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## K-4 Pre-Service Classroom Teachers' Beliefs About Useful Skills, Understandings and Future Practice in Music

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## Abstract

The purpose of this study was to investigate K-4 pre-service classroom teachers' beliefs about useful skills, understandings, and future practices in music. Questionnaire (N=74) and interview (N=35) data were gathered from teacher candidates enrolled in music methods courses at a large, western Canadian university. Music skills and understandings such as singing, listening, and integrating music across other subject areas were rated as "most useful," indicating a definite valuing of pedagogical content knowledge over content knowledge like music fundamentals, music history, or playing accompaniment instruments. Future music practices discussed by pre-service teachers were closely aligned to the beliefs they hold about the benefits of using music to achieve their own classroom teaching goals. No evidence was found to suggest they were able to take on the role of the music specialist. Recommendations for designing music courses for K-4 classroom teachers and future research are offered.

## Introduction

The children that teachers encounter in today's classrooms are widely diverse and use multiple forms of communication for making and sharing meaning (Cornett & Smithrim 2001; Piazza, 1999). Aesthetic development is, therefore, one of the most critical content strands of teacher education programs that aim to prepare general classroom teachers (Jalongo & Stamp, 1997). The level of involvement and role of the classroom teacher in the music education of young children varies in response to prevailing pedagogical approaches, the expectations of national and/or local educational authorities, school operating budgets, access to specialists, or geographical factors. Education in Canada, for instance, is a provincial rather than a national jurisdiction, and therefore, music programs are delivered by music specialists in some provinces and classroom teachers in others. To prepare classroom generalists for a range of possible music teaching assignments, teacher certification typically requires the completion of at least one music methods course. Bowers (1997) noted that instructors find it difficult to make decisions about the content for such courses. And indeed, a growing body of literature targeting the music teacher education of non-specialists reveals varying perspectives regarding appropriate content for these courses.

A dissatisfaction with music methods courses and lack of agreement regarding course curricula has been suggested by several North American researchers (Atsalis, 1987; Brown, 1988; Gamble, 1988; March, 1988; Morin, 1994; Saunders & Baker, 1991). To the contrary, Temmerman (1998) found that the content of music courses for non-specialists in Australian universities was generally consistent. Similarly, Montgomery (1995) reported that Canadian professors were quite consistent in their opinions about the musical competencies that should be addressed in courses for classroom teachers. Gauthier and McCrary's (1999) results showed stronger agreement among university instructors for the content of music fundamentals courses, than for methods courses or those combining methods and fundamentals.

Other researchers have explored classroom teachers' reflections on the usefulness of their undergraduate music courses. Gifford's (1993) pre-service respondents believed that their training in Queensland was "worthwhile and enjoyable," but "difficult," "too theoretical," and

did not meet their music teaching needs during field teaching experiences. Sefzik (1984) found that Texas teachers gave an overall rating of "moderate" to their training in music. Similarly, Goodman (1985) reported that classroom teachers in Ohio viewed their music-teaching competencies and pre-service courses as "somewhat effective," albeit some specific areas in which teachers report "substantial effectiveness" or "little effectiveness." Krehbiel (1990) reported that classroom teachers in Illinois held negative perceptions about their pre-service training in music, while Price and Burnsed (1989) found that classroom teachers who teach music valued the contents of their methods courses more than those who had no music teaching responsibilities. Elementary teachers in Mississippi felt "adequately prepared" to implement singing and listening activities, as well as to correlate music with other disciplines (Bryson, 1983). Similarly, New York and Florida graduates felt that their undergraduate preparation in music was "adequate" (Logan, 1967; Picerno, 1970).

Price and Burnsed (1989), Saunders and Baker (1991), Morin (1994), and Kelly (1998) identified several music skills and understandings (e.g., singing with children, listening activities, and correlating music with other subjects) that in-service teachers studied and used in their semi-rural and urban classrooms. These researchers found that the topics most frequently studied in undergraduate music courses (e.g., playing the recorder, music theory and reading notation, and music history) were not always those that teachers reported to be most beneficial in practice. These findings corroborate with those of other researchers who found little correlation between music course content and the music teaching competencies perceived by in-service teachers to be most useful in the classroom (Goodman, 1985; Kinder, 1987; Stafford, 1987; Vandenberg, 1993). The music content that classroom teachers tend to request for professional development experiences include: music resources for the classroom, strategies for collaborating with specialists, integrating music with other subjects, music listening, and moving to music (Bryson, 1983; Kritzmire, 1991).

Important implications for the content of curriculum and instruction courses in music can also be gleaned from the work of researchers who offer relevant information about the musical practices of the classroom teacher (Bryson, 1983; Kinder, 1987; Logan, 1967; McCarthy Malin, 1994; Montgomery, 1995; Moore, 1991; Morin, 1994; Picerno, 1970; Saunders & Baker, 1991; Stroud, 1981). The findings of these studies indicate that classroom teachers tend to use music to enhance other areas of the curriculum, as a recreational activity, or transition between subjects. The most common activities implemented by generalists in their own classrooms are: unaccompanied singing, singing with recordings, listening to recordings, integrating music with other subjects, moving to music, celebrating special occasions with music, and playing simple instruments.

