

IB PYP 기반 음악중심 통합수업 방안 Music-Centered Integrated Lesson Plan Based on IB PYP

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Abstract The purpose of this study is to design music-centered integrated lessons based on the International Baccalaureate Primary Years Programme (IB PYP). For this purpose, first, the characteristics of IB PYP were examined, and the scope and sequence, and learning contents on music subject of IB PYP were compared with those of Korea National Curriculum. Second, based on this analysis, the music-centered integrated lessons based on transdisciplinary themes were designed in a spiral curriculum. The conclusion of this study are summarized as follows. First, the main characteristic of IB PYP is to integrate subjects on transdisciplinary themes and to help students form their own knowledge through inquiry learning. Second, strands of music in IB PYP are 'reacting' and 'creating', and the overall expectation level, conceptual understanding, and learning outcomes for each strand are presented. It is worth noting that the IB PYP emphasized understanding of the key concepts of each subject. Third, based on the transdisciplinary themes of IB PYP, a music-centered integrated lesson plan that deepens spirally throughout all grades was devised, and the example of 12 lessons for 6 graders focusing on key concepts and inquiry questions is presented.

Key words: IB PYP, PYP music curriculum, integrated lesson, transdisciplinary themes, inquiry learning

초록 본 연구의 목적은 IB PYP(International Baccalaureate Primary Years Programme)를 기반으로 음악중심 통합수업 설계 방안을 탐색하는 것이다. 이를 위해, IB PYP의 특징을 살펴보고, IB PYP 음악과 교육과정의 범위와 순서, 영역을 한국의 교육과정과 비교하였으며, 이를 바탕으로 초학문적 주제에 기반한 음악 중심 통합수업을 학년에 따라 나선형 교육과정 방식으로 설계하였다. 본 연구의 결과는 다음과 같다. 첫째, IB PYP의 주요 특징은 초학문적 주제에 따라 여러 교과를 통합하고 탐구 학습을 통해 학생들이 자신의 지식을 형성할 수 있도록 돕는 것이다. 둘째, IB PYP에서 음악과 영역은 '반응하기'와 '창작하기'로 구분되며, 각 영역에 대한 전반적인 기대 수준, 개념적 이해, 학습 결과를 제시한다. IB PYP가 초학문적 주제를 강조하는 한편 각 과목의 핵심 개념에 대한 이해를 중요하게 여겼다는 점은 주목할 점이다. 셋째, IB PYP의 초학문적 주제에 따라 전 학년에 걸쳐 나선형으로 심화되는 음악 중심의 통합 수업 설계 방안을 제시하였으며, 6학년을 대상으로 핵심 개념과 탐구 질문에 중점을 둔 12차시 수업 설계 방안을 예시하였다.

주제어: 국제공인 초등프로그램, PYP 음악교육과정, 통합학습, 초학문적 주제, 탐구학습

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I . Introduction

The modern society characterized by globalization, diversification, informatization, and variability requires talented person with an open mind and integrated thinking ability to explore various issues. Accordingly, the Korean curriculum emphasizes the ability to explore and solve problems on one's own, and the ability to integrate various subjects beyond the acquisition of fragmentary knowledge in each subject. In particular, it is a very important task to nurture an inquiry attitude and integrated thinking at the elementary school.

The IB PYP(International Baccalaureate Primary Years Programme), an internationally accredited elementary curriculum, has great implications for the implementation of the aforementioned educational tasks. IBO, a non-profit educational organization headquartered in Geneva, Switzerland, started to provide and manage curriculum to help international students learn in 1968. Currently, it is are developing and operating IB, a globally standardized curriculum. IB is divided into PYP, MYP(Middle Years Programme), DP(Diploma Programme), and CP(Career-related Programme). Among theses, the IB PYP, which is in charge of preschool and elementary education for children aged 3-12 years, is composed of integrated subjects focusing on six transdisciplinary themes and is conducted through active inquiry learning by students.

The aim of all IB programmes is to help students develop their international mindedness. They provide an education that enables students to make sense of the complexities of the world around them. Due to the attractiveness of IB as a global education, the number of schools running IB programs has been increasing. As of 2022, it's being implemented in more than 5,500 schools in 159 countries around the world. In Korea(BO, 2022), there are 19 international schools operating the IB programme, of which 16 are operating the Primary Years Programme.

