International
Journal of Human Sciences
ISSN: 2458-9489

Volume: 20 Issue: 3 Year: 2023

Flipped classroom model in physical education and sport teaching

Burcu Karaman[1]

Abstract

This research aimed to reveal the experiences of the 9th grade students and the lesson teacher who use the lipped classroom model in physical education and sports lessons. Therefore, phenomenology, one of the qualitative research designs, was preferred in the research. The research was carried out with 1 physical teacher and 15 9th grade students in a secondary education institution located in the Ereğli district of Zonguldak in the second term of the 2022-2023 academic year. Criterion and convenient sampling, which are among the purposive sampling techniques, were used to determine the study group. In the research, a semi-structured interview form prepared for teachers and students was used as a data collection tool. The interviews were conducted face-to-face in the assistant principal's room at the school. A voice recorder was used to avoid data loss. The interviews lasted 32 minutes with the physical education and sports teacher and between 10-18 minutes with the students. The data were analyzed with content analysis using the Maxqda 2020 program. As a result of the research, it was determined that the physical education and sports teacher and the students had positive opinions about the flipped classroom model. According to the research results, this model; It can be said that it is effective in terms of features such as saving time in the lesson, being fun, attracting attention, being applicable, having an efficient process and being applied in different lessons.

Keywords: Flipped classroom model; physical education and sports lesson.

Introduction

Today, rapid developments in information, technology and communication affect the field of education as well as in all areas of our lives. Making changes in all areas of life in order to keep up with the conditions of the age necessitates current changes in the field of education. However, learning processes and methods are also changing. Learning opportunities have expanded by moving away from the traditional classroom environment/media and making use of technology and digital tools. It is thought that students can have a more interactive and participatory education experience with technologies such as distant education platforms, interactive learning materials, and virtual reality. It is an important necessity to organize education and training life in accordance with the interests, wishes and expectations of today's students, who are "digital natives", in the words of

[1] Ph.D., Independent Researcher, B.kara.88@outlook.com, ORCID ID: https://orcid.org/0000-0003-0161-8825
Submitted: 14/06/2023 Published: 12/07/2023

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

Prensky (2001), who was born in the age of information and technology. Digital natives smartphone, computer, internet etc. It thrives in a rich environment. These students, who are actively open to innovations, need new learning approaches in which they can actively use digital technology. One of these teaching approaches is the flipped classroom model. The flipped classroom model places students at the center of the learning process, allowing students to create their own learning journeys and gain a deeper understanding of the subject.

The flipped classroom model, unlike traditional classroom media, starts with students watching teacher pre-recorded lesson videos. Thus, in the classroom environment/medium, the teacher can explain in detail the subjects that the students do not understand or ask questions. In addition, teachers can organize various hands-on activities and discussions in the classroom to attract students' attention (Bergman & Sams, 2012; Zownorega, 2013; Bond, 2020). One of the most important features of the flipped classroom model is the fact that students are at the center of learning. This model enables students to identify their own learning paths, examine topics in depth, and set their own learning goals. Therefore, it is possible for students to have a better understanding of the subjects and more opportunities to learn.

The flipped classroom model also encourages students to collaborate with teachers and friends. Classroom discussions and group work allow students to exchange information and ideas. This provides learning where students can learn from each other and creates a platform for students to help each other. In this way, students learn the activities, discussions and practices they have done together and gain the habit of working together. This situation increases group communication and interaction among students (Bergman & Sams, 2012; Lage, Platt & Treglia, 2000). Considering the difficulties experienced in creating such activity-centered environments and allocating time for these educational environments, the importance of the flipped classroom model emerges once again. When it is considered on a course basis, it is seen that there is a time problem in transferring the achievements to the students in many courses (Güç, 2017). However, regardless of the reasons, students of practice-based education will continue in the 21st century. It is a fact that it will prepare the world better. Due to all these problems, the effect of the methods that educators will use in their activity-oriented education is of course inevitable. For this reason, the use of this model in the understanding of activity and practice-centered education will provide teachers with more opportunities to practice, and this will save the teacher an important time in gaining gains, skills and values. This model is suitable to be used effectively in many courses in education. One of these courses is Physical Education and Sports.

Physical education and sports is a course that aims to provide lifelong sports habits and a physically active lifestyle in students starting from primary and secondary school (Lee, Burgeson, Fulton, & Spain, 2007; Karaman, 2021). In this course, situations such as giving theoretical information about the subject to be covered by the teacher, preparation for the application, taking attendance reduce the time allocated for applications. The use of the flipped classroom model provides significant advantages in terms of leaving time for in-class activities and practices in physical education and sports classes, where practice and activity are very important (Karaman, 2021). Using the flipped classroom model in physical education and sports lessons has many advantages for teachers and students. Frydenberg (2013) and Karaman (2021) mention that teachers can have a large time frame in terms of planning and implementing in-class activities. In addition, it is stated that it will contribute to the skill development of the students by leaving more time for in-class activities and practices.

In the literature on the flipped classroom model, it is seen that research from different branches such as science, social studies, English, and mathematics are conducted (Boyraz, 2014; Bozdağ & Türkoğuz, 2021; Çetin Köroğlu, 2015; Çoşgun, 2020; Ilgın Özben, 2022; Demiralay, 2014; Khalmatova, 2017; Kong, 2014; Şenel & Kahramanoğlu, 2018; Yestrebsky, 2015). There are also studies on physical education and sports lessons against studies in different branches (Hinojo Lucena, López Belmonte, Fuentes Cabrera, Trujillo Torres & Pozo Sánchez, 2019; Karaman, 2021; Østerlie & Mehus, 2020; Zhao & Kang, 2020). When the researches are examined, it can be said that the studies on physical education and sports education are limited especially in the national literature. It

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

is thought that examining the flipped classroom model in terms of physical education and sports lessons based on skill training will make significant contributions to this field. In addition, it is aimed to conduct a study on this subject, taking into account the deficiency in this area in Turkey. This research aims to reveal the experiences of the 9th grade students and the lesson teacher who use the flipped classroom model in physical education and sports lessons. Within the framework of this purpose, answers to the following questions are sought:

1.What are the students' views on the use of the flipped classroom model in physical education and sports lessons?

2.What are the teachers' views on the use of the flipped classroom model in physical education and sports lessons?

Method

Research Pattern

In this research, it is aimed to reveal the experiences of teachers and students regarding the use of the flipped classroom model in physical education and sports lessons. Within the framework of this purpose, the research was carried out in the phenomenology pattern in accordance with the qualitative research method. The phenomenology pattern is accepted as a research method used in social sciences and is frequently used especially for qualitative research. With this model, it is aimed to reveal a certain experience of the participants (Creswell, 2009). Researches that aim to reveal the thoughts, perceptions, feelings of the participants about their experiences and the state of consciousness that these create in individuals are examined with the phenomenology design (Van Manen, 2007). Therefore, in this study, the experiences of the physical education teacher, who uses the flipped classroom model in physical education and sports lessons, and the 9th grade students participating in the lesson, were tried to be revealed with a qualitative approach.

Working Group

In this study, criterion and convenience sampling from purposeful sampling techniques were used. For the purpose of the research, a physical education teacher and 9th grade students who wanted to use the flipped classroom model were determined as participants. The physical education teacher participating in the research also holds a master's degree. The experience of the participants of the study on the flipped classroom model started with the physical education teacher's research to obtain information about this model. Then the physical education teacher decided to use this model in his lessons. The implementation process was planned by the physical education teacher and the researcher. Then the physical education teacher started to apply this model in some subjects in his lessons. Before starting the research, the course materials and videos prepared by the physical education teacher using the flipped classroom model were watched by the students. Considering all these, it is determined that there should be a teacher and students who have used and experienced the flipped classroom model in their lessons, in accordance with the criterion and appropriate sampling. In addition, attention was paid to their willingness and voluntary participation in the research. The research was carried out with the determined study group, in the second term of the 2022-2023 academic year, with physical teachers and 15 9th grade students in a secondary education institution located in Ereğli district of Zonguldak province. The teacher participating in the study is male, 43 years old, and has been working as a physical education and sports teacher for 21 years. The students consist of 8 girls and 7 boys.

