



ORIGINAL

Examination of The Functionality of The ‘Guitar Education and Accompaniment’ Course Delivered in A Virtual Classroom Environment for Instrument Performance

Examen de la funcionalidad del curso ‘Educación y acompañamiento de guitarra’ impartido en un entorno de aula virtual para la interpretación de instrumentos

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Cite as: Ömer TOKATLI M, CAN A, YUNGUL O. Examination of The Functionality of The ‘Guitar Education and Accompaniment’ Course Delivered in A Virtual Classroom Environment for Instrument Performance. Salud, Ciencia y Tecnología - Serie de Conferencias. 2025; 4:1324. <https://doi.org/10.56294/sctconf20251324>

Submitted: 14-04-2024

Revised: 20-08-2024

Accepted: 16-12-2024

Published: 01-01-2025

Editor: Prof. Dr. William Castillo-González 

ABSTRACT

Objective: this study aimed to determine the technical and musical levels of the students’ instrument performances. In this direction, the functionality of this course was evaluated by determining the technical, musical and general performance levels of the students.

Method: in this study, where action research was adopted, two action studies were implemented within the scope of this study. The Performance Observation Form developed by Şenoğlu Özdemir (2019) as two dimensions, technical and musical, was used as the data collection tool. The study was carried out within the scope of the virtual classroom and Zoom application was used. Also, the Musescore, a native Turkish notation writing program, was used to explain musical information and studies. Within the scope of the study,

Results: the data obtained from the video recordings of the lessons conducted within the scope of the action research contributed to the management of the process for students’ better understanding of subjects they had difficulty with for the next lesson. It was determined that the fact that each of the students in the study group played a different major instrument affected their performance.

Discussion: suggestions were made to improve the instrument performance in the ‘Guitar Education and Accompaniment’ lesson delivered in the virtual classroom environment.

Keywords: Distance Education; Virtual Classroom; Music Education; Instrument Education; Accompaniment.

RESUMEN

Introducción: el objetivo de este estudio fue examinar la funcionalidad del curso de “Educación y acompañamiento de guitarra” impartido en un entorno de aula virtual en términos de desempeño. En este sentido, se evaluó la funcionalidad de este curso determinando los niveles de desempeño técnico, musical y general de los estudiantes.

Método: en este estudio, en el que se adoptó la investigación-acción, se utilizó como herramienta de recolección de datos el Formulario de observación del desempeño desarrollado por Şenoğlu Özdemir (2019) en dos dimensiones, técnica y musical. El presente estudio se llevó a cabo en el ámbito del aula virtual y se utilizó la aplicación Zoom. Además, se utilizó Musescore, un programa nativo de escritura de notación turca, para explicar la información y los estudios musicales. En el ámbito del estudio, se determinaron tres unidades tomando opiniones de expertos y se evaluó el desempeño de los estudiantes de acuerdo con sus desempeños en estas unidades.

Resultados: los datos obtenidos a partir de las grabaciones en video de las clases realizadas en el marco de la investigación-acción contribuyeron a la gestión del proceso para una mejor comprensión de los estudiantes

de los temas con los que tenían dificultades para la siguiente clase. Se determinó que el hecho de que cada uno de los estudiantes del grupo de estudio tocara un instrumento mayor diferente afectó su desempeño.

Discusión: de acuerdo con los resultados obtenidos en el estudio, se realizaron sugerencias para mejorar el desempeño del instrumento en la clase de “Educación y acompañamiento de guitarra” impartida en el entorno de aula virtual.

Palabras clave: Educación a Distancia; Aula Virtual; Educación Musical; Educación Instrumental; Acompañamiento.

INTRODUCTION

Rapidly developing technology offers new learning methods and tools in education, facilitating students' access to information, making learning processes more effective, and creating a global learning environment.

⁽¹⁾ In traditional education, opportunities such as instant access to information by the teacher and student during the lesson and the student's review of course content when needed during their studies are limited. These opportunities can be realized with the distance education system in parallel with the development of technology. Distance education allows individuals to carry out the learning action at a time and place they want, regardless of time and place.⁽²⁾ Although distance education is included in the education system through internet infrastructure and technology in today's conditions, it was seen in the past that it was first included in the education system by correspondence.

