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## Development of a School Orchestra Model in Korean Public Schools and Students' Perceptions of the Orchestra Experience

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### Abstract

The purpose of this paper is twofold. First, it outlines an author-developed school orchestra model. Second, it describes students' perceptions of their orchestra experiences after model implementation in terms of program satisfaction, personal and social experiences, and learning motivation. The orchestra program was implemented in 77 elementary schools over the course of a full school year. The model includes procedures for setting up and managing a school orchestra including teaching curriculum, learning repertoire, and networking the resources. For the students' perceptions of the orchestra experiences, 593 elementary students from 15 schools were randomly selected from the orchestra model schools, and were asked

to complete a survey at the end of the one-year implementation. Students reported satisfaction with the orchestra program, positive personal and social experiences, and learning motivation. The results indicate that school orchestra programs can provide meaningful opportunities for students to gain positive experiences in self-confidence, actualization, building relationships, listening skills, motivation for participation and academic achievement.

### **Introduction**

As part of the regular school curriculum or as an extracurricular activity, music education programs have been shown to be effective in fostering students' skills in social, interpersonal, and academic areas (Adderley, Kennedy, and Berz 2003; North, Hargreaves, and O'Neill 2000; O'Neill 2006; Schellenberg 2006). Numerous studies have documented how the benefits of instrument learning cross over to enhance non-music related skills, and as a result, many public schools are implementing after-school music programs aimed at teaching students more than just music (Chong 2008; Chong and Kim 2010; Costa-Giomi 2004; Mason and Chuang 2001).

The United States has one of the longest histories of school orchestras in the world. The West's interest in school orchestras possibly began in the mid-1800s, and these ensembles were first established in high schools. Interest in school orchestras and bands continued through the turn of the century, and this interest was partly fueled by the progressive education movement that stressed the importance of musical practice as part of general education (Miller 1966). With time, more orchestra programs were introduced in schools with continued growth of school orchestras and bands (Humphreys 1989). In the early 1900s, school systems began to provide orchestra programs with instruments and rehearsal time and offered academic credits for orchestra participation. Around this same time, many professional orchestras expanded their music education programs to school age children (Keene 2010; Myers & Brooks 2002).

Music educators in the United States have formulated various strategies to enhance the orchestra curriculum. National content standards created in 1994 by the Music Educators National Conference helped to 'provide a basic framework for all music teaching' (Lehman 2000) including school orchestra and paved the way for special interest groups, such as strolling strings and fiddle groups, and the inclusion of non-traditional instruments, such as guitars or ocarinas, in the ensemble (Association of Consortium of National Arts Education 1994; Hamann and Gillespie 2013). Now, the National Standards have been revised and renamed as the National Core Music Standards to emphasize artistic processes in creating, performing and responding (National Association for Music Education 2015).

Other countries have also successfully initiated orchestra projects. First, Venezuela is known for its nationwide program, El Sistema, which provides music learning to 300,000 of the country's poorest children (Uy 2012). What is unique about this project is that it is almost entirely funded by the government. All types of music activities, including singing, playing, and listening, are integrated into the orchestra program, and students benefit from frequent rehearsals and enjoyable repertoires. This program has resulted in building students' self-esteem and providing a safe and motivating environment for after-school time. The story of El Sistema's success has spread around the world, and one successful offshoot of El Sistema is Scotland's Big Noise orchestra. Scotland's orchestra program aims to transform students' lives through music and to help them feel welcome and included.

Another influence of El Sistema can be found in England in a nationwide program called In Harmony. Since 2007, famous classical musicians have supported orchestra projects in three areas in England: Lambeth, Liverpool, and Norwich. This program provides flexible practice times by offering morning, lunchtime, and after-school programs. Drawing on the influence of Venezuela's El Sistema, this system also emphasizes the impact of music participation as a means to transform society (Lord, Mahoney 2007; Rickson & Wakins 2003; Tunstall 2012). Despite the benefits delivered through El Sistema and El Sistema-inspired programs, there is criticism of assessments of the program's musical, social, and cognitive functions (Baker 2014; Majno, 2012). Many concerns have arisen about media presentations depicting El Sistema's success, since no empirical evidence about it has been found in academic publications (Baker 2014). Considering the impressive musical results, educational aspects of El Sistema is unclear.