Implementation Process

In the second term of the 2022-2023 academic year, the subject of volleyball, which is a selected sport, was preferred. The application was carried out during the five-week course. The implementation process was planned by the physical education teacher and the researcher. Volleyball was chosen as a chosen sport as a subject. The lesson teacher set up a class WhatsApp group and delivered weekly lesson videos to the group in this way. The preparation of the videos and course

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

materials was carried out by the teacher. The applications to be made in the course were planned with the researcher. Videos were sent to the students on a weekly basis and they were watched by the students before coming to the lesson. When he came into the classroom, the teacher asked questions about the videos and discussions were held with the students. The teacher was active in the process throughout the practices. Practices were held in the school gym. At the end of the application, the researcher conducted interviews with teachers and students for data collection.

Data Collection Tools and Data Collection

In this study, semi-structured teacher and student interview forms prepared by Karaman (2018) were used as data collection tool. There are 5 questions in the teacher interview form and 6 questions in the student interview form. The relevant forms were sent to an academician who had done research on the subject and to another academician working in the field of physical education and sports, and expert opinion was received. In line with the expert opinion received, the questions in the student interview form were adapted and updated. The questions in the student interview form are as follows:

1.What do you think of the flipped classroom model?

2. How did teaching in this way affect your learning?

4. What can you say when you compare the teaching of physical education and sports lessons in this way with the previous way?

5. What do you think about the application of the flipped classroom model to other subjects of this course?

Probe: What do you think about using it in different lessons?

6. If you had to express your experiences about the flipped classroom model in one sentence, what would it be?

The questions in the teacher interview form are as follows:

1. What do you think about the flipped classroom model?

2.What can you say when you think about the effects of this model during the lesson?

3.What can you say when you compare your lessons before using this model with your lessons after using this model?

4.Considering the physical education and sports lesson, on which subjects would you recommend applying this model?

5.If you had to summarize this model in one sentence, what would you say?

The interviews were conducted face-to-face in a quiet room at the school of the teacher who had experienced this model in her lessons. Voice recordings were taken during the interviews to prevent data loss. Relevant recordings were made with the permission of the participants and their parents. The interviews lasted 32 minutes with the physical education and sports teacher and between 10-18 minutes with the students.

Analysis of Data

Content analysis was used in the research. Content analysis is a data analysis technique that is frequently used in qualitative research. Before starting the data analysis, the data obtained from the participants were transferred to the computer environment and written down. Then, the data was transferred to the Maxqda 2020 program and started to be coded. As a result of the coding, the meaningful words were brought together, and categories were formed. In order to increase the internal validity of the research, support was received from the field expert in determining the codes and categories. After the coding made by two different researchers, Miles and Huberman (1994) formula was used to check the reliability, and the coefficient of agreement was 85%. The relevant reliability coefficient in the literature should be at least 70%.

Findings and Comments

The findings were interpreted based on the sub-objectives of the research.

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

1. Findings and Comments Related to Sub-Objective

The first sub-aim of the research was "What are the students' views on the use of the flipped classroom model in physical education and sports lessons?" poses a question. For this purpose, the interview questions made with the students were analyzed. According to the results of the analysis, the categories of learning the subject, *FC model, short definition of the FC model, using it in different subjects and courses, and comparing the FC model* were created within the framework of the theme of using the FC model. Categories are shown in Figure 1.

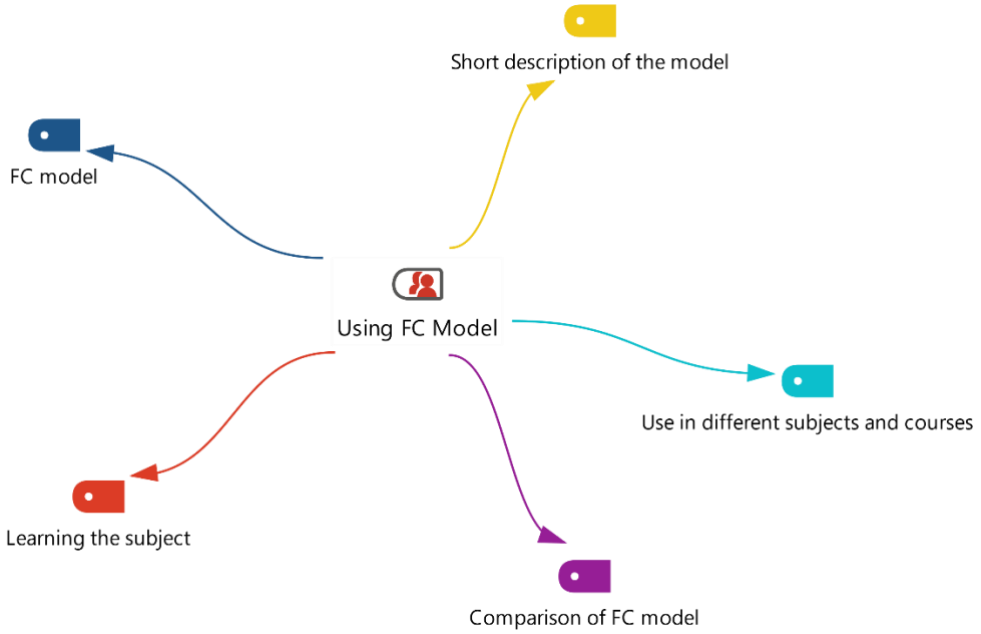

Figure 1. Categories Within the Theme of Using FC Model

It is seen that there are six categories within the framework of the theme of using the flipped classroom model. The students gave place to their experiences about the *FC model,* the effects of this model on learning the subject, its use in different subjects and different courses of physical education and sports, the comparison of this model, and the one-word short definition of the flipped classroom model. In the interviews with the students, firstly, "What do you think about the flipped classroom model?" question was posed. The opinions of the students about the flipped classroom model are given in Figure 2.