Looking at the trends of researches related to IB in Korea, there are many studies that examine the overall characteristics and the implications of the IB program or comparative studies with the Korean curriculum(Baek et al., 2008; Kang & Shin, 2020; Kim, 2017; Lim, 2015; Lim et al., 2018; Park et al., 2013). At the beginning of the study, studies on the overall characteristics of IB were mainly conducted, and researches on operation cases in international schools or public school education are gradually increasing(Kim, 2020; Hong, 2021). Among the researches on IB, research by subject such as english, social studies,

science and mathematics are increasing(Kim et al., 2020a; 2020b; Kim & Jo, 2020; Kang & Kang, 2019), and several researches focusing on the art subject are also found(Ahn et al, 2021). However, the amount of research on PYP, an elementary school curriculum of IB, is small relatively about 11.1%(Kim, 2017), and there is no research on the development or application of PYP programs in the music subject in particular.

Originally, the IB curriculum aims to help international immigrant students develop their learning ability and cultural understanding. In Korea, it has also been introduced mainly in international schools, but recently, there is a movement to accept and operate the IB in the public education curriculum. Above all, even if the IB education system is not fully introduced, the educational philosophy and teaching method pursued in the IB curriculum can expand the horizon of discussion and practice for inquiry learning and integrated classes emphasized in the Korean curriculum.

Accordingly, the purpose of this study is to explore the design method of music-centered integrated classes based on the IB PYP. To this end, we will examine the characteristics of PYP, explore the connection between Korean music curriculum(the 2015 revised music curriculum), focusing on scope and sequence of learning content, and achievement standards, and then present the music-centered integrated lesson plan based on the IB PYP.

II. Characteristics of IB PYP

1. Philosophy of IB

The reasons for the introduction of IB programs in many countries and schools around the world is that the philosophy and composition of the IB program have strengths as a global education required in modern society. Philosophy of the IB is expressed in the mission statement that follow(BO, 2017).

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end, the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become

active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

The IB education is holistic in nature. It is concerned with the whole person. It encourages students to become active and caring members of local, national and global communities. The philosophy of the mission statement of IB is presented in more detail in the learner profile.

<Table 1> The learner profile(IBO, 2017)

Inquirers	We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.
Knowledgeable	We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.
Thinkers	We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.
Communicators	We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.
Principled	We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.
Open-Minded	We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.
Caring	We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.
Risk-Takers	We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.
Balanced	We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.
Reflective	We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

These 10 attributes are about the competencies learners need to nurture, and these can help learners become responsible members of local, national, and global communities.

IB aims to nurture people who have the competencies to adapt to the global world, or international-mindedness, rather than those who have acquired a lot of fragmentary knowledge.

2. Essential Elements of IB PYP

The IB programmes are a continuum curriculum from age 3 to 19, consisting of four programmes; PYP, MYP, DP, and CP. Among these, the PYP is designed for students aged from 3 to 12, and corresponds to the elementary school curriculum in Korea.

The PYP encourages students to learn to appreciate essential knowledge and skills, conceptual understandings, positive attitudes, and responsible action. To help teachers frame a programme that embodies the IB philosophy, the five essential elements are emphasized; knowledge, concepts, skills, actions, and attitudes.

‘Knowledge’ means significant, relevant content that we wish the students to explore and know about, taking into consideration their prior experience and understanding(IBO, 2009a, 10). It encompasses transdisciplinary knowledge and disciplinary knowledge. The latter one is the traditional subject areas: language; mathematics; social studies; science; personal, social and physical education; and the arts. Transdisciplinary knowledge is an important feature that represents the PYP’s educational philosophy and refers to knowledge that transcends the boundaries of traditional subjects. “To be truly educated, a student must also make connections across the disciplines, discover ways to integrate the separate subjects, and ultimately relate what they learn to life”(Boyer, 1995, 82). Based on Boyer's ideas, the six transdisciplinary themes were selected that represent shared human experiences after much discussion and debate. It is shown in Table 2. In order to address the balance between transdisciplinary and disciplinary learning, teachers need to identify when they provides the opportunity for teaching about a particular subject area within a unit.

