Analysis of Video Contents for Teaching and Learning Used in School Music Classes

Ji Hyun Park¹, Yunjin Seo²

 ¹ Professor, Music Education Department, Gwangju National University of Education, Korea, jhp@gnue.ac.kr
 ² Professor, Music Education Department, Gwangju National University of Education, Korea, yjseo@gnue.ac.kr

Corresponding author: Yunjin Seo

Abstract: This study aimed to analyze the types of video content currently used in music classes and to explore potential improvements for future music videos. A total of 159 music video contents of Edunet T-Clear provided at the national level were selected as research subjects. Edunet T-Clear is a resource operated at the national level in Korea, and was selected because it is the online resource center most commonly used in elementary, middle, and high schools. In order to achieve the research purpose, video data was compared and analyzed using documentary research methods that collect, investigate and analyze various records and are conducted for the purpose of understanding-analysis-suggestion of data. The results of analyzing videos, considering both music content and composition, are as follows: Firstly, music videos should be developed with core ideas that reflect the characteristics of the new curriculum, including a variety of content and activities. Secondly, the content needs to be organized hierarchically and tailored to different learning levels. Thirdly, videos should be structured to enhance the interactivity of teaching and learning. Lastly, they should be systematically designed, incorporating various methods, including digital techniques. In conclusion, the results of this study are meaningful in that they improve the usability and practicality of music video content in actual teaching and learning and are an educational method that matches the new era.

Keywords: Music Classes, School, Video Contents, Teaching and Learning, Edunet, Interactive Learning

1. Introduction

Recently, discussions on AI and digital have been very active across all fields. The field of education has so far relied heavily on text-oriented books and materials, so even with the advent of the digital age, there is still a tendency to perceive teaching and learning materials other than books as secondary. However, as times change and students' interests change, there is a need for more active discussions on various teaching and learning materials and methods. Classes in elementary, middle, and high schools are implemented using a variety of methods and strategies to ensure efficient teaching and learning. In particular, classes related to culture and arts emphasize the use of media due to the nature of the area that deals with various senses. Music classes, which primarily deal with auditory information, utilize not only textbooks but also a range of audio-visual media and methods. These include various musical instruments, sheet music, music materials, digital sound sources, virtual instruments, and videos[1].

Received: October 01, 2023; 1st Review Result: November 05, 2023; 2nd Review Result: December 08, 2023 Accepted: January 25, 2024

Videos, in particular, are a widely used tool in music classes as they provide both auditory descriptions, which are central to music education, and visual depictions of specific scenes.

In this context, a diverse array of video materials has been developed and utilized to aid music classes[2] In other countries, it is common for teachers to autonomously develop and apply textbooks at the local or school level. However, in Korea, the government regularly revises and applies new curricula. Consequently, when a new curriculum is announced, various teaching and learning resources and tools that align with these new directions are developed and distributed sequentially. In terms of video materials, a variety of teaching and learning resources are provided nationally through Edunet T-Clear, operated by the Korea Education and Research Information Service.

However, the curriculum was recently revised at the end of 2022[3], prompting a reorganization of teaching and learning materials to reflect the new curriculum's directions and content. This new curriculum will be progressively implemented from 2024, starting with the first and second grades of elementary school, and will be extended to all grades of elementary, middle, and high schools by 2026. As such, there is an urgent need to develop teaching and learning materials that can effectively implement the new curriculum.

Currently, the academic community is focused on developing textbooks in book form that incorporate the new curriculum, as the distribution of textbooks is given priority. However, actual classroom instruction can become more efficient when various video materials are used in conjunction with textbooks[4]. Particularly with the application of the new curriculum, teachers' demand for diverse teaching and learning methods, including videos, has been consistently high. Therefore, this study aims to analyze the video materials currently provided for music classes and, based on this analysis, to suggest directions for producing video content that aligns with the new curriculum. The research questions to achieve this goal are as follows:

1) What content and topics do the current video content materials consist of?

2) How are the current video content materials developed and structured?