Others have investigated factors affecting the nature, extent, and success of these musical practices. Goodman (1985) and Moore (1991) found that teachers' beliefs about the role of music in the classroom were significantly related to their practice. Gray (2000) uncovered a positive relationship between specific clusters of music concepts and activities studied in undergraduate methods courses and the frequency with which classroom teachers used them in their teaching. Amen (1983) reports, however, that the strongest predictor of classroom teachers' time spent on music instruction is grade level. Several other investigators also found that as the grade level

increased, the amount of music instruction decreased (Bryson, 1983; Logan, 1967; McCarthy Malin, 1993; Morin, 1994; Picerno, 1970; Pendleton, 1976; Price and Burnsed, 1989; Saunders & Baker, 1991). The attitudes of generalists towards music teaching, as well as confidence levels have also been identified as factors connected to their music teaching practices (Barry, 1992; Gifford, 1993; Kvet & Watkins, 1993; Lewis, 1991; Mills, 1989). Music methods courses have been found to positively influence attitudes, perceived confidence, and competence (Goodman, 1985; Morin, 1995; Russell, 1996; Vandenberg, 1993); however, music background may be related to achievement in these courses (Fisher, Rutkowski, & Shelley, 1992; Tanner, 1982).

In their summary of the research literature on music teacher education, Verraastro and Leglar (1992) point out that the research studies targeting music education for the classroom teacher have produced inconclusive results, and therefore, a weak foundation for articulating the objectives and content of courses. These scholars, along with researchers like Gauthier and McCrary (1999) and Kelly (1998) suggest that the pursuit of more definitive directions in this area requires the building of a cohesive group of studies. There is a continued need for investigations that might help teacher educators construct music courses that are of optimum use and value to the K-4 classroom teacher.

## Purpose

The impetus for this study grew out of a need to design two music methods courses, a one-credit course in year one and a two-credit course in year two, that would be required of all teacher candidates enrolled in a newly reformed undergraduate teacher education program designed to prepare K-4 classroom generalists. Given limited instructional time of 39 hours in total, there was a desire to target course content that pre-service teachers attending this particular university would find most relevant and meaningful. The purpose of this study was to investigate K-4 pre-service classroom teachers' beliefs about useful music skills and understandings, as well as their beliefs about music and their future music teaching practices. The specific research questions were:

1. What music skills and understandings do authorities in music teacher education regard as important for pre-service classroom teachers?
2. What music skills and understandings do pre-service teachers believe will be most useful in the classroom?
3. Are the mean ratings of pre-service teachers with diverse music backgrounds significantly different from one another?
4. Are the mean ratings of pre-service teachers in first year significantly different from those in the second year?
5. What do pre-service K-4 teachers believe about music and their future music teaching practices?

## Method

Subjects were 82 K-4 pre-service teachers enrolled in first and second year music methods courses in a new teacher education program at a large western Canadian university. During the program orientation at the outset of the 2001-2002 academic year, all subjects were given information about the study, procedures, expectations, and their rights. Essentially, they were asked to do two things. The first was to complete a questionnaire, and the second was to participate in a small group interview. Subjects were assured that their responses and comments would be treated confidentially, and that individuals would not be identified in any aspect of the research. They were asked to give their participation careful consideration, as the results would be used to design future music courses for classroom teachers.

Using guidelines developed by Thomas (1999), a self-report survey instrument was designed listing 30 music skills and understandings, as well as one item intended to gather information on pre-service K-4 teachers' music backgrounds. The topics included in the questionnaire emerged from a content analysis of current textbooks (N=5) and course outlines (N=8) produced by authorities specifically for music courses for classroom teachers. Strategies for analyzing documents suggested by Strauss (1987) and Miles and Huberman (1984) were employed. Documents were reviewed, content themes generated, and frequencies calculated. All topics considered important by authorities were included in the questionnaire. Three free response items were also provided so that respondents could add "other" topics not listed.

Further information about the documents sampled can be given. Current, mainstream textbooks analyzed included: *Integrating Music Into the Elementary Classroom*, 5<sup>th</sup> ed. (Anderson & Lawrence, 2001), *Experiences in Music*, 3<sup>rd</sup> ed. (Gelineau, 1995), *The Musical Classroom: Backgrounds, Models, and Skills for Elementary Teaching*, 4<sup>th</sup> ed. (Hackett & Lindeman, 1997), *Music Fundamentals, Methods and Materials for the Elementary Classroom Teacher*, 3<sup>rd</sup> ed. (Rozmajzl & Boyer-Alexander, 2000), and *Music in Childhood: From Pre-School Through the Elementary Grades* (Shehan Campbell & Scott-Kassner, 1995). The outlines listed under "Music for the Classroom Teacher" in the publication, *Syllabi for Music Methods Courses* (Society for Music Teacher Education, Executive Committee, 1992) were analyzed. These are a compilation of peer-reviewed, exemplary course syllabi intended to serve as models for the development and improvement of university music methods courses.

The questionnaire was administered to pre-service teachers at the beginning of the first class meeting and took about 15 minutes to complete. First, respondents read the following four statements and selected the response that best described their music background: 1) I have never participated in any kind of school music program or private music lessons; 2) I participated in music programs at school (e.g., elementary choir, band); 3) I took some private music lessons as well as participated in school music programs (e.g., play the piano or guitar at a beginning to intermediate level); or 4) I studied music seriously through private instruction, as well as participated in school music programs (e.g., play the flute at an intermediate to advanced level). Then, using a four-point rating scale, respondents indicated the extent to which they believed each of 30 music skills and understandings would be of use to them as classroom teachers. A rating of "1" represented "least useful" and a rating of "4" represented "most useful." The questionnaire was completed using computer answer sheets that were coded by subjects' year in the program, class section, and music background.