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

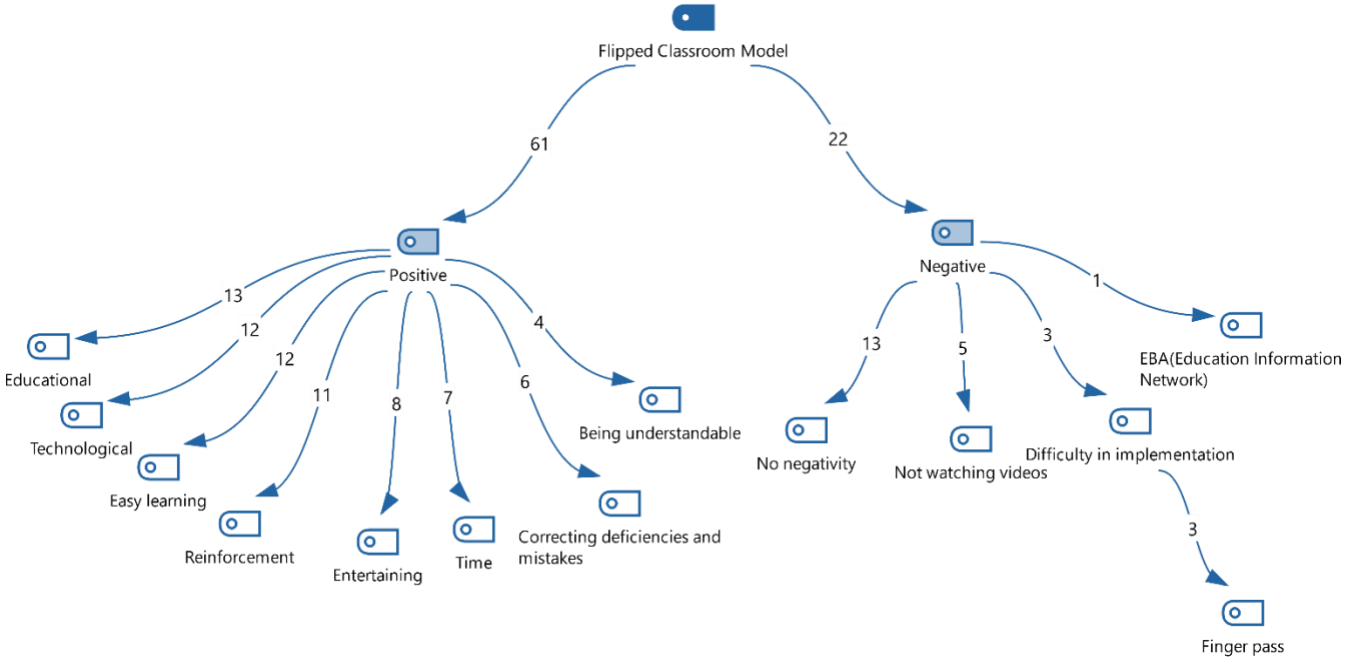

Figure 2. The Flipped Classroom Model

When the views of the students were analyzed, it was seen that there were positive and negative sub-categories in the category of flipped classroom model. When Figure 2 is examined, it is seen that the students generally have a positive opinion. When asked about the negative points about the model, they stated that there is no negativity. The students mentioned the advantages of the FC model in terms of being educational, technological, easy learning, reinforcement, entertaining, time, correcting deficiencies and mistakes, and being understandable. Regarding these, students:

A2: *"Sir, it is actually an educational thing. They were courses made for the purpose of obtaining information easily. For example, we usually play football. We learned the volleyball branch. We learned the rules more easily. We learned better instead of playing randomly without knowing these. For example, when we were playing volleyball, we played randomly. We didn't know the rules that way. We were able to realize what we didn't really know and play better." In his statement, it was stated that besides finding this model educational, it contributed to the learning of a subject easily, and that he realized what he did not know and found it more instructive."*

A3: "It was educational, it was nice. I learned new information. I corrected the mistakes I knew in volleyball. The videos were clear and understandable. It wasn't boring. When I came to the lesson, seeing that the information that I thought was correct was wrong, we reinforced the truth with our teacher. It was beautiful." He expressed an opinion. The student stated that the flipped classroom model is educational, contributes to correcting mistakes and reinforces what they have learned with the teacher in the classroom."

A5: *"I think we also gained time. It was easier to tell our teacher when we watched these at home, learned more and went to school. For example, if we didn't watch it, we would have lost more time when we came to school. It was better in that respect." He expressed an opinion. The student stated that this model contributed to easy learning and saving time for the application phase."*

A12: *"I think it is very useful and efficient. Because it has been very beneficial for me and many of my friends. For example, mostly my friend X, for example, didn't know how to make headlines at all. After the videos, it made a lot of reinforcement. He showed me before the lesson started, for example, I was surprised. The one that provides easy reinforcement is how you throw the ball, how you meet it, it makes it easier because it shows your body postures in detail." He expressed an opinion. The student stated that he easily learned a subject he did not know in detail and*

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

contributed to its application in the classroom. In addition, he observed that his friend, who could not do a certain application in the classroom before, could easily do it."

In addition to the positive opinions of the students, when Figure 2 is examined, it is seen that the negative subcategory is included. When asked about the negative points about the model, they stated that there is no negativity. In addition, the students mentioned the negative aspects of the flipped classroom model in terms of not watching the videos, the difficulty in implementation and the disadvantages of this model in terms of EBA (Educational Information Network). Regarding these, students:

A6: *"I wouldn't say anything negative if what I don't like is like this. It was quite nice and adequate."*

A9: "I don't think I faced any difficulties."

Apart from the A6 and A9 coded students, 11 more students stated that there was no negative or disliked aspect of the model.

A12: "We had a hard time with only three finger cakes. It is also because it is a movement that more professional athletes will do. I don't think it was a matter of teaching the lesson."

A3 coded student stated that they had difficulty in the three-finger pass part during the in-class practice, which professional athletes use easily and because they experience it for the first time, they have difficulty. As it can be understood from these explanations, it is understood that there is no negative opinion about the flipped classroom model, but a situation related to experience. 5 students made an opinion about the negative situation experienced about not watching the videos.

A8: *"Sir, this is actually a good thing, but there is distraction from the phone. Or it may be difficult for those who do not have a phone. Frankly, I did not understand the topics very well. For example, I could not fully understand those movements from those videos. It was smaller than the phone. It would be nice if it was from EBA. It is easier to view than a computer. Normally, it can be difficult for me to understand a subject. I watched it like this and when I came to the lesson, I asked my teacher to show it again."*

A11: *"There were people who came without watching the video. For example, after we watched it, we could both explain the video to our teacher and show the applications there. But because they didn't watch and didn't know, he couldn't tell and he couldn't show the movements. Let's say a person didn't watch it, someone who watched it before him told and showed it, let's say briefly. It must have been showing an error while doing the application. Even if he said he watched it, it was obvious that he didn't watch it. While we were doing the activities more practically, they could do less because they were trying to learn in the lesson. For example, a friend of ours watched regularly to avoid the same situation when they came to class later on."*

A4: "Now it's fine, but some people don't watch it or they don't understand when they don't. We can get bored while waiting for them to attend classes. It can be difficult that way. But it was fine for me."

When the opinions of the students other than A8 were examined, it was stated that the students who came to watch the video had difficulty in the subject compared to the viewers and they were bored while waiting for them to attend the lesson. In the statement of A11, it was stated that the students watched the videos regularly in order not to fall behind in the applications compared to their other friends. T8, on the other hand, stated that the videos sent over the phone cause distraction, instead, if they were sent via EBA, they could easily open them from the computer.

In the interviews with the students, the second question was "How did teaching the lesson in this way affect your learning?" question was posed. The opinions of the students regarding the teaching of the lesson with the flipped classroom model and their learning about the subject are given in Figure 3.

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

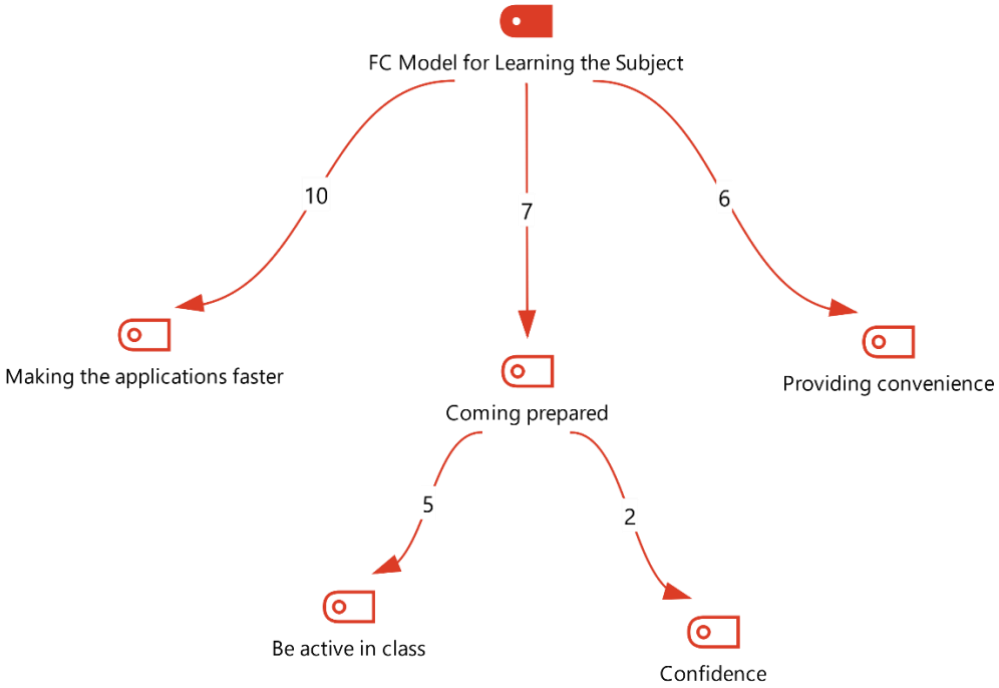

Figure 3. Flipped Classroom Model for Learning the Subject

When the views of the students were analyzed, it was seen that the sub-categories of making the applications faster, coming prepared and providing convenience were included in the flipped classroom model category in terms of learning the subject. When Figure 3 is examined, it has been determined that the fact that students come to the class prepared contributes to their being more active and self-confident in the lesson. In addition, it has been found that it is easier to come to the lesson prepared and they can perform the applications faster during the activity phase.
Regarding these, students:

A3: *"I was able to do the applications more easily and quickly. Because I was conscious. For example, if I had come without watching, I might have been behind the audience. Viewers like me did the exercises with ease, while they did it in a more difficult way than without watching a lecture. So when I said it was hard, the teacher had to show him more. Guess I didn't watch the video. I don't know how to play either. I was not an athlete before. I might have a hard time understanding it. But I didn't live that way."*

A8*: "Actually, it combines these two things. We get the information in advance and it is more fun when we apply it in this way. For example, my friends adapted immediately. They were able to apply the rules right away when playing shuffled."*

A13: *"I learned more. Learning and coming was easier for me in terms of doing. Being more active in the lesson allowed me to learn better."*

A7: *"I was more confident because I knew the subject. I did. I knew. It's more comfortable when you know, and I didn't hesitate to attend the class. The videos had enough information for me to learn the subject. It wasn't boring, it was fun. I was able to come and apply the subject I learned directly. Our teacher liked it, and I think it contributed to my learning in a nutshell."*

When the opinions of the students are examined, it is seen that coming to the lesson prepared helps them to practice the subject more quickly, thus accessing more information about the subject and learning better. In addition, it is seen that having knowledge about the subject before coming to the lesson can be more active in the lesson and can work more confidently.

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

Thirdly, in the interviews with the students, "What can you say when you compare the teaching of physical education and sports in this way with the teaching of it in the previous way?" question was posed. The opinions of the students regarding the comparison of the lesson taught using the flipped classroom model and the way the lesson was taught before this model was used are given in Figure 4.

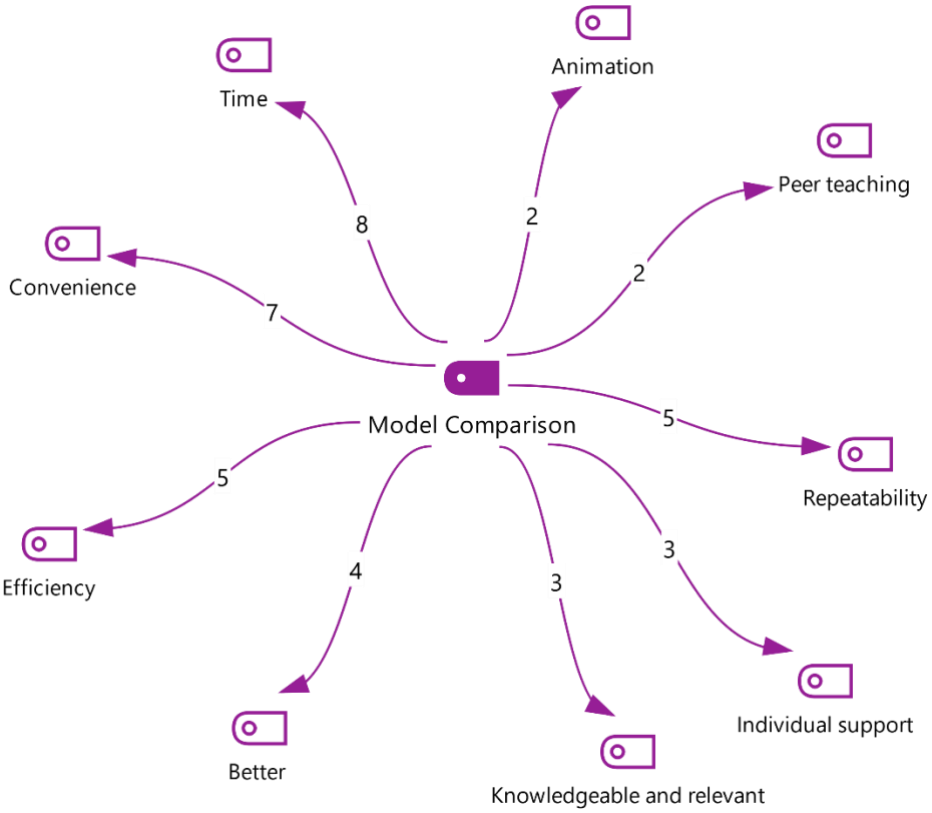

Figure 4. Model Comparison

When the students' opinions were analyzed, it was determined that in the model comparison category, it contributed more in terms of time, convenience, efficiency, better, knowledgeable and relevant, individual support, repeatability, peer teaching, animation compared to the lesson taught using the FC model. Regarding these, students:

A7: *"It helped us to make the movements easier in terms of practice. Previously, of course, we could do the movements when our teacher showed them. However, the fact that we had the opportunity to watch a video too many times allowed us to do the movements faster and easier."*

A14: *"Already, our teacher was able to deal with my friends more during the lesson."*

A9: *"Playing volleyball was more fun when it was like this. Because there was usually no passing. Now everyone knows their place and their mission. It's more fun to play like this. We also use the lesson efficiently. The teacher spends less time both showing a topic and telling us something. When there was attendance, we could lose time while going to class. For example, we had two hours of lessons. But one hour of these two hours was spent trying to do what the teacher showed in order, the other hour we were more flexible. Now, in this one month, we did activities in both of the two lesson hours, and it seemed that the lesson was more fun and the lesson went by faster."*

A10: *"We were understanding with our teacher before, but we want to play more activities and games in physical lessons. The time allotted to this seems to have increased a little more. Besides, I think that watching the videos he sent on the subject made it easier for us to do the movements our teacher asked us to do."*

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

A3: *"I watched the video and became more knowledgeable. I started to participate more, but when I didn't watch the video, for example, I couldn't understand what the teacher was talking about. I didn't know how to throw the ball, how to receive it, how to throw the headline, how the three-pass rule is. For example, animation, my teacher, attracts my attention more when a lecture is in a video. The explanation there, the way it is done is better for me. Generally, because animated videos attract my attention, it works better for my perception thing, my shape."*

Fourthly, in the interviews with the students, "What do you think about the application of the flipped classroom model to other subjects of this course? and "What do you think about using it in different lessons?" questions were posed. The opinions of the students about the application of the flipped classroom model in other subjects of physical education and sports lessons and in different lessons are given in Figure 5.

