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## Theoretical and Methodological Issues in Developing Children Through Music Education

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**Abstract:** This study examines the implementation of the Arts (Music Education) core curriculum in Mongolia's primary and secondary education system under the framework of "Child-Development-Music-Progress." Surveys were conducted among students, experts, administrators, and music teachers to assess the curriculum's effectiveness. The research involved 3200 high school students, 354 professionals, and teachers. Based on the findings, a new curriculum model for music education for Grades 1–9 in general education schools is proposed. This model emphasizes national content while incorporating international trends to promote child development through music education.

**Keywords:** Music education, child development, national content, trends, curriculum

### Introduction:

Mongolia's primary and secondary education systems have incorporated the Arts, specifically Music Education, into their core curricula under the framework of "Child-Development-Music-Progress" [2]. However, the effectiveness of this integration has been subject to scrutiny. Preliminary assessments indicate that while the curriculum aims to nurture students' musical skills and appreciation, there are notable gaps in its implementation, particularly concerning the inclusion of national traditions and the alignment with contemporary educational trends [3]. Students and educators alike have reported a decline in engagement and comprehension as they advance through grades, suggesting that the existing curriculum may be overly complex and insufficiently tailored to the developmental stages of children [3].

This study seeks to address these challenges by developing a more effective music education curriculum for Grades 1–9 in general education schools across Mongolia. To achieve this, the research draws upon a robust theoretical foundation encompassing several key educational and psychological theories. Jean Piaget's Constructivist Theory underscores the importance of active learning and cognitive development, while Lev Vygotsky's insights into the relationship between learning and social interaction highlight the role of collaborative environments in education [4]. Howard Gardner's Theory of Multiple Intelligences advocates for diverse learning modalities, ensuring that music education can cater to varied student strengths. G.B. Elkouni's Activity Theory emphasizes the significance of engaging, hands-on activities in learning, and Abraham Maslow's Humanistic Theory focuses on the fulfillment of individual potential and self-actualization [1].

In addition to these foundational theories, the curriculum framework integrates musical concepts ranging from Pythagoras' theory of music and harmony to traditional Mongolian music theory and contemporary approaches to emotional perception in music [5]. This comprehensive approach ensures that the curriculum not only respects and preserves Mongolia's rich musical heritage but also embraces global trends and innovations in music education .

The primary objective of this research is to develop a systematic, culturally relevant music curriculum that promotes child development through progressive and engaging musical education. This study conducts extensive surveys involving 3,200 high school students, 354 professionals, teachers, administrators, and music educators, to evaluate the current curriculum's strengths and weaknesses. The findings highlight a critical need for curriculum refinement, particularly in simplifying theoretical content and increasing the incorporation of national folk music to enhance student engagement and cultural identity [6]. Building on these insights, the proposed curriculum model emphasizes the integration of Mongolian traditions with international educational standards, thereby fostering an environment where students can thrive both personally and academically. This model advocates for a balanced approach that nurtures individual talents while promoting collective cultural values, ultimately contributing to the sustainable development of Mongolia's educational system through music.

### Literature Review

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### 1. The Role of Music in Child Development

Music has long been recognized as a powerful tool for cognitive, emotional, and social development in children. According to Piaget's theory of cognitive development, learning is most effective when it aligns with the child's developmental stage. In this context, music education provides an ideal environment for active learning, where students engage in hands-on activities such as singing, listening, and creating music, thus facilitating cognitive growth through concrete experiences [7]. Vygotsky's social interactionist theory further emphasizes that learning is a social process, and the collaborative nature of music education, with its emphasis on group activities like ensemble playing, helps children develop essential social skills and emotional intelligence [8].

Music also plays a key role in fostering emotional development. Gardner's Theory of Multiple Intelligences advocates for the inclusion of musical intelligence as an essential component of educational frameworks, suggesting that music education caters to diverse learning modalities. By integrating multiple forms of expression, music education nurtures not only students' intellectual and emotional capacities but also their creative and artistic talents [9]. In Mongolia, this idea aligns with the traditional belief in music as a means of personal expression and social cohesion, supporting the development of emotional resilience and a strong sense of cultural identity.

### 2. Theoretical Foundations of Music Education

The theoretical underpinnings of music education have evolved over time, influenced by a range of philosophical and educational frameworks. One of the most notable theories in this regard is Pythagoras' theory of music and harmony, which underscores the mathematical and physical properties of sound. This theory has had a profound impact on music education, particularly in its emphasis on the connection between music, mathematics, and cognitive development. In the Mongolian context, this connection is reinforced through the study of traditional musical forms and structures, such as the unique systems of pitch and rhythm found in Mongolian folk music [10].