Distance education continued with radio in parallel with the development of technology and was included in the education system. A department established in Wisconsin-Extension University in 1906 to transfer information to people started to broadcast wirelessly, and the first national radio broadcast known in the history of distance education was made.⁽³⁾ As a result of the change and progress in education, television, which was a one-way visual and audio communication tool after radio, began to take its place in society. When the historical process is considered, it is not possible to say that television is a tool used directly for distance education. However, after the 1950s, it was seen that television was also included in the education system with the realization that it was used to transfer information.

Distance education is provided today with the support of the internet and electronic devices (computer, mobile phone, tablet). Individuals can continue their education at any time and from any place they want with technological devices such as computers, mobile phones, and tablets.

Distance education is divided into three categories: synchronous, asynchronous, and mixed. In education carried out in the synchronous model, the teacher and the student carry out mutual education activities simultaneously in the same time period. In this model, instant communication between the student and the teacher takes place through software. These programs enable the creation of a virtual classroom environment and the transfer of traditional education to the digital environment, making the learning process more dynamic.⁽⁴⁾ Asynchronous education is a teaching model in which the teacher and the student do not interact at the same time, and the course content, such as recorded lesson videos, lecture notes, and tests, is usually prepared in advance. It is quite practical, especially for working individuals, to access asynchronous education content after completing their work. However, it is stated that if the asynchronous learning method is constantly used, problems such as students feeling isolated during education and a lack of collaborative learning may arise.⁽⁵⁾ Mixed (hybrid) education is the combination of distance education and traditional face-to-face education.⁽⁶⁾

Virtual classrooms are an important component of online education in distance education. They are defined as synchronous online environments where students from different locations come together at the same time under the guidance of a teacher. These digital environments facilitate two-way information transfer and increase the interaction of individuals in the virtual classroom environment.⁽⁷⁾ In the virtual classroom, there are opportunities such as students getting instant answers to their questions and accessing information via the web during the lesson.⁽⁸⁾ In addition, lessons given within the scope of the synchronous model are recorded, and students are given the opportunity to watch the lessons again, making learning in the virtual classroom environment more effective.⁽⁹⁾

Virtual classrooms are applied in many academic disciplines. Especially in recent years, with the emergence of the importance of technology, it is seen that scientific studies on this subject have accelerated. Music education, which is an applied field within the scope of the virtual classroom, has the potential to provide a qualified education with the provision of the necessary equipment.⁽¹⁰⁾

As a result of the relevant literature review, it is seen that various studies have been carried out in the field of music education within the scope of the virtual classroom in the sub-dimensions of general

music education, musical activities, students, and teachers. It has been determined that these studies also contribute to instrument education.^(11,12) In this context, it is seen that the studies carried out in music education contribute to the professional development of teachers, increase accessibility to different student groups, enrich formal education, and have the potential to improve students' instrument performances.

The sub-objectives determined for the problem of examining the functionality of the 'Guitar Education and Accompaniment' course given in a virtual classroom environment in terms of instrument performance are given below.

1. What is the level of technical performance of students in the 'Guitar Education and Accompaniment' course given in a virtual classroom environment?
2. What is the level of musical performance of students in the 'Guitar Education and Accompaniment' course given in a virtual classroom environment?
3. What is the level of general performance of students in the 'Guitar Education and Accompaniment' course given in a virtual classroom environment?

METHOD

The method of the research was determined as action research. Action research is a research approach that is referred to by various names in the literature, such as participatory action research, collaborative research, libertarian research, action learning, and contextual action research.⁽¹³⁾ It is a method frequently employed by academics and educators who take on the role of researcher during the study process. This approach is practical and aims to improve practices by generating systematic and scientific knowledge in diverse educational fields. One of the most significant goals of action research in education is to systematically comprehend the realities emerging within the educational environment and seek to develop them through transformative actions.⁽¹⁴⁾

Action research targets three main elements. First, it refers to the education of educators, second, the approaches of educators to education and training, and third, the educational environments created by educators. The process of action research includes the transformation of practices, the transformation of the way of understanding practices, and the transformation of the conditions that enable or restrict practices.

In this study, the Performance Observation Form developed by Şenoğlu Özdemir⁽¹⁵⁾ as two dimensions, technical and musical, was used as the data collection tool. The present study was carried out within the scope of the virtual classroom and Zoom application was used. Also, the Musescore, a native Turkish notation writing program, was used to explain musical information and studies.