3) What are the main characteristics of the video content materials currently being used?

4) How should video content materials be improved and organized in accordance with the new curriculum?

This research is significant as it assists teachers in understanding how to structure teaching and learning in accordance with the new curriculum and provides practical guidance on preparing strategies and tools that consider students' levels and interests.

2. Literature Review

2.1 The Role and Utilization of Video Resources in Teaching and Learning

In order to analyze video content and suggest future-oriented improvement plans, it is necessary to examine the role video content plays and how it is used in music teaching and learning. This is because the video content is structured appropriately depending on where and how it is used. The use of video resources in educational processes plays a crucial role in engaging learners and effectively transmitting information. This is particularly true in music education, where video resources are employed in various ways, contributing to the expansion of learning depth and breadth.

2.1.1 Analysis of the 'Role' of Music Videos in Music Education for Teaching-Learning Processes and Learning Outcomes

Music videos have become an integral part of music education. These resources are essential not only

for conveying theoretical knowledge of music but also for understanding practical performance, composition, and the historical context of music. Literature analysis indicates that video resources help learners visually perceive music, respond emotionally, and deepen their understanding of musical concepts[5][6]. Additionally, these materials play a vital role in introducing learners to music from diverse cultural backgrounds and expanding their understanding of different musical forms and genres.

2.1.2 Analysis of the Diverse 'Utilization' of Music Videos in Literature

The application of music videos varies depending on teaching methods and instructional strategies. Research suggests that video resources are used as anything from a simple aid in lectures to an active learning tool that fosters student engagement and interaction[7]. For example, teachers can use videos to visually demonstrate musical techniques to students or explain the historical background of specific music genres or eras. Furthermore, videos assist students in developing critical thinking skills as they analyze and evaluate musical works. Beyond this, video resources can enhance learners' creativity and expressive skills and be integrated into the curriculum in a way that connects with their personal experiences of music[8][9].

Through this literature analysis, it becomes evident that music video resources play a crucial role in arousing learners' interest, accommodating various learning styles, and enhancing the effectiveness of music education. This suggests that video resources are an essential element in improving the teaching-learning process and learning outcomes in music education.

2.2 Key Features of the 2022 Revised Music Education Curriculum

Since Korea must apply the nationally revised curriculum, it is very necessary to develop teaching and learning materials suitable for the direction and content of the new curriculum. It is especially urgent as it is scheduled to be first applied in 2024. By examining the main features of the new music education curriculum, revised and announced at the end of 2022, this section aims to establish a basis for how music video materials should be developed in the future[10][11].

Firstly, the new curriculum moves away from delivering specific content or knowledge and passive learning, emphasizing the application and performance of various activities.

Secondly, it stresses learning based on core ideas, incorporating inquiry-based learning, thoughtful learning, and reflective thinking.

Thirdly, under the overarching premise that "humans (learners) engage in music activities utilizing the unique characteristics of music based on various contexts in life," it highlights the goal of enabling students to express their emotions, creativity, and self-direction in musical activities and to communicate musically within their life communities.

Fourthly, creation has emerged as a new and significant area, with an emphasis on various creative activities to enhance musical creativity. Notably, these creative activities are not limited to simply writing music on staff paper but include integrative and innovative creations that combine different domains or themes and express original ideas in various ways.

Fifthly, the use of modern learning methods, such as artificial intelligence and digital technologies, is increasingly emphasized, highlighting the composition of more vivid and engaging teaching and learning experiences.

Lastly, the curriculum underscores the need to consider students' futures in its content, suggesting that education should not only be confined to current school learning but also impact students' music-related careers and musical activities in daily life. These key features must be adequately incorporated into the music videos that will be developed in the future.

3. Methods

3.1 Research Subjects

This study was conducted focusing on video data uploaded to Edunet T-Clear operated by the Korea Education and Research Information Service, and all data on the subject of 'music' were studied. Edunet T-Crer is the largest teaching and learning resource center operated at the national level in Korea. It was selected as the subject of research because it is the most credible site equipped with various audio-visual materials for education in school settings. A search was conducted in the 'Subject-based Video and Photo Material List' under 'Arts and Physical Education,' using 'music' as the keyword. This process resulted in a total of 159 music videos, all of which were included as subjects of the study.