More contemporary theories of music education, such as Dorrell's theory of music and Vickhoff's emotional perception theory, offer a broader perspective by incorporating the psychological and emotional responses that music elicits in listeners and performers. These theories highlight the importance of integrating emotional expression into music education, thereby fostering a deeper connection to the material for students. Vickhoff's work, in particular, emphasizes how emotional perception in music contributes to a child's emotional regulation and well-being, which is especially significant in the developmental context of education [11].

### 3. Music Education in Mongolia: Challenges and Opportunities

Mongolia's music education system is situated at the intersection of traditional values and modern educational practices. The national curriculum has long struggled with the tension between maintaining the cultural integrity of Mongolian folk music and adopting global music education trends that prioritize classical and contemporary forms of music. This duality often leads to a disconnection between students' cultural identity and their music education experience. As noted in the findings of the study by Batbold et al., there is a significant lack of representation of national music traditions, particularly in the later grades of primary and secondary education, with a heavy emphasis on Western classical music [12].

The methodological challenges faced by teachers in Mongolia further exacerbate this issue. The shift toward learner-centered, knowledge-building approaches has not been consistently implemented due to teachers' limited theoretical knowledge and pedagogical training [7]. This gap in teacher preparedness has resulted in a curriculum that is perceived as overly complex and difficult for students to grasp, especially in the upper grades. The lack of appropriate resources and training in using diverse teaching methodologies has led to inconsistencies in how music education is delivered, hindering its effectiveness [13].

However, there are significant opportunities for improving music education in Mongolia. The introduction of information technology and multimedia tools can enhance the learning environment, providing students with a more dynamic and engaging educational experience. The growing interest in music competitions and extracurricular activities also presents an opportunity for students to showcase their talents and engage more deeply with music outside the classroom [14]. The integration of these opportunities into the curriculum could help bridge the gap between theoretical knowledge and practical application, creating a more balanced and comprehensive music education framework.

### 4. Curriculum Development and Reform

The development of a music curriculum that balances the demands of modern education with the preservation of national traditions is crucial for the future of music education in Mongolia. According to the research conducted by Batbold et al., there is a need for a curriculum that is not only more accessible and engaging for students but also more inclusive of Mongolian folk music. The integration of traditional music, such as Mongolian long songs and short songs, into the curriculum is vital for nurturing students' cultural identity and ensuring that the curriculum is relevant to their lives [6].

The proposed curriculum model, based on the CDIO (Conceive, Design, Implement, Operate) framework, offers a systematic and activity-based approach to teaching music. This model emphasizes the importance of developing students' competencies in creative thinking, designing, composing, and applying music. By incorporating both

national content and international educational standards, the model aims to create a curriculum that is both culturally relevant and pedagogically effective, fostering an environment in which students can thrive academically and personally [12].

### Research Methodology

The study involved 3200 students, 354 specialists, teachers, administrators, and music teachers from 108 classes across urban and rural schools in Mongolia. Results indicated that as students progressed through grades, their active participation and engagement in music lessons, including singing, listening, and dancing, tended to decrease. Particularly, students in grades 5-9 struggled to grasp theoretical content, which aligns with the perception of over-complexity in the current core curriculum. Over 90% of music teachers agreed that the existing curriculum is too difficult for students, reflecting challenges in its practical implementation.

When teachers, specialists, and administrators were surveyed, 71.4% (253 out of 354) believed that the core curriculum was moderately well-developed but not sufficiently effective. In contrast, 18.9% (67 respondents) found it unclear, and 0.09% (34 respondents) found it relatively clear. These results highlight the need for further refinement of the core curriculum.

In line with the study, we also conducted a SWOT analysis of the music curriculum, which has been in effect since 2013, focusing on the goals, structure, content, methods, resources, and evaluation mechanisms within the invariant framework of the curriculum.

