

A REVIEW OF YOUTUBE CHANNELS THAT PROVIDE FLUTE EDUCATION



In this research, it was aimed to examine the channels related to flute education on the YouTube platform. For this purpose, a total of 6 channels, 3 Turkish and 3 foreign, were determined and selected. In determining the channels, the channels with the highest number of subscribers were preferred. In addition, all the topics in the channel content, all the topics in the flute education videos and the flute education videos were compared and examined respectively. Turkish channels A, B, C; foreign channels are named with the letters D, E, F. As a result of the study, it was concluded that the number of videos in foreign channels is higher than the Turkish channels, the number of views of foreign channels, the diversity of topics is higher, and the educational video content is more qualified. In addition, when the last video release date was compared according to the descriptive features of the channels, it was found that Turkish channels do not currently share new videos, while foreign channels still continue to share videos, and foreign channels are older and have a higher number of followers. Among the foreign channels, it has been concluded that channel D and channel F are qualified enough to be used in the flute education process and individuals can benefit from these channels in order to learn how to play the flute effectively.

Keywords: YouTube, Flute education, Flute, Instrument education, Music education

Introduction

Technology aims to make our life easier, and besides being used in all areas of daily life, it also provides benefits in the field of education as in many other fields. Technology is effective at every stage of education. Raja and Nagasubramani (2018) stated that technology is a part of the education curriculum, it is an aid in education and a tool in the process of improving learning, and it supports students to better understand and keep in mind the concepts. It was also stated that thanks to technology, education has moved from a passive and reactive position to an aggressive and interactive one. The use of technology in the education process is very important in terms of appealing to large masses at the same time, being visually and audibly interesting, providing the opportunity to access the desired information in a short time, and providing an effective and permanent learning environment.

The Internet, which is one of the results of technological development, is a mass communication tool that provides access to information in addition to its many functions. It offers educators and students the opportunity to access data in different structures such as animation and video, as well as written, visual and audio content. The most popular of the internet-based video sharing platform is YouTube. Founded in 2005, this platform provides free access to its followers to upload and watch videos. According to Duffy (2008), this platform creates a virtual library environment by providing access to videos for its users. Moreover, this video platform provides an effective

function to offer exclusive videos to each member of the community through the creation of different channels (Klein, 2022).

According to YouTube's own statistics (2023), more than 500 hours of content are uploaded per minute and hundreds of millions of users can access this content. According to the YouTube Turkey impact report (2021), 93% of users prefered the platform to gain knowledge and experience, 83% of parents said they used it because it helped children learn, and 80% of the teachers stated that they used it because it helped students learn. In addition, 71% of users said that YouTube provided an equal opportunity for everyone to learn and improve themselves. Considering the high rates, it can be said that YouTube benefits its users with its educational video content. The Youtube platform aims to teach information from every region of the world through videos and aims to use these contents as pedagogical resources (Duffy, 2008).

The YouTube platform, which offers a diverse range of content, plays a significant role in promoting and advancing music through its wide array of local and foreign music content. Even today, it remains a popular platform for music listening. Scholarly works such as Airoldi et al. (2016) have emphasized the significant impact of internet resources that provide access to music on cultures, while Shackman (2008) highlighted the importance of YouTube music videos in the context of cultural transmission. Moreover, YouTube contains an extensive selection of music education-related videos on topics such as instruments, sound, music theory, and music technology. However, it is important to note that the number of video shares does not necessarily equate to quality content.

The YouTube platform provides a vast collection of educational video content covering various instruments from different cultures and music genres. These contents include technical, theoretical, applied, visual and auditory elements that can be followed at the beginner, intermediate or advanced level. In the instrument education proce the communication between the teacher and the student and the teaching method used by the teacher have an important role in the process of acquiring and developing the targeted behaviors. However, individuals who are unable to receive this kind of instruction for various reasons can still access valuable educational resources through platforms such as YouTube. In addition to this, individuals who want to support the instrument education process they receive face to face, contribute to their personal music culture, follow successful people about the instrument they are learning, as well as those who want to create a musical repertoire at the national and universal level, in short, who want to open up to different worlds about their own instrument can also benefit from the instrument training videos in YouTube. One of the instruments taught how to be played on the YouTube platform is the flute. The beginning and advanced flute education process includes many technical and musical skills such as the introduction of the instrument, proper posture, holding the flue properly, breathing techniques, lip positions, tone practices, fingering exercises, string-arpeggios, practicing etudes-pieces, cleaning the instrument and tuning. Organizing the instruction of these subjects in accordance with the educational process and tailored to the student's level ensures that the teaching of the flute is conducted in an effective manner. On the YouTube platform, there are many national and international channels for flute lessons. However, anyone and almost any type of content can be shared on the platform. Although the channels share content for educational purposes, it is known that some of them lack content and not every channel owner is an expert in instrument education. For this reason, it is

considered that especially the videos posted or reviewed by experts in the field should be used by individuals for music education.

As a consequence of conducting a pertinent review of the literature, studies that were published on the topic of YouTube and instrument training were discovered.

Kruse and Veblen (2012) conducted a study to evaluate 40 folk music instructional videos on four different instruments: banjo, violin, guitar, and mandolin. The videos were selected from five different websites, including puTube. The study analyzed the videos from both a pedagogical and musical perspective. The findings showed that the majority of the videos were geared towards beginners, with the instructors' speaking time accounting for 59% of the videos. The study also highlighted that technical exercises were the most commonly covered topic in the videos.

Hanson (2018) conducted a study to evaluate the instructional merit of YouTube videos pertaining to five different instruments, namely flute, clarinet, trumpet, trombone, and snare drum. The research analyzed a sample of 100 videos, with 20 videos per instrument. The findings of the study revealed that nearly all videos met the technical requirements concerning image and sound quality. Additionally, the study highlighted that the snare drum and trombone videos included highly advanced technical exercises, even for beginners. Despite lacking musicality, the educational content of the videos was deemed satisfactory.

Uygun (2020) conducted a study on 50 YouTube videos providing training on five different instruments: flute, piano, violin, baglama, and guiter. The research investigated various aspects of the videos, including course duration, course characteristics, number of likes, number of views, and continuity. The findings of the study revealed that baglama training videos received more views than videos on the other instruments. Piano videos had the longest duration, while only the majority of guitar training videos demonstrated continuity in their content.

Furthermore, Değirmencioğlu (2014) conducted a study on YouTube channels that provided modal cello training. Açıksöz and Güdek (2018) investigated two video channels that offered piano lessons, and Güzel et al. (2020) analyzed students' perspectives on instrument lessons after evaluating YouTube channels that provided violin training.