Most of the after-school programs, including orchestra programs, emphasize both the musical and nonmusical benefits of music learning including skills in self-expression, relationship building, creativity, leadership, communication, cooperation, and self-satisfaction (Hendricks 2009; Sour 2009). That is important because it is evident that children from lower socioeconomic backgrounds have lower self-esteem than those from higher socio-economic status, especially during the early adolescent years (Rhodes et al. 2004; Trzesniewski et al. 2006; Twenge and Campbell 2002). A wide range of psychological problems, including anxiety, depression, aggression, and relationship issues, are impacted by poverty (Costello et al. 2003, Evans and English 2002). Therefore, it is necessary to provide young children from low-income families to enhance psychological and social supports through various school programs (Durlak, Weissberg, and Pachan 2010).

While the history of school orchestras in the United States and other countries is quite long, their history in Korea is short. The system of after-school programs in Korea was initiated in 1996, and music programs started being included shortly thereafter. The orchestra program

was introduced as one type of music activity for students to learn positive social skills. Many after-school programs were offered for students from low socioeconomic background and most of the music programs including instrument lessons or school choir focused on increasing positive social interactions between peers and increasing musical enjoyment among students (Korea Arts & Culture Education Service 2012).

Based on the link between music education, academic performance and personal well-being, in 2011 the Korean Ministry of Education (KME) initiated the national School Orchestra Project (SOP). The SOP provided public schools with the funds necessary to develop after-school orchestra programs for students from low socioeconomic areas or for at-risk students since the number of students with school maladjustment and those identified as “at risk” is on the rise in Korea (Korea Arts & Culture Education Service 2012).

The purpose of this study was to examine students’ perceptions of their orchestra experiences in terms of program satisfaction, personal and social experiences, and learning motivation after one-year implementation of the developed School Orchestra Project (SOP) model as an after-school program. The model was implemented nation-wide, not only utilizing school resources, but also networking with regional and community organizations. In addition, the model focused solely on the involvement of students from low socio-economic backgrounds in order to ensure that the school orchestra provides a meaningful opportunity for the students who had not had a chance to learn music instruments.

### **Method**

This study examined students’ perceptions of their orchestra experiences after implementing the SOP for one year, nation-wide. For this purpose, the study was performed in two steps: first, the development of the school orchestra model to be implemented and second, implementing it for one year.

#### ***Step 1: Development of School Orchestra Project (SOP) Model***

The model was developed based on various types of literature pertaining to school orchestras from schools that had successful models. Based on the collected literature, further concrete and practical content are being developed in terms of setting up, recruitment, role description, orchestra curriculum, learning repertoire, and other areas that are necessary for initiation and management of the school orchestra program.

The developed model is composed of three sections: initiation, management, and resource networking. Initiation involved setting up the environment for the orchestra program, including physical facilities and instruments, assigning an orchestra conductor; and recruiting members. In the management stage, education plans were formulated for the orchestra and

repertoires were developed from the list of repertoires that the teachers who had had at least three years of school orchestra experience suggested for different levels. Finally, the resource networking involved identifying and connecting physical resources (i.e., collaboration contracts with arts-related facilities near schools), professional pools (i.e., city orchestra conductors, music college professors etc.), and either financial or physical support for managing the orchestra (i.e., supports from regional industrial facilities). The resource networking was essential for seeking strategies to maintain the orchestra.

### *Section 1: Initiation*

During the initial set-up period, the schools establish a physical environment for the orchestra work, designate the orchestra conductor, and recruit members.