<b>Advantages:</b>	<b>Disadvantages:</b>
The curriculum provides students with the opportunity to acquire methods for recognizing and understanding phenomena, events, and works of art.	The curriculum has not sufficiently incorporated national traditions and cultural content.
It fosters the development and creative expression of talent and aesthetic sensibility.	The teaching methodology has been inconsistent, especially in adapting to learner-centered approaches during knowledge construction. Teachers have often lacked the necessary theoretical and methodological knowledge and experience to implement these methods effectively.
The curriculum emphasizes the value of art and culture.	Despite children's enthusiasm for art, the resources and materials for the curriculum are often inadequate.
The teaching methodology supports the development of students' motivation to learn, with activities based on skills and competencies.	Some music teachers lack skills in planning, research, and maintaining cultural literacy.
Music education focuses on developing abilities related to perception, exploration, creation, expression, and performance. It promotes children's talents through activities such as singing, listening, playing music, dancing, and composing.	Assessing children's performance and skill levels has proven difficult, as it is challenging to evaluate each child's progress consistently.
The integration of creative and developmental skills in music education provides opportunities for talent cultivation and performance evaluation.	
The use of various musical instruments and multimedia tools enhances the learning environment.	
The physical environment of the classroom has been renovated with a blend of traditional and modern approaches to meet educational needs.	
There is a growing library of creative works, aligned with students' interests and needs.	

<b>Opportunities:</b>	<b>Risks:</b>
Music education is a subject that captivates children and sparks their interest.	The availability of professional music teachers is limited.

Students often admire and are inspired by the talent and skills of their music teachers.	Music teachers are often called upon to engage in various cultural and artistic activities in addition to teaching, reducing the focus on the music curriculum.
Participation in competitions organized by local communities, schools, and classes provides students with the opportunity to showcase their abilities.	The number of teachers skilled in traditional Mongolian folk songs, particularly short and long songs, is dwindling.
Music teachers, who possess a wide range of knowledge and skills in singing, playing instruments, dancing, planning, composing, and literacy, significantly contribute to the learning process.	Music teachers face significant challenges due to excessive workload and lack of work-life balance.
There is potential to enhance the prestige and recognition of music teachers.	Financial and material support for organizing competitions and other developmental opportunities for students is insufficient.
New generations of music teachers should embrace advanced technologies in the information age.	The high costs of musical instruments and artistic clothing pose a barrier to the practical implementation of the curriculum.
Opportunities exist for developing group-based projects, such as school bands, choirs, and clubs, which contribute to the collective development of students.	
Teachers can enhance their image by developing their own programs and initiatives that attract and involve audiences.	

**Table 1. SWOT Analysis of the Core Curriculum Content (2013-2021).**

#### **Analysis of the SWOT Findings in the Context of Music Education**

The SWOT analysis of Mongolia's music education curriculum reveals both the progress and the challenges the system has faced over the years. Since 2004, the curriculum has been updated every four years, but these changes have not always been smooth. One of the key issues identified is the instability in teaching methods, especially with the shift towards learner-centered approaches designed to foster active knowledge-building. Unfortunately, this transition has been hindered by a lack of theoretical training and pedagogical experience among many teachers, which has made it difficult for them to implement these new methods effectively. As a result, while the intention was to make learning more engaging and interactive, the reality has often been that students struggle to stay connected with the material, particularly as they move through higher grade levels. Another important concern raised in the analysis is the curriculum's reliance on traditional music styles, which has prevented it from fully embracing technological advancements in education. In today's digital age, integrating technology into the classroom is not just a trend—it's a necessity for creating more engaging, personalized, and dynamic learning experiences. The study suggests that the physical classroom environment and available learning materials should be updated to better support the development of each student's individual talents. By adopting a more comprehensive and modern resource system, the curriculum could better meet the needs of diverse learners, providing them with tools and experiences that reflect both their cultural heritage and global trends in music education.

The analysis also points to problems with the current assessment methods used in music education. Many teachers reported that the evaluation criteria were unclear, making it difficult to consistently assess students' progress. Without clear and reliable ways to measure student development, it becomes challenging to understand where students excel and where they may need extra support. This lack of consistency in assessment undermines the goal of music education, which is to foster both academic and personal growth in students. Developing clearer, more developmentally appropriate assessment methods is critical if we want to ensure that music education remains a valuable tool for student development.

The study suggests that a new version of the music curriculum for grades 1-9 should be developed. This updated curriculum would address the gaps and challenges identified in the SWOT analysis, while also taking advantage of the opportunities presented by international trends in music education. By learning from the best practices of other countries, Mongolia can refine its approach to music education, ensuring that it remains relevant, engaging, and effective for today's students.

One promising approach to redesigning the curriculum is to integrate the CDIO (Conceive, Design, Implement, Operate) model. This model emphasizes creativity, composition, and practical application—key elements that can

foster deeper learning and allow students to connect more meaningfully with music. By focusing on the development of these skills, the new curriculum could better nurture students' musical talents while preparing them for future success, both in music and in other areas of life.