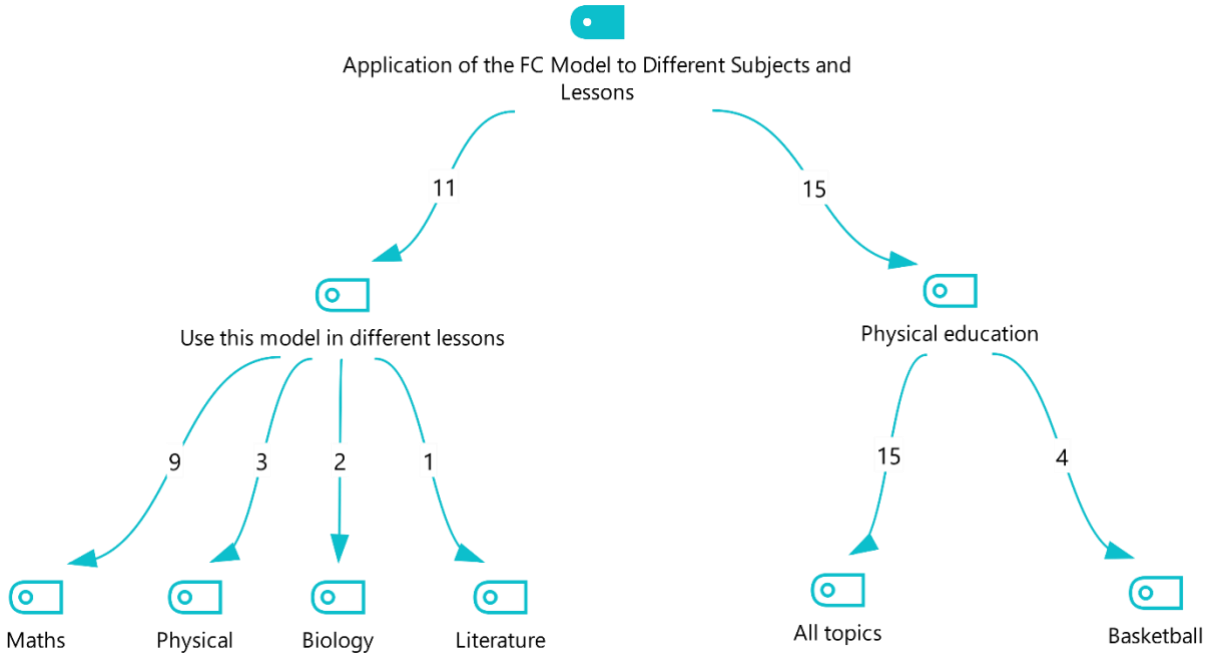

Figure 5. Application of the Flipped Classroom Model to Different Subjects and Lessons

When the views of the students were analyzed, it was seen that there were different lessons and physical education sub-categories in the application of the flipped classroom model to different subjects and lessons. When Figure 5 was examined, it was found that all of the students wanted physical education to be applied in all subjects, and that they thought it would be beneficial to use this model in different lessons. It is seen that the students think that this model will be more effective in terms of learning the subject in different lessons and leaving time to do more activities in the lesson. It is thought that using this model in lessons that are difficult for students will be beneficial. For this reason, the most preferred course by students is mathematics, followed by physics, biology and literature. Regarding these, students:

A1: *"It can be applied in different courses as well. As we study, our habits can increase in terms of more points, more skills and more problem solving."*

A2: "*I would like to. It would be better. We can repeat and practice the subjects we do not understand more. For example, it may be good to use it in difficult lessons such as mathematics, even in numerical lessons, apart from physical education. It helps us to learn and come to the subject and to solve the practical applications related to that subject more in the classroom."*

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

A4: *"I would like it to be applied in other lessons. I would like math. Well, it could be biology. I can't do these lessons. I think it might be easier this way. I open it as much as I want. I repeat. It would be good if we could apply it in the classroom as we wanted."*

When Figure 5 is examined, all of the students stated that they found the flipped classroom model applicable to all subjects of physical education, especially basketball. Students think that the use of this model in physical education classes contributes to facilitating the practices, reinforcing the subject, and making the lessons more fun and effective. Regarding these, students:
A5*: "It will be better and more effective in our different subjects in physical education. We will not tire our teacher either. We reinforce it together with our friends."*

A7: *"I think teaching in this way makes everything easier. For example, we can do football and basketball in physical education. I think it would be fun for them too."*

A9*: "It can be in basketball in gym class. There are those who want to play in the classroom, I think they can learn better. Just as we work in this way, we get efficiency more effectively, so it will be for them."*

A12: *"Also, if it continues to be used in physical education, I think it would not be bad. I think we're doing pretty well."*

Finally, in the interviews with the students, "If you had to express your experiences about the flipped classroom model in one sentence, what would that sentence be?" question was posed. The students' thoughts on this question are given in Figure 6.

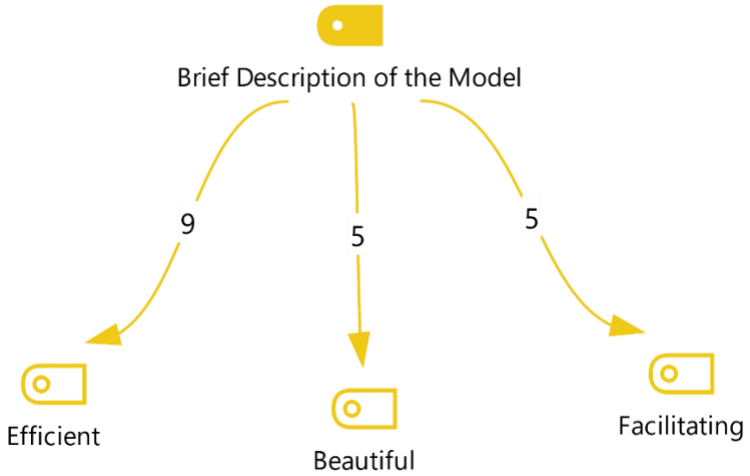

Figure 6. Brief Description of the Flipped Classroom Model

When the opinions of the students are analyzed, it is seen that there are efficient, beautiful and facilitating codes in the short description of the model category. During the interview, when the students expressed their experiences about the FC model in one word, it was found that this model was beautiful, facilitated in terms of learning the subject and making the applications faster, and making the whole course process more efficient. Regarding these, students:
A7: *"My skin is fertile in one word. Because it was a useful experience in terms of learning and applying knowledge. I can say that making it a skill was better and more beneficial."*

A2: *"I would say make it easier. Its facilitating effect helped us improve ourselves in our lesson."*

A15: *"I say beautiful. I think we have very good, productive and fun lessons."*

2. Findings and Comments Related to Sub-Objective

The second sub-objective of the research was "What are the teachers' views on the use of the flipped classroom model in physical education and sports lessons?" poses a question. For this purpose, the

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

interview questions with the physical education and sports teacher who applied this method were analyzed. According to the results of the analysis, the categories of FC model, brief description of the model, effects of the model, its application in different subjects and comparison of the model were created within the framework of the theme of using the FC model. Categories are shown in Figure 7.

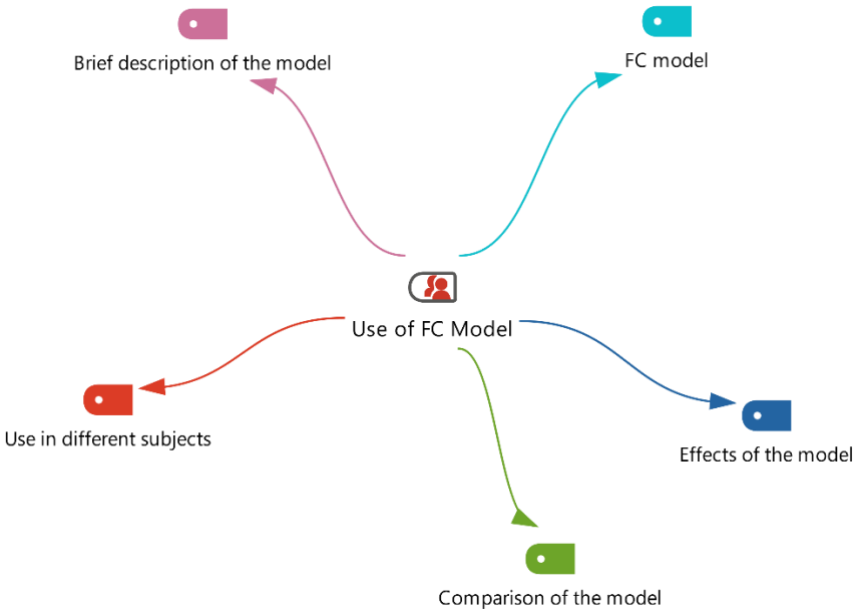

Figure 7. Categories in the Framework of The Use of FC Model

When the figure is examined, it is seen that there are five categories within the framework of the theme of using the FC model. In line with the findings obtained from the teacher, there were different categories such as the effects of the model, the FC model, the comparison of the model, its application to different subjects, and a brief description of the model. In the interviews with the teacher, firstly, "What do you think about the flipped classroom model?" question was posed. The teacher's thoughts on this question are given in Figure 8.