*i. Environment:* To set up the environment, it is important that an independent space is assigned for the orchestra work. The space could be a remodeled classroom or any other available space. After the space is determined and rearranged, the room needs to be equipped with sound-proofing materials, chairs, music stands, a conductor's stand, a sheet music cabinet, an audio device, instrument holders, and an instrument cabinet.

*ii. Orchestra conductor:* For optimum learning outcomes, two teachers are needed to run the orchestra program. The music teacher could be responsible for conducting and the other teacher could assist with administration. The music teacher could take on the conductor role, including developing repertoire and annual plans. The assistant teacher could help take attendance, manage practice schedules, and recruit lesson teachers, etc. When the music teacher assumes the conducting role, it is important that he or she has relevant background and experience. Conducting is a significant responsibility; therefore, another teacher has to assist with the management of the students and other program details. In cases where two teachers are not feasible, schools hire a conductor from the regional orchestra depending on the availability of funds. In this case, the music teacher is responsible for all the administrative work.

*iii. Member recruiting:* Once the environment is set, the music teacher(s) needs to recruit students for the orchestra. Because the intent of this project is to provide students with musical opportunities, it is essential that students not be selected solely based on auditions; rather, the audition is an opportunity for the teacher to gather necessary information about each student's current interests (also as a basis for instrument selection) and expectations. Fundamentally, all students who are interested in playing instruments are allowed to join the orchestra, and any prior musical preparation that an individual may have is considered as an opportunity for further improvement through participation in the orchestra. This orchestra recruitment process emphasizes appropriate behavior, such as compliance, discipline, and

punctuality, as well as self-expression and self-competency.

The model suggests having three months of initial education in basic music theories and hands-on experience playing the instruments alone before playing with others. Thus, the students learn basic music terminologies and concepts at the beginning of the orchestra program. The school can decide if the three-month period should be extended to six months depending on the readiness of the students.

### *Section 2: Management*

*i. Annual program plan:* The annual plan is composed of three phases, which can comprise four months or longer, as needed (see Table 1). In phase I, natural exploration of instruments and their sounds are crucial for students to develop a relationship with music. At this phase, it is important to allow each student enough time to freely explore the sound of the instruments. After this exploration, structured learning of basic techniques and skills for music playing can begin.

In phase II, the students are able to differentiate various timbres and how they are produced by the instruments. With this knowledge, they can learn about different dynamics and tempi. Much encouragement and frequent rewards are necessary during this phase to motivate students' curiosity and participation.

In phase III, the students learn to understand musical expression produced by more sophisticated articulations and techniques. They need opportunities to hear themselves and others and learn how sounds come together. They also need to learn better ways to follow cues and to cooperate with other players. Learning to follow the conductor's guidance and direction is a crucial element of this phase.

**Table 1. Annual Curriculum for School Orchestra**

Phase	Program Plans
I	Objective
	Focus
	Method

	Strategy	<ul style="list-style-type: none"> <li>· Use rewards for attendance and participation (stickers, tokens, etc.)</li> <li>· Use lots of positive reinforcement to decrease student stress due to different abilities. Provide part playing, instead of individual playing.</li> <li>· Learn basic social skills in group playing (listening, attending, following directions, etc.)</li> </ul>
II	Objective	<ul style="list-style-type: none"> <li>· Develop technique for articulate expression</li> </ul>
	Focus	<ul style="list-style-type: none"> <li>· Learn about the repertoire, composers' lives, and themes in music</li> <li>· Practice by groups (sections)</li> <li>· Learn basic techniques (bowing, fingering, tonguing, diaphragm breathing)</li> </ul>
	Method	<ul style="list-style-type: none"> <li>· Practice the sheet</li> <li>· Practice by parts</li> </ul>
	Strategy	<ul style="list-style-type: none"> <li>· Use visual aids for the music in order to avoid boredom and discouragement</li> <li>· For part practice, use a mentoring system to establish musical relationships among the members</li> </ul>
III	Objective	<ul style="list-style-type: none"> <li>· Develop required skills for the repertoire</li> </ul>
	Focus	<ul style="list-style-type: none"> <li>· Understand the music being played and learn to express different emotions</li> <li>· Learn musical expression and how to articulate it</li> <li>· Learn how to listen to one's own playing for expressiveness</li> </ul>
	Method	<ul style="list-style-type: none"> <li>· Learn skills for musical expression (vibrato, blending, etc.)</li> <li>· Play following the conductor</li> <li>· Exchange comments about each other's playing</li> <li>· Prompt and stimulate performances at school or community events</li> </ul>
	Strategy	<ul style="list-style-type: none"> <li>· Encourage self-esteem and sense of achievement</li> <li>· Regularly change the seating arrangement, to encourage all students and provide different experiences.</li> </ul>