Two action studies were implemented within the scope of this research. In the first action research, classical guitar note teaching and tablature note were taught to students within the scope of the determined units. However, the students' willingness to learn through tablature notes caused them to move away from the traditional note method. In this context, the second action plan was adopted in which classical note teaching was used instead of tablature note in the school songs, classical works, and etudes taught to students. Since the students did not encounter any difficulties in the second action plan and the studies in the determined units were suitable for the students' development, the third action plan was not deemed necessary.

The ethics committee approval for this study was approved by the board of Marmara University Institute of Educational Sciences with the decision of 6/1 on 31.08.2022. Institute decision no.359-826.

Research group

The study group of the research was determined by criterion sampling, one of the purposive sampling methods. In this context, the study group was formed with 4 students taking the 'Guitar Education and Accompaniment' course in the Music Education Department of the Fine Arts Education Department of the Faculty of Education of Kastamonu University in the fall semester of the 2022-2023 academic year. The students took the 'Guitar Education and Accompaniment' I course. The distribution of students according to demographic characteristics is shown in table 1.

According to the findings obtained from the demographic analysis of the study group, as seen in table 1, when the gender distribution of the participants is examined, it is seen that females (75 %) are more than males (25 %). It was found that 75 % of the students were Anatolian high school graduates and there was no one in their family who played an instrument. In the 'Guitar Education and Accompaniment' course to be implemented in the virtual environment, the determination of the students' main instruments as guitar, piano, baglama and vocal shows that the study group is rich in musical diversity and has different musical experiences.

Table 1. Demographic information of students*

Demographic Characteristics	Students				F	%	Total (%)
	S1	S2	S3	S4			
Gender	F	F	M	F	3F 1M	75 25	100
Major Instrument	G	P	B	V	1G 1P 1B 1V	25 25 25 25	100
Graduated High School	AHS	ARVHS	AHS	AHS	3AHS 1ARVHS	75 25	100
History of Playing Instruments in the Family	NO	NO	NO	NO	0Y 4N	0 100	100

Note: * F: Female, M: Male, G: Guitar, B: Baglama, P: Piano, V: Vocal, AHS: Anatolian High School, ARVHS: Anatolian Religious Vocational High School, Y: Yes N: No

Data collection tools

Performance Observation Form

In the study of Özdemir (2019),⁽¹⁵⁾ the performance observation form evaluations (in the pre-test and post-test) were made by the exam jury of the relevant instruments in the final exam of the 6th and 7th semester individual instrument (piano, string instruments, guitar) courses, and the evaluations were carried out separately as a piece and an etude that the students were held responsible to play in the exam. In this context, the scores of the jury members were evaluated one by one and the Spearman Brown Rank Difference Correlation Coefficient was used to determine whether there was a difference between the raters. When the scores given by the raters in the guitar commission to the performance observation form were examined, it was concluded that there was a significant relationship ($p < 0,01$). In addition, a significant relationship was found in the scores in the other instrument commissions.

Table 2. Performance observation form item value

Score Range	Performance Level
0,00- 0,80	Very poor
0,81- 1,60	Poor
1,61- 2,40	Average
2,41- 3,20	Good
3,21- 4,00	Very good

The dimensions and sub-dimensions in the performance observation form are presented in table 3.

Table 3. Performance Observation Form dimensions and sub-dimensions

	Technical Dimension	Musical Dimension
Sub-dimensions	Sitting/Holding/Posture Instrument Technique Correct-Clean Playing Tempo Articulation Tone Color	Integrity Phrasing Tone Connected Playing Dynamics Structure Period Expression Texture

In the study, the concordance coefficient of the expert evaluation scores of the performance observation form was examined. In this context, the reliability coefficient was calculated using the SPSS analysis program. The Krippendorff Alpha test was used for this calculation. The Krippendorff Alpha statistic is also used as a concordance statistic in determining the concordance between raters.⁽¹⁶⁾ The Krippendorff Alpha (α) statistic can be applied to different data types. It can be applied to data that includes at least two or more raters. The value ranges for the interpretation of the Krippendorff Alpha coefficient are $<0,67$ Weak 0,67- 0,80 Medium 0,80- 1,00 High.