People who want to learn how to play the flute by themselves on a free platform or students who take professional flute lessons benefit from YouTube videos about teaching how to play an instrument. Considering that the owner of the channel decides the content of the flute training videos on YouTube, that people who are not competent in this field can share them, and that the people who benefit from these videos for educational purposes are not fully aware of the instrument training process, it is considered important to investigate the channels and their content. Moreover, there is a dearth of research on this particular area. Hence, this study aims to investigate the YouTube channels that provide flute lessons, with a focus on (a) all the topics covered in the videos, (b) the specific topics addressed in the flute training videos, and (c) a comparative analysis of the flute training videos available on the platform.

Method

The present study employed a descriptive research design to obtain quantitative data on the subject matter. Descriptive research is typically conducted using a sample that represents the population and aims to provide an accurate representation of situations and events (Aypay et al., 2014). The study's sample was comprised of six YouTube channels that offer flute education, including three Turkish and three foreign channels. To identify potential channels for inclusion in the study, the search terms "flute education" and " side-blown flute education" were entered into the YouTube search bar in Turkish, and "flute education" was used as the keyword in English. All channels that appeared in the search results were examined, and only those whose content was related to flute education were selected. Additionally, the term " side-blown flute" was used as a keyword due to its widespread use in Turkey to differentiate the flute from the fipple flute (recorder). Furthermore, in determining the channels for inclusion in the study, preference was given to those with the highest number of subscribers. The review was conducted in February 2023, and only videos published before that date were considered for analysis. Upon examining the six identified channels, it was found that all of them provided beginner-level flute lessons. The channels were labeled A to F and the Turkish channels were arranged in order of the number of subscribers, and the English channels were arranged in order of the number of subscribers. Table 1 provides information on the number of subscribers to each channel, the date of establishment, and the date of the last video uploaded to the channel. The table indicates that Turkish channels have not published recent videos, while foreign channels continue to publish videos.

Table 1. Descriptive Characteristics of Channels

| Channels | Language of the channel | Number of subscribers | Date of establishment | Publish date of last video |
|----------|-------------------------|-----------------------|-----------------------|----------------------------|
| A | Turkish | 5.83 K | 30.06.2020 | 26.06.2021 |
| В | Turkish | 2.23 K | 29.04.2016 | 15.04.2022 |
| C | Turkish | 1.96 K | 16.03.2018 | 07.06.2020 |
| D | English | 142 K | 12.11.2014 | 03.02.2023 |
| E | English | 116 K | 28.06.2008 | 05.02.2023 |
| F | English | 31.1 K | 10.05.2016 | 20.01.2023 |

Findings

Findings on the examination of the videos included in the channels

In the "other" option given in the tables, you will find content that has nothing to do with flute education or the flute itself. The titles of the topics of the videos were shared as they were named by the channel owner, without changing them.

Table 2. Videos on Channel A

| Number of Contents | Video Content | Number of Videos |
|--------------------|--|------------------|
| 1 | Beginner-level flute education | 20 |
| 2 | Teaching how to play Turkish popular songs | 7 |
| 3 | Etude exercises | 2 |
| 4 | Using the diaphragm | 2 |
| 5 | Teaching basic note values | 1 |
| 6 | Assembling parts of the flute | 1 |
| 7 | Holding the flute | 1 |
| 8 | Using the metronome | 1 |
| 9 | Flute tuning | 1 |
| 10 | Other | 17 |

After examining channel A, it was found that the content primarily focuses on beginner-level flute training (20) and Teaching how to play Turkish popular songs. The channel also includes a small number of videos on etude exercises (2), using the diaphragm (2), teaching basic note values (1), and assembling parts of the flute (1). Additionally, it was mentioned that the music source book for etudes used in the channel was by Gariboldi, but the specific name of the book was not identified.

Table 3. Videos on Channel B

| Number of Contents | Video Content | Number of Videos |
|--------------------|--|------------------|
| 1 | Teaching how to play Turkish and foreign popular songs | 28 |
| 2 | Beginner-level flute education | 12 |
| 3 | Playing Turkish and foreign popular songs | 11 |
| 4 | Teaching basic note values | 1 |
| 5 | Other | 32 |

Channel B predominantly features instructional content on playing popular Turkish and foreign songs, with a total of 28 videos. Additionally, there are 12 beginner-level flute tutorials, 11 videos showcasing the owner's performances of Turkish and foreign folk songs, and a single video providing instruction on note values.

Table 4. Videos on Channel C

| Number of Contents | Video Content | Number of Videos |
|--------------------|--------------------------------|------------------|
| 1 | Beginner-level flute education | 13 |
| 2 | Other | 3 |

The C channel consists mainly of introductory videos to flute lessons (13). The 3 videos outside this content have no content related to flute training.

Table 5. Videos on Channel D

| Number of Contents | Video Content | Number of Videos |
|--------------------|---------------|------------------|
| | | |

| | 1 | Beginner-level flute education | 59 |
|---|----|--|----|
| | 2 | Playing a Western classical music | 54 |
| | 3 | Playing a foreign popular music | 21 |
| | 4 | Different brand/model flute reviews | 15 |
| | 5 | Playing etudes | 15 |
| | 6 | Lip position | 3 |
| | 7 | History of the flute | 2 |
| | 8 | Fixing the flute | 2 |
| | 9 | Tonguing practice | 2 |
| 1 | 10 | Tune practice | 2 |
| 1 | 11 | Playing low and high notes | 2 |
| 1 | 12 | Sound Practice | 2 |
| 1 | 13 | Warm-up exercises for the instrument | 1 |
| 1 | 14 | Teaching the notes | 1 |
| 1 | 15 | Breathing exercises | 1 |
| 1 | 16 | Scale exercises | 1 |
| 1 | 17 | Crescendo and decrescendo on the flute | 1 |
| 1 | 18 | Arpeggio exercises | 1 |
| 1 | 19 | Flute cleaning | 1 |
| 2 | 20 | Study book reviews/recommendations | 1 |
| 2 | 21 | Parts of the flute | 1 |
| 2 | 22 | Other | 41 |
| | | | |

Channel D features a large number of introductory videos aimed at teaching the flute, comprising 59 videos. The channel also includes a significant number of videos featuring the performances of Western classical music, totaling 54 videos. Additionally, the channel offers a notable number of videos on playing foreign popular music (21), different brand/model flute reviews (15), and playing etudes (15). The table also highlights other posts on the channel that focus on technical aspects of the flute and instrument maintenance.

The source materials for the études performed by the proprietor of the channel consist of Köhler op. 33 vol. 1 and Gariboldi op. 132. Furthermore, the classical Western music pieces presented on the channel encompass works from Baroque, Classical, Romantic, and Contemporary periods, authored by notable composers such as Albinoni, Bach, Chopin, Debussy, Doppler, Korsakov, Mozart, Pachelbel, Paganini, Rachmaninoff, Schubert, Tchaikovsky, Telemann, and Vivaldi.

