

## **Turkish Folk Music Lessons with Phenomenon-Based Learning: Preliminary Lessons and Results**

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### **Abstract**

This paper presents the results of a pre-experimental design. The study was carried out with a single-group posttest model. In this study, the Turkish Folk Music unit was chosen for investigation as part of Phenomenon Based Learning with 10th grade high school students. In order to carry out the Phenomenon Based Learning process in an effective way, the teacher is meant to be well-prepared in different aspects. Therefore, during the research, the music teacher tried different introductory and follow-up activities. Following this, the opinions of 84 high school students were considered, concerning the activities. Results revealed that the introductory activities have the utmost importance in Phenomenon Based Learning. Although this study was carried out within time constraints, it was evident that these activities had a great impact on the students and the teacher. The students' discoveries and inferences about both Turkish Folk Music and themselves for the future emerged as promising.

*Keywords:* music education, phenomenon-based learning, Turkish folk music

The teaching and learning approach, which combines and integrates course subjects that have been offered in different ways in Finnish schools since the 1980s, and has become part of Finnish teaching culture, plays a leading role in the 2014 Finnish National Education Curriculum. The approach is called Phenomenon Based Learning (PhBL). With the implementation of this new curriculum in 2016, all schools in Finland began to feature a multidisciplinary program devoted to problem-based teaching and learning at least once a year (Sahlberg, 2018, p. 94–96).

In terms of the topics and main areas covered in PhBL, “the development of multidisciplinary modules in various fields such as language, geography, science and economy and discussion of topics such as climate change, the European Union or the 100th anniversary of Finland’s independence” (Sahlberg, 2018, p. 94), and contains an applied structure of pedagogically different models. Ottawa College calls PhBL an umbrella approach “rather than a pedagogical model...a way of organizing learning in which different research-based pedagogical models are applied” (quoted by Karlsson, 2017, p. 29–30).

Lonka (2019, p. 173) states that PhBL accentuates a holistic approach to learning. This approach is based on the idea that school knowledge should be associated with real-life problems. Students need to learn to come up with new solutions collaboratively. It also combines information on different topics. The aim is not to replace subject learning, but to put it in a broader perspective. “The aim of PhBL is simply opening the bigger picture to the world and understanding it” (Karlsson, 2017, p. 25).

In PhBL, Valamis (2019) listed on its website, that “no specific subject is taught, nor is there any preset learning objective” but “it is also possible to study a subject matter in a phenomenon-based way” (Lonka, 2019, p. 173). The important points are that students work collaboratively, develop problem-solving skills, foster creativity and research skills, learn how to learn, link school knowledge with real-life problems, examine issues from an interdisciplinary and multicultural perspective, and take in other broad 21st-century skills simultaneously (Fields, 2019a; Lonka, 2019, p. 173; Valamis, 2019). The World Economic Forum (2020) presents 21st century skills as Complex Problem Solving, Critical Thinking, Creativity, People Management, Coordination with Others, Emotional Intelligence, Judgment and Decision Making, Service Orientation, Negotiation, and Cognitive Flexibility.

PhBL has five dimensions. These five dimensions are identified and defined within research as:

*Holism*: “PhBL emphasizes a holistic approach to learning. It is based on the idea that in order to develop problem-solving skills, school knowledge needs to be linked to real-life problems. Students need to learn how to create new solutions in collaboration. It also combines knowledge from different subjects.” (Lonka, 2019, p. 173).

*Authenticity* “implies the use of methods, tools and materials, which are necessary for real-world situations to solve problems that are relevant to students’ lives and significant in the community” (Symeonidis & Schwarz, 2016).

*Contextuality* “refers to the learning of phenomena as systemic entities, which are meaningful in a natural context and setting. In this sense, a phenomenon cannot be predefined but stays rather vague and ambiguous, as it is brought up by the students who observe their wider context

In PhBL and teaching, holistic real-world phenomena provide the starting point for learning” (Silander, 2015b).

*Problem-based inquiry:* In PhBL the phenomenon “starts from asking questions or posing problems. At its best, PhBL is problem-based learning, where the learners build answers together to questions or problems posed concerning a phenomenon that interests them” (Silander, 2015a, p. 17).