A focus group interview procedure was also developed to discuss pre-service teachers' beliefs about music and their future music teaching practices (Morgan & Krueger, 1997; Schensul, LeCompte, Borgatti, & Nastasi, 1999). Seven focus groups of 4-6 members were organized according to music background. Two groups consisted of members with stronger music backgrounds, two had weaker backgrounds, and three groups were more diverse with a mix of members with both stronger and weaker backgrounds. Interview questions were designed to solicit information about: 1) the benefits of using music in K-4 classroom teaching; 2) expected levels of involvement in music teaching; 3) expectations of instructional time spent providing musical experiences for children; 4) uses of music in future teaching; 5) factors hampering the use of music in teaching; 5) other professional development pursuits in music.

Interviews designed to take 30-45 minutes were conducted in the following manner: 1) The music background of the focus group, date, and start time of the interview was recorded; 2) The group was welcomed and the purpose of the interview was briefly outlined; 3) Agreement for audio-recording the interview was assured; 4) The micro-cassette was turned on and the entire interview recorded; 5) Each question was posed and discussed in sequence, with notes taken as a back-up; 6) The group was thanked for their contribution to the study; and 7) The end time of the interview was recorded, and then the duration calculated and recorded. Finally, the audio-recorded interviews were transcribed, analyzed and coded using methods of constant comparison (Bogdan & Biklen, 1992) and those pertinent to audio-taped data (Miles & Huberman, 1994).

## Results and Discussion

### Authorities Perspectives on Music for the Classroom Teacher

Overall percentages for the music skills and understandings included in the contents of 13 document samples appear in Table 1. This 30-topic listing satisfied the first research question by uncovering the perspectives of authorities in music teacher education regarding important content for music courses for classroom teachers. The broad range of topics resulting from the content analysis suggests that variability does exist in music methods curricula among universities and colleges.

Table 1. Music Skills and Understandings: Percentage of Pre-Service Teachers' "Most Useful" and "Least Useful" Ratings & Percentage of Inclusion in Textbook and Course Outline Contents

Music Skills and Understandings	Most Useful (%)	Inclusion in Contents (%)
Music Activities With Listening	87.8	92.3
Discipline and Classroom Management	82.4	15.4*
Music Activities With Movement	81.1	84.6

Music Resources for the Classroom	77.0	53.8
Singing With Children	74.4	92.3
Integrating Music With Other Subjects	74.3	76.9
The Value and Role of Music in Education	74.3	61.5
Multi-cultural Music Education	73.0	53.8
Music for Special Times of the Year	71.6	23.1*
Music for Special Learners	70.3	76.9
Music Activities With Classroom Instruments	67.6	76.9
Planning Music Instruction (Short Term)	60.8	92.3
Music Teaching/Presentation Skills	56.8	38.5*
The Elements of Music	55.4	46.2*
Methods and Approaches to Music Education	51.4	53.8
----- -----		
Music Skills and Understandings	Least Useful (%)	Inclusion in Contents (%)
----- -----		
Playing the Autoharp	82.4	61.5*
Playing the Ukulele/Guitar	71.6	46.2
Learning Theory and Music	67.6	61.5*
National Standards in Music Education	66.2	23.1
Music History	66.2	15.4
Playing the Recorder	64.9	38.5
Music Fundamentals and Musicianship Skills	64.9	61.5*
Playing the Piano/Keyboard	63.5	46.2
Using Basal Music Series	62.2	23.1
Music Teaching and Technology	59.5	30.8
Creating Music	58.9	76.9*
Teaching Music Reading and Writing	55.4	53.8*
Designing a Music Curriculum (Long Term)	54.1	23.1
Sequencing Music Curriculum Content	54.1	53.8*
Assessing Learning in Music	54.1	30.8

\*Indicates conflicting perspectives between pre-service teachers and authorities in music teacher education regarding music course content for the non-specialist.

Seventeen of the 30 music skills and understanding were included in 50% or more of the documents reviewed, which is indicative of some consensus around several content areas. The strongest level of agreement was found for eight content themes common to 75% or more of the

textbooks and outlines: planning short term music instruction (92%); music activities with listening (92%); singing with children (92%); music activities with movement (85%); music activities with classroom instruments (77%); music for special learners (77%); integrating music with other subjects (77%); and creating music through improvisation and composition (77%).

Such results are similar to Gauthier and McCrary (1999) and Temmerman (1998) where planning music instruction, music activities with listening, singing, and instruments, and music for special learners occurred as topics for study in 50% or more of the course curricula they examined. Interestingly, moving, integrating, and creating did not emerge as required content topics by these same investigators, while yet other topics like music theory, teaching methods, and analyses of school music curricula did.

### Questionnaire of Useful Music Skills and Understandings

Informed consent was obtained from 74 (90%) pre-service teachers for participation in the survey research, a very acceptable response rate (Thomas, 1999). A profile of the pre-service teachers can be given. Fifty-three (72%) were in the first year of a two-year after degree education program, and 21 (28%) were in the second year. A majority (40 or 54%) indicated that they had taken some private music lessons, as well as participated in school music programs, while 28% (21) reported participating in school music programs only. Smaller proportions of respondents (9 or 12%) reported that they had studied music seriously in addition to participating in school music programs, and even fewer (4 or 5%) indicated that they had never participated in any kind of school or private music program.