*ii. Repertoire:* Repertoire is essential in motivating students to play. For developing repertoire, teachers with a minimum of three years of school orchestra experience provide the list of most successful music repertoire with rationale for the selection (Table 2). For all repertoires, the music themes are rearranged so that even with a little amount of effort, students can produce good harmony with the other players. Most selections are melodies from well-known pieces or repertoires learned from students' music classes at school. Public music education in South Korea provides sufficient experience and exposure to Western classical music, which makes these repertoires familiar to the students. Familiarity is an important motivation tool for students to enjoy the music.

The model suggests repertoires for three different levels depending on the type of orchestra: full, wind, or string orchestra. Suggested repertoires for different levels are selected based on

specific rationales. The rhythmic patterns, melodic progression, range, and articulations are all important factors to consider. Most importantly, the teachers are to bring appropriate rearrangements to the pieces according to students' playing skill.

*iii. Pedagogical Approaches:* Teachers or co-teachers need to have basic composition skills, to modify the music depending on the composite of the orchestra instrumentation and students' ability to play instruments. They need to figure out which parts are more suitable for beginners and advanced performers before assigning parts. Also for students, teachers need to adjust the complexity of a piece of music by altering the rhythm patterns or melodic line of the original piece as necessary to encourage the students. For example, slow notes can be substituted for fast notes in rhythm, and the melodic jump can be substituted by another note within the appropriate melodic range, depending on a student's level of performance.

### *Section 3: Resource Networking*

Since school orchestras require sustained resources in order to continue, each school must be strategic in seeking financial, physical, and human resources. The physical resources can be provided by community arts centers or music schools. The human or professional resources can be provided by music colleges or community musicians. Financial resources can be provided by regional music shops or related companies. The model described here stress that each school must network using various agents in order to tap into financial, physical, human and professional resources. For example, networking with music programs at the regional college can facilitate music lessons and assistance in instrumental playing.

**Table 2. Student Orchestra Repertoire for Different Levels**

Levels	Repertoire Example	Rationale
I	Full Orchestra Prelude from Carmen (Bizet)* Saint Lawrence Suite (Washburn) Symphonic Sketch (Schubert)* Military March (Schubert) Symphony No.9 "New World" (Dvorak)	<ul style="list-style-type: none"> <li>• Repetitive rhythmic patterns</li> <li>• Repeated or consistent syncopation</li> <li>• Subdivided rhythm patterns</li> <li>• Step-wise melodic progressions</li> <li>• Unison or two-layered textures</li> </ul>
	String Orchestra Air for String Allegro (DelloJoio) Brandenburg Concerto (Bach) Fugue in F (Handel) Geometric Dances (Meyer) Hungarian Dance No. 6 (Brahms)*, Three Slavonic Dances (Dvorak)*	<ul style="list-style-type: none"> <li>• Simple harmonic progressions</li> <li>• Clear cadences</li> </ul>
	Wind Orchestra Instant Concert (Walters), African Symphony (B. McCoy), El Bimbo (Paul Mauriat) Carnival of Roses (Joseph Olivadoti) New World (Antonin's) The Sound of Music (R. Rodgers)	