<Table 2> Transdisciplinary themes (IBO, 2012)

Who we are	An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities, and cultures; rights and responsibilities; what it means to be human.
Where we are in place and time	An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and the interconnectedness of individuals and civilizations, from local and global perspectives.
How we express ourselves	An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic
How the world works	An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.
How we organize ourselves	An inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.
Sharing the planet	An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution.

‘Concepts’ represent ideas that are broad, abstract, timeless and universal. With the idea that concepts can help to broaden and deepen students’ learning than specific topics, the PYP emphasizes the inclusion of key concepts as one of the essential elements in the framework of the curriculum. There are 8 key concepts in all, which are expressed as key questions. It is shown in Table 3. They can help to drive students’s inquiry learning and serve as a lens to encourage a transdisciplinary perspective.

‘Skills’ are the broad capabilities that students develop, and the application of learning in life beyond the classroom. The PYP efforts systematically to ensure that students acquire the transdisciplinary skills as follows: thinking skills, social skills, communication skills, self-management skills and research skills(IBO, 2009a, 21-23) The Korean 2015 revised curriculum aims to develop the following skills; communication skills, self-management skills, creative thinking skills, knowledge information processing skills, aesthetic skills., and community skills. The PYP and the Korean 2015 revised curriculum show similarities in the basis of educational philosophies in that they emphasize developing skills in the context of authentic situations.

<Table 3> Concepts (IBO, 2009)

Concepts	Key question	Related concepts
Form	What is it like?	Properties, structure, similarities, differences, pattern
Function	How does it work?	Behaviour, communication, pattern, role, systems
Causation	Why is it Like it is?	Consequences, sequences, pattern, impact
Change	How is it changing?	Adaptation, cycles, growth, transformation, sequences
Connection	What is the link to other things?	Systems, networks, relationships, interdependence, homeostasis
Perspective	What are the points of view?	Subjectivity, beliefs, truth, prejudice, opinion,
Responsibility	What is our responsibility?	Rights, citizenship, values, justice, initiative
Reflection	How does we know?	Review, interpretation, evidence, responsibility, behaviour

‘Attitudes’ are vital pieces in the development of positive attitudes toward people, the environment and learning. These are closely related to the IB learner profile, which help learners become productive, caring, social members of society and develop an international mind. The attitudes that IB encourages learners to demonstrate include appreciation, commitment, confidence, cooperation, creativity, curiosity, empathy, enthusiasm, independence, integrity, respect, and tolerance(IBO, 2009a, 5).

‘Action’, the core of student agency, is integral to PYP learning and to the programme’s overarching outcome of international-mindedness. Through taking action, students come to understand the responsibilities associated with being internationally minded and appreciate the benefits of working with others for a shared purpose(IBO, 2018, 5). In the PYP, school and teachers should make students to have the opportunity and the right to choose their action, to facilitate the action, and to reflect on the action. Student-initiated action is considered an integral part of the learning process. Demonstrations of action can take the type of participation, advocacy, social justice, social entrepreneurship, lifestyle choices(IBO, 2018, 5). Specific examples are as follows: participating community service activities, fund-raising, organizing a campaign, designing exhibitions.

3. Concept-based Inquiry

At the heart of learning methods of PYP is a commitment to structured, purposeful inquiry. Inquiry emphasized in the learning process is one of the learner profile pursued by the IB, acting as a basis for driving others. In the PYP it is believed that inquiry is the way in

which students engage actively in their own learning and learn best.

In particular, the PYP helps students learn transdisciplinary themes of global significance through concept-based inquiry. A concept is a powerful element that conducts inquiry into transdisciplinary content and supports the active construction of meaning. Concepts have relevance inside and outside of the subject area and enable in-depth understanding and transfer, and understanding of concepts is highly emphasized in IB. While understanding the concept of each subject through inquiry, it focuses on linking each subject on transdisciplinary themes, leading to a deeper level of knowledge. Teaching to the fullest extent possible about central ideas through concept-based inquiry can lead to the most substantial and enduring learning.

In the course of this concept-based inquiry, students acquire essential knowledge and skills and engage in responsible actions. Students can be invited to investigate significant issues by formulating their own questions, designing their own inquiries, assessing the various means available to support their inquiries, and proceeding with research, experimentation, observation and analysis that will help them in finding their own responses to the issues.