A summary of responses to the questionnaire completed by K-4 pre-service teachers was prepared using *SPSS for Windows* (Table 1) to answer the second research question. Fifteen of the 30 music skills and understandings were rated as 3 or 4, or towards the "most useful" end of the scale by 50% or more of the respondents. The ten "most useful" content areas receiving rankings of 3 or 4 by 70% or more of the respondents follow: music activities with listening (88%); discipline and classroom management (82%); music activities with movement (81%); music resources for the classroom (77%); singing with children (74%); integrating music with other subjects (74%); music's role and value in education (74%); multi-cultural music education (73%); music for special times of the year (72%); and music for special learners (70%). With few exceptions, these findings are consistent with an earlier study conducted by Morin (1994), and with the music content that generalists apply in their classrooms (Bryson, 1983; Kinder, 1987; McCarthy Malin, 1994; Kelly, 1998). Only one respondent used the "other" category, adding "sound exploration," "making instruments," and "showcasing music talent" as useful content for study.

Fifteen of the 30 music skills and understandings were rated as 1 or 2, or toward the "least useful" end of the scale by 50% or more of the respondents. The ten "least useful" content areas receiving ratings of 1 or 2 by 60% or more respondents were: playing the autoharp (82%); playing the ukulele/guitar (72%); learning theory and music (68%); national standards in music education (66%); music history (66%); playing the recorder (65%); music fundamentals and

musicianship skills (65%); playing the piano (64%); using basal music series (62%); and music teaching and technology (60%). Previous investigations, again, yielded similar results (Kelly, 1998; Montgomery, 1995; Morin, 1994; Price & Burnsed, 1989).

Further examination of the data in Table 1 reveals the congruencies and discrepancies between the perspectives of pre-service teachers and authorities in music teacher education regarding music course content for the classroom teacher. The data suggest that the majority of music skills and understandings considered most useful by pre-service teachers would be included in music courses designed for them. However, it is important to note that four content areas valued by most respondents in this study might not be addressed (discipline and classroom management, music for special times of the year, music teaching skills, music education methods and approaches), while six others not considered useful likely would be covered (playing the autoharp, learning theory and music, music fundamentals and musicianship, creating music, teaching music reading and writing, sequencing curriculum content). Previous research would indicate that such a mix match was likely to occur.

To address the third research question, the mean ratings of pre-service teachers with weak (W), moderate (M), or strong (S) backgrounds were grouped and compared using a one-way analysis of variance (ANOVA). Two of the four initial groups ("no music" and "school music only") were collapsed so that group sizes were considered acceptable for proceeding with the data analysis. Between group comparison results indicated statistically significant differences beyond the .05 level for the five music skills and understandings displayed in Table 2. It is important to note that when several means are being compared there is a higher probability of finding false differences. The smallest *p*-values reported in Table 2, therefore, are most significant.

Table 2. Group Comparisons

Music Skills and Understandings	d/f	F-ratio	p-value	Post-hoc
Planning Music Instruction (Short Term)	2,71	4.676	.012	S>M=W
Integrating Music With Other Subjects	2,71	5.439	.006	S>M=W
Methods and Approaches	2,71	4.308	.017	S>M=W
Music History	2,71	3.292	.043	S>M=W
Discipline and Classroom Management	2,71	3.383	.040	M=W>S

Planning music instruction, integrating music with other subjects, and methods and approaches in music were rated significantly higher by respondents with strong music backgrounds, than by those with weak or moderate backgrounds. Since pre-service teachers with strong music backgrounds might expect to be assigned some music teaching in the future, the higher values placed by them on planning and methods is understandable. However, significant higher rankings for integrating music by this group was unexpected. Past studies suggest that classroom generalists lacking background in music feel most comfortable with integration and therefore, want it emphasized in methods courses (Bryson, 1983; Byo, 1999; Kinder, 1987; Morin, 1994; Picerno, 1970; Price & Burnsed, 1989; Saunders & Baker, 1991).

Another interesting, but less robust finding resulted when comparing group ratings for discipline and classroom management. Respondents with weak and moderate music backgrounds gave "most useful" ratings, while respondents with strong backgrounds did not. The difference is more difficult to explain because this area of professional learning is typically a high priority for pre-service teachers across subject areas, regardless of academic background. It is reasonable to speculate that respondents with richer past musical experiences may have already gained some insights into strategies and approaches for managing effective music learning environments, and have other priorities for their learning. And finally, although statistically significant differences were found between group ratings for music history, the general trend towards "least useful" was consistent across all three groups.

The mean ratings of first- and second-year pre-service teachers were also compared using ANOVA procedures to answer the fourth research question. Statistically significant differences resulted between the two groups for seven content themes ( $p < .05$ ). Five of these seven were rated significantly higher by first-year respondents: playing the autoharp ( $F_{(1,72)} = 8.841$ ); playing the ukulele/guitar ( $F_{(1,72)} = 8.990$ ); playing the recorder ( $F_{(1,72)} = 8.665$ ); using basal music series ( $F_{(1,72)} = 12.205$ ); and music teaching and technology ( $F_{(1,72)} = 5.394$ ). It is important to note, however, that both groups agreed that these would be among the ten "least useful" music skills and understandings for classroom teachers. A similar response pattern occurred for a slightly higher valued topic, teaching music reading and writing ( $F_{(1,72)} = 5.394$ ).

