MUSIC AND LEARNING RESOURCES - A NATURAL COMBINATION

CENTRE FOR NEWFOUNDLAND STUDIES

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Music and Learning Resources - A Natural Combination

by

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A Paper Folio submitted to the School of Graduate Studies $in\ partial\ fulfillment\ of\ the\ requirements$ for the degree of Master of Education

Memorial University of Newfoundland



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Chapter One

Overview of the Study

Introduction

When I began to think about my research component for the Masters of Teaching and Learning program, School Resource Services, I decided that I wanted to incorporate my experiences, my interests and my curiosities into a piece of work that would contribute something new to both the fields of music education and learning resources. As an educator, part of my teaching assignment has involved music, in some form, from Kindergarten to Level Three. As a graduate student, I am involved in studying the current issues in the area of Learning Resources. As a researcher, I wanted to connect both disciplines in my work.

It soon became clear that the paper folio route was the one to pursue. I chose this route because I could examine distinct topics within the contexts of 'music' and 'learning resources'. Using this research format, I felt I could demonstrate the natural links between these two disciplines. Dr. Andrea Rose, professor of music education, agreed to be my supervisor. Later, when Dr. Rose went on sabbatical, Professor Ki Adams agreed to assume this role. Further discussion with these professors and other individuals in the music education and learning resources fields solidified my belief that music and learning resources are, in fact, a natural combination.

Additional research and exploration led to the choice of topics for the folio which I will discuss in more detail in each of the chapter outlines.

Rationale

What do I bring to this work?

The first thing that comes to mind when I think about this question is that I bring a love of music and a love of working with young people. With these two passions come years of personal experience with music teaching and learning as a student, a private instructor and a music teacher for six years in various rural schools.

As a young piano student, beginning lessons at the age of seven, I realized I had found something enjoyable and thus practiced diligently. I progressed well with several local teachers and later, in my university years, studied with well-known St. John's music educators Dr. Eric Abbott and Mrs. Jane Steele. Throughout my years as a piano student, I participated in the annual Kiwanis Music Festivals in Carbonear, completed six levels of the Royal Trinity College of Music Examinations (London), and often played in local churches

Coming from a family where both my parents and my sister were teachers, there was never any doubt in my mind, even at a very young age, that I would become a teacher as well. I hoped that music would somehow play a part in this career choice. After an unsuccessful audition for Memorial University's School of Music, and the death of my instructor Dr. Abbott, I decided not to audition again. Instead, I continued private lessons with Jane Steele and pursued a Bachelor of Elementary Education degree with a concentration in music. While completing the courses for my music concentration, I quickly became aware of the fiercely competitive nature of some of the music students

and was relieved not to be a part of this culture. I vowed to myself that if I became a school music teacher I would pass on my love of music and my love of piano playing simply for what they were for me - experiences to be enjoyed and shared with others.

While in senior high school, I took on the challenge of teaching several beginning piano students. This was an eye-opening experience for me as I realized first hand the complexities of teaching piano. As well, I soon recognized students who had an intrinsic love of the art and the students who were simply fulfilling a parents' wishes. I continue to teach privately today but I limit myself to those who are truly dedicated to developing their musical skills.

As a student who loved music class throughout my school years, I fondly remember those teachers who obviously loved what they were doing. They tried different things, planned wonderful concerts and put in hours of extra time. But most of all, I recall that they had a musical spirit that was contagious. These teachers welcomed all interested students into the various choirs and did the best they could, often with very limited resources. These were the music teachers I most wanted to be like. They taught music as an art to be experienced and loved by all. This is not to say that they didn't give and expect quality work. These model teachers welcomed any and all students as long as they gave their personal best.

It is this philosophy of teaching music that I bring to my career today. In my meetings with students, I endeavour to nurture in them a knowledge, love and appreciation of music that will stay with them for a lifetime.

Looking back on my life's experiences with music, my main disappointment is that I have never had the opportunity to formally study the art of working with choirs. I have had to do my best based on what I learned from my own choir directors as well as from reading and attending music conferences. I have always felt very strongly that there should be ongoing professional development for classroom teachers who teach music to ensure that they are better equipped to rehearse and conduct choirs. A lot of pressure is placed upon these non-specialist music teachers to direct as many as three choirs and perform for the community at concerts and music festivals. The one music education course in the Faculty of Education. (Education 3130 or 3160), Memorial University of Newfoundland, cannot prepare teachers to work with choirs or other ensembles as there is such a wide variety of topics to explore in one term. It would be very interesting to document how many teachers are in this situation in Newfoundland. That is to say, those teachers who have musical talent but were unable to access any courses to help them learn how to use this knowledge in the classroom unless they pursued a music degree. I find it saddening that these professionals are not permitted access to most of the courses offered by the School of Music, Memorial University of Newfoundland. At the same time, perhaps the university needs to be preparing more music teachers who are capable of teaching a variety of subjects along with music. The number of schools in Newfoundland and Labrador where one could teach music full-time seems to be very low and concentrated in urban centres. With cross-curricular integration being encouraged in today's classrooms, all teachers need to have well-rounded preparation and be

comfortable with working in multiple disciplines. Of course, general music teachers would have to have an appropriate level of musical proficiency, whether they are specialists or classroom teachers. If the educational leaders are truly concerned about the music education of all Newfoundland and Labrador students, they would address the issue of preparing non-specialist music teachers to use their knowledge of music properly in the classroom - as soon as possible.

To this paper folio I also bring an enjoyment of working with learning resources and of planning with teachers. I have had some experience with resource-based planning sessions in my position and I have attended several inservices on resource-based learning. For several years I have been the teacher responsible for our learning resource centre and have implemented some resource-based work with both teachers and students. Most recently I have completed relevant courses as part of my degree program for the Masters of Education degree, School Resource Services

As a student in school, I saw teachers who were extremely textbook-oriented and uneasy about trying anything remotely new or different. These are the classes I cannot or choose not to remember. The classes that do stand out in my mind were planned by teachers who were innovative, creative and who simply made learning fun and meaningful. They had students reenact the battle on the Plains of Abraham, invited other school choirs to perform with us in a joint choir, and took us to productions at the Arts and Culture Centre in St. John's. These were teachers who followed a resource-based philosophy long before it received this formal name.

Now, as a teacher myself, I am even more aware of the lack of learning resources and activities available in many schools. Teachers must, therefore, spend many extra hours creating their own resources to suit their needs. It is a challenge as a learning resource teacher to stretch limited budgets for the benefit of all or to be creative when funds do not even exist. This is perhaps why I enjoy the work. It is ever-evolving and extremely fulfilling when students benefit from carefully planned work.

Finally, I bring a desire to learn more about both the fields of music and learning resources and a willingness to go where the research leads me.

What do I hope to learn?

I have no way of really knowing exactly what I will learn from completing this paper folio. I do know that I want to further my understanding of how learning resource teachers and music teachers can work together for the benefit of the students, teachers and the entire school curriculum. I also want to begin to learn how various technologies such as CD-ROM and computers can be beneficial resources in the music classroom, especially in small rural schools where resources are often limited. Hopefully these learnings will all contribute to an extended understanding of the research process and will be of benefit to myself and to others.

How will this paper folio contribute to the fields of music education and learning resources?

In terms of the field of music education, my primary contribution will be to examine the music program currently authorized in our Province through the lens of resource-based learning. I will analyze all current curriculum guides, course outlines and outcome documents to see if music fits into a resource-based framework. In areas where it does not correlate, I will discuss the implications for the field and possibly offer some suggestions. I will also look at the use of computer technology in the music classroom. What are its benefits and what are common challenges for educators? How can technology help the teacher who is not comfortable with the latest equipment and software? How can schools and teachers begin working with technology if they have little or no access to hardware and software?

In terms of learning resources, I will examine the integration of music within all levels of the curriculum. Cross-curricular approaches to teaching and learning are consistent with a resource-based philosophy and are also a great way for teachers to provide musical experiences for students in schools that cannot offer a formal music program.

The following chapters are a result of the previous intentions and philosophies.

Chapter Two

Paper Folio One: An Examination of Current Music Curricula in Newfoundland

Through the Lens of Resource-Based Learning

Introduction

The Government of Newfoundland and Labrador endorsed the implementation of resource-based learning in classrooms in this province when it authorized Learning to Learn in 1991. This document sets the guidelines and policies for resource-based learning in Newfoundland and Labrador schools. The goal was to ensure that in this age of information and technology, students would develop independent learning skills and become life-long learners. No longer was the textbook the only tool; it was now just one of many resources a teacher could use to meet the course objectives while catering to the varied learning styles of students in the class.

Music by its very nature is resource-based. For as long as music has been taught in schools, music teachers have been going outside the provided resources to enrich instruction and keep students motivated - it has been an accepted part of every music teacher's role. For example, consider the yearly school Christmas concert. If music teachers were to solely base the concert program on the musical ideas contained in the authorized resources or even the recommended resources from the Department of Education, after just a couple of years Christmas concerts would become redundant and boring. Music teachers, therefore, regularly go to other sources to plan a concert that is always fresh and entertaining.

The current Kindergarten to Level Three music curriculum offered in our Province seems to be resource-based. Certainly some programs, such as Exploring Music at the intermediate level, are very much resource-based. It is my intention in this first paper to look at a definition of resource-based learning, examine its history, put it into context for the Newfoundland and Labrador education system and use it as a guide to examine the entire Kindergarten to Level Three music program in current use. From this examination I will identify any areas of the program which are lacking in terms of a resource-based philosophy, discuss the implications and offer some possible solutions.

Definitions and History

It is difficult to provide a succinct definition of resource-based learning. One may begin by saying that resource-based learning is, first and foremost, a philosophy. It is not a passing fad to which those involved in education are paying lip-service; but the overall guiding force in the development of curriculum and instructional strategies for educators in many places including this Province. Due to the way that many new trends in education have often come to exist in the educational system, many teachers are resistant to change and view resource-based learning as another concept that will eventually be forgotten. However, resource-based learning has come to Newfoundland and Labrador as a matter of common sense. It is a way to motivate students to learn that has already been successful in other provinces of Canada and in other parts of the world such as Britain. All involved in education should therefore familiarize themselves with resource-based learning because it is a valuable philosophy of teaching and learning that is likely to stay.

Resource-based learning actively involves students in the learning process. It

helps them "learn how to learn" in order to be able to access and effectively utilize the vast amount of information available today. Because the amount of knowledge known to humankind doubles every few years, we can no longer expect students to master a defined body of knowledge as preparation for functioning competently in today's workplace.