Table 6. Videos on Channel E

| Number of Contents | Video Content | Number of Videos |
|---------------------------|--|------------------|
| 1 | Playing Western classical music pieces | 46 |
| 2 | Playing etudes | 38 |
| 3 | Different brand/model flute reviews | 14 |

| 4 | Beginner-level flute education | 5 |
|---|-----------------------------------|----|
| 5 | Motivation to study the flute | 2 |
| 6 | The resumption of flute education | 1 |
| 7 | Other | 53 |

The bulk of channel E's content primarily comprises videos showcasing Western classical music performances (46) and etudes (38). The channel also features videos that provide reviews of various flute brands/models (14). Moreover, there are several instructional videos included in the channel, including introductory videos on flute playing (5), motivational videos offering suggestions on flute training (2), and a single video that outlines the steps needed to re-engage with the instrument.

The channel featured a range of etudes drawn from various sources, including Andersen's op. 33 and op. 15, Berbiguier, Drouet, Donjon's "Elegie, Serenade, Le Chant du Vent", Gariboldi's op. 132 and "30 Easy and Progressive Studies for Flute", Köhler's op. 33 vol. 1 and op. 66, Moyse's "24 Little Melodic Studies" and Rubank. The pieces performed are derived from the Western classical music repertoire and span across diverse periods such as the Baroque, Classical, Romantic, and contemporary eras, featuring compositions by renowned maestros such as Bach, Doppler, Faure, Gluck, Prokofiev, Reinecke, Shostakovich, Tchaikovsky, and Telemann.

Table 7. Videos on Channel F

| Number of Contents | Video Content | Number of Videos |
|--------------------|--|------------------|
| 1 | Playing Western classical music works | 23 |
| 2 | Beginner-level flute education | 15 |
| 3 | Tune exercises | 13 |
| 4 | Flute practice | 13 |
| 5 | Different brand/model flute reviews | 12 |
| 6 | Articulation exercises | 6 |
| 7 | Scale exercises | 6 |
| 8 | Fingering exercises | 6 |
| 9 | Playing foreign populer music pieces | 5 |
| 10 | Etude exercises | 5 |
| 11 | Website recommendation for accompaniment | 4 |
| 12 | Breathing exercises | 4 |
| 13 | Metronome exercises | 3 |
| 14 | Instrument warm-up exercises | 2 |
| 15 | Exercises to improve flute playing | 2 |
| 16 | Reparing the flute | 2 |
| 17 | Vibrato exercises | 2 |
| 18 | Chromatic sequence exercises | 2 |
| 19 | Acelite exercises | 2 |
| 20 | Octave exercises | 2 |

| 21 | Long tone exercises | 2 |
|----|--|----|
| 22 | Sight reading exercises on the flute | 2 |
| 23 | Trill exercises | 2 |
| 24 | Exercises for playing high and low notes | 2 |
| 25 | Musicality exercises | 2 |
| 26 | Pressing double sharp, flat and B-flat | 2 |
| 27 | Arpeggio exercises | 1 |
| 28 | Tongue exercises | 1 |
| 29 | Exercises for notes that are difficult to play | 1 |
| 30 | Lip position | 1 |
| 31 | Cleaning the flute | 1 |
| 32 | Tuning the flute | 1 |
| 33 | Multiphonics on the flute | 1 |
| 34 | Preparing a study plan | 1 |
| 35 | The resumption of flute training | 1 |
| 36 | Alleviating discomfort in the little finger | 1 |
| 37 | Other | 42 |

The preponderance of content found on the channel F is predominantly focused on Western classical music (23), beginner-level flute instruction (15), tune exercises (13), flute practices (13), and different brand/model flute reviews (12). Additionally, the channel provides numerous technical studies aimed at advancing flute playing abilities. The channel's assortment of video content includes a range of topics, such as recommended websites for Accompaniment (4), strategies for improving flute performance (2), warm-up routines (2), sight-reading exercises (2), exercises for enhancing musicality (2), techniques for producing multiphonics (1), and remedies for alleviating discomfort in the little finger (1).

Source books of etudes played in the channel are Andersen op. 63, Moyse, Reichert, Taffanel & Gaubert. The classical Western music pieces played belong to the Baroque, Classical, Romantic and Contemporary periods (Bach, Bizet, Debussy, Gluck, Mendelssohn, Mozart, Schubert, Vivaldi).

Findings On The Examination Of Flute Education Videos in The Channels

The video numbers and video content titles specified in the tables are listed as they are in the channels.

Table 8. Flute Education Videos on Channel A

| Video | Video Content | Numver of | Duration of the |
|-------|---|-----------|-----------------|
| No. | | Views | Video |
| 1 | Posture, holding the flute and blowing technique, | 62 K | 13:21 |
| | introduction to the flute | 02 K | 15:21 |
| 2 | Teaching G, A, B, C notes | 33 K | 12:59 |

| 3 | Note reading exercises | 14 K | 16:36 |
|----|--|-------|-------|
| 4 | Teaching C, D, E, F notes | 15 K | 12:14 |
| 5 | C, D, E, F, G notes reading exercises | 7.1 K | 9:04 |
| 6 | Octaves on the flute | 5 K | 6:23 |
| 7 | 2nd-octave scale exercises | 9 K | 13:19 |
| 8 | C, D, E notes fingering movements | 5.5 K | 12:01 |
| 9 | Teaching how to play 2nd-octave G, A, B, C notes | 4.3 K | 10:21 |
| 10 | Two-octave note reading exercises | 2.6 K | 7:48 |
| 11 | Definition of sharps and flats | 2.3 K | 13:53 |
| 12 | Teaching G-sharp note | 3.1 K | 13:44 |
| 13 | Teaching F-sharp note | 3.2 K | 7:06 |
| 14 | Sixteenth notes | 1.5 K | 8:12 |
| 15 | Teaching legato | 1.9 K | 11:17 |
| 16 | Teaching B-flat note | 2.5 K | 8:48 |
| 17 | Teaching C-sharp note | 2.7 K | 11:08 |
| 18 | Teaching dotted notes | 1.3 K | 18:04 |
| 19 | Teaching D-sharp note | 3.8 K | 9:07 |
| 20 | Syncopation | 1.5 K | 11:06 |

Upon analyzing the instructional videos for flute found on channel A, it becomes apparent that the segments regarding posture, holding the instrument, blowing techniques, and introductory lessons possess the largest viewership (62 K). This is succeeded by tutorials on the G, A, B, C notes (33 K), and the C, D, E, F notes (15 K). Conversely, the topic that received the lowest viewership (1.3 K) was the instruction of dotted notes. The video content dedicated to teaching dotted notes had the longest duration (18:04), whereas the octave study video possessed the shortest length (6:23). As indicated by the provided table, the instructional videos are sequenced from the simplest to the most complex. The channel's content primarily centers on teaching music notation, as evidenced by the sharing of videos (between 2-7,9-14, and 16-20) predominantly focused on this subject matter.