Perhaps the most notable point of tension between first and second year respondents was their disagreement around the usefulness of studying music for special times of the year ( $F_{(1,72)} = 5.404$ ). The first year response tendency towards "most useful" was not shared by second year respondents. We do know from McCarthy Malin's (1994) study that music is used frequently for special occasions by elementary classroom teachers. It is possible that the additional year of teacher education experiences provided the second year group with ample, satisfying opportunities to connect music to holidays and seasons. Their ratings may reflect a readiness to explore other possibilities for musical learning in the classroom.

### The Focus Group Interviews

It was gratifying to have 35 pre-service teachers with varying music backgrounds agreeing to participate in the focus group interviews. A desirable purposive sample resulted from the range of subject types consenting. Concerns about achieving the point of data saturation led to a decision to include them all in the interview process (Bogdan & Biklen, 1992). Interviews ranged from 25 - 50 minutes with a mean duration of 33.4 minutes. Although the information gathered during this time did become redundant, it is important to note that the findings presented below are based on conversations with less than half (43%) of the subjects.

1. *What are the benefits of using music in K-4 classroom teaching?* Pre-service teachers responses to this interview question were numerous and diverse. Little variation was noted between the sub-groups organized by music background and program year. An outcome web of themes emerging from a content analysis of the transcripts is presented

in Figure 1. Six themes linked to related sub-themes were identified and rank ordered as follows: 1) learning mode; 2) teaching interaction; 3) communicative form; 4) aesthetic enjoyment; 5) group development; and 6) classroom management.

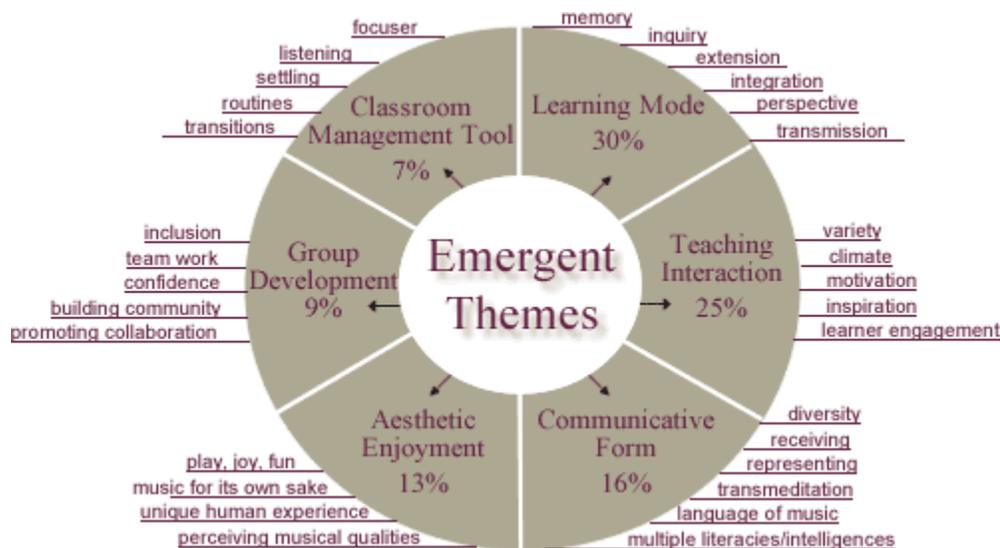


Figure 1

The use of music as a mode of learning in the K-4 curriculum surfaced as a benefit in conversations with 30% of the interview participants. "Integrating" music into non-music areas of the curriculum was broadly perceived by pre-service participants to "enhance learning." Comments were often made about employing music as a "vehicle of inquiry" or to "offer another perspective" to young learners. Drawing on numerous examples from their field experiences, music was rationalized as a "tool for transmission," "path to memorization," and viable way of "extending learning" in the classroom. The belief that music should be combined with other subjects was shared by classroom teachers participating in related studies (Kinder, 1987; Picerno, 1970; Stroud, 1981).

Twenty five percent of those interviewed argued that music plays an important role in augmenting classroom teachers' interactive skills. Effective teachers, they commented, use music to "engage students in learning" by tapping into their musical interests and imaginations. While presenting learning experiences, classroom teachers capitalize on music's ability to "inspire and motivate learners," "set the appropriate mood or climate for learning," and "provide variety." These benefits were thought to increase the quality and satisfaction of interactions between teachers and learners.

The use of music as an alternative form of communication in the classroom was the third major benefit identified by pre-service teachers (16%). Acknowledging the notion that music exists because not all ideas and feelings can be expressed in words, they felt children should have opportunities to "learn the language of music" for the purpose of extending their communicative potentials. In references to language and literacy development, participants talked about music as a unique form of literacy and the importance of drawing upon "multiple literacies" and

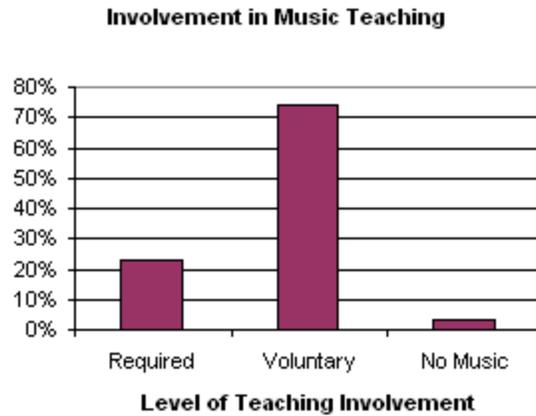
"transmediation strategies" in the classroom. For some, perceived needs to "teach to multiple intelligences" and "diverse learning styles" pointed to the value of giving children the option of "receiving information" and "representing their learning" through music.