### Connection of Content in the Core Music Education Curriculum in Mongolia

The content connection of the core music education curriculum in Mongolia can be visualized as follows:

Table 1: Progression of Content in Primary Education (Grades 1-5)

Grade	Content
Grade 1	Natural sounds
Grade 2	Musical sounds
Grade 3	Notation of musical pitch
Grade 4	Rhythm and emotions in music (with contrasting compositions)
Grade 5	Simple forms of music

In the primary education curriculum, students begin their musical learning journey by exploring the language of music, starting with natural sounds. Through activities such as singing, listening, playing music, dancing, and composing, students are gradually introduced to melody, harmony, and rhythm. By the time they reach the higher grades of primary school, students are able to recognize and understand the various artistic forms that constitute music.

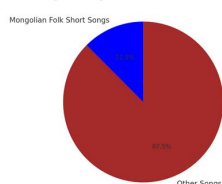
Table 2: Progression of Content in Secondary Education (Grades 6-9)

Grade	Content
Grade 6	Types of art forms
Grade 7	Traditional and modern Mongolian folk music, innovation in folk traditions
Grade 8	Classical music forms
Grade 9	Trends in modern music

In secondary education, the curriculum allows students to explore and understand different genres and styles of music. In Grade 6, students are introduced to various forms of art. In Grade 7, they learn about the rich tradition of Mongolian folk music and its evolution. Grade 8 covers classical music, while Grade 9 focuses on the development of contemporary music.

In the first-grade textbook, there are a total of 13 songs, in the second-grade textbook, there are 14 songs, but no Mongolian folk songs are included. In the third-grade textbook, from 12 songs, 3 are Mongolian folk songs; in the fourth-grade textbook, out of 26 songs, 6 are Mongolian folk songs; and in the fifth-grade textbook, from 15 songs, only 1 is a Mongolian folk song. Thus, in the textbooks from grades 1 to 5, out of a total of 80 songs and instrumental pieces, 10 or 12.5% are "Mongolian Folk Short Songs." Therefore, given the small percentage of Mongolian folk short songs in the textbooks for grades 1 to 5, there is a clear need to include Mongolian folk short songs that are appropriate for the cognitive development of students at this age in primary education music textbooks.

Percentage of Songs in Music Textbooks for Grades 1-5



## Diagram 1. Percentage of Mongolian Folk Songs

In the content for grades 6-9, as seen in the following breakdown:

- In grade 6, the repertoire consists of 37 pieces for singing, listening, and playing, but no Mongolian folk songs are included.
- In grade 7, the content includes 80% folk pieces.
- In the grade 8 textbook, out of 31 pieces, two are arrangements of Mongolian folk songs.
- In grade 9, out of 34 pieces, no national content is included.

This indicates that the content for grades 6, 8, and 9 leans heavily towards classical professional art music. This aligns with the need for curriculum and content development in line with the educational philosophy of music teaching.

The development and changes in the music curriculum for general education schools (GES) in Mongolia, as well as its historical documents, were studied in comparison with the music curricula from 15 countries (United States, Australia, Japan, China, Russia, South Korea, Germany, England, Italy, Singapore, Spain, etc.). The goal was to identify the trends in music education that foster children's development through music.

When analyzing the philosophy and trends in the music curricula of the 15 countries involved in the study, the following patterns emerged:

The music curriculum is based on the heritage of traditional folk culture and emphasizes learning from and passing on the art history and values of each country.

A recurring trend was the recognition of musical knowledge and talents that students acquire from their life environment. This aligns with the principles of the music education curriculum that we developed.

- ✓ 1. Incorporate topics of musical language, history, arts, and literacy education into the curriculum to address developmental issues.
- ✓ 2. The music education curriculum for general secondary schools (GES) is based on folk and public songs as well as theoretical knowledge of music. This foundation considers the musical education students acquire from their life and environment, offering flexibility in adapting the curriculum to these characteristics.
- ✓ 3. Music education is considered a key factor in child development, playing a central role in shaping holistic human development, including aesthetic sensitivity and values such as compassion and love.
- ✓ 4. Music education is viewed through the context of children's needs and interests, as well as the systems of social groups, families, workplaces, and organizations. Special attention is given to the role of music, song, and dance in fostering family happiness.
- ✓ 5. When developing music education curricula, the first step is to identify new trends, evaluate them, and, based on this evaluation, implement a developmental process in sequential steps.
- ✓ 6. In primary schools, local teachers deliver music lessons, with professional music teachers visiting to provide guidance and assistance.
- ✓ 7. Curriculum content reflects the unique characteristics of each ethnic group. Schools, societies, groups, and public initiatives dedicated to preserving and promoting music receive support from the government and non-governmental organizations.
- ✓ 8. Music education is considered in an integrated manner with social and natural sciences.
- ✓ 9. At each level of education, the objectives of arts, aesthetics, and music education differ.
- ✓ 10. Music education also focuses on preparing students to take responsibility for the future, fostering independence, and considering the principles of sustainable development.