Table 9. Flute Education Videos on Channel B

| Video | Video content | Number of | Duration of the | |
|-------|--|-----------|-----------------|--|
| No. | | Views | Video | |
| 1 | How to make sound on the flute | 11 K | 10:52 | |
| 2 | Practice with note values and tonguing techniques | 4.6 K | 8:01 | |
| 3 | Diaphragm and how to use it | 3.3 K | 8:55 | |
| 4 | Posture, holding the flute and teaching G, A and B notes | 4.6 K | 10:10 | |
| 5 | Basic exercises (with G, A, B notes) | 3.9 K | 5:31 | |
| 6 | All notes, C major scale, Teaching a Turkish pop song | 9.2 K | 10:02 | |
| 7 | Teaching a Turkish pop song | 7 K | 12:49 | |

| | 8 | Teaching 2nd octave D, E notes and a Turkish pop | 4.1 K | 11:36 |
|--|----|--|--------|-------|
| | | song | 1.1 10 | 11.50 |
| | 9 | Teaching a Turkish pop song | 1.3 B | 8:42 |
| | 10 | Sharps and flats (1st octave and 2nd octave) | 1.2 B | 6:24 |
| | 11 | Teaching a foreign pop song | 1.4 B | 3:46 |
| | 12 | Teaching 3rd octave notes | 2.8 B | 7:33 |
| | | | | |

Among the videos on channel B, those that provide instruction on the sound production of flute (11 K) and the C major scale, all notes, and one Turkish pop song (9.2 K) have garnered the most views. Conversely, the video (1.2 K) that imparts knowledge on sharps and flats in the first and second octaves has attracted the least number of views. The video dedicated to teaching a Turkish pop song (12:49) holds the record for the longest duration, while the one that teaches a foreign pop song (3:46) is the shortest. Upon closer inspection of the channel's content, it is evident that the majority of its offerings are focused on teaching Turkish and foreign pop songs (6, 7, 8, 9, 11).

Table 10. Flute Education Videos on Channel C

| Video No. | Video Content | Number of Views | Duration of the Video | |
|--------------|---|--------------------|--------------------------|--|
| 110. | | views | viuco | |
| 1 | Diaphragm exercises, introduction to the flute playing, flute | 18 K | 28:50 | |
| | exercises with a moutpiece | | | |
| 2 | Combining parts of the flute, knowledge of musical notes, | 7.9 K | 29:02 | |
| 2 | teaching of all notes, sharps and flats | 7.5 K | 29.02 | |
| 3 | Teaching G, A, B notes | 6.2 K | 35:05 | |
| 4 | Teaching a Turkish pop song (with G, A, B notes) | 4.9 K | 36:22 | |
| 5 | Teaching two foreign songs (with G, A, B notes) | 3 K | 31:08 | |
| 6 | Teaching C note, pause | 3.6 K | 43:36 | |
| 7 | Teaching one popular foreign song (with G, A, B, C notes) | 2.5 K | 30:47 | |
| 8 | Teaching one popular foreign song (with G, A, B, C notes) | 2.2 K | 24:25 | |
| 9 | Teaching f-flat and b-flat notes | 2.4 K | 26:46 | |
| 10 | Trill, full-half sounds, flute fingering and tonguing exercises | 3.2 K | 34:47 | |
| 11 | Teaching of tied notes | 1.9 K | 20:21 | |
| 12 | Different playing of B flat, teaching F and C major | 1.8 K | 37:03 | |
| 13 | Teaching G major, transpose | 4.4 K | 20:24 | |

Channel C's most viewed video (18 K) features diaphragm and flute exercises with a mouthpiece (headjoint), and an introduction to flute playing, while the videos with the fewest views are those that cover different ways of playing B-flat, as well as the teaching of F and C major (1.8 K). The videos on the channel have similar durations, with the longest (43:36) being instructional videos on musical notes, and the shortest (20:21) being instructional videos on tied notes. A significant number of videos on the channel center around the notes G, A, B, and C, and include instruction on songs that utilize these notes (3, 4, 5, 7, 8).

Table 11. Flute Education on Channel D

| Video No. | Video Content | Number of Views | Duration of the Video | Video No. | Video İçeriği | Number of Views | Duration of the Video |
|--------------|--|-----------------------|-----------------------------|--------------|---|--------------------|-----------------------------|
| 1 | Making a sound, parts of the flute, introduction to the flute, B note and metronome | 555 K | 14:09 | 31 | Right-hand technique | 19 K | 5:00 |
| 2 | How to use the flute moutpiece and the tongue | 47 K | 3:32 | 32 | Finger positions | 33 K | 8:07 |
| 3 | How to hold the flute | 12 K | 2:25 | 33 | Flute octave exercise | 26 K | 5:39 |
| 4 | Finger positions for the flute | 42 K | 2:57 | 34 | Finding music notes online | 25 K | 4:59 |
| 5 | How to play B, A, G on the Flute | 125 K | 3:33 | 35 | Practicing effectively | 3.6 K | 6:56 |
| 6 | Proper breathing and use of breath | 91 K | 10:50 | 36 | Recommendation of 3 flute books | 32 K | 3:16 |
| 7 | Proper posture | 58 K | 8:44 | 37 | Staying motivated during the summer period | 1.4 K | 5:23 |
| 8 | Proper placement of the flute mouthpiece/ headjoint | 93 K | 3:17 | 38 | How to play loud on the flute | 8.2 K | 4:44 |
| 9 | Single tonguing for flute | 61 K | 4:35 | 39 | Dynamics | 10 K | 9:06 |
| 10 | Teaching the scales | 22 K | 2:15 | 40 | Fixing the lip position | 41 K | 3:06 |
| 11 | How to read Flute Fingering Charts | 53 K | 3:26 | 41 | Playing high notes on flute quietly and softly | 44 K | 6:27 |
| 12 | Double tonguing for flute | 73 K | 5:55 | 42 | Breathing | 3.7 K | 4:31 |
| 13 | The use of warm air, how to play high notes on the flute | 129 K | 7:50 | 43 | Finding the correct mouthpiece/headjoint placement | 41 K | 7:05 |
| 14 | How to play low notes on the flute | 247 K | 5:07 | 44 | How to control air speed on the flute | 15 K | 9:06 |
| 15 | Vibrato | 181 K | 3:33 | 45 | How to glissando on flute | 47 K | 6:36 |
| 16 | Warming up | 54 K | 5:20 | 46 | Agility practices | 27 K | 5:13 |
| 17 | Different tonguing techniques | 120 K | 2:32 | 47 | How to play your flute performance | 2.4 K | 6:24 |
| 18 | Time management 1 | 3.4 K | 2:49 | 48 | Monitoring and Evaluating the performance on the flute | 14 K | 14:46 |