For a smaller proportion of interview participants (13%), music is valued in the classroom purely as a source of aesthetic enjoyment. Like over 70% of classroom teachers in the Stroud (1981) study, they indicated that children should be provided with "playful," "fun," and "joyful" opportunities to perceive and respond to "musical qualities like rhythm, melody and harmony." Others agreed that music is a "unique human experience that should be valued "for it's own sake" in the K-4 classroom. Experiencing music in and of itself was thought to be a legitimate, educational goal in the classroom.

A fifth theme emerging from conversations with pre-service teachers (9%) uncovered a belief about the value of music in establishing and developing cohesive student groups. Music activities like singing were thought to help "build community" in the classroom. Some reported that playing in an ensemble or doing group projects would promote "collaboration" and "team work." Others felt that music-making is a very "inclusive" process and important crucial "confidence builder" for some children. These ideas are similar to Logan's (1967) respondents who felt that an important purpose of music in the classroom is that of "providing a happy, cooperative group activity" (p. 291).

Implicit in a small portion of interview comments (7%) was the beneficial use of music as a classroom management tool. Some pre-service teachers described music strategies used successfully by their collaborating teachers. Music, they reported, is an effective "focuser" and is often employed to "cue an instructional shift or transition" or "establish routines" in the classroom. Others observed that music can "relax or settle" active learners, or be used to develop the "strong listening skills" they considered necessary for maintaining a positive learning environment.

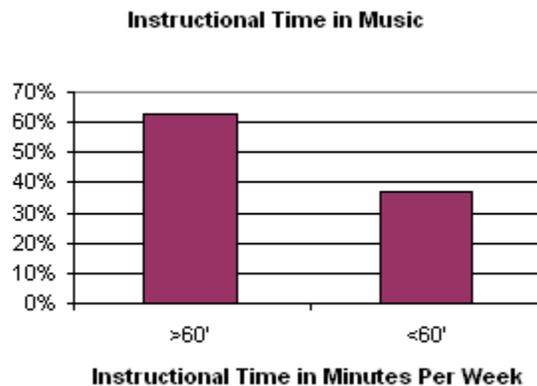
2. *Do you expect to be involved in music teaching in some way in the future? Talk about that involvement.* Participants' responses to this question were quantified and displayed in Figure 2. The large majority of participants (74%) expected to use music voluntarily in their own classroom teaching. The activities they elected to implement would be based on their individual music abilities and comfort levels. Less than one quarter (23%) thought that music would be part of their required teaching assignment. This is not surprising since the majority of K-4 music programs in this Canadian province would be delivered by music specialists. Moreover, these perceptions are consistent with studies that indicate a majority of classroom teachers do not teach much music because specialists are providing music instruction (Amen, 1983; Goodman, 1985; Krehbiel, 1990; Saunders & Baker, 1991; Stroud, 1981). One pre-service teacher (3%) predicted that (s)he would "never teach music or be able to use it to any great degree in the classroom." Year one subgroups with stronger music backgrounds were most optimistic about their abilities to teach music and predicted higher levels of involvement than any other subgroup.



*Figure 2.* Percentages of pre-service teachers' expected involvement in music teaching. During the interviews, subgroups with weaker music backgrounds expressed the most fear and apprehension about teaching music. They seemed "uncomfortable" with the idea and felt they "could not do what the music specialist does." Participants with stronger music backgrounds expressed more confidence, but also felt they "could not do as good a job as a specialist." Other researchers have also found that generalists realize their preparation in music is minimal and lack confidence in their ability to teach music effectively (Byo, 1999; Gifford, 1993; Krehbiel, 1990; Vandenberg, 1993). If necessary, many said they would "help out with the music curriculum" to the best of their ability. Lack of content knowledge and a definite discomfort with the performing aspects of music teaching, like singing or playing the piano, were issues frequently raised, acknowledging that understanding subject matter (content knowledge) is necessary for teaching music effectively. Talking about teaching music at higher grade levels elicited even more expressions of anxiety and stress.

3. *In your future classrooms, how much time do you think you might spend providing musical experiences for your students?* Data gathered in response to this question was easily quantified and appears in Figure 3. The majority of all participants (63%) estimated that they would likely spend more than one hour each week providing musical experiences for children. Of these about half estimated using music somewhere between 61 and 90 minutes each week, while the other half thought their accumulated time would exceed 90 minutes. While no participants talked about spending less than 30 minutes per week, the remainder (37%) could not envision devoting more than 31-60 minutes in a five-day cycle to music-related instruction. As expected, subgroups with stronger music backgrounds across both years in the program estimated spending more classroom time with music than did those with weaker backgrounds. These rather ambitious predications seem counter to an earlier study conducted by the investigator (Morin, 1994), as well as the work of other researchers who found relatively low average amounts of time spent by classroom teachers involving children with music (Amen, 1983; Bresler, 1993; Kelly, 1998; Krehbiel, 1990; Saunders & Baker, 1991; Smith, 1986; Stroud, 1981).

Figure 3.



*Percentages of pre-service teachers' estimates of instructional time spent providing musical experiences for children.*

Ample conversation was generated around the factors that would affect the amount of time a classroom teacher might allocate for music. As previous research indicates, several pre-service teachers thought that the grade level would make a difference. They expected to use "more music activities as the grade level decreased" or vice versa. Others felt that music time would increase or decrease depending upon the "time of year" (e.g., Halloween, Christmas), "children's interest in music," or the "curriculum studies underway in the classroom" (e.g., Sound, Ocean Life). Most admitted that a "need to prepare for public performances" (e.g., assemblies, concerts) could augment the time they would spend on music activities with their students. On the other hand, if they judged the "time children already spend in specialized music programs" as adequate, decreased classroom time for music would likely result. This idea supports Bryson's (1983) finding, which suggested that teachers without the services of a specialist used singing and movement activities more frequently.