These 10 ideas, distilled from a comparative study of the music education systems in 15 countries, align in some ways with the philosophy and content of Mongolia's general education curriculum for primary and secondary schools.

The surveyed countries share the goal of developing each child's artistic sensibility through comprehensive educational activities that involve listening, singing, playing musical instruments, dancing, and creative composition. This is consistent with Mongolia's approach to invariant systems of music education, skill development, and CDIO (Conceive-Design-Implement-Operate) competencies.

For example, in the music curricula of Japan, Singapore, Russia, England, and China, "listening" is emphasized. Similarly, in Japan, Singapore, Russia, and China, the curricula include "singing" and "playing musical instruments." This demonstrates a parallel with the core content of Mongolia's music education program.

Although the overall content is similar across countries, closer examination of unit planning and lesson topics reveals that countries such as Singapore, Japan, and China place greater emphasis on their national songs, customs, ethics, history, and traditions from primary school onwards. As a result, there is a recognized need for Mongolia to expand the inclusion of its folk songs, traditions, and customs in its curriculum, integrating them alongside global music traditions.

**Research Findings**

Based on the traditional pragmatic philosophy of music education, psychological foundations, and the research objectives, this study examined the philosophy, content, and methodology of music curricula in 15 countries. The research analyzed these aspects through the lens of a 10-invariant system of music education, aligning with four core principles: equality, inclusiveness, formality, and democracy. By defining the underlying concepts, trends, and direction, a new theory of "HÖGSÖL" was proposed. Additionally, an alternative model for music education was developed.

The theoretical foundations of music education curricula: In order to develop the theory of Högsöl, we studied the following theories: Among them, there are four theories that have developed into systems based on eight fundamental approaches explaining the essence of music, four philosophies of music, two philosophies of music education, a philosophy of music, and a single approach in music didactics. In the scope of the research topic, bibliographic analysis revealed four music theories, which include:

- Pythagorean Theory of Music and Tones (Pythagoras, BCE 576-495)
- Traditional Music Theory
- The Latest Theory of Music (Dorrell, 2005)
- The Theory of Emotional Perception in Music (Vickhoff, 2008)

Through the creative thinking, hard work, and dedication of scholars such as Bennet Reimer, Keith Swanwick, David Elliott, and David Hume, two main philosophical foundations of music education emerged: Aesthetic Formalism [Aesthetic Formalism: "music education as aesthetic education"], and Pragmatism [Pragmatism: "music education as a conditioned act or praxis" (Reimer, 1966; Wester-Lund, 2003)].

Aesthetic Formalism, which emerged in the mid-20th century and became widely used in music education and teaching practices, is considered the traditional philosophy of music. The new philosophy of music education, based on Elliott's Pragmatism, views music education as a "praxis" or conditioned act. By adopting this belief, music education, its goals, content, methodology, and environment are essentially aimed at guiding students in playing music (Reimer, 1966).

The philosophy of music education, as represented by Reimer's Aesthetic Formalism, suggests that "through the development of musical tones, an individual experiences and creates their own unique aesthetic." In contrast, Elliott's Pragmatism suggests that "through the development of tones, individuals can nurture their health, clear their minds, and cultivate their emotions to experience beauty." Despite differences in expression, both philosophies emphasize personal growth and development through music.

Thus, the theory of Högsöl can be considered a philosophical foundation of music education, coexisting alongside Aesthetic Formalism and Pragmatism. Högsöl [Hög (music) - the development of one's spirit through musical tones, Söl (flavor) - represents the essence and quality of life and personal growth] merges the ideas of music, development, and the cultivation of wisdom in life. The theory proposes that music, through its tones, nurtures the spirit and helps individuals develop life wisdom.