| 19 | Time management 2 | 1.8 K | 2:50 | 49 | Easy Tonguing Workout for Flute | 22 K | 19:34 |
|----|--|-------|------|----|---|-------|-------|
| 20 | Management of music performance and anxiety | 2.1 K | 3:42 | 50 | 3 intermediate flute exercises | 55 K | 8:16 |
| 21 | Piccolo and tips on playing better | 113 K | 4:34 | 51 | Tips for practicing | 9.4 K | 11:27 |
| 22 | How to get rid of an airy flute sound | 457 K | 9:21 | 52 | How to play 2nd and 3rd octave notes | 9.2 K | 7:03 |
| 23 | Singing while playing the flute | 32 K | 4:12 | 53 | Monitoring and evaluating the performance on the flute | 5.3 K | 13:20 |
| 24 | The three different b-flat fingerings | 4.9 K | 2:41 | 54 | How to make note endings on the flute | 8.4 K | 5:34 |
| 25 | How to play loud on the flute | 17 K | 5:41 | 55 | The first one of the intermediate flute lessons | 10 K | 8:21 |
| 26 | How to clean your flute after playing | 73 K | 2:54 | 56 | Octave, breathing and breath support exercises | 5.7 K | 19:59 |
| 27 | Cleaning the flute | 144 K | 4:16 | 57 | Reichter exercise #1 | 7.9 K | 7:02 |
| 28 | Cleaning the piccolo | 11 K | 1:53 | 58 | Reichter exercise #2 (arpeggio) | 7.3 K | 10:07 |
| 29 | How to play in tune | 37 K | 4:57 | 59 | Determining someone's level on the flute with the help of a book | 2.8 K | 8:35 |
| 30 | Tips of playing in tune | 14 K | 5:06 | | | | |

The contents of the most watched videos on the channel D are as follows; making a sound on the flute, parts of the flute, introduction to the flute, B note and metronome (555 K), how to get rid of an airy flute sound (457 K), how to play low notes on the flute (247 K), vibrato (181 K), cleaning the flute (144 K), using warm air, how to play high notes on the flute (129 K), how to play B, A, G on the flute (125 K), different tonguing techniques (120 K), piccolo and tips on playing better (113 K). The videos with the least number of views are as follows; time management 2 (1.8 K) and staying motivated during the summer period (1.4 K). The longest of the videos shared on the channel (19:59) consists of videos with Octave, breathing and breath support exercises and the shortest (1.53) with content about cleaning piccolo. There is also content (21, 28) on the piccolo instrument on the channel.

Table 12. Flute Education Videos on Channel E

| Video No. | Video Content | Number of views | Duration of the Video |
|--------------|---|--------------------|-----------------------------|
| 1 | Buying a new flute, an introduction to the flute playing, lip positions and how to make sound on the flute with a mouthpiece (headjoint), | 647 K | 26:45 |

| | articulation and tonguing techniques, practice with a mouthpiece, how to | | |
|---|---|------|-------|
| | joining a flute, tuning, holding the flute, how to play G, A, B, C notes, | | |
| | how to relax your flute embouchure, how to play D, E, F, B-flat, E-flat | | |
| | notes, how to play from high to low notes, proper breathing on the flute, | | |
| | cleaning the flute | | |
| 2 | Comparison of some models when buying a new flute | 89 K | 6:56 |
| 3 | Choosing a new flute: open and closed holes | 57 K | 12:30 |
| 4 | How to Choose a Piccolo | 27 K | 7:01 |
| 5 | 5 practial methods for practicing difficult music tracks | 15 K | 7:15 |

The video with the highest number of views (647 K) on Channel E is the number 1 video. This video has comprehensive content such as buying a flute, introducing the instrument, making sounds on the flute, teaching how to play notes, breathing control, tuning and cleaning the flute. The video on 5 practial methods for practicing difficult music tracks is the one with the least number of views (15 K). The duration of the 1st video on the channel (26:45) is the longest, and the 2nd video (6:56) is the shortest. Most of the videos are about instrument selection and purchase (2, 3, 4). There is also content on the piccolo selection (4) on the channel.

Table 13. Flute Education Videos on Channel F

| Video | Video Contont | Number of | Duration of the | |
|-------|--|-----------|-----------------|--|
| No. | Video Content | views | video | |
| 1 | Positions, lip positions, breathing, how to use a | 16 K | 7:33 | |
| • | mouthpiece (headjoint) | 10 K | 7.55 | |
| 2 | Exercises with a flute mouthpiece (headjoint) | 4.6 K | 10:31 | |
| 3 | Holding the flute, flute hand position | 19 K | 9:48 | |
| 4 | Posture | 2.9 K | 12:16 | |
| 5 | Breathing, exercises | 19 K | 27:19 | |
| 6 | Balance and sound | 2.8 K | 12:32 | |
| 7 | Tone practice | 139 K | 9:58 | |
| 8 | Practicing low notes | 77 K | 12:01 | |
| 9 | 12 easy-to-play musical works | 4.7 K | 18:26 | |
| 10 | 5 things you should never do when beginning the flute | 51 K | 7:50 | |
| 11 | 7 biggest breathing mistakes | 6.8 K | 8:06 | |
| 12 | The do's and don'ts of flute tonguing | 24 K | 10:24 | |
| 13 | Tonguing technique, exercises | 10 K | 4:45 | |
| 1.4 | The proper mouthpiece (headjoint) position for playing | 11.77 | 10.26 | |
| 14 | the flute | 11 K | 10:26 | |
| 1.5 | Low, middle, high notes, articulation, mechanism, tone | 12.17 | 17.29 | |
| 15 | colors | 12 K | 17:28 | |

Upon examining the viewership statistics of Channel F, it is evident that the videos on Tone Practice (139 K), practicing low notes (77 K), and 5 things you should never do when beginning the flute (51 K) have garnered the highest number of views. On the other hand, the videos on Posture (2.9 K), balance and sound (2.8 K) have attracted the lowest number of views. Analysis of the video durations indicates that the longest video is the one focusing on breathing exercises, which spans a duration of 27 minutes and 19 seconds. Conversely, the shortest video is the one that demonstrates tonguing technique exercises, which lasts for only 4 minutes and 45 seconds.