In the study, the reliability of the performance observation form data filled out by the expert evaluator was

tested statistically with Krippendorff's alpha coefficient. Krippendorff Alpha statistic is also used as a concordance statistic in determining the agreement between raters.⁽¹⁶⁾ In this analysis conducted with Krippendorff Alpha (α) statistic, the degree to which the evaluations of three different field experts were consistent was determined. A Krippendorff's alpha coefficient below 0,67 indicates weak agreement, between 0,67-0,80 indicates moderate agreement, and above 0,80 indicates high agreement. The concordance coefficients of the 3 field experts obtained within the scope of the study are presented in table 4.

Unit Performances	Krippendorff Alpha Reliability Estimation					
	Alpha	LL95 %CI	UL95 %CI	Units	Observers	Pairs
Unit 1- Performance	,9231	,8942	,9519	4,0000	3,0000	12,000
Unit 2- Performance	,8376	,7322	,9244	4,0000	3,0000	12,000
Unit 3- Performance	,9276	,8987	,9550	4,0000	3,0000	12,000

When table 4 is examined, the concordance coefficient for the evaluations of three field expert raters for all three units is highly reliable according to the Krippendorff Alpha Concordance Coefficient reference ranges.

Implementation Process

In the first phase of the research, an action plan was created with the aim of having an open and adaptable structure to variables. Within the scope of this plan, the 'Guitar Education and Accompaniment' course implemented for a period of 15 weeks was examined under the heading of three determined units. These three units consist of "Basic techniques and practice technique of the guitar", "concept of tone and analysis" and "accompaniment". In this way, an intervenable research design was adopted.

Before starting the study, the content of the 'Guitar Education and Accompaniment' course in the music teaching undergraduate program was examined in detail by two experts. As a result of this comprehensive examination, the data collection tools required for the research were determined and a roadmap that would form the basis of the lesson plan was drawn. The content of the 'Guitar Education and Accompaniment' course in the Music Teaching Undergraduate Program published by the Council of Higher Education (YÖK) in 2018 was taken as the basis in the creation of the lesson plan.

In order to increase student participation and learning efficiency in the virtual classroom, digital tools were used in the course content and presentation. A notation program called "MuseScore" was used in song teaching. In terms of course materials, Google Drive was used so that students could easily access course materials prepared for use in a digital environment, both visually and auditorily.

When the data obtained from the first action plan were evaluated, it was not necessary to make extensive changes to the curriculum. The main problem was that students focused too much on reading tablature notes and avoided reading basic guitar notation. For this reason, the second action plan was initiated and basic note teaching was continued. In line with the data obtained, the third action plan was not needed and the remaining weeks were completed.

The "performance observation form" developed by Özdemir⁽¹⁵⁾ and course video recordings were used to determine the students' performances during the implementation process of the research.

Data Analysis

In the 'Guitar Education and Accompaniment' course given in a virtual classroom environment, a measurement tool was used as the basis for evaluating the results of the study carried out to determine the instrument performance levels of the students.

This measurement tool is a performance observation form and consists of 15 sub-dimensions. The high average score obtained from this form indicates that the student's performance in that sub-dimension is at a high level. In this context, the general performances of the students were examined in 15 sub-dimensions of two technical and musical dimensions, and the arithmetic mean and standard deviation values of these dimensions were calculated to determine the general average performance levels.

Ethics committee approval

The ethics committee approval for this study was approved by the board of Marmara University Institute of Educational Sciences with the decision of 6/1 on 31.08.2022. Institute decision no.359-826.

RESULTS

In this part of the research, the findings regarding the research questions created to examine the functionality of the "Guitar Education and Accompaniment" course given in the virtual classroom environment regarding

instrument performance are given in order.

In this context, the arithmetic mean, standard deviation values, frequency and percentage distributions of the students' general performance level scores regarding technical and musical dimensions and sub-dimensions are presented below.

General performance levels of students regarding the technical dimension

The performance items related to the technical dimension and sub-dimensions of the performance observation form and the arithmetic mean and standard deviation values related to the students' realization of these performances are presented in Table 5.