3.2 Research Methodology and Procedure

To achieve the research objectives, the study employed Documentary Research methodology, based on the research subject literature. Documentary research methodology is a research method conducted for the purpose of verifying, understanding, critically analyzing, interpreting, and suggesting data through the collection, investigation, and analysis of various records. This is the most appropriate method for presenting problems and alternatives to be solved in this study. Documentary Research involves collecting and investigating various documents and is conducted with the aim of understanding, analyzing, interpreting, and proposing data[12]. Accordingly, the methodology involved setting the research topic and questions through a preliminary survey of music videos and related educational literature, planning data collection on the specified research subjects, executing data collection, setting analysis criteria after reviewing the collected data, analyzing the data, and then categorizing and organizing the analysis results to draw final conclusions and recommendations.

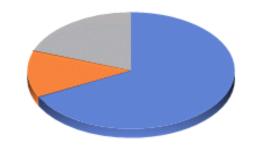
The specific research procedures were as follows: First, all music videos uploaded on the Edunet T-Clear site were collected and categorized according to music themes. Second, analysis criteria were established for a more systematic analysis. The criteria included two categories: content analysis and composition analysis. The purpose was first to examine the 'what' (content) from a musical perspective, and then 'how' (method or editing) it was composed. Third, content analysis was conducted by dividing it into major musical activities such as singing/instrumental/music appreciation/creation, and major music themes commonly featured in music classes like music in everyday life/multicultural music. Fourth, composition analysis examined the overall content structure and development patterns, as well as the methods of content delivery within the videos. Fifth, the current teaching and learning characteristics of the videos were comprehensively analyzed to identify and summarize their strengths and weaknesses. Sixth, considering the key features and direction of the new music curriculum, suggestions were made on how future music video content should be structured and composed.

4. Results

4.1 Analysis of the Content of Music Videos

4.1.1 Analysis of the Overall Video Content

The analysis of the content of 159 music videos revealed the following [Fig. 1]. Videos featuring music activities like singing, instrumental playing, appreciation, and creation were the most numerous, totaling 114. Videos focusing on music-related themes like the integration of music into daily life or multicultural music amounted to 22. Content considering music history, theory, and more advanced topics for those considering a career or major in music totaled 33.



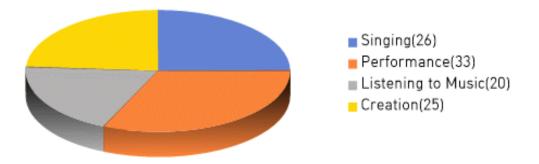
- Music Activities Based on School Music Classes(114)
- Music in Every day Life & Multicultural Music(22)
- In-depth Music Major Related Content(33)

[Fig. 1] Analysis Results of the Overall Content of Music Videos

4.1.2 Analysis of Content by Category

1) Analysis according to music activities

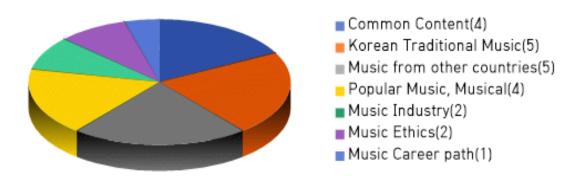
A closer examination of each category revealed that videos related to instrumental playing were the most numerous at 33, followed by singing videos at 26, music creation at 25, and music appreciation at 20. The variety of instruments covered in these videos was extensive, ranging from traditional Korean instruments like the 'Jang-gu' and 'gayageum,' to Western instruments like recorders and keyboards, and more recently popular instruments like ukuleles, kalimbas, and handbells. The relatively lower number of appreciation-related videos typically involved listening to traditional Korean or classical music and understanding related theories and concepts. These videos tended to focus on a few traditional and classic pieces rather than a wide range of contemporary songs.