*Open-ended learning processes:* “In the learning process, new information is always applied to the phenomenon or solving a problem, which means that the theories and information have immediate utility value that is already evident in the learning situation” (Silander, 2015a, p. 17).

In the last decade, different studies have been conducted in different countries on PhBL. These studies reveal that students who study with PhBL show significant improvement compared to students who study with traditional methods. When the topics covered are examined, it is clear that issues related to 21st-century skills emerge as research topics, such as digital development and literacy (Nolkhom and Saifah 2020), creative thinking in physics (Tongsoong and Jermtaisong, 2020), language (Nguyen, 2018), reading (Valanne et al., 2017), and agroecology (Francis et al., 2013).

### **The Role of the Teacher in PhBL**

In traditional education, the teacher is regarded as the most knowledgeable person in the room, the one who teaches those who are willing to learn, utilizing systematic step-by-step planned lessons. With PhBL, the teacher’s role is decentralized. However, this does not diminish the role of the teacher but differentiates it, and probably makes it difficult for teachers accustomed to traditional teacher-centered approaches. Lonka (2019, p. 186-187) describes this situation as such: “Even though the phenomenon-based approach calls for the active and responsible role of the participants, the role of the teacher-facilitator should not be undermined. On the contrary, carrying out a phenomenon-based project calls for interdisciplinary and fine-grained, sensitive coaching by the teacher. In addition to subject matter experts, pedagogical knowledge is at the center. The teacher needs to have very good social and emotional skills in order to support constructive interaction and a deepening interest. The task of the teacher is to create an encouraging and safe atmosphere and to act as a ‘scientific midwife’ in order to help to create new insights about the phenomenon, the topics, the group process, and the emotional challenges of the project.”

To carry out the PhBL process in an effective way, the teacher should create a safe environment in which every student can freely express their opinions in the classroom, ask questions, conduct research, cooperate with their classmates, create and structure their knowledge with the right guidance; the teacher should guide them competently in this regard, and come to the fore when necessary to determine the “*anchor phenomena*” (Gunshenan et al., 2021) at the points left incomplete by the students. The teacher should also prepare and apply lectures and “*scaffolding studies*” (Bjønness & Kolstø, 2015). “Each teacher may tailor the elements of PhBL according to their own pedagogical style” (Lonka, 2019, p. 183). In other words, the teacher should be able to take the initiative, consider the needs of the class, including learning objectives and atmosphere and possess sufficient pedagogical equipment and experience.

## Background of the Research

In this experimental study, the Turkish Folk Music (TFM) unit was chosen in accordance with the PhBL approach with 10th-grade high school students. In studies conducted in different cities across Turkey, it was found that the rate of listening to TFM is low among adolescents' music listening preferences (Sakar and Maba, 2015).

Beyond listening preferences, TFM is not seen as an interesting subject in music lessons, and little effort is made to learn it. Donna Fields noted a similar situation in her speech at the Oxford National Conference in Italy in 2019 but rejoiced in the fact that all students passed exams successfully for the first time when PhBL was used on the subject of "Ancient Civilizations," a course that a teacher in Spain had had difficulty teaching for years. Fields's (2019b) speech inspired us to choose the topic of TFM in this thesis, a topic in which students generally show little interest and on which they score poorly on exams.

As Lonka (2020) states, "in terms of establishing relationships between different subjects, PhBL teaching also includes an interdisciplinary teaching approach. Interdisciplinary teaching is based on the view that a certain concept, problem or issue is evaluated with the perspectives of different disciplines and then brought back as a whole." At this point, the connection of TFM with the disciplines of geography, history, ethnography, folk dance, visual arts, and literature was deemed appropriate for interdisciplinary work, and it was thought that there would be acculturation, information-gathering, and sharing not only for TFM but also for different aspects of the Turkish culture by establishing interdisciplinary connections. In the thesis process (beyond learning the dynamics and history of TFM), ways to adapt the elements of this music style and use them as a means of expression will be sought.

When the 10th grade music program was examined, the educational attainments of TFM are determined as follows.