Table 5. General performance levels of students regarding the technical dimension

Dimension	Sub-dimension	Scale Item	Performance	f	%	Total
Technical Dimension	Sitting/Holding/Posture	Ability to maintain the correct, comfortable sitting/holding posture required by the instrument	Very good	1	25	f : 4
			Good	2	50	% 100
			Average	1	25	
	Instrument Technique	Ability to correctly apply the techniques required by the instrument in a piece/etude	Very good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
		Ability to provide the coordination required by the instrument	Very good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
	Correct-Clean Playing	Ability to play the piece/etude correctly, clearly/with intonation	Very good	1	25	f : 4
			Good	2	50	% 100
			Average	1	25	
		Ability to play the piece/etude with correct and appropriate finger numbers	Very good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
		Ability to play the piece/etude with a correct rhythmic structure	Very good	1	25	f : 4
			Good	2	50	% 100
			Average	1	25	
	Tempo	Ability to play the piece/etude in tempo	Very good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
		Ability to play the piece/etude while maintaining the tempo	Very good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
	Articulation	Ability to play the piece/etude by paying attention to articulation	Very good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
	Tone Color	Ability to use different sound colors within a piece/etude	Very good	2	50	f : 4
			Good	1	25	% 100
			Average	1	25	

As seen in table 5, the technical dimension performance levels of the students were addressed with six sub-dimensions which are sitting/holding/posture, instrument technique, correct-clean playing, tempo, articulation and tone color, respectively.

In the sitting/holding/posture sub-dimension, it was found that half of the students performed the performance of "Being able to provide the correct and comfortable sitting/holding/posture required by the instrument" at a good level, while the remaining students performed at a very good and average level. On the other side, in the articulation sub-dimension, half of the students performed the performance of "Being able to play the piece/etude by paying attention to articulation" at an average level, while the remaining half performed at a very good and good level. Within the context of sound color sub-dimension, half of the students performed the performance of "Being able to use different sound colors within the piece/etude" at a very good level, while the remaining half performed at a good and average level.

Students' performances regarding the tempo and instrument technique sub-dimensions were measured with two separate observations.

In the tempo sub-dimension, it was found that half of the students performed the performance of "Playing the piece/etude in tempo" at an average level, the remaining half performed it at a good and very good level, and 50 % of the students performed the performance of "Playing the piece/etude while maintaining the tempo"

at an average level, 25 % at a good level, and the remaining 25 % at a very good level. In terms of the instrument technique sub-dimension, it was found that 50 % of the students performed the performance of “Applying the techniques required by the instrument correctly in the piece/etude” at an average level, 25 % at a good level, and the remaining 25 % at a very good level, and 50 % of the students performed the performance of “Providing the coordination required by the instrument” at an average level, 25 % at a good level, and the remaining 25 % at a very good level.

The performances related to the correct-clean playing sub-dimension were also measured with three separate observations. Accordingly, it was concluded that 50 % of the students performed the “Playing the piece/etude correctly, clearly/with intonation” performance at a good level, 25 % at an average level and the remaining 25 % at a very good level in the context of the correct-clean playing sub-dimension. According to the findings, 50 % of the students performed the “Playing the piece/etude correctly and with appropriate finger numbers” performance at an average level, 25 % at a good level and the remaining 25 % at a very good level. 50 % of the students performed the “Playing the piece/etude with a correct rhythmic structure” performance at a good level, 25 % at an average level and the remaining 25 % at a very good level.

General performance levels of students regarding the musical dimension

The performance observation form performance items related to the musical dimension and sub-dimensions and the frequency and percentage distributions of students’ performances are presented in table 6.

Table 6. General performance levels of students regarding the musical dimension

Dimension	Sub-dimension	Scale Item	Performance	f	%	Total
Musical Dimension	Integrity	Ability to play the piece/etude as a whole, fluently, without pauses	Good	1	25	f : 4
			Average	3	75	% 100
	Phrasing	Playing the piece according to the phrase planning (making the original phrase structure of the piece heard)	Very Good	1	25	f : 4
			Good	2	25	% 100
			Average	1	50	
		Ability to play phrases in integrity	Very Good	1	25	f : 4
			Good	2	50	% 100
			Poor	1	25	
	Tone	Ability to play phrases with desired nuances	Very Good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
		Ability to play the piece/etude with an effective tone	Very Good	1	25	f : 4
			Average	3	75	% 100
	Connected Playing	Ability to play while maintaining integrity during position transitions	Good	1	25	f : 4
			Average	2	50	% 100
			Poor	1	25	
	Dynamics	Ability to play the piece/etude with the specified loudness level	Very Good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
		Ability to play the piece/etude according to the specified nuances	Very Good	1	25	f : 4
			Average	3	75	% 100
	Period	Ability to play the piece/etude according to its period characteristics	Very Good	1	25	f : 4
			Good	2	50	% 100
			Average	1	25	
	Structure	Ability to play in accordance with the structural features of the piece/etude	Very Good	1	25	f : 4
			Good	1	25	% 100
			Average	2	50	
	Expression	Ability to play the piece/etude with an expression that is appropriate to its character and emotion	Very Good	1	25	f : 4
			Average	2	50	% 100
			Poor	1	25	
	Texture	Ability to play the piece/etude according to its texture (monophony, polyphony, homophony)	Very Good	1	25	f : 4
			Good	2	50	% 100
			Poor	1	25	