Music is an art form that influences the human spirit, mental state, and develops actions and skills. This idea aligns with the concept of Högsöl. Within the invariant system of the curriculum, the music education programs for primary and secondary schools in Mongolia are guided by international standards, focusing on singing, listening, playing music, dancing, and composing, as shown in Diagram 1, which represents the continuous implementation of the curriculum's invariant system.

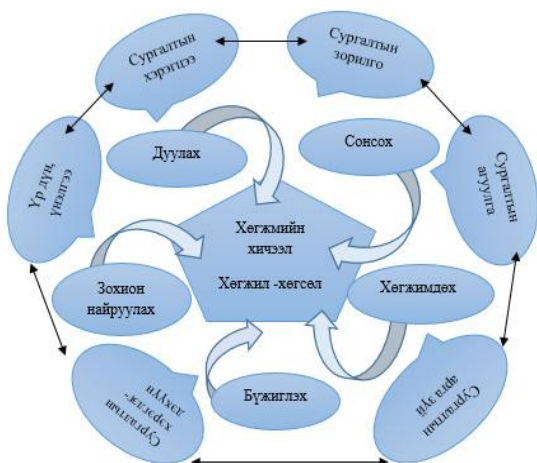


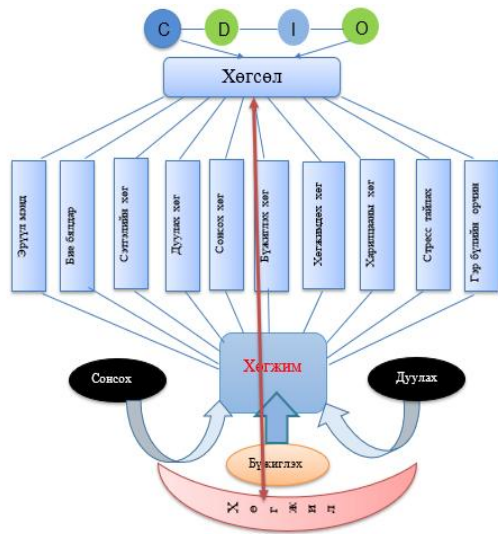
Diagram 1. The invariant system of the educational curriculum is being implemented continuously.

The idea of "Music-Development-Prosperity" follows the concept that everything progresses and flourishes. Development, achieved through body, mind, and intelligence, ultimately leads to Högsöl. By attaining growth in both body and mind, one reaches Högsöl, which reflects the CDIO competencies of thinking, designing, creating, and applying.

Thus, "Music-Development-Progress" is considered to align with the CDIO competency. CDIO (Conceive, Design, Implement, Operate) represents an educational framework that provides learners with the ability to "create real systems,

activities, and products" based on the principles of conceiving, designing, building, and operating. If we visualize the connection between "Music-Development-Progress" and CDIO, the diagram would illustrate:

Diagram 2. The relationship between "Development-Music-Progress" and CDIO competencies, as well as its relevance to the development of music education curricula.



CDIO (Conceive, Design, Implement, Operate) represents the idea that through the harmony of music, children can develop physically, emotionally, and socially, smiling with joy, and envisioning a bright future filled with the promise of progress. If we connect the theoretical and methodological issues of primary and secondary music education curricula with the theories and concepts of child development and personal growth, the relationship becomes apparent. The development and growth of students in general education schools (EBC) can be summarized as follows: The didactic structure of music is examined through the system of actions represented by CDIO competencies (conceiving, designing, creating, and applying), and the teaching methodology is based on theories of learner development, stages of cognitive development, and the laws of mastery (orienting, mastering, evaluating, and developing). It also emphasizes the principle of learners constructing and applying knowledge themselves.

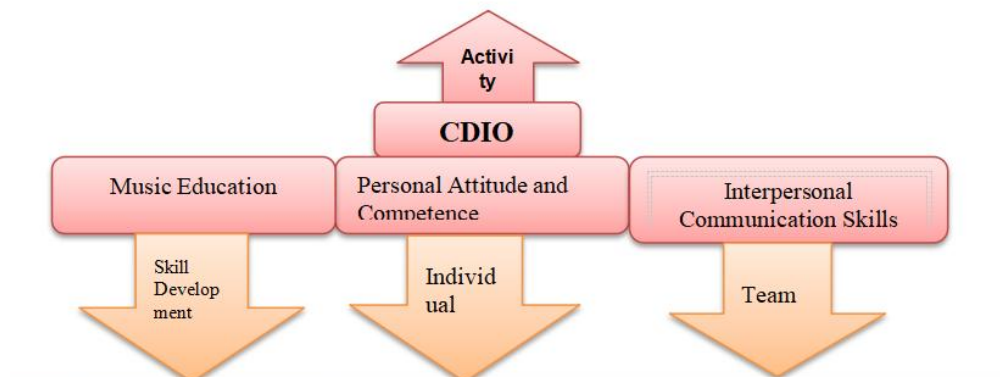


Diagram 3: The outcomes of teachers' and students' CDIO competencies (Development through Conceive-Design-Implement-Operate activities).