Findings On Comparative Analysis of Flute Education Videos on the Channels

Table 14. Comparison of Flute Education Videos on Channels

| | | Furkis | h |] | Foreig | 1 |
|--|---|--------|-----|----------|--------|---|
| | C | Channe | els | Channels | | |
| Topics | A | В | С | D | Е | F |
| The history of the flute | - | - | - | ✓ | - | - |
| How to identify parts of the flute (mouthpiece/headjoint, body, foot | 1 | , | ./ | | | |
| joint) | • | • | • | • | • | • |
| How to tune your flute | ✓ | - | - | ✓ | ✓ | ✓ |
| Flute cleaning and maintenance, | - | - | - | ✓ | ✓ | ✓ |
| Body posture, holding the flute | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Flute breathing (diaphragm) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lip position | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Making sound on the flute headjoint | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tone exercises | - | - | - | ✓ | - | ✓ |
| Music theory (introduction of notes, note duration values, sharp- | , | , | , | , | , | , |
| flat) | • | • | • | • | • | • |
| Long tone exercises | - | - | - | ✓ | - | ✓ |
| Metronome | ✓ | - | - | ✓ | ✓ | ✓ |
| Scales | - | - | - | ✓ | - | ✓ |
| Arpeggios | - | - | - | ✓ | - | ✓ |
| Vibrato | - | - | ✓ | ✓ | - | ✓ |
| Articulation | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Fingering exercises | - | - | ✓ | ✓ | - | ✓ |
| Etude | ✓ | - | - | ✓ | ✓ | ✓ |
| Musical pieces | - | - | - | ✓ | ✓ | ✓ |

As shown in Table 14, all Turkish channels covered introduction to parts of the flute, posture, holding the flute, breathing techniques, lip position, producing tones on the headjoint of the flute, music theory issues, and articulation exercises in their first videos on flute instruction. Channel A is the only channel that has covered flute tuning, metronome, and etude, and channel C is the only channel that has covered vibrato and articulation. None

of the channels have covered the history of the flute, its cleaning, maintenance, tone exercises, long tone exercises, scales, arpeggios, and musical pieces.

Upon analyzing foreign channels, it can be observed that all of them have posted videos that cover similar aspects of flute playing. These include videos on the introduction of flute sections, the process of tuning the instrument, techniques for cleaning and maintaining the flute, proper posture and holding techniques, various breathing exercises, lip positions for producing sounds from the mouthpiece (headjoint), music theory, the metronome, articulation, as well as etudes and music pieces for practice. Notably, only channel D has shared a video that delves into the history of the flute.

Upon comprehensive analysis of all the channels, it can be observed that channel D has posted videos covering all the topics relevant to beginners' flute instruction, while channel F has covered all the topics except the history of the flute. Notably, the foreign channels have shared a greater number of videos covering aspects of flute instruction than Turkish channels.



Results and Discussion on the Review of the Videos Available on the Channels

Upon analyzing the video content of channel A, it is evident that the majority of videos pertain to introductory flute training, followed by tutorials on playing popular Turkish songs. The remaining videos cover only a few topics that provide supplementary support to the flute education process. Additionally, two etudes were played from a book by Gariboldi, although the specific name of the book was not mentioned. In both in-person and remote learning contexts, instruction takes place under the guidance and supervision of qualified teachers. However, when students utilize YouTube as their primary learning platform without direct supervision, they must independently determine, or follow the guidance of the channel owner, regarding which study materials and musical pieces are suitable for their level of proficiency. To address this challenge, it is proposed that channel owners openly share information regarding the textbooks and music tracks they use with their followers. Doing so is anticipated to help students more effectively navigate this independent learning process. Through investigative analysis, it has been determined that a significant proportion of the content featured on channel B is dedicated to instructional videos elucidating the techniques for performing popular Turkish and foreign songs, complemented by video recordings of the channel proprietor's own musical performances. Furthermore, both channel A and B exhibit a preponderance of instructional videos specifically showcasing the playing of popular songs. It is surmised that this state of affairs serves to capture the interest of flute students who are active subscribers of these channels. According to Sak Brody (2016), the Suzuki music teaching method primarily emphasizes Western classical music in its repertoire. However, the method also incorporates popular children's songs and folk melodies, thereby enriching its scope. Brody further highlighted that "Twinkle Twinkle Little Star," a universally familiar song among children, has been subject to rhythmic variations be Suzuki, and features prominently in the repertoire as an introductory piece for several musical instruments. In the process of learning to play an instrument, the student's playing popular songs and working with familiar tunes is both more fun and more motivating at the beginner level. For this reason, the

fact that Turkish channels give priority to teaching how to play popular songs in terms of content may be related to the channel's aiming to be more remarkable, to be followed by more people, or to the desire to motivate students more in the beginner level instrument teaching process. The channel **C** consists of beginner-level flute education videos and there are other non-flute related content on the channel.

Channel **D** primarily comprises beginner-level flute instruction videos, along with classical Western music and foreign popular music performance videos, all presented by the channel's owner. Moreover, the channel features videos that scrutinize various flute brands/models, as well as videos showcasing etudes and other materials that support flute training. Similarly, channel **E** predominantly showcases classical Western music performances and etudes performed by the channel owner, and also includes a large number of videos that evaluate different brands/models of flute. In comparison, the majority of the videos on channel **F** feature classical Western music performances by the channel owner, in addition to beginner-level flute education, tone exercises and reviews of different flute brands/models. Furthermore, the channel has a greater range and variety of video content to support flute education than other channels.

It has been observed that performance videos of classical Western music pieces make up the majority of the content in all foreign channels. In a study conducted by Whitaker et al. (2014), which examined music education videos on foreign channels streamed on YouTube, it was concluded that these channels have a significantly higher number of performance-oriented videos compared to other instructional content. It was also found that all foreign channels incorporate works and composers from the Baroque, Classical, Romantic, and Contemporary periods, a topic that is not addressed by Turkish channels. As the flute is a Western instrument, it is essential to start learning how to play it with the help of classical Western music pieces. Including such music pieces in music education channels provides benefits such as introducing the composers of the period, the characteristics of the era, developing skills for interpreting music pieces specific to the period, and recognizing the instrument's potential. It has been observed that foreign channels successfully perform music pieces from these periods, which require technical and interpretive knowledge and skills. The absence of classical Western music pieces in Turkish channels may be attributed to the channel owners' lack of knowledge or their perception that such content may not be interesting enough for viewers, leading to a lower number of subscribers.

Research findings indicate that the performance recordings of etudes featured on foreign channels D and E constitute a substantial portion of the content, whereas Turkish channels solely present this subject matter on channel A, albeit limited to a meager two videos. Etude exercises are known to enhance the technical and artistic proficiency of instrumentalists. The proprietors of channels D and E have expounded on the origin and methodology of beginner-level etude exercises, as well as the critical attributes to bear in mind when undertaking them. Therefore, it is recommended that these topics should be integrated into the curriculum of all flute education channels.

The study revealed a notable discrepancy between Turkish and foreign flute education channels concerning the coverage of flute brand/model reviews. While foreign channels extensively featured this theme, it was conspicuously absent from Turkish channels. Ascertaining and evaluating the relative merits of different

brands/models of flutes can be a daunting task, especially for beginners or those contemplating changing their instrument, given various factors such as geographical location, lack of prior experience, and limited access to various brands/models in one place.

