed.), In Model Temelli Beden Eğitimi (ss. 109-137) Ankara: Spor Yayınevi ve Kitabevi.
- MoNE (2007). *Primary school (grade 1-8) physical education curriculum* [In Turkish]. Ankara: Ministry of Education.
- MoNE (2013). Secondary school (grade 5-8) physical education curriculum [In Turkish]. Ankara: Ministry of Education.
- MoNE (2018). Secondary school (grade 5-8) physical education curriculum [In Turkish]. Ankara: Ministry of Education.
- Moura, A., Graca, A., Macphail, A., & Batista, P. (2020). Aligning the principles of assessment for learning to learning in physical education: A review of literature. *Physical Education and Sport Pedagogy*, 26(4), 388-401. https://doi.org/10.1080/17408989.2020.1834528
- Nevenglosky, E. A., Cale, C. & Aguilar, S. P. (2019). Barriers to effective curriculum implementation. *Research in Higher Education Journal*, *36*, 1-31.
- Oh, J., & Graber, K. C. (2017). National curriculum for physical education in the United States. *Quest*, 69(2), 220-235. https://doi.org/10.1080/00336297.2016.1218776
- Ozcan, G., & Mirzeoglu, A. D. (2014). Beden eğitimi öğretim programına ilişkin öğrenci, veli ve beden eğitimi öğretmenlerinin görüşleri. *Amasya Üniversitesi Eğitim Fakültesi Dergisi*, 3(1), 98-121.
- Ozturk, B. (2001). Derse giriş davranışlarının öğretmenler tarafından kullanılma durumu. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 7(1), 107-124.
- Ozturk, I. H. (2012). Teacher's role and autonomy in instructional planning: the case of secondary school history teachers with regard to the preparation and implementation of annual instructional plans. *Educational Sciences: Theory & Practice*, 12(1), 271-299.
- Powell, E., Woodfield, L. A., Nevill, A. M., Powell, A. J. & Myers, T. D. (2018). 'We have to wait in a queue for our turn quite a bit' Examining children's physical

- activity during primary physical education lessons. *European Physical Education Review*, 25(4), 929-948. https://doi.org/10.1177/1356336X18785343
- Recker, J. (2013). Scientific research in information systems: A beginner's guide. New York: Springer.
- Rink, J. & Stewart, S. (2003). Insights and reflections on a state assessment program. *Journal of Teaching in Physical Education*, 22(5), 573–88. https://doi.org/10.1123/jtpe.22.5.573
- Rink, J. E. (2013). Measuring teacher effectiveness in physical education. *Research Quarterly for Exercise and Sport*, 84(4), 407-418. https://doi.org/10.1080/02701367.2013.844018
- Roehrig, G.H., Kruse, R.A., & Kern, A. (2007). Teacher and school characteristics and their influence on curriculum implementation. Journal of Research in Science Teaching: *The Official Journal of the National Association for Research in Science Teaching*, 44(7), 883-907. https://doi.org/10.1002/tea.20180
- Rogan, J. M., & Grayson, D. J. (2003). Towards a theory of curriculum implementation with particular reference to science education in developing countries. *International Journal of Science Education*, 25(10), 1171-1204. https://doi.org/10.1080/09500690210145819
- Tang, L. F., & Ma, Y. P. (2002). A survey of the implementation of the new curriculum: Problems and obstacles [in Chinese]. *Theory and Practice of Education*, 22(7), 52–55.
- United Nations. (2004). Sport for peace and development: International Year of sport and physical education. Report of the Secretary-General, 16 August 2004 (A/59/268/Add.1). https://www.sportanddev.org/sites/default/files/downloads/15\_\_intl\_year\_of\_sport\_ and p e 2005 final report.pdf
- Varol, Y. K., & Imamoglu, F. (2014). Comparatively analyzing the physical education curriculum in elementary education according to teacher opinions in Turkey and England. *Journal of Physical Education and Sport*, 14(1), 98. https://doi.org/10.7752/jpes.2014.01016
- Ward, P., & Doutis, P. (1999). Toward a consolidation of the knowledge base for reform in physical education. *Journal of Teaching in Physical Education*, 18, 382-402.
- Ward, P., Doutis, P., & Evans, S. (1999). Lessons, conclusions, and implications of the Saber-Tooth Project. *Journal of Teaching in Physical Education* 18(4), 455–463.
- Wright, S., McNeill, M., Fry, J., Tan, S., Tan, C., & Schempp, P. (2006). Implications of student teachers' implementation of a curricular innovation. *Journal of Teaching in Physical Education* 25(3), 310–328. https://doi.org/10.1123/jtpe.25.3.310
- Yin, R. (2013). *Case study research; design and methods*. 5th Edition. (Vol. 28). Portland: Ringgold Inc.



This is an Open Access article distributed under the terms of the Creative CommonsAttribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0). For further information, you can refer to https://creativecommons.org/licenses/by-nc-sa/4.0/