II	Full Orchestra	Arirang (Bauernschmidt)* Gavotte (Telemann)* Sleigh Ride K. 605 (Mozart)* The Tempest (Smith, R) Pachelbel's Canon (Pachelbel)*	<ul style="list-style-type: none"> <li>• 4 layer texture</li> <li>• Over 5-interval leap in the melodic progression</li> <li>• Subdivisions and Syncopations</li> <li>• Extended progressions and forms</li> </ul>
	String Orchestra	Bach Suite for String Orch (Leidig) Colorado Suite (Feese) Country Dance(Boyce) Fantasia for Strings (Del Borgo) Nocturne from MidsummerNights Dream (Mendelssohn)	
	Wind Orchestra	Hey Jude (Beatles) Persis (Jaems L. Hosay) Aventura (James Swearingen) Bumblebee (Rimsky-Korsakov)* Symphonic Variations (Jacob de Haan) Alvamar Overture (James Barnes)	
III	Full Orchestra	Ceremonial March (Mozart) Symphony No. 2 in C "Little Russian Symphony"(Tchaikovsky) Slane(Wagner) Judas Maccabaeus Suite (Handel) March of the Peers (Sullivan)	<ul style="list-style-type: none"> <li>• Various musical concepts</li> <li>• Chromatic progression with more melismatic expression</li> <li>• Wide melodic range</li> <li>• Dynamic rhythm patterns</li> </ul>
	String Orchestra	Concerto in G (Vivaldi)* Dorian Bariations(Israel) Lullaby(Hofeldt) Serenade for Strings(Leyden) Rondo AllaTurca(Mozart)	
	Wind Orchestra	Pacific Dreams (Jacob de Haan) Psalm and Celebration (Bruce Pearson & Chuck Elledhe) The Wind of Poseidon (R. Smith) Song of Sailor and Sea (R. Smith) Flashing Winds (Jan Van der Roost) Marche Slave (Tchaikovsky)	

*\*These pieces are in the Music Subject textbook*

*\*\*The music pieces listed in this table were selected from popular school orchestral performance pieces in Korea.*

### ***Step 2: Implementation of School Orchestra Project Model***

A total of 77 schools received funding from the Ministry of Education for setting up the initial program, which included establishing a desirable physical environment for the student orchestra and purchasing instruments. The schools were selected by examining three criteria: First, the regional characteristics of each school's location, including the student population's socioeconomic level, the degree of cultural disadvantage, and the regional remoteness; Second, the educational environment, specifically each school's resources and infrastructure related to the arts education; and last, the school's capacity and eagerness to maintain the school orchestra through active resource networking.

Among the 77 schools, 15 schools were randomly selected from 18 different districts using a

stratified random sampling proportionate to the number and size of the schools. After one academic year of implementing the model, a survey was administered to examine students' perceptions on program satisfaction, personal and social experience, and learning motivation during that year.

The scope of the study was primarily to examine how students perceived the experience of the orchestra program after its implementation. For this reason, the study did not employ a baseline nor control group design; instead, a survey was administered to examine their perceptions of the orchestra experience after its implementation. In other words, the administered survey was intended to capture students' perceptions of their experiences as a result of participating in the orchestra model.

The developed survey was composed of four categories. The first category inquired about their enjoyment, the appropriateness of the curriculum, their willingness to recommend the program, and the program's uniqueness. The second category inquired about their personal experience regarding the participation, playing for others, practice, and their expected future career. The third category inquired about their social experience with making friends, building relationships, communication, and listening to others. The last category inquired about their motivation for participating in the orchestra, their class participation and their academic achievement.

After the initial questionnaires were developed, six music educators and music therapists evaluated the validity of the questionnaires within the categories identified as the areas of orchestra experience. The categories and relevant questionnaires were developed based on the literature review of previous studies (Hansen et al. 2003; Hendricks 2009; Nam 2012; North. Hargreaves & O'Neil 2000; Sour 2009; Yang 2012).