[Fig. 2] Analysis Results of Content by Musical Activity

2) Analysis according to music-related topics and themes

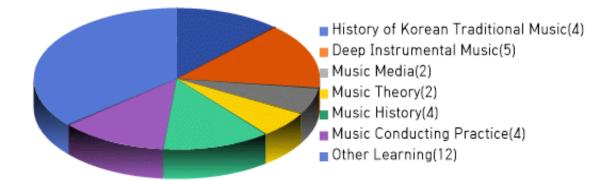
Further examining videos on themes commonly found in music education, such as music in everyday life or multicultural music, showed that both Korean traditional music and music from other countries featured in five videos each. This was followed by four videos each on pop music genres like musicals and universally applicable music concepts. Videos on topics like the music industry, music ethics, and career paths were relatively less common. This suggests that even when dealing with music outside the school curriculum, the focus tends to remain on the music typically covered in textbooks.



[Fig. 3] Analysis Results of Content by Music Themes

3) In-depth analysis based on music careers or majors

Videos with more advanced content for those considering a music major or career were also available, with 33 videos in total. Among these, five were on instrumental learning, four each on the history of Korean music and music in general, and four on conducting practice. Two each were dedicated to music theory and media. The remaining 12 videos featured various situations, like the opening ceremony of Festival A or highlights from Orchestra B, serving as illustrative examples. In summary, videos related to music majors or careers were mainly divided between Korean and classical music, with a focus on the history and theory in each area.



[Fig. 4] Analysis Results of Advanced Music Content Related to Careers or Majors

4.2 Analysis of the Composition of Music Videos

4.2.1 Analysis of Content Composition and Development

An analysis was conducted on how the content reviewed so far is composed and developed within the videos. All videos were structured in a uniform format consisting of 1) Introduction, 2) Development, and 3) Conclusion. The introduction introduced the learning topic, the development section expanded on the learning content, and the conclusion typically involved solving problems to summarize the learning. In other words, rather than a variety of compositions based on different themes or activities, the videos followed a similar format.

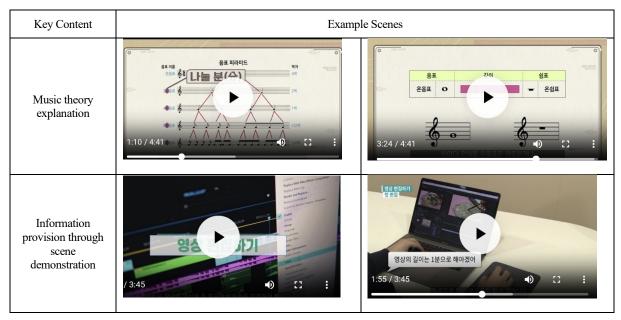
In the development section, the videos could be broadly divided into 1) theoretical videos and 2) activity videos, which will be further analyzed below.

Section	1) Introduction	→ 2) Development	→ 3) Conclusion
Key Content	Introducing the learning topic	Expanding the learning content	Problem-solving for learning summary
Example Scenes	학습 주제 대가는 이 한 : : :	2.1) Theoretical videos & 2.2) Activity videos	

[Fig. 5] Analysis Results of the Overall Composition and Development of Music Content

4.2.2 Content Development Analysis 1: Theoretical Videos

The first type of content development is through theoretical videos. These primarily explain music theory, where an announcer reads explanatory text while corresponding sections appear on the screen like a chalkboard presentation. Additionally, some videos directly demonstrate the topic being explained, for example, showing how to use a music software program while explaining it. Regardless of the style, these theoretical videos focused almost exclusively on theory, with little to no appearance of instructors.



[Fig. 6] Analysis Results of Content Development in Music Theory Videos

4.2.3 Content Development Analysis 2: Activity Videos

The second type of content development involved activity videos, which were categorized into three types: 1) editing and showing existing video materials, 2) showing videos of experts performing, and 3) playing audio tracks alongside sheet music. Whether the material was pre-existing or newly created, these videos typically presented the content without any additional editing.