As seen in table 6, it was observed that the students’ musical performance levels were examined in different dimensions such as period, structure, expression, texture, dynamics and phrasing. However, it was concluded that not all students could perform these performances at a very good level in the structure, expression and texture dimensions. According to the findings, in the tone sub-dimension, it was found that 3 of the students

(75 %) performed “Playing the piece/etude in an effective tone” at an average level and the remaining 1 (25 %) student performed this performance at a very good level. In the connected playing sub-dimension, it was seen that 2 of the students (50 %) performed “Playing while maintaining integrity during position transitions” at an average level and 1 of the remaining 2 students (25 %) performed it at a poor level and the other 1 (25 %) student performed it at a good level. In the period sub-dimension, it was seen that 2 of the students (50 %) performed “Playing the piece/etude according to its period characteristics” at a good level, 1 of the remaining 2 students (25 %) performed it at an average level and the other 1 (25 %) student performed it at a very good level. On the other hand, in the structure sub-dimension, it was found that 2 of the students (50 %) performed “Playing in accordance with the structural features of the piece/etude” at an average level, 1 of the remaining 2 students (25 %) performed at a good level, and 1 of them (25 %) performed at a very good level. In terms of the expression sub-dimension, 2 of the students (50 %) performed “Playing the piece/etude with an expression that is appropriate to its character and emotion” at an average level, 1 of them (25 %) performed at a poor level, and the remaining 1 (25 %) performed at a very good level. In the texture sub-dimension, it was found that 2 of the students (50 %) performed “Playing the piece/etude according to its texture (monophony, polyphony, homophony)” at a good level, 1 of them (25 %) performed at a poor level, and the remaining 1 (25 %) performed at a very good level.

The performances of the students regarding the dynamics sub-dimension were measured with two separate observations, and it was concluded that 2 of the students (50 %) performed “Playing the piece/etude with the specified loudness level” at an average level, 1 (25 %) performed it at a good level, and the remaining 1 (25 %) performed it at a very good level in the dynamics sub-dimension. Under the same sub-dimension, it was found that 3 (75 %) students performed “Playing the piece/etude according to the specified nuances” at an average level, and the remaining 1 (25 %) student performed it at a very good level.

The performance of the students regarding the phrasing sub-dimension was measured with three separate observations. Accordingly, it was determined that 2 of the students (50 %) performed “playing the piece according to the phrase planning (making the original phrase structure of the piece heard)” in the phrasing sub-dimension at an average level, 1 (25 %) performed at a good level and the remaining 1 (25 %) performed at a very good level. It was found that 2 of the students (50 %) performed “playing phrases in integrity” at a good level, 1 (25 %) performed at a very good level and the remaining 1 (25 %) performed at a poor level. Also, 2 of the students (50 %) performed “playing phrases with desired nuances” at an average level, 1 (25 %) performed at a very good level and the remaining 1 student performed at a good level.

General Performance Levels of Students Regarding Musical and Technical Dimensions

When the general results are examined, it can be said that the technical and musical performance results of the students are similar. The general performance levels of the students, including their technical and musical performances, are also at a good level with (2,54±0,97).

Performance Dimensions	x	ss	Performance Level
Regarding the Technical Dimension	2,63	0,94	Good
Regarding the Musical Dimension	2,45	1,00	Good
Overall Performance Average	2,54	0,97	Good

DISCUSSION

Depending on the problem of examining the functionality of the instrument performance of the ‘Guitar Education and Accompaniment’ course given in the virtual classroom environment, it was determined that the average results obtained from the technical and musical performance levels of the students were close to each other according to the determined purpose, and it was concluded that their general performance was at a ‘good’ level.

