

## TEACHING ONLINE LESSONS OF PHYSICAL EDUCATION AND SPORT THROUGH THE METHOD FLIPPED CLASSROOM

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**Abstract:** *Teaching online in pre-university school for many teachers of physical education and sports was a great challenge. The way in which we managed to adapt to the new teaching conditions determined us to carry out a project in Braşov, called Move & Dance from Home. In this paper we want to present a way of teaching online in the form of the inverted class using the materials made in the project. The main activity that we pursued in this project consisted in carrying out physical activities from the contents of the school curricula of primary and secondary education that can be taught online. This project was conceived by the teachers of physical education and sports from the Middle School Nr. 30, Braşov: Romila Cristina, Tudor Felicia, Pană Gabriela, Ciuciulete Georgiana and Mr. Marius Grancea personal trainer. This project was joined by 27 teachers of physical education and sports, from 12 partner schools from Braşov. The teaching materials were used as teaching aids for the schools included in the project. The conclusions of the study highlighted useful information on how to improve online teaching in primary and secondary school.*

**Key words:** *physical education and sports lesson, online teaching, method Flipped Classroom.*

### 1. Introduction

In 2020, in all countries of the world there was a major change in people's normal lifestyle, including sports activities, due to the rules that had to be observed

by citizens, due to the COVID-19 pandemic. [8]

The suspension of lessons as they were performed in normal conditions, the closure of schools and sports activities, by generating a state of emergency in

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Romania was enforced starting with 10.03.2020. [3]

This created a major problem for the entire Romanian society.

This situation has taken over the entire education system, especially the pre-university system. Every school, every teacher sought to carry out their activity as efficiently as possible online. Online teaching is not new; it has been used especially by academia for distance teaching or by various institutions or organizations that hold online courses. [1]

Teachers and students had to adapt to the conditions of teaching through electronic means and the Internet. If in the school year 2019/2020 it was a novelty, in the following school year it became something usual.

In these circumstances, a series of pedagogical, technical and content impediments inevitably arose in the field of many school subjects, especially those of a vocational nature. Because it was a unique situation, the teachers tried to come up with new and efficient ideas for online teaching. [9]

The Ministry of Education came to the aid of teachers, providing them with various educational platforms as well as courses for their initiation in terms of online teaching, such as the Google Classroom platform, Google Meet. [5]

Although studies have shown that these online courses are less effective and can cause stress among students, due to difficulties in handling devices or socializing [2], compared to classical teaching, it increased transparency of classes. Parents were able to see how a class works, what the teacher's attitude and language are and how he or she manages conflict situations during class, but also what his or her child's level of

preparation is compared to the class level. [7]

Specialists in the field of physical education and sports have been concerned since the establishment of online teaching emergencies. According to studies, many high school students prefer online courses for learning physical education and sports. [10]

Among the methods used by many teachers during the online teaching period, there is the method Flipped Classroom. This consists of posting the materials by the teachers on the teaching platform; the student must view the materials, which can then be practiced in lessons or individually. [4] According to specialists, this method has proved relevant in teaching physical education and sports lessons. According to studies, the method Flipped Classroom has proven to be more effective than classical teaching methods. [6]

### **1.1. Premises and purpose**

This study we started from the premise of the importance of teaching physical education and sports during the period when students have to learn from home, and lessons take place online. The way in which we managed to adapt to the new teaching conditions determined us to carry out a project in Braşov County, called Move & Dance from Home.

The main activity aims at carrying out the physical activity in the school year 2020/2021 by the students from the middle and primary school from the Middle School Nr. 30, Brasov and from the educational partners involved in the project.

Our project aims to bring to the attention of students, and not only, the

importance of knowing and capitalizing the benefits of physical activity, both at school and in their free time. They aim to supplement the thematic content provided in the school curriculum. We believe that this project will achieve an improvement in maintaining optimal health, in the motor development of students and the acquisition of optimal general skills in the school performance of students.

The project aims that through its actions, students be motivated to practice daily physical activities either in an organized or individual way.

## **2. Material and Method**

### **2.1. Participant**

The Move & Dance from Home project was addressed first of all to the children from the participating schools, as well as to their parents, the local community, who will benefit indirectly, and to the teachers from the partner schools.