Consequently, the inclusion of video reviews and recommendations of diverse brands/models of flutes by channel owners could be invaluable to provide guidance in this regard. The analysis suggests that foreign flute education channels outperform their Turkish counterparts in terms of content scope and instructional quality.

Results and Discussion on The Examination of Flute Lesson Videos On The Channels

In channel **A**, the video containing information on posture, holding the flute, techniques for blowing the flute, introduction to the instrument, and notation teaching has attracted the highest number of views, while the video teaching dotted notes has received the least number of views. The video on teaching dotted notes has been identified as the longest video in terms of duration, while the shortest video is the one demonstrating octave practices. In channel **B**, the video that explains how to make a sound from the flute, as well as the videos teaching various notes, major scales, and methods of playing Turkish pop songs, have attracted the highest number of views, while the video discussing and explaining modifier signs has the least number of views. The video on teaching how to play a Turkish pop song has been identified as the longest in terms of video duration, while the video teaching how to play a foreign pop song is the shortest in duration. In channel **C**, the video focusing on diaphragm exercises, playing the flute with a mouthpiece (headjoint), and an introduction to the flute has received the most views, while the videos teaching fa-do major and different playing methods of the **B** flat have attracted the least number of views. Additionally, the video about teaching note D and how to use 'Pause' has been identified as the longest video in duration, while the video about teaching tied notes is the shortest in terms of duration.

The most viewed videos in all Turkish channels are those related to introduction to the flute, making a sound on the flute, and teaching of notes. The decline in viewership as the topics become more diverse and advanced may be attributed to factors such as followers finding the instrument difficult to progress, losing motivation, or the channel owner not providing sufficient encouragement in their approach. Furthermore, upon analysis of the channel's video content, it is believed that the number of videos on teaching how to play popular Turkish songs is directly proportional to the followers' desire to immediately play a popular song after mastering the basic aspects of the instrument.

In the channel **D**, the videos about sound production, parts of the flute, introduction to the flute, B note and metronome, how to get rid of an airy flute sound, how to play low notes on the flute, vibrato, flute cleaning, the use of warm air, how to play high notes on the flute, how to play B, A, G on the flute, different tonguing techniques and piccolo and tips on playing better topics have been found to have the highest number of views. The videos about time management and staying motivated during the summer period are the least watched ones. The longest video duration belongs to the one about octave, breathing and breath support exercises, while the shortest belongs to piccolo cleaning video. The content of this channel, where beginner flute education videos are examined, is quite comprehensive. Videos of technical exercises with the content of how to read flute fingering charts will help

students who are just starting to play the flute. No videos about warming up to the instrument, time, performance and anxiety management, how to get rid of an airy flute sound, singing while playing, finding notes on the internet, how to make note endings on the flute are available on other channels. Channel E differs from other channels in that it has a limited number of videos. The channel covers various flute education topics such as instrument introduction, sound production, articulation exercises, music teaching, breathing, and instrument cleaning in a single video, which has the highest viewership and longest duration on the channel. It is believed that the popularity of this video is due to its comprehensive coverage of many topics related to flute education. On the other hand, the least viewed video on the channel is a practical method video on playing a difficult music piece. Additionally, the comparison of flute models video has the shortest duration. The majority of videos on the channel are about instrument selection. It has been found that the tone teaching video is the most viewed among the videos on the channel F, whereas the videos on body posture and balance and sound education have the least views. The video on breathing and exercises has the longest duration, while the video on tonguing techniques and exercises has the shortest duration.

In addition to the videos on inyroduction to the flute on foreign channels, videos on advanced technical subjects were watched by a high number of followers. As the topics diversified and progressed, no significant decrease was observed in the number of views, so there may be situations such as the followers remain motivated during the instrument learning process, are eager and curious about the process, and the channel owner has an encouraging attitude.

As a result, it has been found that the number of videos on different subjects related to flute education in foreign channels and the number of views of the videos are higher than Turkish channels, and these videos are more qualified than Turkish channels. In addition, there was no significant correlation between the number of views of the videos and the duration of the videos.

Results and Discussion on The Comparative Analysis of Flute Training Videos on Channels

It has been determined that all of the Turkish channels about teaching how to play the flute contain videos about the introduction of the flute parts, posture, holding the flute properly, breathing techniques, lip positions, making a sound from the mouthpiece (headjoint), basic music theory issues and articulation practices at the beginning of the learning how to play the instrument. However, none of them shared videos on the history of the flute, its cleaning and maintenance, tone exercises, exercises on playing high notes, scales, arpeggios and how to play music pieces. Apart from a small number of etudes in channel A, there is no video about the etudes.

An examination of all foreign channels revealed that, in addition to beginner-level topics, there were also videos on etudes and musical exercises in all foreign channels. Channel D presented videos related to all subjects that support the process of flute education. Likewise, channel F provided videos on all topics except for the history of the flute.

The approach taken in the initial training process for learning to play the flute can vary depending on the instructor. Nonetheless, the subjects that aim to develop technical and musical skills for students are generally consistent. According to Schleuter (1997), proper posture, hand, arm, finger placement, producing a high-quality and unique tone, and accurate intonation are fundamental techniques required for playing any instrument. However, Turkish channels do not offer any content related to key topics in the process of learning the flute. These topics include sound making exercises to achieve a clean, distinctive tone, establishing mastery of the instrument, warming up before playing, practicing arpeggios and scales for intonation accuracy, and developing skills for interpreting musical pieces. Despite their crucial importance in the flute learning process, these topics are not addressed in Turkish channels.

The study concluded that foreign channels have a greater number of videos, views, and a wider range of topics compared to Turkish channels. Furthermore, the educational video content of these foreign channels is of higher quality. Among the examined channels, channels D and F were identified as having qualifications that can be utilized in the flute education process. Descriptive analysis of the channels' features also revealed that while foreign channels continue to share videos, albeit older ones, and have a higher number of followers, Turkish channels do not share any current videos. This lack of updates among Turkish channels is consistent with Uygun's (2020) study on Turkish instrument training channels. According to the research, there is no continuity in any of the 50 flute training videos examined. This result may be attributed to factors such as channel owners failing to reach their desired number of followers or views, not meeting their financial expectations, or followers not finding their content sufficient or effective for the education process.

Recommendations

The YouTube platform allows individuals the liberty to upload flute training videos, which inevitably results in the proliferation of inaccurate and substandard methods of learning the flute, as followers may unintentionally learn improper techniques. Wye (1998) posits that being proficient in playing the flute is necessary for being a good flute teacher; however, proficiency alone does not guarantee competence in teaching how to play the instrument. According to his statement, it is important to note that teaching and playing an instrument are two distinct skill sets, and proficiency in the former requires knowledge in flute pedagogy. Therefore, individuals who provide flute education on channels, regardless of their expertise in flute playing, cannot ensure an effective education process without being pedagogically competent. Consequently, it is advisable that qualified individuals and institutions in the field of flute education share their videos on channels to enhance the quality of Turkish channels that offer flute training. Furthermore, it is advised to have the existing videos scrutinized by professionals in the field. According to Whitaker et al. (2014), music educators who opt to incorporate YouTube as an additional teaching resource must carefully assess the videos available on the platform as teaching materials and methods. The study recommends that students taking flute lessons follow the content recommended by their instructors to obtain beneficial outcomes from these channels. It is also suggested that the qualified foreign channels should be made accessible to everyone by providing Turkish voiceovers or clear subtitles.