Learning Area: Listening-Singing

Sings heroic folk songs

Listens to TFM songs

Sings modal pieces of Turkish music

Learning Area: Musical Perception and Knowledge

Recognizes the beats of Turkish music styles

Recognizes the modal structure of Turkish music

Learning Area: Music Culture

Explains the general characteristics of 17th and 18th-century Turkish music

Explains the importance of the compilers' contribution to TFM

Recognizes Turkish musical instruments

## The Rationale of the Research

The teacher who applies PhBL should guide their students in the stages of asking questions and determining the phenomenon, create a safe environment for the students to express their ideas freely, support the group and help them find direction, and observe the students' ability to think holistically, originally, and critically. Students should be willing to connect with different fields, do research, and share their research results. The teacher should back away from his/her position as the only active, leading person in the classroom, and prepare, support, maintain, and evaluate the environment in which students participate.

Students who have been exposed to a rote, knowledge-based process in the education system for many years may resist a student-based, libertarian education approach like PhBL, which is group-work-oriented and requires that students process and structure information themselves. For this reason, in this research, what can be done differently during the introduction to the PhBL course, what types of strategies might be used to direct students to ask questions and find phenomena, and guidance structures are examined. This study attempts to reveal how students and teachers alike evaluate this process.

### Materials and Methods

A pre-experimental design was used in this research. “In pre-experimental designs, the researcher works on a single group and an intervention is made to this group during the experiment” (Creswell, 2017, p. 170). The study was carried out with a single-group posttest model. “The application of the independent variable to a randomly selected single group and the measurement of the effect on the dependent variable constitute the single-group model” (Karasar, 2004, p. 96).

**Research group.** PhBL activities were held with a total of 102 students from different levels studying at a local high school involved in distance education during the pandemic time (10th grade - 11 students; 11th grade - 81 students; 12th grade - 10 students). Following the lessons, the opinions of 84 people (58 girls, 26 boys) who were willing to answer the research questions were recorded.

**Data collection.** Data were collected using the interview technique, one of the primary qualitative research method techniques. Interviewing is defined as “a mutual and interactive communication process based on asking and answering questions and conducted for a predetermined and serious purpose” (Stewart & Cash, 1985; quoted by Yıldırım and Şimşek, 2013, p. 147). To prepare the interview form, questions were determined with the input of one educational sciences expert, one music education expert, and one high school guidance expert. In line with the opinions of the experts, 11 questions were posed to the students. In the interview form, the questions pertained to feelings that PhBL activities aroused in students, its differences with other music lessons, whether they want to do this type of work again, whether they want to see this type of work in other lessons, how their knowledge of TFM changed (as well as their interest in this type of music), and what these lessons looked like to them (through the application of metaphors). After a music lesson, students were informed about the study, what the questions were, and the importance of their answers.

**Ethical procedures.** Written permission was obtained from the school administrators regarding the experiment and interview process prior to the research. In addition, the parents of each student were contacted, the nature of the process was explained, and their written permission was obtained. Afterwards, an interview request was sent to the students who attended the classes, and the students who were willing to be interviewed were included in the research process.

**Data analysis.** Content analysis was applied to the data collected through the interviews. Content analysis has the objective of identifying concepts and relationships to explain the collected data. For this purpose, the collected data must first be conceptualized, then organized logically according to the emerging concepts, and accordingly the themes that explain the data must be determined.” (Yıldırım & Şimşek, 2013, p. 259).

Following research guidelines, the following steps were followed in the data analysis process:

- All data were subjected to content analysis and codes were given to “significant sections among the data” (Yıldırım & Şimşek, 2013, p. 259). The coding was done according to concepts obtained from the data.
- In the metaphor analysis, sentences lacking “cause” and which were not meaningful were excluded from the data.
- Then the categories were determined. Yıldırım and Şimşek (2013, p. 268) stated, “codes were brought together and examined, common aspects were examined, and categories and subcategories explaining these categories in more detail.”
- The reliability formula, “Reliability=Agreement/ (Agreement + Disagreement),” suggested by Miles and Huberman (1994) was used for reliability calculation and the agreement coefficient between encoders was calculated. The agreement coefficient between the two researchers was found to be 79.95%. Studies with a concordance coefficient above 70% are considered reliable (Miles & Huberman, 1994). This result reveals that the collected data was reliable.
- Categories and subcategories were tabulated. Sample sentences that were thought to best express the categories were selected, presented, and interpreted.