Obviously some basic concepts about the world and society are necessary for students to understand, but it is much more beneficial for students to learn how to access the vast amount of information available to them so that they can function in any type of situation they may encounter in life.

According to Learning to Learn (1991) resource-based learning is identified by the following characteristics:

- students actively participate in their learning;
- learning experiences are planned based on instructional objectives;
- learning strategies and skills are identified and taught within the context of relevant and meaningful units of study;
- a wide variety of resources is used;
- locations for learning vary;
- teachers employ many instructional strategies;
- teachers act as facilitators of learning; continuously guiding, monitoring, and evaluating student progress; and
- teachers work together to implement resource-based learning across grade levels and subject areas (p.3).

Although many books have been written on resource-based learning, these

previous characteristics provide a concise look at the most important elements of this philosophy. Resource-based learning, then, is a philosophy that prepares students to become lifelong learners by ensuring they can effectively utilize the unlimited resources in the world around them to gain knowledge and understanding. The role of the teacher in the process is mainly that of a facilitator and a guide for learning.

Resource-based learning, though relatively new to the educational scene in Newfoundland and Labrador in a defined sense, has been recognized for more than twenty-five years, with its origins in Britain. Two educators that are commonly linked to the development of this philosophy are Norman Beswick and L.C. Taylor.

Taylor's book, Resources for Learning, first published in 1971, suggests that his ideas were actually being thought out in the 1960's. The book discusses shortcomings in secondary education in Britain and proposes some possible resolutions to these problems. Taylor recognized the downfalls of a system that expected everyone to sit quietly in his/her seats and learn the same amount of material from the same set of textbooks in the same amount of time. He hoped to improve the quality of education for students by helping educators realize that students cannot always be expected to learn at the same pace and in the same way, and that in order for them to reach their full academic potential, they may sometimes need to have material presented to them individually or in a different manner. Taylor states:

For severely practical reasons schools in the past have emphasized the 'being told': if children are in any case to be gathered together into schools, what cheaper

than that their supervisors should talk to them, or more orderly than that they should sit attentive in desks? We have established a **teaching-based** system of learning. If we were instead to arrange things for 'active personal interaction with people and things' we'd have a **resource-based** system of learning. (p. 233)

Taylor later says that:

If we move towards resource-based methods then our propensity to develop coherent systems will cause many contingent alterations in the school - in classroom layout, timetable practices, style of assessment, kinds and quantities of learning materials, school architecture, the functions of the teacher, classroom relationships, and the 'arts and habits' of learning. Thus what may be - should be at first - a small shift, can bring about in time a significant change in the texture of secondary schooling. But to alter the method in use in a school is no easy thing. (p. 252)

It is quite clear that Taylor was a progressive thinker in terms of the nature and structure of schools and learning systems. Yet more than a quarter of a century later, we still have educators adhering to traditional methods of teaching when much evidence points to the fact that there is more involved in meaningful learning than sitting children quietly in rows and spoon-feeding them facts.

Beswick's book entitled Resource-Based Learning was first published in Britain in 1977. In it he looks at education, communication media and library science in terms of their position in a world of change, their relationship to resource-based learning and their affinity with each other. He talks about how quickly information becomes irrelevant and out-of-date and believes that "the task of the teacher is no longer to purvey facts but to develop understanding, which includes the planning of experiences and tasks from which that understanding can grow" (p. 9). Beswick goes on to discuss the importance of putting a greater emphasis on concepts and attitudes rather than facts, the need for students to be able to find out things for themselves, the preparation of students for lifelong learning and the change in the role of the teacher from one of instructor and director to that of collaborator and advisor. These ideas have continued to play a major role in the refinement of what resource-based learning means to educators today.

It is clear that resource-based learning originated in Britain but it is the 1982 document, Partners in Action: The Library Resource Centre in the School Curriculum, developed by the Ontario Ministry of Education, that brought these ideas to Canadian systems of education. This document echoes many of the concepts put forth by both Taylor and Beswick. The rationale states:

Resource-based learning refers to planned educational programs that actively involve students in the meaningful use of a wide range of appropriate print, non-print and human resources. Such programs are designed to provide students with alternative learning activities; the selection of activities and learning resources, the location of the activities, and the expectations for a particular student depend on the objectives established for that student. (Partners in Action, 1982, p. 1)

This document was to be the bridge between the development of curriculum in Ontario and classroom practice in that province. It soon became the model for the development of resource-based learning programs and resource centres in many Canadian schools.

In 1995 a revision to Partners in Action appeared in the draft form of Information

Literacy and Equitable Access: A Framework for Change. The document is nonprescriptive so that individual Ontario boards can adapt it to their own situations.

The Introduction states that the "ministry recognizes the continuing value of Partners in Action with regard to important concepts. However, the world of information and learning has changed dramatically over the past decade, and significant changes in our approach to information technology and information skills instruction are required if we are to prepare our students for success in the future" (Information Literacy and Equitable Access, 1995, p. 1).

The emphasis in these documents from Ontario is certainly ahead of what has been developed in Newfoundland and Labrador in that technology is very much in the forefront. Although this is changing here, there still seems to be an imbalance between the amount and quality of technology, including computers, available to students in many urban schools and technology available to students in the majority of rural Newfoundland and Labrador schools. However, since Information Literacy and Equitable Access is a progressive and guiding document in the field of learning resources, it will probably lead the way for other Canadian systems of education in terms of keeping the thrust of

resource-based learning current.

The document which has the most direct relevance for Newfoundland and Labrador educators, and which has drawn on many of the previously mentioned sources, is Learning to Learn: Policies and Guidelines for the Implementation of Resource-Based Learning in Newfoundland and Labrador Schools. This document was authorized by the Minister of Education in 1991 and discusses models for resource-based learning, leadership roles and responsibilities, the development of school facilities and collections for the proper implementation of this philosophy. An opening statement summarizes the focus of the document:

As students in today's schools approach the 21st century, they find themselves in an era of rapidly increasing knowledge and changing technology. It is no longer adequate for students to acquire a select body of knowledge and expect it to meet their needs as citizens of the next century. The need for lifelong learning is shifting the emphasis from a dependence on the 'what' of learning to the 'how' of learning - today's students must 'learn how to learn.'

(Learning to Learn, 1991, p. 1)

This rationale provides a clear vision for the examination of all current curricula offered in Newfoundland and Labrador schools, including music. As students are developing their musical potential and understanding, are they also being prepared for the world of the next century, and are the skills they are acquiring beneficial to other areas of school and life?

Curricular Analysis

The current Program of Studies (1998-1999), a Newfoundland and Labrador

Department of Education document which outlines the entire Kindergarten to Level Three curriculum for any given year, includes opening statements regarding the goals of the music curriculum for each level of schooling. Although expectations increase as students move through the system, the common focus for all levels is the development and subsequent nurturing of aesthetic sensitivity through meaningful and challenging musical experiences. This is meant to be achieved through the use of resources authorized by the Minister of Education which are deemed essential for curriculum delivery, recommended resources which are valuable supplementary resources also recommended by the Department of Education, and additional resources provided by such places as the school resource centre. Many teachers, however, will further supplement the course materials with their own resources.

An individual look at the characteristics of the resource-based philosophy as applied to the music curriculum for each level will show how the stated goals and resources work together to achieve the Department of Education's policy of resourcebased learning.

Primary and Elementary

These two areas of schooling can be examined together as the Elementary music curriculum is simply an extension of what has been learned in the Primary music curriculum. Many of the specific objectives for each of the music outcomes as stated in the new draft provincial government document entitled *Music Education Framework* (1998) are exactly the same. Those that are different will have additional requirements for the student such as "extend", "more complex", "increased length" in terms of what students are expected to learn.

The most recent Primary music curriculum guide in existence is Primary Music:

A Teaching Guide, authorized in August, 1983. The latest Elementary document is

Elementary Music: Curriculum and Teaching Guide from 1985. These two documents will soon be enhanced by the draft document Music Education Framework (1998). This document will be the guiding force for music teachers in terms of what students will be expected to accomplish at various stages in their school life. This K-12 framework document will not replace the detailed curriculum guides but will simply identify the expected outcomes towards which teachers must guide their students. The ideas for instruction found in the curriculum guides are still very valuable to teachers and will help students achieve the stated outcomes. The framework document consists of sixteen general curriculum outcomes in the areas of performing and creating, listening, reading and writing and understanding and connecting concepts. It also identifies specific curriculum outcomes for primary to senior high.

The current *Program of Studies* (1998-1999) states that "music is an essential part of the Primary curriculum because it promotes growth in the three major areas of learning: the affective, cognitive and psychomotor". From Kindergarten to Grade Three.

"the elements of rhythm, melody, harmony and form, and the expressive controls of texture, timbre, dynamics, tempo and articulation, are explored through direct experiences such as singing, speaking, playing, moving, listening, hand signing, notating, reading, writing, deriving, analysing, improvising, composing and evaluating"(p.31). The authorized resources for the program include books such as *The Kodaly Context, Music Bullders I and Music for Fun, Music for Learning*. A complete list of both the authorized and recommended resources for the Primary program is found in Appendix A and a list for the Elementary level is found in Appendix B.

It is now necessary to look at each characteristic of resource-based learning that has been approved in *Learning to Learn* and analyze its effectiveness in terms of the Primary and Elementary music programs.

One characteristic of resource-based learning is that "students actively participate in their learning" (Learning to Learn, 1991, p. 3). This is an area where the Primary and Elementary music programs are designed very well. The entire focus in these early years is to keep students constantly doing - singing, dancing, skipping, clapping, using expressive voices, acting out characters from a story; the list is endless. One of the curricular outcomes in the new framework document Music Education Framework states that "students will develop performance skills as a foundation for and means to experiencing music" (p.36). Within this outcome is a specific objective which says "students will perform musical patterns with body percussion and simple classroom instruments" (p.36). Another outcome states "students will respond personally, critically,

and creatively to music by moving, performing, writing, symbolizing, illustrating and graphing, and discussing and sharing thoughts, images and feelings (e.g., illustrate)" (1998, p. 46). These outcomes and objectives clearly indicate through action verbs such as perform, illustrate, sing, demonstrate and discuss that active learning is very much a part of the Primary music program. That is not to say that the teaching of basic concepts through traditional methods such as lecturing or worksheets does not have its place at appropriate times. It should not, however, take precedence.