4. *How would you use music in your future classroom teaching?* Except for some variation in emphasis and attempts to illustrate by example, it was interesting to find that discussions of pre-service teachers' future music practices were directly aligned with the six broad themes identified as benefits in Figure 1. In the context of discussing this question, the rank order of themes changed to: 1) learning mode; 2) classroom management; 3) communicative form; 4) teaching interaction; 5) group development; and 6) aesthetic enjoyment. This notion provides further support for Goodman's (1985) and Moore's (1991) findings which indicate that classroom teachers' beliefs and practices are closely linked. It is interesting that these resulting themes reflect a very different teaching emphasis from that of a music specialist. Also interesting is the close mesh between the interview and questionnaire data whereby the music skills and understandings judged "most useful" by pre-service teachers would directly support linking music with the academic and social development of children.

Plans for using music as a "learning tool in other subjects" dominated the discussion across all subgroups in both years of the program. Almost one third (29%) suggested a range of music-

based experiences such as: "teaching reading through song lyrics," "writing poems with spelling words," "introducing social studies units with folk songs," "studying science sound concepts with instruments," "exploring mathematical concepts of pattern in music," or "stimulating drawing or painting with recorded music."

Approximately one quarter of all subjects interviewed spent time talking about how they would use music in the classroom as a management tool (25%) or alternative form of communication (23%). Some envisioned the use of songs to "start or end the day" or "accompany morning weather reports and clean-up time." Others thought they would use "clap-back rhythm patterns to get children's attention" or "musical recordings to relax the class." Surprisingly, comments related to classroom management were elicited exclusively from subgroups with stronger and weaker backgrounds, and not the diverse subgroups. As a communication vehicle, pre-service teachers often mentioned that they would use music for "encouraging children to interpret ideas in the curriculum," "sharing classroom learning," "individual self-expression," or "multiple literacy development."

The remainder of the interview dialogue focused on the use of music to enhance teaching interactions (13%), group development (7%), and aesthetic enjoyment (4%). Comments representative of these themes included using music to "set the mood for a class," "build a sense of belonging," or "provide fun, recreational experiences." Also strikingly notable throughout these discussions is the parallel between pre-service teachers' initial perceptions of the activities they would lead in their classrooms and the actual music practices of generalists (Kinder, 1987; McCarthy Malin, 1994; Saunders & Baker, 1991; Stroud, 1981).

5. *What factors might hamper the use of music in your future classroom teaching?*

Participants identified a range of factors in response to this question (Table 3), but by far, pedagogical content knowledge of music emerged as the most critical. This theme occurred in the dialogue with all sub-groups in both first and second year, but as expected, most prominently among interviewees with weaker music backgrounds. Forty percent felt that they "lack[ed] musical ability and knowledge of teaching music" and expressed concerns about their "knowledge of and access to music resources." Some felt they "did not know enough about the potentials for connecting with music." Others feared "not knowing as much as the children" and were afraid to "teach them wrong." This finding supports those of others such as Mills (1989), Gifford (1993), and Byo (1999) who reported that generalists have little confidence in their ability to teach music. It also points to the need for stronger music teacher education for classroom teachers.

Table 3. Factors Hampering the Use of Music by Pre-Service Teachers in Future Classroom Teaching

Thematic Categories in Descending Order	Percentage of Interviewees
Pedagogical content knowledge of music	40%
Instructional time	20%
Lack of support for music teaching	11%
Noise and fear of distracting others	11%

Perceived interference with specialists' work	6%
Children's interests in "inappropriate" pop music	3%
Attention to learners' non-music interests and needs	3%
Presence of adults in the classroom	3%
Teacher's discomfort with teaching music	3%
Limited classroom budget for music materials	3%

Three other factors were raised many times by interviewees. Instructional time was identified as problematic by about 20% of participants who viewed music primarily as "conflicting with other curricular demands like language arts and mathematics." This finding was echoed in studies by Krehbiel (1990) and McCarthy Malin (1994). Some pre-service teachers (11%) also believed that "lack of support for music in the schools" by parents, peers, or administrators could affect their attempts to use music in their future practice. Another small group (11%) felt they might be bothered by the "noise level" and worried about "distracting other teachers."

Prospective teachers that were interviewed talked less frequently about a host of additional factors that could have a negative influence on their future music teaching. A few viewed music teaching as somewhat "territorial" and did not want to "interfere with the music specialist's work." Others felt that "children's interests in popular music were not always appropriate for school." Very child-centered participants stated that they would address "learners' current interests and needs and these might be non-musical." One stated that s(he) would "not teach music if there were any other adults in the classroom." A classroom teacher's "lack of comfort" and "limited classroom budget" were also mentioned as inhibiting factors.