In the technical performance dimension, it was concluded that the students performed ‘good’ in the sub-dimensions of Sitting/Holding/Posture, Instrument Technique, Correct-Clean Playing and Tempo, as well as in the sub-dimensions of Integrity, Phrasing, Dynamics, Structure, Period and Texture in the musical performance dimension. In the musical performance dimension, it was concluded that not all students performed at a very good level in the sub-dimensions of structure, expression and texture. It can be thought that this result is due to the fact that the students experienced the ‘Guitar Education and Accompaniment’ course for the first time in the virtual classroom environment and the inadequacy of the technological infrastructure.

It can be said that digital course materials were highly effective in the lessons conducted as part of this study. Research on the use of digital materials indicates that when course materials are designed with versatility, they enhance the learning experience and strengthen student interaction.^(17,18) This study’s findings align with these

conclusions, emphasizing the importance of high-quality digital content in supporting students' educational progress.

Despite the overall effectiveness of the program, it was observed that students struggled in certain sub-dimensions requiring advanced skills and musical experience. The lack of a robust musical background for guitar performance among some students resulted in lower scores in these dimensions. According to Özbek⁽¹⁹⁾, achieving artistic performance requires analyzing the stylistic features of a piece, such as its form, creation process, and period characteristics. Developing technical skills during music education is critical for transforming basic instrument performance into an artistic expression.

The participants in this study had varying musical backgrounds: S1 specialized in guitar, S2 in piano, S3 in baglama, and S4 in vocal performance. Among them, S1 emerged as the most successful student due to their existing guitar expertise. S1's ability to quickly and effectively comprehend and execute assigned pieces was attributed to their prior experience and technical skills developed during undergraduate studies. While this advantage allowed S1 to excel, it also highlighted the potential risk of reduced motivation if course content does not challenge students with prior expertise. To address this, differentiated course programs could be developed, incorporating advanced technical studies for students whose major instrument is guitar, thereby enhancing the course's functionality and engagement for such participants.

The findings also revealed the influence of students' major instruments on their technical and musical performance in guitar education. For instance, S3, whose major is baglama, demonstrated higher performance levels than S4, whose major is vocal. This disparity underscores the impact of experience with similar stringed instruments on success in guitar performance. The structural and technical similarities between the baglama and the guitar likely contributed to S3's relatively better performance. Supporting this, Çoğulu⁽²⁰⁾ notes that playing techniques of the baglama and classical guitar have mutually influenced each other since the late 20th century.

S2, whose major instrument is piano, ranked as the second most successful student after S1 in technical and musical performance. The piano's role as both a solo and accompaniment instrument, along with its suitability for foundational music theory education, appears to have supported S2's success. Studies suggest that the guitar and piano can serve as alternative accompaniment instruments, further highlighting their compatibility in music education.⁽²¹⁾

S4, on the other hand, exhibited the lowest performance levels among the participants. This can be attributed to the unique requirements of the vocal major, which emphasizes distinct musical and technical skills unrelated to stringed instrument performance. S4's lack of prior experience with stringed instruments further contributed to their challenges in adapting to guitar education.

Interestingly, although three of the students did not have prior guitar training in their musical backgrounds, all participants demonstrated improvements in their guitar performance levels during the 'Guitar Education and Accompaniment' course conducted in the virtual classroom. These findings align with literature suggesting that instrument education through distance learning can successfully enhance students' musical abilities.^(17,22,23,24)

CONCLUSION

This study concluded that students demonstrated good performance in both technical and musical dimensions during the virtual 'Guitar Education and Accompaniment' course, with digital course materials playing a key role in enhancing their learning experience. However, technological disparities between the teacher and students contributed to performance differences, and the lack of detailed student feedback was a limitation of the study. Future research should focus on gathering more in-depth student perspectives, improving technological infrastructure, and expanding the sample size across different institutions to generalize the findings.

RECOMMENDATIONS

According to the results obtained in the research;

- The performance levels of the students were determined in the lessons. However, the students' thoughts on the 'Guitar Education and Accompaniment' course given in the virtual classroom environment are not clearly known. In this context, it is recommended that different studies be conducted in order to understand the students' thoughts on the subject in more depth and to evaluate the suitability of the educational materials.
- In this study conducted in a virtual classroom environment, it was determined that the teacher and the students did not have equal technical equipment. As a result of this situation, there were individual performance differences between the students. In this context, it is recommended that the minimum technological needs of the teacher and the student be supported by institutions and organizations in the lessons to be conducted in a virtual classroom environment.
- It is recommended that similar studies be conducted in different institutions and with different study groups in order to generalize the results obtained.

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FINANCING

None.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest

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