**Experimental procedures.** During the study, a total of 240 minutes was spent with each group (4 weeks x 2 course hours; class hours: 30 minutes). In the first two weeks, introductory activities were studied, while in the 3rd and 4th weeks, follow-up activities were studied. The courses were held through Zoom and the EIN (Education Informatics Network) digital education platforms. Since the students were not required to attend distance education classes during pandemic conditions, the study was carried out with students who attended the course.

TFM, which is a common subject in the experimental process, was investigated utilizing the PhBL approach, but with different introductory and follow-up activities with each group. The findings were evaluated as a whole with the logic of all students participating in PhBL activities, but teachers’ observations concerning each activity were shared separately.

### Activities

In order to understand the dynamics of PhBL and gauge “phenomenon identification-questioning” orders in different ways, the teacher first provided “Covid19” as a phenomenon and the students were given the opportunity to ask questions, they were curious about. In the following lessons, activities related to TFM were carried out. In these activities, after different introductions, the students first asked questions about the subject, the questions were noted, and each student was asked to list three questions they were most curious about. The questions that received the most votes were re-read, and the phenomena that would enable the subject to be handled holistically were determined by the students. Once phenomena were determined, lessons were created to explore them.

Below are the different introductory activities undertaken in different groups:

- Without any preliminary preparation about TFM, students asked questions they were curious about. As such, phenomena were determined.
- Students were asked to create mind maps about TFM, and then ask questions about the subject and identify phenomena.
- The study began with a visual about TFM that gave brief information. In the image<sup>[1]</sup>, there are instruments, artists, and folk dances of various regions on the map of Turkey. The given

image was interpreted with the help of questions asked by the teacher. Questions concerning differences in folk dance costumes, the effects of climate and geography on music, life and culture were asked, and the visual was interpreted. Then, students asked questions they were curious about, and phenomena were determined.

- Students were first asked to create mind maps about TFM, the visual related to the subject was revealed and interpreted, and students were asked to read and interpret an article containing brief information about TFM. In the next stage, students determined the phenomenon related to the subject by asking questions they were curious about.
- The teacher started the lesson by playing the *bağlama* and singing a folk song, then briefly focused on the type of music, the region of its origin, and the story of the folk song. Students were asked to write questions that they were curious about, and phenomena were determined, taking their mind maps into account.

Following these introductions, different mini-events were held in which students worked individually, performed research, and prepared mini-presentations to consider what might be done to turn the subjects into projects. These activities included the following scenarios:

- “Let’s assume that a museum about world music will be established. In this museum, there will be a room dedicated to the music of every culture. There will also be a room describing TFM. What should we know about TFM in order to design this room? Which aspects of TFM should we consider? How would you design the room?”
- “Let’s assume that our school decided to bring your ideas together with the students who share the same desks as you in the future in the *I Have a Message from the Past to the Future* campaign. You are requested to write your ideas about the place and future of TFM in today’s music genres in these letters to be opened and exhibited in 10 years. How can you convey your thoughts by building a bridge between the past and the future of TFM?”
- “As a cultural transmitter, you have a journal in which you write to your grandchildren on various topics. Tell your grandchildren about the past, present, and future of TFM by writing an article explaining what TFM is, how it developed, and its importance and necessity.”

## Findings

In this section, the categories obtained from the data analysis are presented in tables, following by a narrative.

Students described their feelings as happy, excited, curious, enthusiastic, confident, and relaxed when reflecting on their experiences with PhBL, as shown in Table 1.

**Table 1**

*The feelings that PhBL evokes in the students*

|              |         |  |
|--------------|---------|--|
| Happy        | because | the activities are fun.                                    |
| Excited      |         | the classes are going very well.                           |
| Curious      |         | I am learning something new.                               |
| Enthusiastic |         | I am thinking “what are we going to do today?”             |
| Confident    |         | I contribute to the lesson by participating in activities. |
| Relaxed      |         | I can freely express my own ideas and they are respected.  |



Table 2 illustrates the categories consisting of students' statements about the quality of PhBL which were determined as follows: Curiosity and Imagination, Accessing and Analyzing Information, Information Literacy, Effective Thinking, Questioning and Problem Solving, Creativity and Innovation, Holism and Contextuality, Interdisciplinary, Student-Oriented.