It involves the synthesis, analysis and manipulation of knowledge, whether through play or through more formally structured learning. Inquiry can take many forms including(IBO, 2009a, 29):

- exploring, wondering and questioning
- experimenting and playing with possibilities
- making connections between previous learning and current learning
- making predictions and acting purposefully to see what happens
- collecting data and reporting findings
- clarifying existing ideas and reappraising perceptions of events
- deepening understanding through the application of a concept
- making and testing theories
- researching and seeking information
- taking and defending a position
- solving problems in a variety of ways.

III. Music Curriculum in IB PYP and Korean

1. Philosophy in IB PYP and Korean Curriculum

The IB curriculum is in line with Korean 2015 revised curriculum(Ministry of Education, 2015) in that it emphasizes the development of learners' competencies and the connections between subjects. As can be seen from <Table 4>, the IB PYP and Korean curriculum aim to nurture creative, active and considerate talents within the community. The learner profile and competencies are also similar in both the IB PYP and the Korean curriculum. Both curricula emphasize the use of knowledge and information rather than the acquisition of simple knowledge. They focus on learners' active, creative and inquisitive learning. In addition, communication and empathy with other people are also emphasized.

However, actually, the contents of Korean curriculum and textbooks are fragmented for each subject rather than pursuing the integration of various fields. So integrated classes, which are commonly seen in schools, are often confined to simple topic-centered integration.

<Table 4> Philosophy in IB PYP and Korean curriculum

	IB PYP	Korean curriculum
Aim of education	International-mindedness	Creative convergence talent with the right personality
Learner profile (Ideal image of a person)	Inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, reflective	Independent person, creative person, educated person, person living together
Competency	Skills (acquisition of knowledge, comprehension, application, analysis, synthesis, evaluation, dialectical thought, meta-cognition)	Key competencies (Self-management, knowledge-information processing, creative thinking, aesthetic sensitivity, communication, community)

2. Scope and Sequence of Music in IB PYP and Korean Curriculum

The strands of PYP art including music are largely divided into responding and creating, and those of Korean curriculum are divided into expression, appreciation, and daily life. Responding in PYP corresponds to the appreciation in Korean music curriculum, and creating in PYP to the expression in Korean. In the Korean curriculum, the three domains tend to

be perceived as separated. PYP's responding and creating are intrinsically connected. These strands are concept-driven and have been designed to interact with each other, working together to support the overall development of the students(IBO, 2004; 2009b).

PYP music presents the overall expectations, the conceptual understandings, and the learning outcomes.¹⁾ The overall expectations and the conceptual understandings could be matched with key concepts, generalized knowledges, content elements, skills in Korean curriculum. PYP emphasizes the conceptual understanding as a basis for inquiry learning, and it's detailed in the learning continuums arranged in a spiral according to developmental phase.

The learning outcomes of PYP correspond to the achievement standards of the Korean curriculum. The learning outcomes are composed of specific content that guides musical inquiry, and those serve as a standard for inquiry learning. The above contents are presented <Table 5>.

<Table 5> Music in IB PYP and Korean Curriculum

Strand	IB PYP music	Korean music curriculum
	Responding, creating	Expression, appreciation, daily life
Music curriculum	For each strand, 1. Overall expectations (phase 1~4) 2. Conceptual understanding (phase 1~4) 3. Learning outcomes (phase 1~4)	Achievement standards for each strand, 1. Learning element 2. Explanation of achievement standards 3. Method of teaching and learning 4. Methods of assessments

IV. Music-centered Integrated Lesson Plan

The IB PYP is composed of integrated subjects focusing on six transdisciplinary themes, each of which is designed to be a spiral learning that is progressively intensified according to the grade level. Learning in the PYP is achieved through active inquiry learning by students. Therefore, in this study, it's intended to design music-centered integrated lessons based on PYP's transdisciplinary unit of inquiry that can be applied to Korean elementary school.

1) Expectations and conceptual understandings are presented that apply across the different art forms in line with the philosophy of IB that emphasizes integrated learning, and the learning outcomes are presented as independent art content according to the characteristics of each art form.