The survey consisted of 16 items, each answered along a four-point Likert scale (1= strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree). Students filled out the survey in the classroom instead of in the practice room, to avoid any influence by their peers. The students were asked to participate in the survey if they were willing to; therefore, completing the survey was considered as implied assent for participation (Chambliss and Schutt 2010).

## **Results**

The survey was distributed to 694 students. Among them, 101 responses were discounted from the data analysis since they were incomplete. Incomplete surveys were excluded from the analysis because they would bias certain survey items. Therefore, a total of 593 surveys were analyzed, resulting in an 85.4% return rate. Students' grade levels are shown in Table 3. Of the 593 students, 348 were female and 245 were male.

**Table 3. General Characteristics of Participating Students**

	Item	n	(%)	Mean age (years)	SD	Total N (%)
Grade(age)	6 <sup>th</sup> (12)	157	(26.5)	11.56	1.234	593(100)
	5 <sup>th</sup> (11)	155	(26.1)			
	4 <sup>th</sup> (10)	154	(26.0)			
	3 <sup>rd</sup> (9)	80	(13.5)			
	2 <sup>nd</sup> (8)	26	(4.4)			
	1 <sup>st</sup> (7)	9	(1.5)			
	No response	12	(2)			
Gender	Female	348	(58.7)			
	Male	245	(41.3)			

For the program satisfaction category, 551 students (92.9%) reported that they were satisfied with their orchestra experiences, while 564 students (95.1%) responded that the level of program content was appropriate. To the question of whether they would recommend the program to peers, 517 students (87.2%) responded positively. Lastly, 436 students (73.5%) reported that they consider this program was special among other programs in school (see Table 4).

With respect to the personal experience of the orchestra, 462 students (77.9%) perceived their level of participation in the orchestra was relatively high, and 499 students (84.1%) expressed a positive experience of performing in public. Also, 541 students (91.2%) indicated that they practiced instruments in their spare time, which implied that they were able to use their leisure time musically. In terms of their future career, 523 students (88.2%) reported that they considered music as a future career. These results imply that students' music learning experiences contribute to building their sense of confidence.

For students' perceptions of social experience in the orchestra, 389 (65.6%) students reported that they could become closer to some friends and 449 (75.7%) students reported that they made new friends. Students not only indicated that they had a chance to initiate communication by talking to others (85%) but also that they liked to listen to others (87.7%). In regards to the learning motivation, 452 (76.2%) liked to spend time at school after class. Also, 482 (81.3%) students grew to like other classes along with the orchestra program, and 533 (89.9%) of the students indicated that their interest in the class had increased. Last, 544 (91.8%) of the students indicated that their motivation for academic achievement had increased.

**Table 4. Students’ Perception of Orchestra Experiences**

Categories	Questionnaires	Agree N(%)	Strongly Agree N(%)	Total N (%)
Program Satisfaction	[Q1] Was the orchestra program enjoyable to participate in?	244 (41.1)	307 (51.8)	551 (92.9)
	[Q2] Were you able to follow and learn the instruments without difficulty?	288 (48.6)	276 (46.5)	564 (95.1)
	[Q3] Would you recommend this program to other friends?	211 (35.6)	306 (51.6)	517 (87.2)
	[Q4] Do you think that this program is special, compared to other after-school programs?	194 (32.7)	242 (40.8)	436 (73.5)
Personal Experience	[Q5] Were you able to participate fully in the program without any difficulty?	235 (39.6)	227 (38.3)	462 (77.9)
	[Q6] Did you like the opportunity to play your instrument in front of others?	255 (43.0)	244 (41.1)	499 (84.1)
	[Q7] Did you like spending your spare time practicing your instruments?	214 (36.1)	327 (55.1)	541 (91.2)
	[Q8] Did the orchestra experience help you think about your future career?	216 (36.4)	307 (51.8)	523 (88.2)
Social Experience	[Q9] Were you able to become close to your friends, participating in this program?	253 (42.7)	136 (22.9)	389 (65.6)
	[Q10] Were you able to make new friends, participating in this program?	267 (45.0)	182 (30.7)	449 (75.7)
	[Q11] Did you have a chance to talk to others, participating in this program?	242 (40.8)	262 (44.2)	504 (85.0)
	[Q12] Did you like listening to others or their playing?	251 (42.3)	269 (45.4)	520 (87.7)
Learning Motivation	[Q13] Did you like spending after-school time on this program?	217 (36.6)	235 (39.6)	452 (76.2)
	[Q14] Did any class become more fun, because of participating in this program?	270 (45.5)	212 (35.8)	482 (81.3)
	[Q15] Did you become any better in following class instructions, because of participating in this program?	248 (41.8)	285 (48.1)	533 (89.9)
	[Q16] Did you become motivated to get better grades for other classes, because of participating in this program?	224 (37.8)	320 (54.0)	544 (91.8)