**Table 2**  
*The Quality of PhBL Lessons*

| Category  | Sample Sentence  |
|---|--|
| Curiosity and imagination                           | "It felt very nice to think and talk about such a thing (creating a museum) even if it was a dream."   |
| Accessing and analyzing information                 | "After the lessons we did, what I realized were the wrong things I thought I knew. A lot of things I knew were actually wrong. I was very happy that these mistakes were corrected after the lessons."<br>"It required more participation than other events. I needed to ask more questions and think."  |
| Information literacy                                | "We learned that musical events do not necessarily require instruments, and we can gain a lot of information about music by doing the right research."   |
| Effective thinking, questioning and problem solving | "Thanks to my teacher's comment on my way of thinking, I found the answer to the question that had been lingering in my mind for a long time. My teacher got to know me much better because the thought was at the forefront."<br>"I loved the activity where we asked questions. Because I've never thought this deeply about things before." |
| Creativity and innovation                           | "I gain different perspectives, I answer the questions I ask, and I place those questions in my imagination."<br>"I really felt that I had improved myself so much just in a lesson without giving away our days and weeks."<br>"I can think creatively, even for a short time, which I noticed in myself."                                    |
| Holism, contextuality                               | "I think we are talking about things in the easy world life."<br>"In fact, we learn gradually as we go gradually, so it stays better in mind."<br>"I like to find the phenomenon words or phenomenon sentences about TFM because it is both interesting and comprehensive in that it summarizes a huge subject."                               |
| Interdisciplinary                                   | "I would like to be able to compare and contrast music with other branches of art because in this lesson we looked at music from different angles and branches."<br>"It seems music matches with different areas."   |

|                  |  |
|------------------|--|
| Student-oriented | “These were more student-focused, thought-provoking courses.” “Lessons are generally very student-oriented. It’s a really important feeling to go with the flow as if you were teaching with Socrates in Socrates’ time and that his ideas are really important—of course, our teacher is not trying to change our ideas like our teacher Socrates, but she is trying to show us the way.” |
|------------------|--|

Students stated that their views on TFM changed positively and that their positive attitudes on research and learning have developed independently of music, which can be seen in Table 3.

**Table 3**

*Thoughts after PhBL*

|                                   |  |
|-----------------------------------|--|
| Related to TFM                    | “I started listening to TFM, it caught my attention more, and I wondered about the instruments and researched them. I think it’s a nice genre of music and it’s never ordinary.”   |
| Related to holistic point of view | “I think it made us appreciate and love music a little bit differently.”<br>“Instead of waiting for someone to answer the questions I wondered about, I started researching myself.”<br>“I learned to look from many points of view, not from one direction. I realized the mystery in the visible.” |

Students’ opinions on the inclusion of PhBL in other courses were mostly positive (%88) as shown in Table 4.

**Table 4**

*Opinions on the Inclusion of PhBL in Other Courses*

| Opinion  | Sample Sentences  | f   |
|----------|---|-----|
| Positive | “There is no other lesson where my ideas are so important and able to change the course of the lesson.”<br>“...because I would be happy to know where each lesson or topic comes from and why, and I think we are very hungry for information right now.”<br>“...because when you do, you become more aware of the things you do, the paths you take, and the effort you put into understanding something is the key to understanding the logic of that business. And you don’t easily forget something you understand the logic of.” | 74  |
| Negative | “I think it won’t happen in other courses because there are scientific courses.”<br>“I don’t want to see the activities we do in other lessons because that’s what makes the music lesson special.”<br>“I don’t want it because it would be difficult.”   | 110 |

The categories of the metaphorical views of the students towards PhBL are as follows: Comforting, Entertaining, Instructive, Self-Confidence Developer, Liberating, Creative, Holistic, Intriguing. The metaphors and the causes of the metaphors are presented in Table 5.