Another criteria that must be met is that "learning experiences are planned based on instructional objectives" (Learning to Learn, 1991, p. 3). This is where the new music framework document is extremely valuable. For each of the prescribed outcomes, several specific objectives are listed. For example, a general outcome for elementary music is that "students will demonstrate the intrinsic fusion of concepts, skills and feelings through performing and creating" (p.38). A specific objective for this outcome states that students should be able to "maintain fluency in performance with the integration of two or more parts" (p. 38). It is clear what is expected for children to know at the end of each major level of schooling. Also it is up to individual teachers to decide, using the resources provided and recommended, and going to sources on their own, exactly what is the best way for students in their particular classes to meet each of these outcomes in the time provided. So planning is a necessary yet individual step which hopefully will ensure that all Newfoundland and Labrador students meet the same objectives regardless of which school they attend or what method their teacher uses to deliver the curriculum.

Teachers must also be aware, that for resource-based learning to occur, "learning strategies and skills must be identified and taught within the context of relevant and meaningful units of study" (Learning to Learn, 1991, p. 3). I believe this is related to another feature of resource-based learning which is that "teachers should work together to implement resource-based learning across grade levels and subject areas" (p. 3). These two features of the resource-based philosophy complement each other in that teachers can plan units of work across and within curriculum areas to help achieve objectives for music and other subjects at the same time. Students become aware of the links between parts of the curriculum while learning required skills and strategies. This is not to say that all units of work should be cross-curricular but that, when appropriate, learning situations be designed this way.

In an ideal school setting (and this is where time is often an inhibiting factor) teachers would have the opportunity to meet and collaborate on topics and themes being covered in particular classes throughout the year. The music teacher could then integrate classroom themes with what is being covered in the music class. That is not to say that the theme must dictate the entire music class or that musical concepts should be compromised, but simply that songs, dances, games and other activities could be theme related. This makes the learning more meaningful and more relevant. The Primary and Elementary music outcomes include a section on understanding and connecting contexts. An excellent example of a related objective states that "students will develop self and socio-cultural awareness through music of Newfoundland, Canada, and other cultures"

(Music Education Framework, 1998, p. 58). The Musicanada program has some excellent musical selections with Canadian and even Newfoundland and Labrador origins. This authorized resource can easily be used to help achieve this specific objective.

Another feature of resource-based learning is that "a wide variety of resources is used" (Learning to Learn, 1991, p.3). The Primary and Elementary music programs do have many resources - both authorized and recommended. However, music teachers will often bring in additional materials to supplement the topics being covered in each class. These may include storybooks, household objects for making homemade instruments, library resources, cassette tapes, guest speakers, etc. Thus, if a teacher uses only the resources listed for the program he/she may not be properly meeting this resource-based criteria. Creativity is needed for going outside the provided resources to find materials to maximize student learning and motivation.

"Locations for learning vary" in a resource-based curriculum (Learning to Learn, 1991, p. 3). The potential for using different locations as part of the Primary and Elementary music programs is strong and can be linked to the curricular outcomes. The most common locations are of course the music room, gymnasium or auditorium, regular classroom and sometimes the school or public library for research. However, in order for students to "explore the role of music in society, demonstrate a respect for the contributions of others in music making, and to explore musical relationships between the community and school," (Music Education Framework, 1998, p. 42), other places of

learning need to be considered. If possible, field trips to Arts and Culture centres and various concerts and theatres would be ideal. In many places in Newfoundland and Labrador, however, schools do not have the means to avail of such activities, but they can bring in local musicians or visit local churches and other groups. The key is for teachers to be creative and to explore other options for meaningful learning experiences.

Two equally important features of resource-based learning are that teachers "employ many different instructional techniques and teachers act as facilitators of learning; continuously guiding, monitoring, and evaluating student progress" (Learning to Learn, 1991, p. 3) The Primary and Elementary music programs would not survive if they relied on the traditional lecture method of teaching. Many different teaching styles are needed to reach all children because they have their own individual learning styles. Some are better at singing, others excel at dance, still others thrive on instrumental activities. Many children are visual learners and programs such as the Kodaly method help with this. Others need to manipulate felt notes on a flannel board before learning truly occurs. Teachers must have a knowledge of various learning styles and then design lessons to accommodate them. Also, teachers must guide children to learn - not tell them. This has often been a concern when referring to the resource-based approach since many feel it takes longer for a child to discover what the teacher wants them to learn than when the teacher simply tells them. This is something educators must work out for themselves. There must be a balance between the transmissional approach and the transactional and transformational approaches of curriculum development. The Primary and Elementary

music programs certainly lean towards a transactional mode which is congruent with a resource-based style.

Intermediate

The Intermediate music program consists of two streams; a general stream for which the program is Exploring Music, and a specialist stream where there is a choral or instrumental focus on performance. The Program of Studies for 1998-1999 states that the prescribed learning outcomes may be realized through a classroom program or a particular performance category. The general program, which in fact may be delivered by a specialist, is ideal for non-specialist music teachers and allows music to be taught in schools that may not otherwise have been able to offer a music program. A non-specialist music teacher is usually a classroom teacher that has a certain level of musical proficiency attained in ways other than that of a university music degree. They may, for example, have an education degree with a concentration or minor in music supplemented by private music study. A complete list of authorized and recommended resources for these Intermediate programs is found in Appendix C.

The Intermediate program builds upon the skills and understandings already learned in the Primary and Elementary grades. As students, by this time, should already have some basic music skills, the Intermediate years are seen as an opportunity to provide enrichment to the music program through an application of these skills and knowledge in different situations. This moves students beyond the technical into the expressive realms of music - from the lower order to the higher-order thinking skills (*Program of Studies*, 1998–1999).

Following is an application of the features of resource-based learning to the Intermediate music program.

In terms of active participation in learning, the Intermediate program has many opportunities. If students are members of a choral group or instrumental ensemble, the involvement in obvious. In the Exploring Music program there are also many opportunities for students to be active. For example, there is a unit on researching music in the community in which students are involved in collecting data and interviewing people in the community. This process is definitely "hands on." After interviewing local musicians, students invite them to the school for a performance. This ties in nicely with the objective that "students will demonstrate the value of musical experiences through their personal and community involvement with music and the arts" (Music Education Framework, 1998, p. 55). Thus the criteria for active learning can easily be met under both streams of the Intermediate music program.

In a resource-based environment learning experiences are planned based on learning outcomes. Therefore, specific instructional objectives, designed to help students achieve these outcomes will be the major organizing component for all music programs when the Music Education Framework document is finalized for use in the schools. All sixteen outcomes in the document apply to various areas of the Intermediate program in some way. In all areas of the curriculum, not just music, teachers will have to be very

clear about what students are expected to know at the end of any particular unit and this will form the basis for evaluation. Accountability is critical as teachers are required to demonstrate that they did indeed teach for each specific objective.

Intermediate music allows for strategies and skills to be taught within meaningful units of study. For example, in Exploring Music, if a particular class is interested in Jazz then that could easily become the focus for a unit on understanding music around us. In the performance stream, compositions and pieces for in class study and performance can easily be centred around a theme, such as Remembrance Day or patriotic music. What is meaningful for a class on the Labrador coast may not be the same choice for a group of students in a city. Therefore different musical choices can be made from school to school and year to year and still the key objectives can be met. Teachers must be flexible to meet the needs of each particular class and be willing to change each year.

The resources provided by the Department of Education for Exploring Music are numerous and varied. They include such items as video and audio cassettes, books, and musical scores. The instrumental stream also has many practical resources which would be supplemented by musical repertoire of the teacher's choice. Both programs, the general Exploring Music and the choral or instrumental stream, need to be updated to include some computer software resources that would support the programs. Bringing technology into the music curriculum opens up a whole new area for the Intermediate student who always wanted to study music yet did not want to play an instrument or sing.

As in Primary and Elementary, there are the expected sites for learning. However, in the choral and instrumental streams, learning could be enhanced by attending performances by other musicians. Teachers could make this a required part of the program in that a report would have to be written on the event critiquing a certain piece or the entire show. Exploring Music also has many opportunities for different learning locations. For example, the section on broadcast music could certainly include a visit to a local radio station or recording studio.

Teachers need to employ many different approaches when helping students to learn, whether it is in terms of a choral, instrumental or classroom setting. Not all students can be reached in the same way. Resource-based learning requires that teachers act as facilitators and this is the basic role of the teacher when working with a choral or instrumental group. Exploring Music would involve some class instruction on such topics as the elements of music, but most of the course can be covered by having students work either alone or in groups to research and discuss course topics with the teacher guiding instead of lecturing.

Finally, teachers offering the choral and instrumental streams can choose pieces of music for performance following a class theme. For instance, if Japan is being studied in Grade 8 religion and social studies, and Japanese poetry is the focus for Language Arts, then the music teacher could work with the classroom teacher(s) to look at the influence of music on Japanese culture. A class culminating activity could include displays of Haiku, Japanese foods, artwork and the performance of some Japanese folksongs.

Members of the community could be invited to the school as an audience for the presentation of student work. This process could just as easily apply to the Exploring Music course with a look at Newfoundland and Labrador folksongs in conjunction with the work of various Newfoundland and Labrador authors. Again, it is important to stress that music pieces should not be forced to fit into classroom themes. Instead, they should be chosen very carefully to reflect the development of concepts and skills. The Intermediate music program can quite easily complement and support learning outcomes in the regular classroom while simultaneously meeting the musical curricular outcomes.

Senior High

The Senior High music program is designed to suit students at any level of musical ability. The Experiencing Music 2200 course is a general course available to all students regardless of their musical background. Applied Music 2206/3206 allows students to develop their performance abilities individually or in small groups. It too is available to beginning music students. Ensemble Performance 1105/2105/3105 provides for musical experiences in a choir, band or orchestra. The course is progressive over three years with all students meeting together yet progressing at their own pace within the ensemble.

The characteristics of resource-based learning can be applied to the entire Senior High music program as well.

Experiencing Music 2200

Experiencing Music 2200 is very much a resource-based course. In fact, the Introduction in the course description states that it involves a resource-based approach to teaching and learning (Experiencing Music, 1995). All the features of this philosophy have been carefully considered in the course design.

Students are actively involved in learning in accordance with this statement: "It is a practical study of music in which active involvement with various aspects of music is encouraged. 'Experiencing music' is the key to the delivery of the course" (Experiencing Music, 1995, p. 1).