The support of didactic materials is provided by the teachers of physical education and sports from the Middle School Nr. 30 Brasov and by Mr. Marius Grancea, personal trainer / sports instructor at the Marius Grancea Studio Fitness. Partner teachers from this project who agreed to participate in the filming were also able to take part in the making of the videos.

Between 14.09.2020 / 15.10.2020, 27 teachers from 12 schools in Brasov County signed up for the project. These are: Middle School Nr. 11, „St. O. Iosif”, Brasov, „Emil Racovita” National College Brasov, Middle School Nr. 3, „Gheorghe Lazar”, Brasov, Middle School Nr. 5, Brasov, Middle School Nr. 14, „Saint Bartholomew”, Brasov, Brasov High School with Sports Programme, C.N. „Mrs. Stanca” Fagaras, Halchiu Middle

School, Sanpetru Middel School, Ghimbav Middle School, Budila Middle School, Teliu Middle School.

One of the ways to emphasize the materials created is the method Flipped Classroom. Teachers who are partners in the project can use the teaching materials created as teaching aids for physical education and sports lessons.

### **2.2. Procedure**

The teaching materials were made as videos which contain specific physical activities for the moments of the physical education and sports lesson.

We began to film the materials in September 2020 and ended in March 2021. The following activities were carried out within the project:

- Movement through a complex of physical exercises;
- Movement through Zumba steps;
- Aerobic step movement.

The mentioned activities contain physical exercises, such as:

- ✓ Complex of physical exercises performed without or with objects;
- ✓ Work - Up;
- ✓ Tabata;
- ✓ Power stretching;
- ✓ Zumba kids;
- ✓ Aerobic kids;
- ✓ Flash mob;
- ✓ Thematic dances.

After making the videos, they were sent to all project partners through a social application.

The purpose of the project consisted of a contest between the schools participating in the project with a video made by them. The contest was called „We love movement”, and each of the schools participating in the competition

prepared a video with various physical activities that can be done from home. The competition was won by the Middle School No. 30, Brasov.

In order to obtain feedback from the project partners, we conducted a survey in the form of a questionnaire with closed and open answers. This was done on the Google Forms platform. The questionnaire sent on February 15, 2021, could be accessed at the following link:

[https://docs.google.com/forms/d/1YisIMRi4QZdx2M5B2QAj5sFcIDwn\\_pUcBGXH6Fo](https://docs.google.com/forms/d/1YisIMRi4QZdx2M5B2QAj5sFcIDwn_pUcBGXH6Fo)

sE/edit?usp=sharing, and teachers were able to complete it by March 7, 2021.

The questionnaire was completed individually and anonymously. The questionnaire was completed by 20 teachers.

The questions of the questionnaire were the following:

- 1.How did you find out about this project?
- 2.Was this project useful?
- 3.Did you use the exercises and information in the project?
- 4.What impact did these have on your students?
- 5.How did this project help you?

6.How do you assess the quality of the exercises within the project?

7.How do you appreciate the involvement of the project team in making the materials?

8.Will you participate in this project in the future?

9.What materials did you like most about this project?

10. Do you have any suggestions to improve this project?

### 2.3. Results

The answers to this questionnaire helped to collect data on the effectiveness of this project. Next we will analyze the results obtained for each question.

To the question “How did you find out about this project?” out of the 20 teachers surveyed, 12 (60%) answered from the project team, 5 (25%) answered from the project partners, and 3 (15%) they responded - from the pedagogical coordinators.

*Answers received to question 1*

Table 1

From the project team	From project partners	Responsible of pedagogical coordinators
60%	15%	25%



Fig. 1. *Answers received to question 1*

It is noted that 60% of those who completed the questionnaire heard about the project from the organizers, and 40% from the project partners or pedagogical

circle coordinators.

To the question "Was this project useful?" out of 20 teachers, 19 (95%) answered yes and 1 (5%) answered no.