**Table 5**  
*The Categories of the Metaphors*

| Category     | Metaphor  | Cause  |
|--------------|---|--|
| Comforting   | Sea<br>Therapy<br><br>Therapy<br><br>Chocolate dessert  | “It comforts you.”<br>“Sometimes thinking, sometimes having fun, relaxes the soul.”<br>“You go to the psychologist and pour your heart out; it’s like asking questions like that.”<br>“It always makes a good impression.”   |
| Entertaining | Educational game<br><br>Sitting in the park and watching the children play and have fun<br>A meaningless, happy feeling<br><br>Football game<br>Activities in kindergarten<br>Fruit<br><br>Chess**<br>Watching TV<br><br>Coming home after a tiring day and making coffee and sipping your coffee with classical music. | “We learned by having fun like children playing with toys.”<br>“There is no reason to watch them, but you are happy for no reason.”<br><br>“If you speed up the car a little while going downhill and you get a feeling that you can’t understand but it makes you extremely happy, that’s it.”<br>“All emotions in one place.”<br>“Personal and entertaining.”**<br><br>“If you care about it and do it to truly learn, you will be as happy as if you ate fresh fruit, but if you do it casually you will be sad as if you ate rotten fruit.”<br>“Provoking and entertaining.”**<br>“I enjoy watching a movie as well as doing the activities we do in class.”<br>“I can say that like I love coffee, I love and enjoy the activities we do together.” |
| Instructive  | Ferris wheel<br><br>Change<br>Utopia<br><br>Interview<br>Project assignment<br>Seminar  | “To reach the information we have stored is the best way when the time comes.”<br>“Cause young people to learn TFM.”<br>“It is not possible, but after all, it is based on thinking.”<br>“Mutual dialogues resemble conversations.”<br>“Careful work.”   |

|                         |   |   |
|-------------------------|---|---|
|                         | <p>Basketball training</p> <p>Talking to my friend</p> <p>Scientific study</p> <p>Buying something new</p> <p>Archaeological excavation</p> | <p>“We learned what we did not know by asking questions and gained new and different information.”</p> <p>“I gain a new experience with the sweat I shed in basketball, and I think it’s worth it, and I’m having a lot of fun at the same time.”</p> <p>“Because when I talk to my friends, I usually learn something.”</p> <p>“There are those types of questions.”</p> <p>“We do something new and learn.”</p> <p>“You know that there are many valuable things under the ground, but you need to be careful, touch the right place, and work hard.”</p> |
| Self-confidence builder | <p>Studying with Socrates</p> <p>Meeting</p> <p>Car</p>   | <p>“It’s a really important feeling to go with the flow and have your ideas really matter—of course, she’s not trying to change our minds like our teacher Socrates did, she’s trying to point the way.”</p> <p>“Because everyone’s opinion is valued and their right to speak is taken seriously.”</p> <p>“The car would not have been able to move forward without our participation.”</p>  |
| Liberating              | <p>Butterfly</p> <p>My books</p> <p>Seaside</p> <p>Chat environment</p> <p>Social activity</p> <p>Reading book</p>                          | <p>“I liken it to freedom.”</p> <p>“One of the places where I can find my own world.”</p> <p>“I feel free by the sea.”</p> <p>“A setting where we say what we know and think about a topic.”</p> <p>“We can be more active.”</p> <p>“While reading a book, we dive into the book, and when we listen to music, we get caught up in the feeling of the music.”</p>   |

|            |  |   |
|------------|--|---|
| Creative   | <p>Letter</p> <p>Snow</p> <p>Brainstorming</p> <p>Being in charge of a new exhibition as a group</p> <p>Finnish education system</p> <p>Hypnosis</p> | <p>“The activities or articles we did would be our own ideas and thoughts, and the most comfortable platform for us to do or write them comfortably would be letters.”</p> <p>“Actually, everything we do from the outside is the same, TFM, but all those questions, all the thoughts, are very different from each other and unique.”</p> <p>“Many people come up with their own opinions and we reach good conclusions about a subject.”</p> <p>“I likened us to a group that generates ideas for exhibition design.”</p> <p>“It does not make the student memorize, it teaches, it is made according to the student’s request and makes the student happy.”</p> <p>“But not in a bad way. We are all focusing on the same thing, and we all have different ideas in our minds.”</p> |
| Holistic   | <p>Layers of the atmosphere</p> <p>Endless jukebox</p> <p>Pomegranate</p>  | <p>“Atmosphere has layers; events in music can also be these layers.”</p> <p>“When you open that box, a <i>matryoshka</i> comes out in different shapes; it is very impressive.”</p> <p>“It’s whole and not interesting on the outside, but inside it has a lot of different things.”</p>   |
| Intriguing | <p>Scrolling through social media</p> <p>Chatting with myself</p> <p>Ripped sock</p> <p>Crossword</p>  | <p>“My friends’ ideas are new tabs, and other things may interest me at any time.”</p> <p>“The times I ask questions and wonder are usually with myself.”</p> <p>“When you grab the end of the yarn, turn to the area of interest, the rest is coming, just keep pulling.”</p> <p>“Because it is fun, informative and intriguing.”**</p>  |