[Fig. 7] Analysis Results of Content Development in Music Activity Videos

5. Discussion

5.1 Main Features and Future Directions of Music Videos

Based on the analysis so far, the main features, along with their strengths and weaknesses, can be summarized as follows:

Firstly, music videos were categorized and presented by field and genre. Videos on themes like music in everyday life were also divided by genres found in textbooks. This approach was appropriate for specific learning areas but somewhat limited for integrated or connected learning. Considering the 2022 revised music curriculum emphasizes integrated[13], applied learning, current videos should evolve to include more complex musical situations.

Secondly, while current videos cover a wide range of content due to their segmented production, they also tend to focus only on specific topics, overlooking others. For instance, there's a concentration on traditional genres like national music and classical music, potentially neglecting contemporary musical contexts. Rather than segmenting areas and genres, it might be more beneficial to create a series of videos centered around core concepts. The 2022 curriculum emphasizes learning a few key concepts and applying them across various situations and compositions, suggesting the potential for serialized video production[14]. In essence, producing a series of videos covering various genres based on core ideas, whether in national music or classical, could lead to more meaningful learning.

Thirdly, while the content was appropriately centered around main topics, the lack of categorization by grade or level led to ambiguous hierarchies. Videos organized hierarchically by levels like beginner/intermediate/advanced would be more beneficial for students. Such hierarchical organization could involve not just content but also application levels. The revised curriculum stresses application and transfer of core concepts, which is challenging at the initial stages. Therefore, videos could start with fundamental concepts at the beginner level and gradually apply and transfer these concepts in more complex contexts at advanced levels.

Fourthly, videos on music creation mainly focused on traditional composition methods like notation, limiting the portrayal of diverse creative possibilities. The 2022 revision emphasizes innovative and varied creations, including those using digital and AI methods. Hence, future videos on music creation should incorporate a wider range of materials and situations.

Fifthly, there were relatively few videos considering music majors or activities beyond primary and secondary education. While the focus should be on foundational music content, the revised curriculum advocates for more future-oriented and socially connected music learning[15], necessitating more content considering various careers or majors in music. Especially as these career-related aspects are often not covered in regular school lessons, videos would be an ideal medium for such content.

Sixthly, while the introduction-development-conclusion structure provided cohesive video progression, the uniformity across all videos lacked diversity. Future videos should feature a variety of

compositions based on activities like singing/instrumental/creation/appreciation and themes like multiculturalism and integration into daily life. Particularly since the revised curriculum emphasizes real-life application and transfer, showing real-life music activities in videos would be meaningful.

Seventhly, the almost exclusive use of voice and text for content delivery, while effective for conveying information, lacked interactivity in teaching and learning. The revised curriculum moves away from mere delivery of content and knowledge, focusing instead on interactive and collaborative teaching and learning[16][17]. Therefore, future music videos should include teachers and students, showing learning occurring within a collaborative and interactive exchange.

Lastly, while the videos clearly presented the intended content through appropriate multimedia effects (animated scores, color markings, etc.), they often resembled mere PowerPoint presentations, which might not be entirely engaging for learners. Instead of fully utilizing the advantages of video format, many contents appeared as if they could have been conveyed effectively through simple documents or chalkboard presentations. Considering the emphasis on digital utilization in the revised curriculum, future music videos should make better use of digital technology in their composition.

5.2 Suggestions for Examples of New Music Video Production

Considering the above perspectives, examples of how music videos can be structured in the future ([Table 1]) can be proposed from a teaching-learning perspective. The focus is on organizing videos into a connected series to focus on students' creative activities and promote students' progressive learning. Learning methods and structures should apply problem-solving or project-based learning, and a variety of digital methods should be utilized and integrated during the editing and production process.