Table 2  
*Answers received to question 2*

Yes	No
19(95%)	1 (5%)

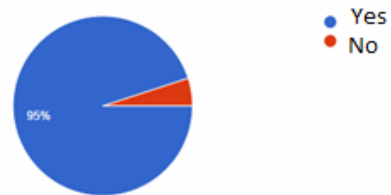


Fig. 2. *Answers received to question 2*

We notice that 95% of those who completed the questionnaire consider our project useful. This positive feedback gives us confidence to continue implementing the project in the next school year. We are also satisfied because it is useful to all those who participated. The fact that one

teacher stated that it was not useful for him determines us to find solutions to make it better.

To the question "Did you use the exercises and information in the project?", out of 20 teachers, 17 (85%) answered yes, 3 (15%) answered sometimes.

Table 3  
*Answers received to question 3*

Yes	No	Sometimes
17 (85%)	0	3(15%)

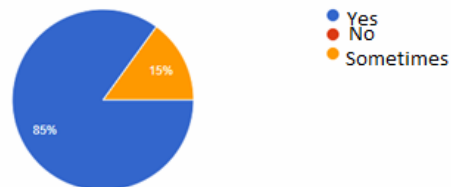


Fig. 3. *Answers received to question 3*

According to the answers received, it is observed that teachers access and use the new created materials in a fairly large proportion. By using the materials we consider that they are useful in the instructive-educational process.

have on your students?", out of 20 teachers, 16 (80%) answered 'very well', 4 (20%) answered 'well' and to the variants 'satisfactory' and 'we did not use the materials' there were no answers.

To the question "What impact did these

Table 4

*Answers received to question 4*

Very well	Well	Satisfactory	We did not use the materials
16 (80%)	4 (20%)	-	-

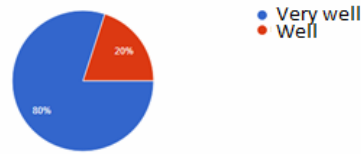


Fig. 4. Answers received to question 4

The positive responses received from our project partners show us that the materials were used, and all the teachers received positive feedback from students which determines us to continue with the

project.

To the question "How did this project help you?" question with multiple answers, the following percentages were recorded.

Table 5

Answers received to question 5

To organize better and conduct my physical education classes online	To improve the knowledge input	To exercise every day to be in good health
90%	35%	20%

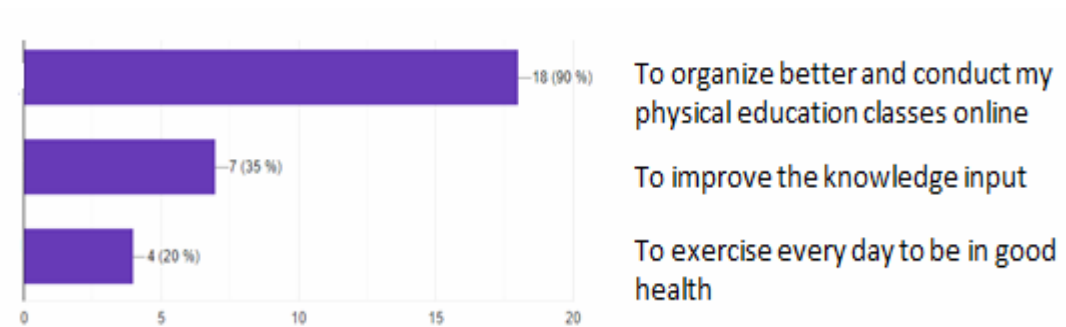


Fig. 5. Answers received to question 5

According to the answers received, we notice that the materials were used during the online physical education and sports lessons, for a better organization of the lessons. Among the materials made by the participants, some were considered to have improved teachers' specialized knowledge. We believe that through this

positive feedback we have achieved the objectives of this project.

To the question "How do you assess the quality of the exercises within the project?", out of 20 teachers, 18 (90%) answered 'very well', 2 (10%) answered 'well' and there were no answers to the 'satisfactory' response.

Table 6  
*Answers received to question 6*

Very well	Well	Satisfactory
18 (90%)	2 (10%)	-

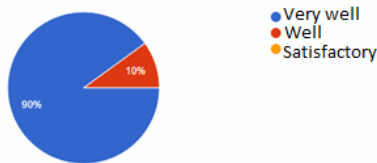


Fig. 6. *Answers received to question 6*

Considering the answers to the questionnaire, the materials were very well made, and these positive answers determine us to continue.