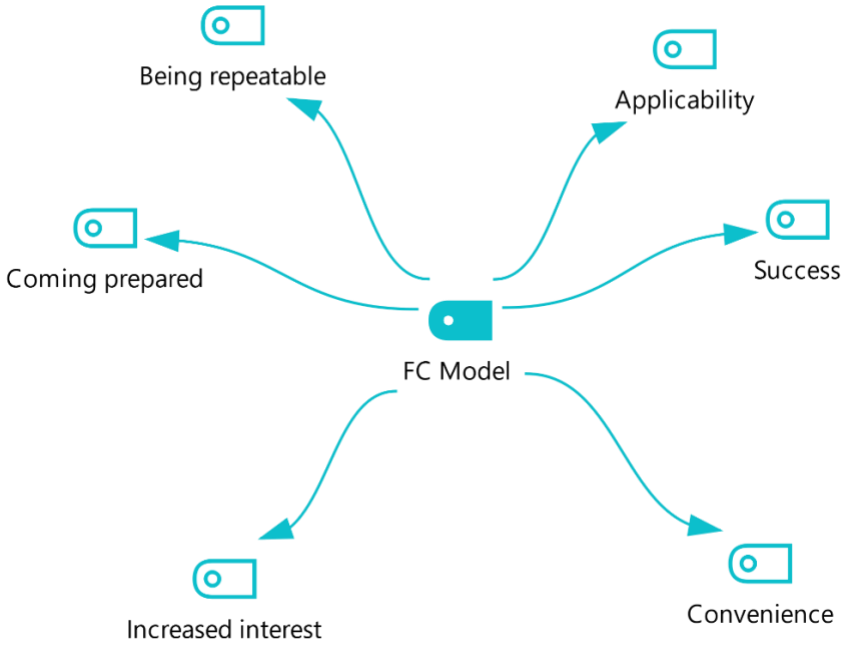

Figure 8. The Flipped Classroom Model

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

When the opinions of the teachers were analyzed, the codes of applicability, success, convenience, increased interest, coming prepared, being repeatable were obtained in the category of flipped classroom model. When the views of the physical education teacher were examined, it was seen that he mentioned the advantages of using the FC model. Teachers' views on these are as follows:

"If we're talking positively or negatively, it's definitely, definitely positive. Well, I can't say it's not bad, it's definitely positive. Because I'm talking about those who don't know anything about the subject and those who have never done that branch. They come knowing something good or bad. Even if they cannot fully implement the application, they come there knowing what to do in theory. Maybe they can't put it into practice right away, but they can express it in theory, all of the audience. I always made the same comparison in my lessons. For those who watch and those who don't, who never knew volleyball before. I took them apart and asked questions. When I tell the audience what it is, those who are neutral towards volleyball, who have never played before, step forward. Those who claim to play also have a chance to correct what they know wrong. In theory, they can see these mistakes. The application is not something that can be achieved by just watching videos, it takes a little more practice and experimentation."

"It is a viable model. The fact that children come to this lesson knowing what they will do definitely increases their success. The audience is one step ahead of those who do not. Even if he has not watched in practice, perhaps a student can do better in practice than one who does. It can detect better. But if they are at the same skill level, it is much easier to teach it to those who watched the video and those who did not watch it."

When the teacher's expressions were evaluated, it was seen that the FC model was applicable and increased the success of the students. It was stated that the students had the opportunity to correct what they misunderstood, and that the students who came prepared and at the same skill level perceived it better than the others. In addition to these, according to the teachers' opinion, there are statements that the model has increased the students' curiosity and interest in the subject, and that it contributes to the re-watching of the students who could not attend the lesson due to absenteeism. Regarding these, the teacher made the following statements:

"Even when these children do not come to school, they have the chance to watch retrospective lessons when they are absent. The child did not come to school, but I know, he can say more or less about the subject. It would be great rather than being completely oblivious."

Secondly, in the interviews with the teacher, "What can you say when you think about the effects of this model during the lesson?" question was posed. The teacher's thoughts on this question are given in Figure 9.

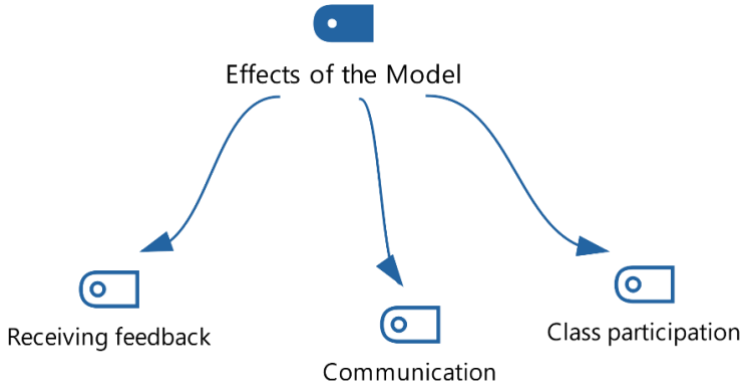

Figure 9. Effects of the model

When the views of the teachers were analyzed, the codes for receiving feedback, communication and class participation were obtained in the category of the effects of the model. It was seen that the teacher mentioned the positive effects of the model in terms of students' participation in the lesson,

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

communication with the students, receiving and giving feedback from the students. Teachers' views on these are as follows:

"There was an increase in class participation, but there was definitely an increase in their interest. Because students are more interested in what they know. It was as if they felt more confident."

"Considering in terms of communication with students, we always try to spare time for each student. However, the decrease in the time to show and get it done in this way provided the opportunity to deal more one-on-one with the students who could not do those movements."

"When we used this model, I started to get faster feedback from students. Anyone who watched the videos I sent could immediately ask questions and give answers in the classroom. The accuracy of the movements was also a feedback for me."

Thirdly, in the interviews with the teacher, "What can you say when you compare your lessons before using this model with your lessons after using this model?" question was posed. The teacher's thoughts on this question are given in Figure 10.

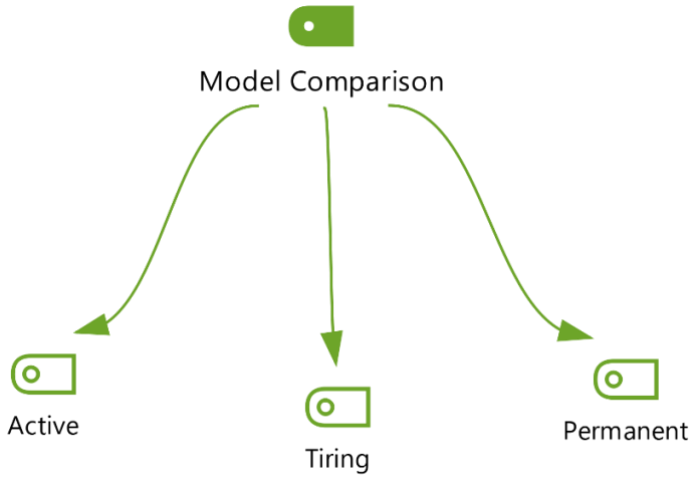

Figure 10. Model comparison

When the teachers' opinions were analyzed, active, tiring and permanent codes were obtained in the Model comparison category. The teacher thinks that this model would be better if it was blended with the show-and-make method and thus ensure the permanence of the information. He stated that the knowledge will become more permanent as it will also attract the attention of the students by blending it with visuality and technology. He made the following statements regarding this.

"It would be great if this show and supports the application method. This enriches it, makes it even more permanent, because it attracts the attention of the students because it is involved in the visual. Thus, it ensures that the information is more permanent. In particular, it ensures that the information is permanent. If he can do the application after a certain time, he will not forget it easily. Now he does it."

Although the teacher stated that it would be difficult for individuals who are not inclined to technology regarding the preparation process before and during the lesson, he stated that it should not be difficult to carry out such activities today. He also stated that he was more active in the course process and was interested in students one-on-one. Regarding this, he made the following statements:

"It is tiring for teachers at first, but if it is the first time, it is not too tiring to find these videos for normal individuals who are more inclined to technology. In the 21st century, it should not be difficult for every individual to keep up with the age of technology."