The course description includes a section on the Key Stage Curricular Outcomes and how they directly relate to the Experiencing Music course. These outcomes are listed to show their relationship to the Essential Graduation Learnings which describe the knowledge, skills, and attitudes expected of all students who graduate from high school as decided by the Atlantic Provinces Education Foundation (p. 7). For example, under Aesthetic Expression, the Music Education Framework document states that graduates will be able to respond with critical awareness to various forms of the arts and be able to express themselves through the arts (p. 27). One of the related specific objectives for Experiencing Music states that students will "recognize the relationships that exist between music and other art forms" (Experiencing Music, 1995, p. 17).

The section on instructional strategies states that the development of learning strategies demands creativity and flexibility since there will be students of varying backgrounds and needs in the class. In other words, teaching and learning should be guided by the philosophy of resource-based learning. It lists some possible approaches such as lectures, discussions, field trips, presentations and peer coaching (Experiencing Music, 1995). It even goes further to suggest activities under each of these strategies, making this a very comprehensive course description

The teacher's role is one not of lecturer but of musician, coordinator/director, comusical participant, and catalyst for creativity in the classroom (Experiencing Music,
1995). There is even a section on using a wide variety of resources with a list of
suggestions such as recordings, videos, TV programs and performers. Examples are also
given of relevant locations for learning such as the classroom, forests, churches and folk
festivals (p. 38).

Finally, in terms of a cross-curricular approach to course delivery, the following statement is made: "the potential exists for collaboration with programs involving cooperative education and entrepreneur education" (Experiencing Music, 1995, p. 1).

Thus, the course is focused around the resource-based philosophy and is, in fact, designed with this philosophy in mind.

Applied Music 2206 and 3206

Applied Music 2206 and 3206 are designed with a resource-based approach in mind. They set out to ensure that students develop musical understandings through the integration of theory and performance, or the "doing" and "knowing" of music. The "doing" is what guarantees that students are actively involved in their learning. The specific curriculum objectives are based upon the music education General Curriculum Outcomes and also the Essential Graduation Learnings. They are very specific for each level of the course (2206 and 3206), for each component (theory and performance) and also for each instrument and voice (See Appendix D).

It is recognized in the curriculum guide that different instructional strategies will be needed depending on the organization and varying needs of the class. The group may be all percussion, for example, made up of students with previous Intermediate experience, or it may be a group of students beginning an instrument for the first time. Some suggested strategies to use are echo-response, playing and singing, analysis, movement and peer coaching. The teacher's role will involve working with individuals as well as small groups and she will be a resource person/facilitator as she rotates around the class (Applied Music, 1995).

Locations for learning in these courses will mainly be the music classroom and auditorium. There may be opportunities for field trips to hear other musicians and there will more than likely be class performances for an audience. Teaching and learning is supported by a wide variety of print and non-print resources. Many of them are recommended in the guide and undoubtedly music teachers will have some of their own relevant resources from which to draw.

Although these courses do not lend themselves as easily to a cross-curricular approach as do some others, there are still some ways it can be done. For example, students can prepare pieces for performance that are related to a theme being studied in a Canadian culture or a history course. Also, the evaluation section for the courses includes a portfolio with journal writings and personal reflections. The time for the actual work on these pieces of writing can be integrated into the English and literature courses with consultation with the appropriate teacher. Thus, the courses Applied Music 2206 and 3206 fit the criteria for a resource-based course quite well.

Ensemble Performance 1105, 2105 and 3105

Ensemble Performance 1105, 2105 and 3105 ensure that the first feature of resource-based learning is met. In these courses students are actively involved in their learning - it is the basis of the program. The course description of each states that "music is a performing art and that one of the most efficient and effective ways to learn about music is to experience it through performance" (Ensemble Performance, 1993, p. 2).

As with any other course, desired learning outcomes should be established in the beginning. Again the guiding force for music teachers is now the draft Music Education Framework document. However, the specific objectives for Ensemble Performance will depend on the skills of the students in the class. Specific skill objectives are included in the guide but an interesting point is made. It states that "these skill objectives are not intended to be restrictive or exhaustive, rather they are intended to provide direction and sequence in delivering a flexible and relative program" (Ensemble Performance, 1993, p.

In this set of courses, teachers are definitely facilitators. They guide students through the three years of the program and the students progress at their own level and often advance from the role of a follower to a leader, assisting the teacher in an instructional role. Since most often all three levels of the class meet together, teaching strategies must be very flexible yet highly organized. Previously learned skills must be reinforced as well as new skills properly introduced. Learning is more meaningful when it builds upon what students already know. The Curriculum Guide states that "strategies are based on the assumption that students should enjoy learning and accrue lasting benefits when they find that their work is immediately useful; when they can apply ideas and information through composition, performance or research" (Ensemble Performance, 1993, p. 9).

The number and variety of resources for these courses is only limited by the teacher's knowledge of the resources and their creativity. There will be the obvious use of instruments, and instrumental and choral music scores. There will also likely be reference books, visiting musicians, and guest speakers. However, the instruments, voices and scores remain the key resources. Locations for learning will primarily be music rooms, auditoriums, and libraries for research projects.

Ensemble Performance courses have opportunities for cross curricular integration.

Performance pieces can always reflect a class or school theme and research projects on a composer or musical time period, for example, can be completed in an English course with the collaboration of both teachers, and an appropriate evaluation mechanism.

Conclusion

The entire music curriculum for the Province of Newfoundland and Labrador has been revamped over the past few years. Even though most of the resources for the Primary and Elementary program have remained the same, the expectations for the programs themselves have been revised and clarified with the publication of the draft
Music Education Framework (1998). This document will soon support the curriculum guides already in existence for the Primary and Elementary levels.

The Intermediate general course Exploring Music and its choral and instrumental performance counterparts also draw upon the outcomes from the new framework document although each will have its own individual focus. Finally, the Senior High program has been totally revised with courses now available for students of any musical background. The two new courses Experiencing Music 2200 and Applied Music 2206 and 3206 replace the previous Choral Performance, Instrumental Performance and Music Theory courses.

Overall, the new music program for the Province has a resource-based focus. This is partly due to the fact that whether or not music teachers realized, music courses more than likely already met the criteria for resource-based learning long before it formally received this label. However, the Department of Education is moving forward with a clear resource-based focus and is now consciously applying it to all areas of the school curriculum, including music. Resource-based learning is government policy and is meant to be adapted and used by every school board, school and teacher in the province. It is

very important to note, however, that even though the programs provide the opportunity for all the criteria to be met, (albeit some programs meet some criteria better than others), it is at the school level where the philosophy of resource-based learning must be realized. For example, Exploring Music in the Intermediate program is an excellent course to be integrated with Language Arts and Social Studies programs. However, if teachers do not fully understand the holistic philosophy of resource-based learning or if they do not collaborate with each other on ways to integrate their subjects, resource-based learning in its truest sense will not occur. Teachers may choose to simply stay in the classroom and teach from the Exploring Music text and test the material read in class. In this situation, the potential of the course will not be realized.

Teachers now have to take the new Music Education Framework draft document (1998) and apply it to the course and level of the music program that they are teaching. It must be their guiding force. Like many other courses, music classes often have students with a great range and variety of knowledge and skills. Teachers therefore have to be creative and flexible in their teaching strategies to make resource-based learning work in their classrooms. It is often much easier, and thus very tempting, to plan lessons based on the lecture method where students are taught but do not necessarily learn.

Resource-based learning requires a lot of work but its benefits to students and to teachers far outweigh its limitations. The current music program in this province offers a curriculum that easily fits into the resource-based philosophy and meets the required learning outcomes not only for music but also for graduation from high school. If realized

to its full potential, resource-based learning applied to the current music curriculum will help develop the strategies and skills necessary to prepare students for the ever-changing information age that we live in today.

Chapter Three

Paper Folio Two: The Benefits of a Union Between Music Education and Technology

Introduction

In this era of increased focus on all things scientific and technological, many school arts programs have suffered and music is no exception. In fact, having a complete music program in a school is uncommon and having that program delivered by a full-time music specialist is a rare privilege. It is clear that technological advances will continue to increase at an astounding pace and that schools will have to work hard to offer programs that ensure students keep up with these changes. So, where does music fit in to an already strapped school timetable? The answer may lie in taking advantage of the school technology curriculum and merging it with the school music curriculum.

Let us take a look at the issues involved in such a union to arrive at a realization of its many potential benefits.

Music Education and Technology - Suitable Partners?

On the surface, music education and technology might appear to be at opposite ends of the spectrum. Technology deals with things scientific and mathematical, and music involves feelings, emotions, and aesthetic matters. Stockley (1994) however, says "this is not necessarily the case, as some modern music is as mathematically-based as a math equation, and computers are being used more and more as a creative tool than for simple calculation" (p. 21). Mackenzie (1988) says that "our society has already accepted the micro-computer's presence in the workplace and home, and now its propriety in the

arts is endorsed by universities, arts councils, educators and artists alike" (p. 15). Moore (1992) summarizes the union between music education and technology when he says "music as an art balances and enhances the science of the technology. Technology doesn't degrade the arts. Rather it is the arts that enrich technology" (p. 67).

So if technology can be used as a creative tool to support a music program, how can we ensure a smooth fit into the already existing school curriculum?

Curriculum Integration

When schools are planning a merger of music education and technology, it should be clear that the prescribed music curriculum already in place at the school should guide the use of technology in the music classroom and not the other way around. However new areas of learning may be realized as integration occurs and course outcomes and objectives will have to be revised with the use of new technology. It is much better to look at the curriculum outcomes and objectives to see where technology can be integrated instead of compromising the planned program just to be able to say that technology is being used in the course. It is important to remember that existing goals for music instruction have been developed over a long period of time with input from a host of professionals. While some of these goals are still valuable, attempts to eliminate them should be examined. Willman (1992) makes an important point when he says that the technology must be examined closely to determine the fit with the curriculum. He says "some portions of the curriculum may be enhanced greatly through the use of technology;

others may be taught best using more traditional techniques. The technology first needs to be evaluated carefully on the basis of its contribution to the curriculum, not purchased first and plugged into the curriculum at points that may or may not even be supportive to learning what the school has determined is important" (p. 33). Eakle (1996) points out another caution. She says computers can be used in elementary classes, both by music and classroom teachers, making music more accessible to all. However, computer music can never replace real, personal music experiences such as a child's physical involvement with music. A computer can never replace a good music teacher and a teacher should never be fooled into thinking that by using a computer they are automatically providing music learning (p.15).