1. Design Principles for Integrated Lesson Based on Transdisciplinary Themes

When designing an integrated class based on transdisciplinary themes, teachers need to develop as a unit or program containing an organic series of processes, not a single lesson. IB PYP recommends a framework for designing a program of inquiry including transdisciplinary theme, central idea, lines of inquiry, key concepts, related concepts.

A transdisciplinary theme needs to be accompanied by a description that explains what students will be inquiring into under this theme. It plays a key role in designing a program of inquiry. The central ideas that is organically related under each transdisciplinary theme need to show a clear developmental progression. The lines of inquiry is to clarify and develop understanding of the central idea. It makes it possible to know the proper contents and sequence of inquiry learning in the programme. Listing the concepts(key concepts and related concepts) on a programme of inquiry will help to focus the direction of the inquiries. The PYP presents principles for developing a transdisciplinary programme of inquiry. A brief summary of this is as follows <Table 6>.

<Table 6> Criteria for reviewing a programme of inquiry (IBO, 2012)

Central idea	• Central ideas are relevant to the transdisciplinary themes under which they have been placed. • Each central idea is written as one sentence. • Central ideas are written in such a manner as to develop conceptual understanding supported by the identified PYP key concepts. • The PYP key concepts have been identified (no more than three) for each unit of inquiry.
Line of inquiry	• The lines of inquiry develop understanding of the central idea. • Three or four lines of inquiry have been identified for each unit. • The lines of inquiry develop understanding of aspects of the designated transdisciplinary theme. • Within the unit, the lines of inquiry are distinctive yet connected to one another. • The lines of inquiry are written in such a manner as to develop conceptual understanding supported by the identified PYP key concepts and related concepts.

2. Music-centered Integrated Lesson Based on Transdisciplinary Themes

1) Construction of Music-centered Transdisciplinary Unit

In this study, a music-centered transdisciplinary unit is constructed based on the PYP framework consisting of transdisciplinary theme, central ideas, lines of inquiry, key concepts, related concepts, skills, subject areas, PYP learning outcomes and Korean achievement standards as can be seen in <Table 7>.

The transdisciplinary theme “how we express ourselves” is selected in order to construct a music-centered transdisciplinary unit that can be applied to music classes in Korean elementary school. This theme is considered fundamentally relevant to all young students and, in particular, closely related to music. Based on this theme, the unit is constructed to help students see the world and express themselves through the lens of music.

The central ideas are selected based on the transdisciplinary theme “how to express ourselves”, taking into consideration the level of each grade level. The lines of inquiry are structured to help understand the central ideas, and the key concepts, related concepts, and skills extracted for learning. The central ideas and lines of inquiry show a progressive process, gradually deepened from grades 3 to 6. In addition, related subjects that are integrated around music under the central ideas are presented in the subject areas.

Focusing on music, the learning outcomes of PYP music and the achievement standards of the Korean music curriculum are presented in addition to the PYP framework. This is to confirm whether the content of the integrated unit based the PYP is appropriate for the Korean music curriculum.

<Table 7> Examples of transdisciplinary unit according to grades

Grade	3	4	5	6
Transdisciplinary theme	How we express ourselves: An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; appreciation of the aesthetic.			
Central idea	Music creates images of stories and events.	People communicate their feelings and ideas in a variety of art forms.	The media uses a variety of strategies to influence our ideas and choices.	Art is used to express our own culture and identity.
Lines of inquiry	- Genre of music - Work that combines - Music and story - Same story can be expressed in different ways	- Various forms of art - How artists express their ideas, feelings and thoughts through art - Expressing as art/ Responding to art	- Purpose of advertising - Examine the types, styles and locations of advertisements - Devices that create advertising effectively and influence choices - Relationship between advertising and its target group	- How culture is express-ed through art - Artworks and cultural features of different parts of the world - Identify the cultural characteristics of music from different countries - World music performance
Key concepts	Form, function, perspective	Form, function, perspective	Function, perspective, reflection	Perspective, form, causation
Related concepts	Connection, change	Interpretation, opinion, expression	Communication, relationships, opinion, prejudice	Change, reflection
Skills	Thinking, self-management	Self-management, research, thinking	Thinking, social skill, communication,	Research, thinking, communication,
Subject areas	Music, Korean, Visual Arts	Music, Visual Arts, Korean, Dance	Music, Korean, Society, Visual Arts	Music, Society, Visual Arts, Dance, Korean
PYP learning outcomes	Responding: phase 2 - Create a musical composition to match the mood of a visual image. - Explore individually or collectively a musical response to a narrated story.	Responding: phase 3 - Analyse different compositions describing how the musical elements enhance the message.	Responding: phase 3 - Discuss music that relates to social issues and/or values.	Responding: phase 4 - Explain the role and relevance of music in their own culture, its uses and associations through place and time. - Interpret and explain the cultural and/or historical perspectives of a musical composition
	Creating: phase 2 - Explore vocal sounds, rhythms, instruments, timbres to communicate ideas and feelings. - Express one or more moods/feelings in a musical composition.	Creating: phase 3 - Create and record a composition focusing on form, structure and style to give more meaning to their message	Creating: phase 3 - Create a musical composition expressing their own ideas and feelings on a social issue	Creating: phase 3 - Present, in small groups, innovative musical performances on a selected issue