\*\* Fits in many different categories.

### Teacher Observations

Teachers noted that the importance of the introductory activities in PhBL had been understood, and it was seen that students’ questions will enable them to deal with the subject from a holistic perspective that will prepare the ground for a good start. They also reported that the fact that they were curious about their own questions on the subject and would work on the phenomenon they determined based on those questions excited students and motivated them to seek answers to their questions. The *why*, *how* and *what-if* questions and scenarios that are not based on definition eliminate memorization and utilize knowledge and creativity together, giving a spark to students.

Furthermore, when only the questioning activity was performed without preliminary activities, the questions asked were very similar and the subject could not be dealt with holistically. As a result of this, although the phenomena determined by students were related to the subject, they were insufficient on their own, and students could not make a choice among the determined phenomena. As such, they interpreted this as an inadequate introduction to the subject. Students who were not informed about the study stated that they were hesitant to ask wrong questions about the subject and that if the introduction part started with a video, visual, or horizon-opening, better questions would be formed, and the study would be more efficient.

It has been observed that students were influenced by the visuals in the questions that began with them, and they were inspired to form questions. Additionally, it has been observed that students can handle the subject holistically in the mind-mapping activities and, as a result, they asked a variety of questions. The mind-map enabled students to establish different ways of thinking about the subject and to develop different perspectives that allowed them to ask questions pertaining to different disciplines on the subject. In the activity where the teacher played the *bağlama* and sang a folk song, students paid attention, and the teacher's singing with an instrument instead of a recording, aroused their interest. The class responded to the teacher's questions about the folk song, and the lesson, which started in a conversational mood, continued with different activities that preserved the same participatory atmosphere.

While designing the TFM room in the museum event, it was observed that the process of creating questions was done naturally and without difficulty, with the question "What should we know to design this room?" It was observed that students' questions addressed multi-disciplinary perspectives. When the students were asked to address their grandchildren, they used sincere and warm language and stated that they gave advice that encouraged them to listen to TFM and that they wanted them to know the value of our music. The same warmth is not felt in the letters to their peers.

One of the important observations of the study was as follows: When PhBL activities were offered to the same class at different times, students who had difficulty in asking questions the first time and were insecure and hesitant, while determining the phenomena, participated more actively and did not have difficulty (or had less difficulty) in the next activity owing to their prior experience.

Another noteworthy data in practice is that students describe TFM as "old," something which older people listen to. During the study, they concluded that TFM and folk songs are part of life. Listening to the folk songs allowed them to reflect on the lives of people, gain knowledge about the subject, and, most importantly, deal with the subject holistically by establishing connections with other disciplines.

## **Results and Discussion**

In the implementation of PhBL, the teacher's mastery of the main principles of PhBL, as well as his/her mastery of the field, of active learning methods and approaches, inclination to interdisciplinary work, pedagogical equipment, and social skills (communication skills with both students and other teachers) are important. It is immensely important that a teacher who has not been trained in PhBL gains knowledge and, more importantly, experience. As a matter of fact, Fields (2019b) warns teachers about this issue: "it won't work for the first time. It won't work really well the second time. The third time you are more confident, your students are a little more confident. And it begins flowing." As Fields stated, it is extremely essential for the

teacher and students to gain competence in this subject for the efficient functioning of the PhBL process. In the same way, active participation (asking questions, identifying phenomena, and preparing a ‘product’) helps students as they navigate the new approach. These activities also strengthen communications between the teacher and students.