Change in Teacher and Student Roles

When technology becomes a part of the music classroom, the roles of the teacher and the students change. Traditional methods of teaching such as the lecture method still play a part in curriculum delivery but, more than ever before, the teacher's role is that of a facilitator. He will be freed to work one-on-one with students in a guiding position.

Students who formerly may have sat in a class that was boring because they already knew the material can now work on the computers and other electronic equipment at their own pace and level. As a result, the study of music becomes much more interesting and personal to them. Monaghan (1993), quoting Gene Aitken, a director of jazz-studies at the University of North Carolina, says that "when a teacher lectures and students sit there as

listeners, those are not very exciting roles to be in. Now the teacher's role has changed to that of coach: the student has changed to a participant. Students have the ability to learn at their own tempo" (Aitken cited in Monaghan, 1993, p. A23).

So, changing teacher and student roles is another consideration when bringing technology into the music classroom.

Benefits of a Union Between Music Education and Technology

Despite the concerns of curriculum integration and the change in teacher and student roles, there are many benefits that can occur once a solid, fused curriculum is in place. These include maintaining school music programs, making music available for everyone, meeting curricular outcomes for music and technology, and accessing information and higher-learning skills, tapping student expertise, responding to learning styles, providing instant feedback, saving time, and making learning visual and active.

Following is a discussion of the benefits of a union between music education and technology.

Maintenance of School Music Programs

One of the strongest advantages of combining the school music and technology programs is that it often rescues a music program from being eliminated from the school curriculum in times of restraint and educational cutbacks. Unfortunately, with a focus on technology, mathematics and the sciences, arts programs often suffer and music teachers find themselves fighting to maintain funding and support. When teachers educate themselves as to the proper uses of technology, and can demonstrate the relatively low cost of introducing technology in the music classroom, music programs often can be salvaged. Once the program is up and running, the enthusiasm of the students and the success of the courses will likely speak for themselves.

I observed a prime example of such a success story when I visited Bray's Grove School in Harlow, England, John Maybury came to this school as the music teacher and found very little in the way of resources. He began by selling soft drinks to raise money for the music program and did quite well with this venture. He was interested in bringing technology into the music classroom but had very little knowledge and no equipment. He first obtained a free computer from the county school board and soon became hooked. Since no professional development was offered, he taught himself the basics and then began to build up a keyboard lab. He later added synthesizers, microphones, and other technology. Students became very excited in the compulsory junior high classes and more enrolled in the senior high music classes. They are proud of the excellent music program their school now offers. Some students even "work" through lunch hours and breaks to complete projects. A shining culmination of Maybury's hard work was the school's production of its own compact disc. All the songs on it were composed entirely by the students and the compact disc itself was recorded at the school in their tiny studio. These inspiring accomplishments took place over just five or six years under the guidance of a teacher with determination and a vision. John Maybury is firm in his belief that

technology is not driving the students to take the classes. They must first have a desire, knowledge and inclination towards music. The computer is simply an aid or a tool for learning. He believes that linking computers with music is a way to keep the program going in a time when money is tight and things get cut. He also knows that teachers must be innovative in looking out for their own programs as no one else will (J. Maybury, personal communication, May, 1996).

The key is for music teachers to educate themselves and be prepared to discuss exactly what is involved in starting a music/technology merger.

Music Availability for Everyone

Another benefit of integrating technology into the music classroom is that, all of a sudden, music becomes available to all students regardless of their musical background or training. Teachers who have done all they can to get more students interested in their courses may now find they have many more students enrolling because of their interest in computers. In primary and elementary music classes levels of excitement and interest rise as students get involved in creative music/computer projects. A *Teaching Music* article supports this claim: "the available technology makes creating music a simpler process and can thus be used to attract more than just the musically gifted to music. Classes can include students with lots of music knowledge and students with no music knowledge at all" (Nolan, 1994, p. 37). Stockley (1994) says that because of Musical Instrument Digital Interface (MIDI), performing and composing can become part of the everyday music

class, making these musical experiences more accessible to all students, not just those fortunate enough to have received private training. The combination of a keyboard and computer with appropriate soft ware can be used to teach music reading, notation, music history and even ear training. However, teachers need to be aware that the powerful programs available today can translate a recording into instant notation without the student knowing how to read or write music so this technology needs to be considered seriously before being used in any music classroom.

When there is a wide variety of students in a class, there is the possibility of peer tutoring taking place. Older and more experienced students could work with the musical 'novices' and therefore the teacher would be free to work with individuals. Also junior and senior high music students could be "music buddies" for the primary and elementary students to help with the development of their music skills. As well, when students are this excited about learning music they are bound not only to have fun, but also to stay motivated and enjoy practising a lot more.

Curricular Outcomes for Music and Technology Are Met

Another advantage of a union between music education and technology is that curriculum delivery becomes very efficient as learning outcomes for both areas can be met simultaneously. They need not be entirely separate entities when an school is looking at curriculum development for the year. The music teacher and the technology teacher, who would be specialized in more areas of technology other than music-related ones, can meet to plan course work that will satisfy the outcomes for both subject areas.

Tied in to specific curricular objectives are the Essential Graduation Learnings that all students are supposed to have achieved upon completion of Level Three in this province. All areas of the curriculum must be geared to helping students realize these learnings and work towards achieving them needs to begin as early as the primary and elementary levels. For example, one of the Essential Graduation Learnings deals with technological competence. It states that "graduates will be able to use a variety of technologies, demonstrate an understanding of technological applications and apply appropriate technologies for solving problems" (Music Education Framework, 1998, p. 21). The Applied Music 2206 and 3206 course descriptions list six examples of Key Stage Outcomes that students are expected to have realized at the end of Level Three that correlate with the Essential Graduation Learnings for technology. For example, "graduates will be able to improvise rhythmically/melodically in a variety of contexts and styles with voice, instruments and technology and use technology to improvise, compose and perform" (p. 13).

One reason there is a current influx of technology into the classroom is that there is a need for students to learn to use tools in preparation for entry into the job market (Peters, 1992). Having competency in technology in Kindergarten to Level Three music classes helps students become technologically literate in all subject areas. These competencies can be carried throughout life. Forest (1992) feels "music educators must prepare students to be the musicians of the next century and that it is important that

students be technologically literate in music as well as other areas" (p. 35).

Accession of Information and Higher-Learning Skills

No longer is it sufficient for schools simply to be purveyors of facts for students to memorize and regurgitate for evaluation purposes. The amount of knowledge known today doubles every few years so teachers now have a different responsibility to students. They must ensure that students have the skills to access the information that is available to them and use it in the most appropriate way. This accessing, evaluating and utilizing of information involves much higher-level cognitive skills than simple memorization of facts. A merger between music education and technology promotes these higher-level skills.

In 1992, Joanne Willard wrote an article entitled "Exploring Music Through Technology". In it she mentions a man named Larry Fried and his Music Technology courses in northern New Jersey. Fried says he is not trying to give his students knowledge but rather he is trying to give them the skills they need to go out and find knowledge for themselves. He piloted a music technology course in 1991 that he believes supports the school board's goal to keep up with technology. Much of the equipment to start up the course is on loan from Fried himself and he and the students are building a text as they go. He designed the course so that students of any musical background could achieve success. The enthusiasm of the students is proof that it is working. Exploration is his philosophy of teaching Music Technology. He has no set bank of knowledge that he

wants to impart; he just wants students to "learn how to learn" on their own (Willard, 1992).

When technology is introduced into the music classroom, students are placed in a number of active roles including performer, composer, improviser, consumer and critic. Each requires the development of higher-level cognitive skills such as comprehension, application, analysis, synthesis and evaluation (Willman, 1992).

Thus, we have shifted from the acquisition of information to the selection and processing of information. Educators are being called upon to adapt and adopt new modes of teaching that reflect the need for developing and fostering new modes of thinking in their students as well as themselves (Moore, 1992). This is a huge responsibility that can be helped along when technology becomes a familiar part of the music curriculum.

Student Expertise and Computer Use at Home

For teachers who are uncomfortable with technology, it is reassuring to know that many students, some of them quite young, already have a great deal of knowledge about computers and electronic instruments. Students who are comfortable with technology can easily share their knowledge with both the teacher and other students in the course. This makes the transition from being a non-user to a user of technology much easier for the teacher. A 1994 Teaching Music article entitled "Focusing, Advocating and Using Technology" in supports this benefit "another idea for slowly easing both yourself and the

administration into technology involves recognizing that most students are very familiar with some aspect of technology" (p. 43). So, instead of being intimidated by students who know more about technology than they do, teachers should be glad to have the expertise in the class upon which they can build.

The reason for this technological expertise among students is that many of them are greater users of technology outside school than they are during the school day (Moore, 1992). Arnett (1995) says "the majority of today's music students have more music technology in their homes than they have in their music classrooms. Teachers should take advantage of this trend and use it to promote both the music and technology curriculums in the school" (p. 14).

A Variety of Learners

In some areas of the school curriculum it is very difficult to organize course materials and evaluate students when there is a wide variety of learners in the class.

Classes often include students that are able to grasp abstract concepts while others need visual examples, there are sometimes students of different races in the same course and almost always there will be a broad range of intelligence levels among students of the same age. However, using technology in the music classroom raises everyone's level of learning simply because everyone is exploring and is able to work as an individual - and at an individual pace and an individual level of ability (Blakeslee, 1994). Student evaluation must, of course, be based upon pre-determined curriculum outcomes, but the

degree to which students achieve these outcomes will vary. Everyone should meet curricular objectives at the end of the school year but many likely will far exceed the expectations.

Instant Feedback

With students often working individually with technology, another benefit is that they receive instant feedback on their work. In a 1994 Teaching Music article entitled "Creativity With Instant Feedback", Nolan quotes a retired music teacher by the name of Ed Harris from Billings, Montana: "What a computer does is make it possible for students to get instant feedback on their compositions. You can literally compose for a symphony orchestra without having to hire a symphony to hear how it sounds" (p. 37). Feedback may come from a simple Computer Assisted Instruction (CAI) program that essentially drills the student on various musical concepts such as rhythm and harmony or from a much more complex piece of software such as Band-In-A-Box that permits students to use a keyboard to enter chords as a harmonic progression and then plays it back in a style of their choice (p. 37). So the doors are opened wide for students to be creative and hear the results of their work right away. This is extremely motivating for the students and it also frees the teacher up to work with others in the room.