<Table 7> Continued

Grade	3	4	5	6
Korean achievement standards	Appreciation (Grade 3~4) - Listen to music that expresses a situation or story and express feelings about the music.	Appreciation (Grade 3~4) - Listen to music that expresses a situation or story and express feelings about the music.	Expression (Grade 5~6) - Express a scene or situation in a story through music.	Expression (Grade 5~6) - Listen to music from various cultures and present the characteristics of music.
		Daily life (Grade 3~4) - Find and present Korean traditional music used in daily life.	Daily life (Grade 5~6) - Present on the effects of music on mental and physical health.	Daily life (Grade 5~6) - Discover and present the musical cultural heritage handed down in our region.

3. Practice of Music-centered Integrated Lesson

<Table 8> shows the detailed plan of the 12 sessions for 6th graders among the above transdisciplinary unit plan. Under the transdisciplinary theme “How we express ourselves,” the central idea for the 6th grade is selected as “Art is used to express our own culture and identity”. This is the last of a series of central ideas that gradually deepened through the grades under the transdisciplinary theme. The key concepts and inquiry questions are presented in this lesson plan so that students can deepen their conceptual understanding and promote their inquisitive thinking.

<Table 8> Example of lesson plan for 6th graders

Session	Contents for learning	Key concepts & inquiry question	Related subjects
1~2	- Understand locations around the world - Know the different continents and oceans of the world - Explore countries in each continent - Examine the area and shape of different countries around the world - Explore various aspects of life around the world - Explore different climates and lifestyles of each continent - Discover the relationship between various lifestyles and climate - Find examples of food, clothing and shelter that were influenced by the natural environment (e.g. Food: Turkey - Lamb kebab, Clothing: Inuit in the Arctic- Anorak, Shelter: Papua New Guinea - Elevated house) - Explore various musical instruments around the world - Examine the characteristics of various instruments around the world (e.g. Luhya in Kenya - Olwika (drinking horn), West African - Shekere, Indonesia - Angklung) - Guess which the musical instruments belong to - Discover the relationship between musical instruments and the natural environment	[Perspective] If the climate where we live becomes very hot/cold, how will our clothes/food/week change? [Causation] How does different climates influence people's food/clothing/shelter? [Causation] How does the environment impact on instruments people make?	Society, Music
3~4	- Understand various religions and human social environment around the world - Know the different religions of the world - Find out the characteristics of the human environment by country/region - Categorize regions of the world based on common culture - Explore various art works from around the world - Guess which country/region the various buildings/paintings/patterns in the world belong to (e.g. building: Rome - Colosseum, painting: Korea - Ink-and-wash painting, pattern: Ghana - Adinkra pattern) - Discuss about the influence of the human social environment in various works of art - Explore examples of musical instruments or music that show the influence of the natural and social environment	[Perspective] On what basis would you classify various countries of the world? [Causation] Why do you think this work has been made? [Causation] How does the environment impact on artworks? [Perspective] Conversely, do art also affect the culture of the region?	Society, Korean, Visual Arts, Music
5~6	- Explore various folk songs from around the world - Listen to and sing along to various folk songs from around the world (e.g. France - Il court, il court le furet, Tanzania - Simamaka, Russia - Golden moon play, Scotland - Aiken drum, Philippines - Sasara Ang Bulaklak) - Examine the characteristics of folk songs - Guess which country/region folk songs are from - Classify them by region/country different countries around the world - Explore traditional musical instruments and playing styles from around the world (e.g. String instrument: Europe - Violin, Cello, Viola, Contrabass(rubbing strings with a bow) Asia - Gayageum, zheng, Koto, Dantran, Yatag (flicking the string with fingers)	[Form] What makes a song a folk song from that country ? [Form] What makes this dance unique? [Function] What sounds can you make with this instrument?	Music, Society, Dance