References

- Açıksöz, F., & Güdek, B. (2018). Müzik eğitiminde YouTube etkisi: Online piyano dersleri. *Turkish Studies*, *13*(6), 1-22. http://dx.doi.org/10.7827/TurkishStudies.12821
- Airoldi, M., Beraldeo, D., & Gandini, A. (2016). Follow the algorithm: An exploratory investigation of music on YouTube. *Poetics*, 57, 1-13. http://dx.doi.org/10.1016/j.poetic.2016.05.001
- Aypay, A., Cemaloğlu, N., Sarpkaya, R., Tomul, E., Baştürk, R., Ellez, A. M., Şahin, B., Yolcu, H., Karakaya, İ., & Turgut, Y. (2014). *Bilimsel Araştırma Yöntemleri* (4. Baskı). Abdurrahman Tanrıöğen (ed.). Anı Yayıncılık.
- Değirmencioğlu, L. (2014). Makamsal viyolonsel eğitimi için e-öğrenme kapsamında bir kitaplık önerisi:
 YouTube örneği. *Erciyes Üniversitesi Güzel Sanatlar Enstitüsü Dergisi*, 3, 1-17. https://dergipark.org.tr/tr/pub/erciyessanat/issue/5876/77754
- Duffy, P. (2008). Engaging the YouTube Google-eyed generation: Strategies for using Web 2.0 in teaching and learning. *Electronic Journal of E-learning*, 6(2), 119-130. https://eric.ed.gov/?id=EJ1098687
- Güzel, B. B., Çakır, H., & Çelen, Y. (2020). YouTube üzerinden video destekli keman öğretimine ilişkin öğrenci görüşleri. *Bilim, Eğitim, Sanat ve Teknoloji Dergisi (BEST Dergi)*, 4(1), 31-43. https://dergipark.org.tr/tr/pub/bestdergi/issue/50074/626503
- Hanson, J. (2018). Assessing the educational value of YouTube videos for beginning instrumental music. Contributions to Music Education, 43, 137-158. https://www.jstor.org/stable/10.2307/26478003
- Klein, C. (2022). Using YouTube to connect and educate individuals in the chemical industry. *International Journal of Technology in Education and Science (IJTES)*, 6(1), 74-85. https://doi.org/10.46328/ijtes.342
- Kruse, N. B., & Veblen, K. K. (2012). Music teaching and learning online: Considering YouTube instructional videos. *Journal of Music, Technology, & Education*, 5, 77–87. 10.1386/jmte.5.1.77_1
- Mpfs [Medienpädagogischer Forschungsverbund Südwest] (2022). Basisuntersuchung zum medienumgang 12-bis 19-jähriger. JIM-studie 2022. Medienpädagogischer Forschungsverbund Südwest, Stuttgart. https://www.mpfs.de/studien/jim-studie/2022/
- Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. *Journal of Applied and Advanced Research*, 3(1), 33-35. https://dx.doi.org/10.21839/jaar.2018.v3S1.165
- Sak Brody, Z. (2016). "Suzuki yetenek eğitimi" felsefesine kısa bir bakış. *Sanat ve Tasarım Dergisi*, 6(1), 79-88. 10.20488/www-std-anadolu-edu-tr.291235
- Schleuter, S. (1997). A sound approach to teaching instrumentalists. Schirmer Books.
- Shackman, D. (2008, May. 25). World fusion? Global communication about music videos on YouTube. Paper presented at the International Communication Association Annual Conference Division for Global Communication and Social Change. Montreal, Que'bec, Canada.
- Uygun, G. (2020). YouTube ortamında çalgı eğitimi veren videoların çeşitli değişkenler bakımından incelenmesi. Balkan Müzik ve Sanat Dergisi, 2(2), 13-26. 10.47956/bmsd.801844
- Whitaker, J. A., Orman, E. K., & Yarbrough, C. (2014). Characteristics of "music education" videos posted on YouTube. National Association for Music Education, 33(1), 49-56. 10.1177/8755123314540662
- Wye, T. (1988). Proper flute playing. Novello Company Limited.
- YouTube (2023). https://www.youtube.com/

| Youtube Türkiye Etki Raporu (2021). https://www.youtube.com/intl/ALL_tr/howyoutubeworks/progress-impact/impact/#youtubes-impact-in-turkey |
|---|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

Youtube Music Channels-Çeviri.docx

ORIGINALITY REPORT

2%

SIMILARITY INDEX

PRIMARY SOURCES

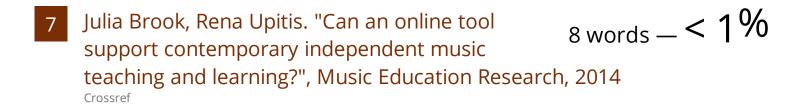
- KENAN DAGDELEN. "Quality Assessment and Content Analysis of Youtube Videos on Trabeculectomy", Research Square Platform LLC, 2022

 Crossref Posted Content
- www.atlasconference.org

 Internet

 16 words < 1 %
- Gregory D. Breetzke, Karina Landman, Ellen G. Cohn. "Is it safer behind the gates? Crime and gated communities in South Africa", Journal of Housing and the Built Environment, 2013

 Crossref
- Kutnu, Merve. "ozengen Keman Egitiminde Suzuki 12 words <1% Metodunun Etkisi", Bursa Uludag University (Turkey), 2022
- 5 www.researchgate.net 11 words < 1 %
- Sang Gyun Shin, Dong Joon Min. "A Study on the Reduction Behavior of FeO by Analyzing Pore Characteristics Using the Labyrinth Coefficient at High Temperature", Metals, 2021



- Lida Solano, Paola Cabrera-Solano, Eva Ulehlova, Verónica Espinoza-Celi. "Using Efl Youtube Videos as Supplementary Resource for Teaching Vocabulary", Proceedings of the 5th International Conference on Information and Education Innovations, 2020 $_{\text{Crossref}}$
- Serhat Koca, Murat Aytaş. "chapter 6 Measuring Student Satisfaction Level Regarding Aesthetic and 8 words <1% Instructor Dimensions of Web-Based Distance Learning Programs", IGI Global, 2021
- ijemst.net
 8 words < 1 %
- ijetsar.com
 8 words < 1 %
- www.digitalcultureandeducation.com 8 words < 1%

OFF

OFF