Technology Saves Time

Anyone who has ever had to spend hours transcribing scores knows what an

arduous task it can be. Computers, however, can achieve the same results printed with high quality in a fraction of the time. Computer sequencing, which is to composers what word processing is to writers, allows users to see their compositions on a computer screen as they play them. Works in progress can be quickly played back, and composers can create parts for other instruments as needed, again saving many hours of copying (Monaghan, 1993).

Using MIDI, which lets computers control instruments, students can edit compositions. Users can also replay and record compositions directly to audio cassette or print them out on laser printers. This ease of musical notating also makes for less mistakes in student work. Mistakes that slip by on paper are apparent when compositions are played back by a computer with full orchestration (Monaghan, 1993). Thus, students take great pride in passing in high quality work. Valuable music class time that was formerly spent in handwriting compositions can be used for more productive experiences.

Bringing technology into the music classroom saves time and is therefore of great benefit.

Active and Visual Learning

Modern applications of teaching and philosophies such as resource-based learning, encourage students to be actively involved in learning. In fact, being actively involved helps students to learn better. Incorporating technology into the existing curriculum encourages active rather than passive learning where students simply sit in their seats and listen to information being spoon-fed to them by the teacher. Students no longer sit in front of a computer sometimes playing games with music backgrounds, but rather actively engage in learning and producing music with the help of the computer (Forest, 1995).

Computers also provide a visual means of learning for students. Students often learn more efficiently when they can see what the teacher is talking about rather than just by listening to an explanation. Mayer and Sims are quoted in Baltzer (1996) as saying that "the main problem with the traditional listening lesson is more fundamental: music is an aural art, yet most students are visual learners" (p. 33). If our goal is to introduce students to the joy of music, we must change our traditional approach of presenting music through listening alone. No longer is it adequate for a music teacher to merely provide background information on a piece and then play a recording to a passive audience. With the technology available today, students have the benefit of being able to interact with a piece of music through the use of various multimedia presentations such as those found on the World Wide Web or through the use of CD-ROM technology. They can go instantly, for example, to any part of a symphony, hear instruments demonstrated, receive background information on the composer or even play related games. The possibilities afforded by today's technology cannot be passed up in favour of a passive music classroom setting.

Conclusion

All areas and levels of today's school curriculum are being permeated with technology - music is no exception. The difference is that while it is almost certain that the languages, mathematics and sciences always will remain at the core of any school's program, there are no guarantees that music will always have a secure place in the school curriculum. Many schools are already feeling the effects of budget cuts and some music programs have been scaled down or eliminated. To keep music programs going strong, or in some cases merely surviving, music teachers must keep up with current technology. A key is to start slowly and become comfortable with the equipment and software that is out there. For example, four-year-olds can operate the most sophisticated stereo equipment when a green dot is placed on the "play" button, a red dot on the "stop" button, and a yellow dot with an arrow on the "rewind" button (Forest, 1995).

The benefits of a union between music education and technology are many but they cannot be fully realized until educators recognize that technology can be integrated appropriately for the benefit of all. Technology will not be the salvation for a dying school music program if you do not have a music teacher that is first and foremost dedicated to teaching music. Properly instituted, however, technology in the music classroom can help save a school's program by motivating all Kindergarten to Level Three music students and proving to the school administration that objectives for both subject areas can be effectively met without compromising either. To suggest bringing technology into the music classroom is not to suggest that music now play a subservient

role. On the contrary, it speaks to the importance of continuing music in the school and, in fact, enhancing it to further motivate those students who already have an interest in the art.

In today's educational system, integrating technology is not only necessary, it is imperative.

Chapter Four

Paper Folio Three: Integrating Music Within the Curriculum

declining enrolment and subsequent lower teacher allocations. The music room has become the centre for technology in the school. The urban regions tend to fare much better but still struggle to hold on to music specialists.

The answer to maintaining a viable music curriculum in this province may lie in the idea of curriculum integration. When examining this concept, one must keep in mind that authentic integration does not simply mean supporting, for example, a penguin theme in Grade 1 Language Arts with a song about penguins. One should question what musical skills are being developed in this common scenario. That is not to say that students will not enjoy or remember information they learned about penguins from singing such songs but that integration in its most valuable form speaks to using music to help students learn concepts and skills that are common across all subject areas. These include skills such as communicating, higher-level thinking, working in groups, problem-solving and even physical development. If music can help students learn different academic areas as well as help prepare them for life in general, without compromising musical integrity, then successful integration has taken place.

The four Atlantic Provincial Departments of Education have collaborated on what are termed Essential Graduation Learnings. These are statements describing the knowledge, skills and attitudes expected of all students who graduate from high school. They confirm that students need to make connections and develop abilities across subject boundaries if they are to be ready to meet the shifting and ongoing demands of life, work and study today and in the future (The Atlantic Canada Framework for

Essential Graduation Learnings, 1995). The categories of learning include aesthetic expression, citizenship, communication, personal development, problem-solving, technological competence and spiritual and moral development. This current document reiterates that students must connect learning in order for it to be meaningful. A draft version of the 1998 document Music Education Framework has been published that addresses how music can positively contribute to all of these areas of learning.

If it is known that, in real life, learning does not occur in isolation, than why should it occur in schools? There is a gradual move towards integrating academic and artistic areas but many educators are not yet comfortable with the concept. While there are some concerns that need to be addressed, there are proven benefits of the integration process. This paper looks at the idea of integration, what it means, why we should consider it, and some concerns teachers have about making it a regular part of school life.

What is Integration?

Harris (1995) believes that "an integrated approach to subjects and to life is one sign of excellence in teaching" (p. 12). So what exactly is integration?

It may be easier to say what integration is by stating what it is not. Integration is not, as was stated in the Introduction, simply supporting a theme in a certain grade with a related song. If a senior high class is learning about the demise of the Newfoundland and Labrador fishery we cannot claim an integrated curriculum when the music teacher turns

up with a song about fish. This is simply making a content connection. Hope (1995) says that "asking students to count ballet shoes does not teach them to dance" (p. 27). In order to have successful integration we need to make conceptual connections in addition to content connections, and the connections need to be natural human connections and not forced subject area connections (Wiggins and Wiggins, 1997). Hope believes "if students are to gain optimum benefits, educators who would combine disciplines at the K-12 level must be clear about their purposes, and fashion their choices, expectations, approaches and public relations - accordingly" (p. 27). Harris (1995) states that "integration means much more than finding a topical song to go with a science unit. It refers as well to those learnings that are common to what all teachers want for kids, such as laterality, tracking, finding patterns, listening skills, processing information, making extensions, and discriminating. Integration refers to the sharing of conceptual commonalities among all disciplines" (p. 17).

Bresler (1995) found in her research that there were four main ways in which educators were bringing music into the general classroom and calling it integration. The most common, and easiest to implement, she named the subservient approach. Here music was simply added to other academic areas as a way to liven up the class and keep students interested as in the example of learning a song about penguins in our Grade 1 theme. It could also refer to changing the lyrics of a song to help students remember, for example, the elements of the Periodic Table.

The next style of integration she called the co-equal or cognitive integration

style. This was the least common because it was the hardest to implement. Here teachers required discipline-specific knowledge or skills to help students develop higher-level thinking skills while still emphasizing aesthetic qualities.

Next she observed what she refers to as the affective style. This occurs when teachers used music to change students' moods for example by listening to a classical piece to relax them and help them concentrate on written work.

Finally, the social integration style had music complementing the school curriculum. It provided for school functions by having students perform at such events as concerts and parent nights. Often, because there was little time for rehearsal, there could be very little attention paid to aesthetics, sophisticated content or style.

Only in the co-equal or cognitive integration style can music effectively enhance learning in other subject areas and still maintain its integrity. The other three styles of integration are fine only if they are viewed for what they are, add-ons to the curriculum already in place and not musically valid in their own right. This distinction needs to be understood by those hoping to have successful integration of music in the curriculum.

Barrett, McCoy and Veblen (1997) confirm Bresler's findings and summarize the importance of distinguishing between valid and invalid interdisciplinary work:

Certainly, music can be used as an effective strategy for memorizing facts, an especially pleasurable form of group activity, an outlet for creative ideas, or a focal point for community gatherings. These useful functions, as admirable or desirable as they may be, are inadequate to serve as

primary reasons for the inclusion of music in the curriculum. In the absence of a stronger rationale, teachers could be lead to a false sense of accomplishment, assuming that music is being taught or learned when it might be more accurate to say that music is being used. What is the distinction? A comprehensive program attends to the quality of students' experiences with music by addressing the ways students learn to perform, describe, and create music; the use of carefully chosen musical examples to study; the development of perception; and the cultivation of expressive responses to music (p. 27).

Thus, the basic idea of an integrated curriculum is that there is a fundamental core of learning essential for all students to acquire and that each of the various disciplines have a significant contribution to make towards that core (Thompson, 1992). This requires that many teachers will need to be involved in a team approach to planning an integrated curriculum if it is to be successful. The curriculum must also relate to the lives of the students if it is to be meaningful. In keeping with the very nature of knowledge and learning in real life, an integrated curriculum must be interdisciplinary in nature.

It seems that educators are beginning to realize the potential of making meaningful relationships among learning areas in order for students to be more able to recognize the integrated way that knowledge is used and viewed in the world (Burnaford, 1993). Integration is a way of helping students make new connections among subject areas as well as reinforcing the skills and knowledge they already have by relating

learning to real life. We cannot simply expect students to arrive at these connections on their own; they need to be guided to this discovery. With this definition in mind, the concept of curriculum integration is a very powerful one that schools should seriously consider.

Why Integrate?

"Music is just too powerful to be confined to a certain space in the school, block of time in the day, or particular teacher alone. The fundamental rationale for broadening the scope of topics and activities to include music is this: A comprehensive general curriculum is incomplete without music, because music is central to personal and shared experience" (Barrett, McCoy and Veblen, 1997, p. 17).

Despite concerns of educators regarding the concept of integration, the case for it is compelling. There are valuable benefits to making music a part of other academic areas that should be considered.

First, it is important to note that it is not necessary for teachers to force connections between music and other areas as these connections already naturally exist.
An intriguing concept is that "a truly comprehensive music program is already interdisciplinary in nature because musical understanding draws upon many forms of knowing and understanding" (Barrett, McCoy and Veblen, 1997, p. 20).

Walker (1989) states that the connections between music and literature, particularly the art of rhetoric, are very strong. He goes on to say that the connection between music and mathematics has always been and still is so strong as to make them almost inseparable. He cites the examples of how mathematics has enabled Western musicians to tune their instruments and make up the major and minor scales. He even goes as far as to say that the separation of music from the other arts, and from mathematics and science, is harmful to our understanding of the nature of music in Western culture.