**Discussion and Implications for Music Education**

This study described the developed school orchestra model and examined the students’ perceptions of orchestra experiences after the program. Overall, the students’ perceptions of

their orchestra experiences were positive. They reported relatively strong satisfaction with the program, positive experiences of performing, spending time practicing, building relationships, communication, listening to others and motivation for learning and for academic achievements. These findings are consistent with other studies that showed positive self-development through music tasks (Gillespie and Hamann 1998; Hendricks 2009; Sour 2009). The school orchestra model placed much consideration on serving students from low socioeconomic backgrounds. Limited learning opportunities are often associated with low socioeconomic status; however, inclusive music activities, such as school orchestras, provide these students with structured opportunities to experience positive interactions with peers, increase their self-confidence through assigned musical roles, and to view music as a potential career. Providing successful experiences and positive rewards through music-making can help students increase their intrinsic motivation for learning and participation (Fitzpatrick 2006).

Specific characteristics of this study should be noted: First, the socioeconomic characteristics of the school region were considered for school and student recruitment, since students from low socio-economic background were the focus of this research. Second, much effort went into selecting the repertoire so students would feel rewarded by their music-making, even though they knew a minimum number of techniques and had limited skills. Third, the school orchestra program was offered after school, while their caregivers were at work. Providing after-school care helps students to view school as more than just an educational facility.

Fostering personal and social skills through music can become a mainstream practice, and schools with orchestra programs can offer opportunities to reinforce these skills and competencies. Student orchestras offer many personal and social benefits to find and/or nurture talent, learn and practice relationship-building skills, and enhance self-confidence. Also, performing in communities for the public can promote self-esteem and a sense of reward.

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### **About the Authors**

Hyun Ju Chong is a Professor in Music Therapy at Ewha Womans University, Seoul, Korea. She has been facilitating diverse music education and therapy projects in school settings funded by the Ministry of Education. Among two major project areas, one is about administering various forms of programs starting from music-interest groups expanding into large orchestral programs. The major purpose of these projects is not only to gain musical skills but also to enhance non-musical (personal, social, etc.) skills to promote the quality of life in school for the students through music experiences. The second project area is about providing therapeutic programs for adolescents at risk who are in probation for delinquency. By teaching them drum playing and rap singing, they are able to alleviate their aggressiveness and repressed anger. Most recent research areas include how rhythm is related to and therefore facilitate working memory. Her research team is developing technical measurement tools for evaluating rhythm reproduction tasks. Research topics include children's ability of identifying rhythmic gestalts and reproduction of certain rhythmic patterns that change over the age. She is currently president of Korean Music Therapy Education Association, and editor of Music Medicine.



Soo Ji Kim is Associate Professor of Music Therapy Education, Director of the Ewha Arts Education Therapy Institute, and Director of Ewha Music Rehabilitation Center at Ewha Womans University in Seoul, Korea. Her research focus is the therapeutic use of music for facilitating human behavior within educational and medical settings. She has participated in the government research project regarding development and implementation of music education and therapy content for after-school programs including school orchestras for underprivileged students. Kim serves as chief editor of the Journal of Music and Human Behavior and is the vice president of the National Association of Korean Music Therapists.

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