	Topic Category	Main Content Direction	Series Content for Each of the 4 Videos
1	Creation, First Steps	Integrating basic music concepts across genres	 Video 1: Understanding Basic Music Concepts through Practical Application: Rhythm, Beats, Notes, Scales, Tala, etc. Video 2: Exploring Various Notation Methods and Imitating Music Corresponding to Each Notation: Rhythmic Scores, Staff Notation, Melodic Lines, Simple Regular Script, etc. Video 3: Modifying and Presenting Parts of Selected Compositions in Terms of Rhythm/Beat/Pattern; Peer Review and Modification of the Composition Video 4: How Do Composers Create Music?
2	Digital Media Usage Creation	Utilizing methods like Metaverse, AI, Software, Apps	 Video 1: Understanding Various Digital Media that Can be Used in Creation Video 2: Hands-on Practice with Various Digital Media Used in Creation (1): Usage, Production Process, Exploring Expression Techniques Video 3: Using Selected Digital Media to Compose Parts of a Composition as Intended, Comparison with Standard Notation Video 4: Sharing, Presenting, and Peer Review of Compositions Created with Digital Media; Modification and Publishing of the Composition
3	Meta Fusion Music Maker	Learning music creation projects suitable for videos	 Video 1: Understanding Various Video Music: Animation Music, Drama/Movie OST, etc. Video 2: Exploring the Role of Music in Videos, Setting Music Suitable for Videos, Understanding Music Copyright Video 3: Collecting and Modifying/Arranging Music for Creation Aligned with Scenes and Storylines Video 4: Presenting Created Videos and Music, Explaining the Intent of Creation, Writing a Creation Practice Journal, and Peer Review

[Table 1] New Music Video Examples(Proposal)

6. Conclusions

In elementary and middle school music classes, various video contents are being used for efficient teaching and learning. With recent curriculum revisions, there is a growing demand for the development of new video content aligned with the updated curriculum. Consequently, this study aims to analyze diverse music learning video materials available on Edunet T-Clear and to propose directions for creating content that aligns with the new curriculum. In summarizing the discussion on the main features and future directions of music videos, the following points emerge. Music videos are categorized by theme and genre but lack integration across various areas. This approach does not align with the direction of the 2022 revised music curriculum, which emphasizes integrated, application-based learning, indicating a need for more complex content composition. The current videos tend to be segmented, focusing on specific contents, suggesting a need for series production centered around core concepts.

Additionally, videos on music creation are predominantly focused on traditional methods, revealing a gap in showcasing a variety of creative approaches. There is a noticeable lack of videos considering careers or majors related to music, and the uniform structure of introduction-development-conclusion lacks diversity. Active participation by instructors and interactive learning approaches are required, along with more effective video production using digital technologies. This study's examination of video content in elementary and middle school music classes, particularly within the context of Korea's national curriculum, highlights several key areas for improvement and future development. The findings suggest a pressing need to realign music video resources with the evolving educational standards set by the 2022 revised curriculum, which advocates for a more integrated and practical approach to music education. The significance of this research lies in its potential to guide the future production of music video content that is more aligned with current educational needs. This can include the incorporation of digital technology and innovative teaching methods to make music education more engaging and relevant to students' lives.

In future research, it is necessary to investigate the impact of the proposed video content improvements on students' learning outcomes during actual teaching and learning using observational research methods. Action research and field studies could also be conducted on how these videos can be used to improve specific skills in music education, such as creativity, critical thinking, and collaborative learning. There is also to explore the impact of integrating advanced digital technologies, such as AI and interactive media, into music education videos.

In conclusion, this research underscores the need for a paradigm shift in the way music video resources are developed and utilized in the context of Korea's national curriculum. In particular, it is meaningful in that it suggests various methods and strategies that can expand auditory-based music classes to audiovisual aspects. By aligning music video content with the principles of the revised curriculum and embracing digital innovations, educators can significantly enhance the quality and effectiveness of music education, preparing students not just for academic success but also for a lifelong appreciation and understanding of music. Based on these efforts, music video content will be able to maximize both practical motivation in music classes and practicality and efficiency in music learning.