In Newfoundland and Labrador, music is so much a part of our cultural heritage that it cannot be ignored. Music tells the story of peoples' lives throughout history, through good times and bad. How can a senior high cultural heritage class embark upon a study of the fishery without including a study of such songs as the "Squid Jiggin' Ground"? The music and its lyrics bring history alive for young people.

As babies we learned to distinguish between the voices of our mother and other people in our lives. As we got older we became aware of and internalized the different sounds in our environment. In school we probably studied the timbres of different musical instruments and voices. Thus "the science of sound, acoustics, and the expressive creation and organization of sound, music, are closely related" (Barrett, McCoy and Veblen, 1997, p. 21). Music is also naturally connected to our physical development as it relates to the body, to movement and kinesthetic feeling. "Through expressive movement to music, singing, and playing, students use their bodies to learn about music, internalize rhythm, and relate sound and gesture" (p. 22).

Another natural connection with music is identified by Barrett, McCoy and

Veblen (1997). They say that "music is a form of cognition, involving processes of thinking in sound and with sound. Composition, improvisation, performance, analysis, representation, reflection - all of these musical activities depend upon mental skills and strategies that are particular to the discipline" (p. 22).

A second, very practical benefit of integrating music with other subject areas is that it may help a school keep its music program. If teachers are comfortable with the concept of integration and can administer it effectively, then schools need to consider bringing integration on stream. Proper planning time will have to be provided if the process is to be successful. The alternative to integrating music with other areas may be a total elimination of the music curriculum in some schools. However, even in schools with a full-time music specialist on staff, integrating music across the curriculum should become a part of the regular way things are done. In this way connections will be realized and common skills needed by all students upon graduation can be reinforced across all subject areas. Barrett, McCoy and Veblen (1997) reinforce this idea when they argue that "students' educational experiences are strengthened when both generalists and specialists attend to the potential of disciplines within the curriculum to connect and cohere. For interdisciplinary understanding to flourish, teachers must share a collective responsibility for and commitment to integrated forms of study" (p. 16).

Another benefit of integrating music across the curriculum is that each area being integrated is enhanced and enriched. Hoffman (1994) states that "the arts truly are core and that all other subjects enhance the arts and the arts enhance all other subjects" (p. 35). Students who are exposed to an integrated approach receive the benefits of music even if they are not enrolled in the school band, choir, orchestra or general music class. Simply by being a literature, social studies or cultural heritage student, a student can be exposed to valuable music instruction if the integration is implemented properly. Their appreciation and knowledge of emotional and aesthetic areas of learning can also be enhanced greatly with music instruction. Thus, everyone can benefit in an integrated setting.

A final, and important area where curriculum integration of music can be of great benefit is in helping improve student achievement in other subject areas. Whyte (1995) reports that scientists at the Centre for Neurobiology of Learning and Memory at the University of California, Irvine, have found that music instruction can improve a child's spatial reasoning, which is essential to success in mathematics, the sciences and engineering. The scientists tested children before and after eight months of voice and piano lessons and found that their spatial reasoning had improved by thirty-five percent. An article in the Saturday, May 26, 1996, edition of The Evening Telegram reported on a study by Martin Gardiner, research director at the Music School in Providence, Rhode Island. The study tested ninety-six school children between the ages of five and seven. The results indicated that the children who had extra music and art showed a marked improvement in mathematics skills and that the children who showed below-average reading skills caught up to average if they were on the enriched arts program. Both of these studies lend support to the concept of integrating music with other areas of the

curriculum.

Common Concerns Dealing With the Concept of Curriculum Integration

According to Hope (1995) "integrity means ensuring that programs combining disciplines are honest about how they advance the knowledge and skills of students" (p. 28). Of primary concern to educators is maintaining the integrity of the music curriculum when integration takes place.

Maintaining integrity is of definite concern when teachers are not sure of what they are supposed to teach or how they are supposed to teach it because of a lack of musical training. Also "many educators are justly concerned when it appears that a discipline is corrupted or trivialized as an attachment or window dressing to other areas of study" (Barrett, McCov and Veblen, 1997, p. 19). When music educators are asked to participate in an interdisciplinary project, usually it is teaching students songs that relate in some way to the history or social studies curriculum. Although this kind of music activity can be an important contribution to making curriculum connections, often developing creativity or perceptual and performance skills are neglected and the music curriculum suffers accordingly (Campbell, 1995). Sloppy, haphazard attempts at integration may indeed liven up a social studies class but may do nothing to increase a student's knowledge of musical concepts. Songs should only be chosen to accompany a theme or concept if they support what is being studied in the music classroom. Music teachers should not have to apologize when they inform their colleagues that there is no

song, for example, about the colour red that supports what the children are learning in music at that particular time. In other words, when musical ideas are presented in non-musical contexts, music skills are not really being taught even though students may enjoy listening to or performing a piece. Musical experiences in music classes need to stem from musical works (Wiggins and Wiggins, 1997). Walker (1989) is adamant when he says that any attempt to present music in the curriculum which denies its intrinsic artistic value, or diminishes the integrity of musical art should be resisted.

Another fundamental concern that seems to arise among educators is that if curriculum integration is brought on stream in a school, then the music program will be lost. In a time when music programs are increasingly being cut back or eliminated, it is very easy to understand where this fear would originate. "As the arts successfully permeate the entire curriculum, arts educators begin to worry that integrated programs may be seen as a replacement or substitute for comprehensive arts curricula" (Barrett, McCov and Veblen, 1997, p. 24). Thompson (1992) supports this concern, reporting that some music teachers are hesitant to become involved in integration projects because they viewed the projects as attempts to erode the music program. When music is combined with other subject areas it is often seen as a first step in the elimination of the music curriculum. Teachers need, therefore, to be assured that integration projects are designed to enrich and enhance the music program as well as the programs of the other subject areas and to expand upon, not detract from, their scope.

Barrett, McCoy and Veblen (1997) suggest the following:

To counter these fears of superficiality, diffusion and replacement, we believe that arts specialists should have primary responsibility for developing regular and sequential programs of instruction. This is not to suggest that the arts are the exclusive province of specialists, though.

General classroom teachers and arts specialists can collaborate on projects that complement both the arts programs and other areas of the curriculum, strengthening the overall educational experience for students. A broad focus on "arts across the curriculum," however, must not compromise the depth of "arts within the curriculum" (p. 24).

Another valid concern teachers have about integrating music with other subject areas is that they will not have sufficient time to meet with classroom and subject area teachers to properly plan interdisciplinary work. Teachers will often argue that they find it difficult to find the time to plan the curriculum that they must teach for the year because they are asked to take on so many other responsibilities in the school. Thus any new ideas, however valid, are often looked upon as just another intrusion. Music teachers will also see their students a lot less than a regular homeroom teacher will and this is a disadvantage because they have so many things to cover in such a short time. So, although they may agree with the concept of integration and recognize the fact that they can be of help to the classroom or subject teacher and vice versa, time is definitely a restricting factor. Burnaford (1993) quotes a fourth grade music teacher as saying "we have so much to teach already, we don't have time not to make every teaching moment

count" (p. 44). "For this reason alone, many music educators are understandably cautious about interdisciplinary plans" (Barrett, McCoy and Veblen, 1997, p. 20).

Educators are also concerned that there is a great deal of inconsistency in the degree of musical training that teachers in the field possess. Thompson (1992) says that "the success of curricular integration depends on the expertise and motivation of the teachers involved" (p. 49). However, teachers cannot successfully integrate course materials that they are not knowledgeable of or comfortable with - even though may support the concept of integration. Harris (1995) argues that "the integration of music across the curriculum must await musically trained teachers" (p.11). She goes on to say that "there is a gap between the programs teachers are expected to deliver and the skills and knowledge required of them. As a result, in districts where a single teacher must assume responsibility for integrating all subjects, many children simply do not receive music" (Harris, 1995, p. 12). Hope (1995) is clear when he says "if success in combining disciplines is to be ours, the first resource is competent, capable teachers" (p. 29).

One strategy for getting more teachers comfortable with using an integrated approach to teaching in public schools is to model the methodology to preservice teachers (Kite et al., 1994). There must be some degree of consistency in the preparation of both specialized music teachers and general classroom music teachers (as related to integration) if any benefits are to come from curriculum integration. Harris (1995) sums up the issue by saying that "for music programs that speak to the personal, social, artistic, intellectual and physical development of each child, schools require teachers who know

and love music, who make life-long learning their aim, and who see the connections between music and other areas of learning" (p. 17).

The preceding concerns are not arguments against the concept of integrating music across the curriculum but simply cautions for educators. Any attempts to integrate music should be carefully planned so that all areas being integrated maintain their own integrity at all costs.

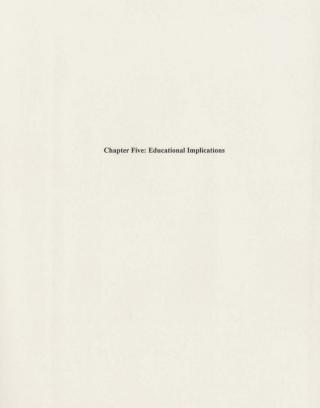
Conclusion

In an educational climate that is constantly changing and is always presenting educators with new ideas and philosophies to be tried in their classrooms, the concept of integrating music across the curriculum may just be viewed as another intrusion into an already busy school day. However, an integrated curriculum remains a viable idea because, as educators, we want to prepare students to be life-long learners and to help them to see the connections among all facets of life. Nothing in life occurs in isolation; everything is related and contextual. This is how it should be in school as well.

Proper integration includes the support and involvement of many teachers and administrators and requires an adequate amount of time for planning and preparation. Students are at the centre of this planning and will receive the benefits of experiencing a music curriculum which might not otherwise have been available to them.

Ideally, the music curriculum would be delivered by a music specialist, but the reality in Newfoundland and Labrador is that these specialists are not always available in schools. Perhaps, then, there needs to be an examination of how teachers are trained in this province. There are many classroom teachers with musical knowledge and ability who should be afforded the opportunity to refine their musical skills for use in the classroom. In the absence of a music specialist, who better to bring about successful integration then a teacher who is comfortable working in a variety of areas? Further to this, those university students who are pursuing a music education degree would likely benefit by being exposed to teaching other areas of the curriculum so as to broaden their expertise and help them plan work effectively with the general classroom teacher.