To the question “How do you appreciate the involvement of the project team in making the materials?”, out of 20 teachers, 20 (100%) answered ‘very well’, and no answers were registered for the ‘good’ and ‘satisfactory’ variants.

Table 7  
*Answers received to question 7*

Very well	Well	Satisfactory
20 (100%)	-	-



Fig. 7. *Answers received to question 7*

In order to make a quality project, we consider that the organizers must be involved in the making of the project. The answers received show us the appreciation of the participants and that we were really committed to the making of the project. The proof was in the maximum number of positive answers from participants to the question on “involvement of the project team”.

To the question "Will you participate in this project in the future?", out of 20 teachers, 19 (95%) answered ‘yes’, 1 (5%) answered ‘maybe’, and ‘no’ variant was not chosen.

Table 8  
*Answers received to question 8*

Yes	No	Maybe
19 (95%)	-	1 (5%)

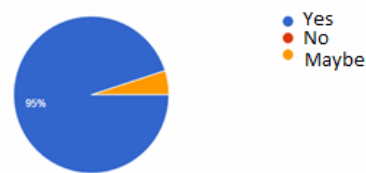


Fig. 8. *Answers received to question 8*

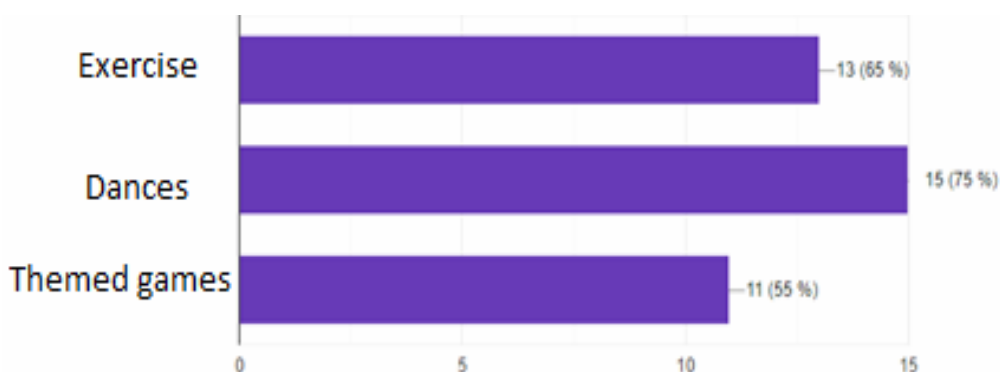
According to the answers, all teachers want to participate in the next edition of the project, which determines us to improve the project activities.

To the question "What materials did you like most about this project?" question with multiple answers, the following percentages were recorded.

Table 9

*Answers received to question 9*

Exercise	Dances	Themed games
65%	75%	55%

Fig. 9. *Answers received to question 9*

According to the answers, the dances were the most appreciated, followed by exercises with physical activities and thematic games.

To the question “Do you have any suggestions to improve this project? ”, a question with open answers, most teachers wrote they have been satisfied with this project, but we also received suggestions such as:

- exercises for coordination with various objects;
- balance exercises;
- selection of exercises according to age or level of training.

After interpreting the results of this questionnaire, we consider that the exercises performed within the Move & Dance from Home project were well chosen and performed. Even if, to a very small extent, their usefulness was not as expected for some teachers, the

suggestions they made convince us to continue with this project in the future.

### 3. Conclusions

Because we are going through a more difficult period and teaching online is a necessity in this period, we consider that such projects are very useful and welcome in local, regional and national communities.

From the analysis of the answers received to the questionnaire addressed to the partner teachers in the Move & Dance from Home project, it was found that this project was useful and that the materials made in the project were useful in physical education and sports lessons at lower secondary and primary level.

The materials created correspond to the contents of the school curricula, and to the requirements of the age peculiarities. Through the autonomy of the physical



education and sports teacher, he can select his teaching material according to the level of the class he teaches.

The analysis of the answers provided a positive feedback regarding the way in which the Move & Dance from Home project was realized. We believe that this project can also be seen as an example of improving and streamlining online teaching in primary and secondary school.

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