Each of the introductory activities in this study provided the teacher with direction in asking questions and managing the phenomena-finding processes. In addition, it has been revealed that visual and audio media benefit student learning and participation. Bjonness and Kolstø (2015) point out the importance of scaffolding activities. For the present study, only the mind map activity was used. It has been witnessed that it is effective and that students can ask meaningful questions and identify phenomena thanks to the mental connections they have established through the activity. Thus, starting from the view that PhBL is an umbrella covering many active learning methods and approaches, enriching lessons with different activities should be an emphasis.

This study clarifies the position of students in the traditional educational approach. In this context, they are used to the process of listening, taking notes, and accepting what is given without questioning. In such a system, student creativity is dulled. Learning in a rote-based system means not being encouraged to add to the knowledge base, and most importantly, not being curious about the existence of different information. These may hinder student development. When students’ opinions concerning PhBL are examined, their positive feelings become apparent. Students expressed their feelings as excited, curious, enthusiastic, relaxed, and self-confident. Lonka (2019, p. 18) notes changes brought out by the PhBL approach: “According to the Finnish core curriculum, pupils are guided towards recognizing and naming different emotions from early on. Furthermore, they need to gain awareness of their own values, strengths, and weaknesses. In order to cope with others, it is necessary to be aware of one’s values, thoughts, hopes, and feelings in different interactions and situations. Such awareness helps to separate one’s own thoughts, goals, and feelings from those of others.”

Students’ opinions that met the dimensions of the new approach in terms of 21<sup>st</sup>-century skills were considered important. Particular emphasis was placed on the processes by which students acquire knowledge, how they process it, express themselves effectively, ask questions, produce original ideas, and center themselves within the process. While evaluating this relatively limited process, a student noted that “*we learn more information and discover more than other activities.*” Another praised its time efficiency: “*I really felt that I improved myself in a lesson without giving away our days and weeks.*” The majority of the students stated that they enjoyed asking questions and that they realized how effective it was to ask questions (“*I liked the activity where we asked questions. Because I had never thought about this topic so deeply before.*”). Asking qualified, in-depth questions that lead to potential research helps students become better critical thinkers and also fosters holistic thinking and cognitive skill. One student noted, “*I had a little trouble finding a keyword because it was a bit difficult to find that keyword from a broad perspective.*” The students themselves coined the word “keyword” to better understand the notion of “phenomena.” As a matter of fact, when asked, “Do you want this type of work to continue or to be in other courses?” only one student responded negatively: “*I don’t want to because it would be difficult.*”

Seventy-four of the 84 students (88%) who answered the research questions expressed a positive opinion on the PhBL approach, displaying an eagerness that they should continue, both in music lessons and other lessons. Only 6 of them gave a negative answer believing that the music lesson is special: “*I do not want to see the activities we do in other lessons because*

*I think that's what makes the music lesson special, it is different.*” Therefore, these views are heard as positive rather than negative. Two of the students thought that certain lessons are not suitable for PhBL: *“I don't think it is suitable in other courses because there are scientific courses, I do not know how it works there.”* This judgment of the student actually stems from inexperience. Previous research and studies reveal that scientific courses indeed are suitable for PhBL.

The categories of the metaphorical views of the students towards PhBL are as follows: Comforting, Entertaining, Instructive, Self-Confidence Developer, Liberating, Creative, Holistic, Intriguing. In these categories, the dimensions of PhBL, 21<sup>st</sup>-century skills, and the relaxing and liberating qualities of these activities were emphasized. Students expressed that they changed their opinions about TFM: *“I know that TFM is not as simple as I thought anymore... If someone asks me what kind of society the Turks are living in, I recommend that they listen to TFM...”* It reveals that the PhBL activities delivered results in terms of music specifically.

Although focused on a single group of students, this study reveals important findings regarding the phenomenon-based approach used with teaching secondary school students. Conducted during the global pandemic, it also clarified the role of more traditional education, and revealed the enthusiasm of students for learning which gave them greater control. The study also offered the perceptions and experiences of teachers and considers their competence in planning, implementing, and evaluating PhBL activities and projects. The students' discoveries and inferences concerning both TFM and themselves for the future were evaluated as promising.



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