The CDIO framework, as a new system for international educational reform, emphasizes the skills that students must acquire, which becomes an approach to enhancing their "personal competencies."

Table 4: The conceptual framework of teachers' and students' CDIO competencies (Development through Conceive-Design-Implement-Operate activities).

	C - Conceive	D - Design	I - Implement	O - Operate
	Child	Development	Music	Progress/Advancement
Folk Educational Philosophy	Labor	Knowledge	Culture	Upbringing
Scholars' Theoretical	J. Piaget "Constructivist"	H. Gardner "Theory of"	L. Vygotsky "Theory of the"	E. Erikson's "Ego" or "Self" Theory



Views	Theory" (Cognitive Development)	Multiple Intelligences"	Relationship Between Learning and Development" (Cultural-Historical Cognitive Theory)	(Socialization Theory)
			A. Maslow's "Humanistic Theory"	G. B. El'kun's "Theory of Activity"
Academician B. Jadamba	Production	Knowledge Creation	Human Action	Learning and Humanization Through Action
Academician B. Jadamba	Talent Selection	Talent Creation	Talent Management	Talent Evaluation, Encouragement, and Sustainable Development
Music Education Skills	Perception and Acceptance	Execution and Interest in Research	Creation and Development	Creative Exploration, Expression, and Evaluation

- When implementing the results of our research, we will widely apply traditional Mongolian teaching methods, along with general teaching methods, to support, discover, and develop students' talents and foster creative thinking in education. These include:
- Taking into account the differences in age, experience, characteristics, and needs of children, we will selectively enrich and deepen content related to patriotism, pride, and national values. Methods and approaches corresponding to these will be implemented in alignment with CDIO (Conceive, Design, Implement, Operate) competencies.
- Utilizing films, videos, CDs, DVDs, and websites related to the arts and culture of different generations in an appropriate and targeted manner.
- Creatively applying methods such as introducing students to the natural and scenic beauty of the homeland through photos, art, albums, music, traditional arts, museum exhibits, and performances in theaters, as well as introducing them to renowned artists and performers.

Music teachers responsible for imparting these CDIO competencies should possess a high level of expertise and skills, be recognized in their field, and meet professional standards. These teachers should hold a bachelor's degree in music education, have teaching certification, and possess skills in singing, playing musical instruments, acting, dancing, composing, and creating. Additionally, they should be knowledgeable in pedagogy, psychology, and research methodologies.

The development of classrooms and a fully equipped learning environment, based on both traditional and unique approaches to music education as well as advancements in information technology, will be aimed at enhancing the knowledge, skills, and talents of every student. Textbooks for primary and secondary music education will be authored, published, and distributed under the direction of the central educational administration. Moreover, the creation, publication, and distribution of open and freely accessible teaching guides and recommendations for implementing the music curriculum for primary and secondary education will be carried out.

During the course of our research, we developed one version of the content direction for the music curriculum of grades 1-9 in general secondary schools (GSS). The conceptual framework and content direction of the program have been outlined and demonstrated as follows:

### One Version of the Content Direction for the Music Curriculum

Table 5. Content Direction of the Music Curriculum

Level	Grades	Content Area	Details
I Level	I-III	Traditional Music Heritage and	- Develop thinking skills by learning environmental sounds, traditional melodies, and folk music. - Compose melodies, recite poetry to music, and