*6.) Beyond the required music courses you are taking as part of your teacher education program, what other professional development experiences in music have you pursued so far?* The professional development pursuits of pre-service respondents discussed in relation to music education are summarized in Table 4. When conversing about supplementary learning, more than half (54%) of the pre-service teachers interviewed talked about the nature of the experiences they *planned* to pursue, rather than what they had undertaken thus far. Those in sub-groups from diverse or strong music backgrounds spoke most often and more enthusiastically about their desires to "learn to play the harmonica," "take a course in early music development," "enroll in keyboard and singing lessons," and the like. Time and money constraints made partaking in "music workshops" a more attractive option than longer courses for most interviewees across subgroups in both years of the program. Efforts to overcome these obstacles seem important in light of research findings indicating that professional development experiences can significantly effect the music practices of generalists (Begoray & Morin, 2002; Boyle & Thompson, 1976; Moore, 1991).

#### Professional Development Experiences in Music Undertaken by Pre-Service Teachers

Thematic Categories in Descending Order	Percentage of Interviewees
Plan to pursue professional development in music	54%
Compulsory music courses only	43%
Compulsory music courses and 1 or more elective courses	29%

Compulsory music courses and private music lessons	11%
Compulsory music courses and participation in choir	6%
Compulsory music courses and participation in music workshops	6%

It is interesting to note that participants with weaker music backgrounds elaborated on the type of professional development experience they would like most. Members of these subgroups would not want to "take a course in the music building" or "be actively involved in music-making." Instead, they desired "practical sessions especially designed for non-music people" where they could "just get more information." Courses, they felt, would be more positive and enjoyable if teacher-learners were not "assessed" or "judged."

Aside from some ambitious plans to take action to augment their music knowledge and skills, a large proportion of participants (43%) admitted that they had not yet pursued any professional development beyond the two compulsory music courses in their program. For those who did, 29% had taken one or more additional elective courses in music and/or dance education, 16% were currently enrolled in private music lessons, 6% were singing in choirs, and 6% had attended music workshops. Almost all of these supplementary experiences were undertaken by interviewees in subgroups with diverse or strong music backgrounds. Only one member of a subgroup with weaker music backgrounds reported taking a creative dance course and music workshop.

### Conclusions and Recommendations

The results of a content analysis of textbooks and course outlines suggest that varying perspectives do exist among authorities in music teacher education regarding music course curricula for the classroom teacher. Questionnaire responses indicate that K-4 pre-service teachers hold strong opinions about the usefulness of particular music skills and understandings which are largely in keeping with the opinions of in-service teachers, and tend to be the ones that are embedded in the music practices of generalists. Many, but not all, of the music skills and understandings identified as "most useful" by K-4 pre-service teachers would likely be included in courses designed for them. However, some conflicting perspectives were found between authorities and pre-service teachers, pre-service teachers with different music backgrounds, and pre-service teachers in the first and second year of the program.

Interview data show that pre-service teachers value music and can articulate numerous benefits for its use in their classroom teaching. Most predicted they would spend more than one hour each week involving children with music, but that this involvement would be voluntary and not part of a required music teaching assignment. The future music practices described by pre-service teachers were closely aligned to the beliefs they hold about the benefits of using music in their classrooms, and reveal a role that would address the teaching agenda of a generalist, rather than music specialist. Lack of pedagogical content knowledge in music was the most critical in a range of factors identified as possible barriers to their music teaching practice in the future. Professional development pursuits beyond their two required music courses were limited.

Future teaching and continuing education in music would more likely be undertaken by K-4 pre-service teachers with stronger music backgrounds.

Based on this study, it is recommended that music teacher educators consider targeting the music skills and understandings rated as "most useful" (e.g., singing, listening, integrating), and de-emphasize or eliminate those rated as "least useful" (e.g., playing accompaniment instruments, music fundamentals, music history) when designing courses for pre-service K-4 teachers. Since the perspectives of these generalists demonstrate a valuing of *pedagogical* content knowledge (concepts of what it means to teach music) over content knowledge (concepts of music as subject matter), priority should be given to crafting courses that help them plan and implement *children's* learning about and through music in the regular classroom context. These recommendations, however, do point to the need for an important discussion among music teacher educators about whether music methods courses should work to support and enhance classroom teachers beliefs and practices, or seek to develop and change them.

The participants in this study offered no evidence to suggest they were able to take on the role of the music specialist, providing the leadership, expertise, and independence necessary to deliver the music curriculum per se. Their beliefs about useful music course content and future music practices, however, are helpful in determining what specific aspects of a music curriculum generalists can reasonably be expected to implement (e.g., relating music to other subjects). An exploration of the differentiated, but complementary roles of generalists and specialists in the music education of young children should be addressed in any music course for the classroom teacher. Furthermore, clear indications of stronger investments in their own classroom teaching goals and responsibilities signals a greater need for addressing issues related to holistic, interdisciplinary approaches to teaching involving music, especially for higher grade levels. In areas where music specialists are not employed, methods course instructors may have to take on a broader, more transformational curriculum agenda, preparing the classroom teachers to deliver all strands of the K-4 music program. And finally, collaborative, university-school partnerships are recommended as fertile ground for investigating ways to inform and improve music course curricula.

Directions for further research can be offered. Studies are needed to determine the expectations that educational authorities hold for K-4 classroom teachers in music education, as well as the relationship between expectations and the content of music methods courses. Similar survey research should be conducted with pre-service teachers attending other universities. Follow-up studies could be conducted with pre-service teachers once working in the field to examine the degree to which they use particular music skills and understandings and the ways in which they are used. New courses emphasizing pedagogical content knowledge in music, and employing school-based formats should be designed, piloted and evaluated for their effectiveness. And finally, it would be advantageous to design studies to identify the essential music learning conditions for classroom teachers.

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