References

 S. K. Lim, S. K. Hong, Analysis of Domestic CCM Video Content Characteristics - Focused on Youtube content from 2010 to present -, Popular music Content Journal, (2022), Vol.6, No.2, pp.38-60.
 DOI: 10.53755/PMCS.2022.6.2.38

[2] D. H. Lee, J. Y. Park, Content analysis and utilization plan of 'Culture and Arts Education in Music (Gugak) Curriculum' video content developed by Korea Arts and Culture Education Promotion Agency (ARTE), Korean traditional music education Journal, (2022), Vol.51, No.51, pp.207-243.

- [3] Ministry of Education, Music Curriculum, Ministry of Education, (2022) Available from: https://ncic.re.kr/mobile.dwn.ogf.inventoryList.do
- [4] J. Woo, J. Shin, A Study on Middle School Students' Perceptions of Content Utilization-Focused Music Classes, Korean Journal of Arts Education, (2021), Vol.19, No.4, pp.23-40.
- [5] E. S. Choi, J. E. Jeong, The Adaptation of 5G Technology in Blended Music Learning, Journal of Future Music Education, (2021), Vol.6, No.2, pp.63-82.
 DOI: 10.36223/jnafme.2021.6.2.004
- [6] G. K. Yun, Analysis of the Current Status of YouTube Contents Related to Instrumental Music Education, Korean Journal of Arts Education, (2021), Vol.19, No.4, pp.89-105.
- [7] S. G. Kim, J. E. Cho, A Study on How to Use Video Data in Secondary Music Appreciation Class, The Journal of the Smeieccu, (2022), Vol.43, No.2, pp.20-50.
- [8] J. H. Park, J. Kim, Exploring the composition of new music curriculum according to the direction(draft) of the next national curriculum in 2022, Korean Journal of Research in Music Education, (2021), Vol.50, No.3, pp.57-77. DOI: 10.30775/KMES.50.3.57
- [9] S. K. Lim, S. K. Hong, Analysis of Domestic CCM Video Content Characteristics Focused on Youtube content from 2010 to present -, Popular music Content Journal, (2022), Vol.6, No.2, pp.38-60. DOI: 10.53755/PMCS.2022.6.2.38
- [10] Ministry of Education, Music Curriculum, Ministry of Education, (2022) Available from: https://ncic.re.kr/mobile.dwn.ogf.inventoryList.do
- [11] OECD, OECD Future of Education and Skills 2030, (2021)
 Abailable from: https://www.oecd.org/education/2030-project/teaching-and-learning/learning/ core-foundations
- [12] D. C. Ju, G.S. Hyeon, K. H. Min, J. M. Yang, Y. H. Kim, S. K. Cho, J. H. Kim, S. M. Kwon, D. H. Cho, J. H. Park, H, H. Choi, E. J. Lim, Understanding of music education research methods, Seoul: Hakjisa, (2018)
- [13] J. H. Park, J. Kim, Comparative Analysis of Music Curriculum Documents: Focusing on USA, Canada, Australia, New Zealand, Singapore, Germany, France, and Finland, Korean Journal of Research in Music Education, (2021b), Vol.50, No.4, pp.71-92, DOI: 10.30775/KMES.50.4.71
- [14] J. H. Park, Exploring the Improvement Direction by Analyzing the Degree of Change in the Composition of the Content of Korean National-Level Music Curriculum, Asia-pacific Journal of Convergent Research Interchange, (2021), Vol.7, No.2, pp.55-64. DOI: 10.47116/apjcri.2021.02.06
- [15] Ministry of Education, Music Curriculum, Ministry of Education, (2022) Available from: https://ncic.re.kr/mobile.dwn.ogf.inventoryList.do
- [16] S. G. Kim, J. E. Cho, A Study on How to Use Video Data in Secondary Music Appreciation Class, The Journal of the Smeieccu, (2022), Vol.43, No.2, pp.20-50.
- [17] J. H. Park, Comparative analysis of competencies presented in OECD education 2030 and 2015 revised music curriculum: Focusing on the degree of reflection of competency, Korean Journal of Research in Music Education, (2019), Vol.48, No.4, pp.161-180.