"You become more active in the classroom lesson process. You take care of all students individually during the lesson."

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

Fourthly, in the interviews with the teacher, "When you think about physical education and sports, on which subjects would you recommend applying this model?" question was posed. The teacher's thoughts on this question are given in Figure 11.

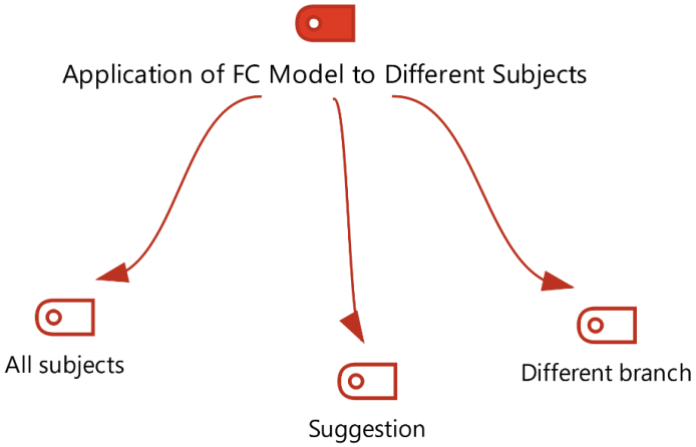

Figure 11. Application of FC in different subjects

When the opinions of the teachers were analyzed, all subjects, suggestions and different branch codes were obtained in the category of applying flipped classroom model to different subjects. The teacher said that this model is applicable to all subjects of physical education. He also said that it is possible to use it not only in physical education lessons but also in lessons in different branches. In addition, he made suggestions for the Ministry of National Education and schools regarding the use of this model. He made the following statements regarding this:

"Everything in this physical education curriculum is also used. It is applied in every subject. Nutrition is also used in health, it is also used in sequencing formations. In subjects such as first aid traffic information, they can sometimes be included in our lessons and are also used in them. In short, it is used in all subjects."

"It is also used in all other branches. In fact, I think it should be used, and I think it will contribute to a very effective lesson process better."

"If I make a suggestion to use this model, if it is accepted by the school and the ministry, every school can prepare a digital and live-streaming curriculum for itself. While we give our annual plan, we can also give it with application and explanation videos. The more weeks we make, the more videos there can be. For example, some topics can cover four weeks. Some videos can be made to cover 4 weeks. It is something that can be directly goal-oriented by getting out of the chore part of the job."

In the interviews with the teacher, "If you had to summarize this model in one sentence, what would you say?" question was posed. The teacher's thoughts on this question are given in Figure 12.

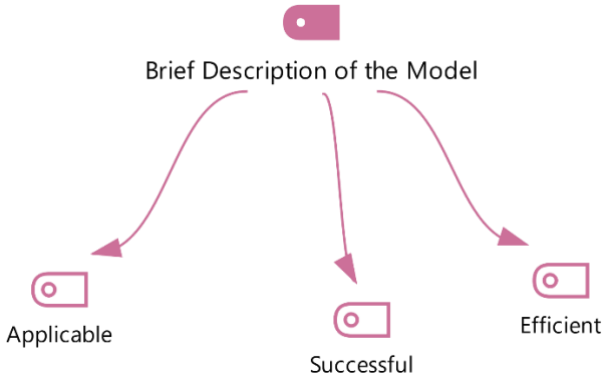

Figure 12. Brief description of the model

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

When the teacher's opinions were analyzed, applicable, efficient and successful codes were obtained in the category of short description of the model. The teacher stated that this model is applicable in terms of use in lessons, successful in terms of results, and makes the whole course process more efficient. Regarding this, he made the following statements:

"I can say that it is efficient, successful, feasible. Because our lesson process was more effective and efficient, students were able to understand and apply better, and their success increased. I can say that I found the model itself successful in terms of being very effective and applicable in terms of continuing the course of the course."

Conclusion and Discussion

In this research, the experiences of the 9th grade students who applied the flipped classroom model in physical education and sports lessons and the lesson teacher who used this model were revealed. After the interviews with the teachers and students who participated in the research, it was seen that the use of the flipped classroom model in physical education and sports lessons provides convenience in many aspects such as learning the subject, making the applications easily, participating in the fun lesson process, not having time problems, and having knowledge. In different studies conducted using the FC model, it is seen that students have positive opinions due to features such as permanent learning, facilitating learning and making the lesson fun, and time (Chen, Wang, Kinshuk & Chen, 2014; Davies, Dean & Ball, 2013; Turan & Ball, 2013). Goktas, 2015).

In the first sub-aim of the research, students' opinions about this model were taken. The students found the FC model useful in terms of being educational, contributing to correcting mistakes, reinforcing the subject, making the applications easy and fast, and learning the subject easily. When the opinions of the students are examined, it is seen that coming to the lesson prepared helps them to practice the subject more quickly, thus accessing more information about the subject and learning better. In addition, it has been determined that having knowledge about the subject before coming to the lesson can be more active in the lesson and work more confidently. In the research conducted by Østerlie (2018), it is seen that the use of the FC model in physical education classes increases the learning level and motivation of the students and contributes to the development of their sense of autonomy. In this study, the fact that students are more interested in the lesson is consistent with their being more active and self-confident in the lesson because they have knowledge about the subject.

It has been seen that the lessons taught using the FC model are more advantageous in terms of time, convenience, efficiency, learning information, being interested in the lesson, individual support, repeatability, peer teaching, and animation compared to the lessons taught with the other normal curriculum. Considering the findings, it can be said that the courses intertwined with technology by the students are more interesting. It can be said that this result is consistent with the results obtained from the qualitative findings of the research conducted by Østerlie (2018). As a result of the related study, it is stated that the use of digital tools in physical education lessons is an effective and useful tool for learning.

Students want the FC model to continue to be applied in all subjects of physical education. They also think that it would be beneficial to use this model not only in physical education and sports but also in different courses. Mathematics is the most preferred course by students, followed by physics, biology and literature. These courses, which are considered difficult for students, were preferred because the FC model facilitates understanding, provides advantages in terms of time, and contributes to more activities in the course.

When the students expressed their experiences about the FC model in one word, it was concluded that this model was beautiful, facilitating the learning of the subject and making the applications faster, and making the whole course process more efficient.

In the interviews with the teacher of the physical education and sports course who carried out the applications in the research, it was concluded that the model was successful. Like the students, the

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

teacher of the course also emphasized the positive aspects of the model. The positive effects of the model were found in terms of students' participation in the lesson, communication with the students, receiving and giving feedback from the students.

As a result of the teacher interview, it can be said that the FC model is applicable and increases the success of the students. In addition, it was observed that the students had the opportunity to correct what they misunderstood, and the students with the same skill level who came prepared perceived it better than the others. In addition to these, it was concluded that the students who could not attend the course due to absenteeism contributed to the ability to watch the videos again, and their curiosity and interest in the subject increased. It can be said that the use of this model affects the curiosity and interest of the students and they are willing to come to the lesson prepared. In parallel with these results, it is seen that the CMS model is used in physical education classes in different studies, which significantly increases the intrinsic motivation of students (Karaman, 2021; Lin, Hsia & Hwang, 2021; Østerlie & Mehus, 2020).

The teacher thinks that this model would be better if it was blended with the show-and-make method and thus ensure the permanence of the information. It is thought that the knowledge will become more permanent as it is blended with visuality and technology will attract the attention of the students. In addition, according to the findings obtained from the teacher interviews, it was determined that the students who came to the lesson after examining the videos and materials from a theoretical point of view were better than other students in terms of both practice and theory. This result matches the results of Lin, Hsia, Sung, & Hwang (2019). Lin et al. (2019) concluded that the dance skills of the students in the group using the FC model showed a better improvement than the others. In addition, Karaman (2021) thinks that the use of the FC model in physical education classes will have effective results in subjects that are intensive in terms of theoretical knowledge. Because in order to carry out the applications, a solid foundation of theoretical knowledge must be established.