<Table 8> Continued

Session	Contents for learning	Key concepts & Inquiry question	Related subjects
5~6	- Explore the characteristics of various musical instruments - Examine the characteristics of various instruments - Guess which country/region it is from - Classify them by region/country • Identify cultural characteristics of music - Discuss the cultural influence of a region/country on the music of different countries around the world	[Form] What makes a song a folk song from that country? [Form] What makes this dance unique? [Function] What sounds can you make with this instrument?	Music, Society, Dance
7~8	• Explore Korean folk songs by region - Appreciate Korean local folk song performances (e.g. Gyeonggi - Arirang, East region - Miryang Arirang, South region - Jindo Arirang) - Guess which region the folk songs is from - Examine the characteristics of folk songs by region - Discuss the natural and humanistic environment that influenced local folk songs • Explore traditional/local musical performance and instruments - Search for traditional musical performance and instruments in the region where students live (eg. Andong - pungmulnori performance, Jindo - Drum dance, Jeju - Water jar accompaniment) - Listen to music played with traditional instruments - Examine the characteristics of traditional instruments - Discuss the influence of local natural and cultural characteristics on instruments and music	[Form] What makes a song our folk song? [Form] What makes this instrument unique? [Causation] How does the environment impact on folk song / instrument?	Music, Dance, Society, Korean
9~10	• Investigate the relationship between the music and the environment - In each group, choose your interest among various traditional instruments/music from around the world - Anticipate the relationship between the instrument and its environment - Make an investigation plan - Collect and analyze data • Presentation - Design the presentation - Present what you have prepared - Mutual evaluation - Self-evaluation	[Form] What makes the music/instrument characteristic of the country? [Causation] How does the natural and social environment impact on music/instruments people make?	Music, Society, Korean, Visual Arts
11~12	• Prepare Regional music concert where we live - In each group, Determine a music and musical instrument that can represent our region - Discuss the meaning of their own music concert - Practice music concert • Regional music concert presentation - Performance - Mutual evaluation - Self-evaluation	[Perspective] Which instruments would you choose to play this pattern or song, and why? [Form] What is the message in this performance? [Perspective] How does this music make you feel?	Music, Visual Arts, Dance, Korean, Society

V. Conclusion

In this study, a music-centered integrated lesson plan was explored and presented focusing on the transdisciplinary themes of IB PYP. The contents of this study are summarized as follows.

First, the IB PYP emphasizes the integrated classes based on the transdisciplinary themes that transcend the confines of the traditional subject areas, and students' active inquiry learning. A framework for the design of such learning is presented based on essential elements such as knowledge, concepts, skills, actions, and attitudes.

Secondly, the IB PYP's music curriculum is structured around conceptual understanding. It has two strands of responding and creating, which are intrinsically connected and designed to interact with each other. PYP music's conceptual understandings are detailed in the learning continuums arranged in a spiral according to developmental phase. This framework guides teachers to devise concept-driven lessons, inquiry-based lessons.

Finally, in this study, based on the transdisciplinary theme of IB PYP, an outline of the music-centered integrated class that are arranged in a spiral from 3rd grade to 6th grade was devised, and lesson plan for 6th graders was exemplified, focusing on key concepts and questions for inquiry. They are designed to be applied to the Korean curriculum. Transdisciplinary theme-based integrated classes need to be planned in a spiral structure so that they can develop a deeper understanding of the theme, rather than being limited to one class or one grade.

IB PYP suggests that the curriculum should focus on fostering the ability to think in an integrated way by linking various subjects and the ability to conduct inquiry learning in a modern society that requires learners' agency and adaptability to changes. Afterwards, the music curriculum should focus on understanding the key concepts of the music subject through inquiry learning, integrating it with other subjects based on this, and helping to understand people and the world more deeply.

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