		Pride	<ul style="list-style-type: none"> <li>practice rhythms and movements.</li> <li>- Create music with natural materials (stones, wood).</li> <li>- Apply what is learned in music lessons to practical use.</li> </ul>
		National Identity Content	<ul style="list-style-type: none"> <li>- Explore environmental sounds (nature, humans, animals).</li> <li>- Learn calls and melodies related to the five traditional animals.</li> <li>- Practice breathing exercises and vocal development.</li> <li>- Learn lullabies, praise songs, and heroic chants.</li> <li>- Listen to and recognize folk songs and dances.</li> <li>- Learn traditional dances such as Biy Biyeleg and Yoohor.</li> <li>- Utilize natural resources for musical creation.</li> </ul>
		National Trends	<ul style="list-style-type: none"> <li>- Study basic music theory (pitch, rhythm, notation).</li> <li>- Learn to play basic melodies on traditional instruments.</li> <li>- Perform dances such as Cha Cha Cha and practice vocal expression.</li> </ul>
II Level	IV-V	Oral and Musical Arts Integration	<ul style="list-style-type: none"> <li>- Breathing exercises to enhance vocal skills.</li> <li>- Learn traditional tales, songs, and differences between Mongolian epics and musical storytelling.</li> <li>- Explore Mongolian instruments (Morin Khuur, mouth harp, and others).</li> <li>- Perform dances like Yoohor and Jaahan Dulmaa.</li> </ul>
		National Trends	<ul style="list-style-type: none"> <li>- Understand musical expression (melody, rhythm, dynamics).</li> <li>- Learn the origins of folk and classical music.</li> <li>- Practice reading, writing, and performing musical notations.</li> <li>- Explore traditional games like Dembee.</li> </ul>
III Level	VI-IX	Artistic and Creative Thinking	<ul style="list-style-type: none"> <li>- Appreciate and understand the beauty and purpose of art.</li> <li>- Compose, organize, and participate in artistic works.</li> <li>- Evaluate, preserve, and respect art forms.</li> </ul>
		Folk and National Music	<ul style="list-style-type: none"> <li>- Learn traditional arts such as throat singing, whistling, and folk songs.</li> <li>- Explore long and short Mongolian songs.</li> <li>- Perform traditional dances like the "Three Rivers Melody".</li> <li>- Study differences between traditional and contemporary Mongolian music.</li> </ul>
		Modern Music Education	<ul style="list-style-type: none"> <li>- Study global music styles (Baroque, Rococo, Romanticism).</li> <li>- Learn Western and Eastern classical music traditions.</li> <li>- Practice reading, writing, and performing musical notations.</li> <li>- Learn classical dances (Waltz, Tango, Polka).</li> </ul>
		Musical Instruments and Composition	<ul style="list-style-type: none"> <li>- Learn to play stringed, wind, and percussion instruments.</li> <li>- Study symphonies, solo pieces, and orchestral music.</li> <li>- Understand music theory and composition methods.</li> </ul>

#### Implementation Results of the Program's Concept and Content Direction:

- Provides guidance for developing a music curriculum for general secondary schools (GSS) that meets international and regional standards.

- Enhances the continuity and cohesion of music education at the elementary, middle, and public education levels.
- Creates opportunities for students at the elementary and secondary education levels to develop and preserve their knowledge of traditional Mongolian folk songs, culture, and art.

### Conclusion:

The theoretical and methodological foundation for the revised music curriculum was constructed in alignment with the “Practicalism + Synthesis of Emotion and Action” approach. This framework was designed to address the objectives and goals of the research by providing a comprehensive and practical structure for music education. The "Practicalism" component emphasizes the importance of applying theoretical knowledge in real-world contexts, while the "Synthesis of Emotion and Action" approach focuses on the balance between emotional engagement and active participation in music learning. Together, these elements form the basis of a curriculum that fosters both intellectual growth and personal expression through music.

A new version of the curriculum was developed and proposed, integrating the content and philosophy of global music education programs with the unique cultural values of Mongolia’s music traditions. The proposed curriculum is grounded in the CDIO (Conceive, Design, Implement, Operate) competencies, which combine national content with international trends. This integration aims to provide a well-rounded, globally relevant education while preserving and promoting Mongolia's rich musical heritage. By incorporating both local and global perspectives, the curriculum fosters a more inclusive and diverse approach to music education.

This new curriculum framework was specifically designed to be systematic and activity-based, spanning all levels of general secondary education—from elementary to middle school. The curriculum encourages active participation and experiential learning, focusing on essential competencies such as thinking, composing, creating, and applying music at each grade level. These competencies provide a clear structure for both students and educators, enabling music education to be more engaging, progressive, and aligned with the developmental stages of learners.

The approach also supports the implementation of sustainable development goals (SDGs) through music education by improving both the methodological possibilities and the overall conditions for effective teaching. By focusing on active learning and creative expression, this curriculum not only aims to enhance students’ musical abilities but also nurtures skills that are valuable across various areas of personal and academic development. In doing so, it contributes to the broader goal of sustainable educational practices that promote lifelong learning, cultural awareness, and social cohesion through the arts.

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