Although the teacher thinks that it will be difficult for individuals who are not inclined to technology regarding the preparation process in the classroom and before the lesson, when the application is just started, he stated that it should not be difficult to carry out such activities today. He also stated that the teacher is more active in the course process and deals with the students one-on-one. The teacher said that this model is applicable to all subjects of physical education. In addition, he thinks that it will provide advantages not only in physical education lessons but also in lessons in different branches. When the teacher expressed his experiences about the FC model in a single word, it was concluded that this model could be applied in lessons, successful in terms of results, and made the whole lesson process more efficient.

According to the results obtained from the research, the use of this model in physical education and sports lessons has positive aspects for teachers and students. This research was examined by collecting data at the end of a five-week application period in physical education and sports course. The process can be examined by applying it to different subjects of physical education and sports lessons. In addition, different study groups can be determined and the results of this research can be examined in a comparative way.

References

Bergmann, J., & Sams, A. (2012). Flip Your Classroom: Reach Every Student İn Every Class Every Day. Washington: International Society for Technology in Education (ISTE)

Bond, M. (2020). Facilitating student engagement through the flipped learning approach in K-12: A systematic review. *Computers and Education, 151,* 103819. https://doi.org/10.1016/j.compedu.2020.103819

Boyraz, S. (2014). İngilizce öğretiminde tersine eğitim uygulamasının değerlendirilmesi. Yüksek Lisans Tezi, Afyon Kocatepe Üniversitesi Sosyal Bilimler Enstitüsü, Afyon.

Bozdağ, H. C. & Türkoğuz, S. (2021). 5. sınıf fen bilimleri dersi öğrencilerinin ters yüz sınıf modeline yönelik görüşleri. *International Journal of New Trends in Arts, Sports & Science Education (IJTASE),10*(2), 83-104.

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

Chen, Y., Wang, Y., Kinshuk., & Chen, N. S. (2014). Is FLIP Enough? or Should We Use the Flipped Model Instead? Computers & Education,79, 16-27.

Creswell, J. W. (2009). Research design, qualitative, quantitative, and mixed methods approaches (Third Edition). California: SAGE Publications

Çetin Köroğlu, Z. (2015). The effects of flipped instruction on pre-service English language teachers' speaking skills development. Doktora Tezi. Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, ankara.

Çoşgun, G. (2020). Ters yüz eğitim modeliyle STEM etkinliklerinin fen bilgisi öğretmen adaylarının öz yeterlik inançlarına ve STEM eğitim yaklaşımına yönelik etkisi. Yüksek Lisans Tezi, Akdeniz Üniversitesi Eğitim Bilimleri Enstitüsü, Antalya.

Davies, R. S., Dean, D. L., & Ball, N. (2013). Flipping the Classroom and Instructional Technology Integration in a College-Level Information Systems Spreadsheet Course. *Education Technology Research Development,61,* 563-580.

Demiralay, R. (2014). Evde ders okulda ödev modelinin benimsenmesi sürecinin yeniliğin yayılımı kuramı çerçevesinde incelenmesi. Doktora Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

Frydenberg, M. (2012). *Flipping Excel. Proceedings of the Information Systems Educators Conference*, New Orleans Louisiana, USA.

Güç, F. (2017). Rasyonel sayılar ve rasyonel sayılarda işlemler konusunda ters- yüz sınıf uygulamasının etkileri. Yayımlanmamış Yüksek Lisans Tezi, Amasya Üniversitesi Fen Bilimleri Enstitüsü, Amasya.

Hinojo Lucena, F. J., López Belmonte, J., Fuentes Cabrera, A., Trujillo Torres, J. M., & Pozo Sánchez, S. (2019). Academic effects of the use of flipped learning in physical education. *International journal of environmental research and public health*, *17*(1), 276.

Lee, S. M., Burgeson, C. R., Fulton, J. E. & Spain, C. G. (2007). Physical education and physical activity: Results from the school health policies and programs study 2006. *Journal of School Health, 77*(8), 435-463. https://doi.org/10.1111/j.1746-1561.2007.00229.x

Ilgın Özben, D. (2022). Tersyüz sınıf modelinin ilkokul matematik dersi öğretimine etkisi: Karma yöntem araştırması. Yüksek Lisans Tezi. Akdeniz Üniversitesi Eğitim Bilimleri Enstitüsü, Antalya.

Karaman, B. (2018). Ters yüz sınıf modelinin sosyal bilgiler 7. sınıf yaşayan demokrasi ünitesinde uygulanması. Yüksek Lisans Tezi. Aydın Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü, Aydın.

Karaman, B. (2021). Beden eğitimi ve spor dersinde uygulanan ters-yüz öğrenme modelinin öğrencilerin bilgi, beceri ve motivasyon düzeylerine etkisi. Yüksek Lisans Tezi. Pamukkale Üniversitesi Eğitim Bilimleri Enstitüsü, Denizli.

Khalmatova, Z. (2017). Yabancı dil olarak Türkçe öğretiminde modern yöntem ve tekniklerin kullanımı: ters-yüz sınıf modeli. *Hacettepe Üniversitesi Yabancı Dil Olarak Türkçe Araştırmaları Dergisi*, (3), 35-51.

Kong, S. C. (2014). Developing Information Literacy and Critical Thinking Skills Though Domain Knowledge Learning in Digital Classrooms: An Experience of Practicing Flipped Classroom Straregy. Computers & Education, 78, 160-173.

Lage, M. j., Platt, G., & Treglia, M. (2000). Inverting the Classrıım: A Gateway to Creating an Inclusive Learning Envirenment. Journal of Economic Educaion,31(1), 30-43.

Lin, Y. N., Hsia, L. H., Sung, M. Y. & Hwang, G. H. (2019). Effects of integrating mobile technology-assisted peer assessment into flipped learning on students' dance skills and self-efficacy. Interactive Learning Environments. https://doi.org/10.1080/10494820.2018.1461115.

Lin, Y. N., Hsia, L. H., & Hwang, G. J. (2021). Promoting pre-class guidance and in-class reflection: A SQIRC-based mobile flipped learning approach to promoting students' billiards skills, strategies, motivation and self-efficacy. *Computers and Education, 160*, 104035. https://doi.org/10.1016/j.compedu.2020.104035

Karaman, B. (2023). Flipped classroom model in physical education and sport teaching. *Journal of Human Sciences*, *20*(3), 250-268. doi:10.14687/jhs.v20i3.6382

Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. On the Horizon. https://doi.org/10.1108/10748120110424816

Şenel, M., & Kahramanoğlu, R. (2018). İlkokul İngilizce dersinde ters yüz sınıf (flipped classroom) modeli uygulamasının değerlendirilmesi. *Disiplinlerarası Eğitim Araştırmaları Dergisi*, *2*(3), 28-37.

Turan, Z. & Göktaş, Y. (2015). Yükseköğretimde Yeni Bir Yaklaşım: Öğrencilerin Ters Yüz Sınıf Yöntemine İlişkin Görüşleri. Yükseköğretim ve Bilim Dergisi, 5(2), 156-164.

Østerlie, O. (2018). Flipped learning in physical education: Why and how? *Physical Education and New Technologies,* 7, 55-57.

Østerlie, O. & Mehus, I. (2020). The impact of flipped learning on cognitive knowledge learning and intrinsic motivation in norwegian secondary physical education. *Education Sciences.* https://doi.org/10.3390/educsci10040110

Van Manen, M. (2007). Phenomenology of practice. *Phenomenology & Practice, 1*(1), 11-30

Yestrebsky, C. L. (2015). Flipping the Classroom in a Large Chemistry Class- Research University Environment. *Procedia- Social and Behavioral Sciences, 191*, 1113- 1118

Zhao, D. & Kang, H. L. (2020). Practice exploration of flipping classroom in table tennis club in the informatization age. Procedia Computer Science. https://doi.org/10.1016/j.procs.2020.02.044

Zownorega, J.S. (2013). Effctiveness of flipping the classroom in a honors level, mechanics- based physics class. Masters Theses. Eastern Illinois Universty.