There are, as with all things worth studying, valid concerns to be addressed. However, the overwhelming benefits of integrating music within the curriculum, whilst still maintaining its integrity, warrant a closer examination by those involved in education in this province. Walker (1989) sums up the issue when he says that "sloppy and ill-conceived integration is not the answer, but neither is the isolation of music from everything else in the curriculum" (p. 29). The final word, however, belongs to Smith (1995) who states "the proper object of study in arts education is the work of art and this is what should be integrated into the basic curriculum of general education; this is what policy makers should centre on; and this is where the funds for implementing the standards should be spent. I would not spend one cent on interdisciplinary studies or attempts to cultivate a general creativeness" (p. 22).



Educational Implications and Recommendations

Much information has been reported in the previous papers but there are a number of key points from the research that need to be reiterated.

First of all, it is clear that the Newfoundland and Labrador education system has progressed in its focus of the development of resource-based learning. For example, courses such as the senior high Experiencing Music 2200 have been designed with this philosophy in mind. The potential exists for the entire Kindergarten to Level Three music curriculum to have a resource-based emphasis, but several issues need to be addressed. First of all, teachers must believe in the value of resource-based learning and familiarize themselves with it in order to use it properly in their teaching. Also administrators must allow time for collaborative planning which is essential if meaningful connections between subject areas are to be made. The primary, elementary and intermediate music programs could benefit from the inclusion of relevant software as part of the approved resources. Of prime importance, however, is the ability and willingness of the music teacher to take the current draft Music Education Framework document and adapt it to suit the individual courses and students from year to year. Flexibility of planning is the key if students across Newfoundland and Labrador are to meet through resource-based learning the intended curricular outcomes in a way that is meaningful to their particular educational situation

Technology is a part of everyone's daily lives and students need to be effective

users of this medium to compete in today's world. Bringing technology and music together can have many benefits if caution is taken with their merger. First the music curriculum needs to be examined to see where technology naturally fits instead of trying to force the union. Music teachers must be totally committed to teaching music so as not to let technology erode the music curriculum. Any attempt to bring technology into the music program must be carried out slowly in order to be effective. Finally all involved must remember that in no way can technology ever become a substitute for real musical experiences such as performing in an orchestra or choral group.

The integration of music with other curriculum areas is becoming common practice and if done properly can serve to enhance learning for all students involved. Teachers and administrators must be knowledgeable and supportive of the process and willing to invest time and energy to see it succeed at the classroom level. A key concern is the pre-service education of both the music teachers and the classroom and subject area teachers. All involved must be prepared as part of their training to work with other teachers in a collaborative manner to plan meaningful student work. They must be openminded and willing themselves to learn and adapt each year. Integration within all areas of the curriculum helps students realize the natural links that exist in learning.

Thus resource-based learning, the use of technology in the music program and the integration of music within all curriculum areas are valuable concepts. Their place in the Newfoundland and Labrador educational system serves to strengthen the belief that music and learning resources are, in fact, a natural combination.

References

Paper Folio One: An Examination of Current Music Curricula in Newfoundland

Through the Lens of Resource-Based Learning

Beswick, Norman (1977). <u>Resource-based learning</u>. London: Heinemann Educational Books

Government and Newfoundland and Labrador. (1983). Primary music: A teaching guide. St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1985). <u>Elementary music:</u> <u>Curriculum and teaching guide.</u> St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1991). <u>Exploring music</u>. St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1991). <u>Learning to learn. policies</u> and guidelines for the implementation of resource-based learning in Newfoundland and <u>Labrador schools</u>. St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1993). Course description: Ensemble performance 1105, 2105, 3105. St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1993). <u>Intermediate music:</u> <u>Curriculum and teaching guide.</u> St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1995). <u>Course description: Applied music 2206 and 3206.</u> St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1995). Course description: Experiencing music 2200. St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1998). <u>Music education framework (draft)</u>. St. John's, Newfoundland.

Government of Newfoundland and Labrador. (1998 - 1999). <u>Program of studies.</u> St. John's, Newfoundland.

Ontario Ministry of Education. (1982). <u>Partners in action: The library resource</u> centre in the school curriculum.

Ontario Ministry of Education and Training. (1995). <u>Information literacy and</u> equitable access: A framework for change: A draft document for discussion and response.

Taylor, L.C. (1971). <u>Resources for learning</u>, <u>2nd ed</u>, Hammondsworth, England: Penguin Books.

Paper Two: The Benefits of a Union Between Music Education and Technology

Arnett, Patricia (1995). Managing the music classroom with technology. <u>Learning</u> and <u>Leading With Technology</u>, 23(4), 14-17.

Atlantic Canada framework for essential graduation learning, (draft) [Brochure].

Baltzer, Sam (1996). Enhancing aural lessons with multimedia programs. <u>Music Educators Journal</u>, 83(3), 33-36, 50.

Blakeslee, Michael (1994). Let your curriculum be your guide. <u>Teaching Music</u>, <u>1</u>(4), 38-39.

Boody, Charles G. (1992). New tools for music education. <u>Music Educators</u> Journal, 79 (3), 26-29.

Dahlin, Ken (1995). Double your effectiveness. Teaching Music. 2(5), 38-39, 44.

Eakle, Kit (1996). Music for all! Alla Breve, 20(2), 15-19.

Focusing, advocating and using technology. (April, 1994). <u>Teaching Music</u>, pp.42-43, 50.

Forest, Joyce (1995). Music technology helps students succeed. <u>Music Educators Journal, 81</u>(5), 35-38, 48.

Government of Newfoundland and Labrador (1995). <u>Course description: Applied music 2206 and 3206</u>, St. John's, Newfoundland.

Klinger, Mike (1995). The one-computer music classroom. <u>Teaching Music</u>, 3, 34-35.

Mackenzie, Scott (1988). Microcomputers for music education. <u>Canadian Music</u> Educator. 29(4)15-24.

Monaghan, Peter (1993). The latest in technology brings fresh tone to teaching and learning in music. <u>The Chronicle of Higher Education</u>, 40(3), A23-A24.

Moore, Brian (1992). Future technology working for education. <u>Music Educators Journal</u>, 79(3), 30-32, 67.

Moore, Brian (1992). Music, technology and an evolving curriculum. NASSP-Bulletin, 76(544), 42-46.

Mueth, Larry (1993). MIDI technology for the scared to death. <u>Music Educators Journal</u>, 79(8), 49-53.

Nolan, Evonne (1994). Creativity with instant feedback. <u>Teaching Music</u>, 2(3), 36-37, 55.

Peters, David (1992). Music software and emerging technology. <u>Music Educators Journal</u>, 79(3), 22-25, 63.

Stockley, Heather (1994). Technology in the music classroom. <u>Canadian Music Educator</u>, 36(2), 21-24.

Wilkinson, Scott. Teach your children. B.C. Music Educator, 36(2), 36-42.

Willard, Joanne (1992). Exploring music through technology. <u>Techtrends</u>, <u>37</u>(3), 23-24.

Willman, Fred (1992). New solutions to curricular problems. <u>Music Educators</u> <u>Journal</u>, 79 (3), 33-35, 68.

Paper Three: Integrating Music Within the Curriculum

Barrett, Janet R., McCoy, Claire W., & Veblen, Kari K. (1997). Sound ways of knowing. New York: Schirmer.

Bresler, Liora (1995). The subservient, co-equal, affective, and social integration styles and their implications for the arts. <u>Arts Education Policy Review</u>, 96(5),31-37.

Burnaford, Gail (1993). The challenge of an integrated curricula. <u>Music Educators</u> Journal, 79(3), 44-47.

Campbell, Mark Robin (1995). Interdisciplinary projects in music. <u>Music Educators Journal</u>, 82(2), 37-44.

Fallin, Jana R. (1995). Children's literature as a springboard for music. <u>Music Educators Journal</u>, 81(5), 24-27.

Harris, Dr. Carol (1995). Disciplines and integration: Music education in a stable learning environment. <u>Canadian Music Educator</u>, 36(4), 11-19.

Hoffman, Elizabeth (1994). Creative ideas for collaboration. <u>Teaching Music</u>, <u>2</u>(2), 34-35.

Hope, Samuel (1995). Making interdisciplinary connections. <u>Arts Education Policy Review</u>, 96(5), 26-30.

Kite, Thomas et al (1994). Using program music for interdisciplinary study. <u>Music Educators Journal</u>, 80(5), 33-36, 53.

Music, art help kids learn other skills. (1996, May 25). The Evening Telegram. p. 17a.

Nolan, Evonne (1995). The ideal...closer than you think. <u>Teaching Music</u>, 2(4), 32-33, 48.

Siddons, Hally Ruth (1995). Grade 7 and 8 instrumental music and the common curriculum. Canadian Music Educator, 36(6), 23-28, 39.

Smith, Ralph (1995). The limits and costs of integration in arts education. <u>Arts Education Policy Review, 96</u>(5), 21-25.

Thompson, Keith P. (1992). Integrating music into the curriculum: A recipe for success. BC Music Educator, 35(2), 47-51.

Walker, Robert (1989). A few words on integration and the integrity of music in education. <u>Canadian Music Educator</u>, 31(2), 27-30.

Whitaker, Nancy (1994). Whole language and music education. <u>Music Educators Journal</u>, 81(1), 24-28.

Whyte, Kenneth (1996, June). Why Johnny can't sing. Saturday Night, pp. 13-14.

Wiggins, Jackie & Wiggins, R. (1997). Integrating through conceptual connections. <u>Music Educators Journal</u>, 83(4), 38-41.

Appendices

Appendix A: Primary Learning Resources

Government of Newfoundland and Labrador. (1998-1999). Program of studies. St. John's, Newfoundland.

Authorized

- > Primary Music: A Teaching Guide
- > Games and Movement > The Kodály Context (out of print)
- > Music Builders I (out of print) · teachers' guide
 - · recordings
- > Music for Fun. Music for Learning (out of print)
- > Musicanada 3
 - · student text (one per school)
 - · teachers' edition

 - · piano accompaniments · cassettes
- > Song Collection (Grades 1, 2, and 3)

Recommended

> Birkenshaw-Fleming, Lois. Come on Everybody, Let's Sing! Toronto: Gordon V. Thompson, 1989.

A large resource of musical activities for all children in regular, mainstreamed and special classes, organized by popular themes and categories.

> Choksy, Lois, The Kodály Method, 2nd ed., Englewood Cliffs, N.J.: Prentice-Hall, 1988.

A teacher resource outlining the sequencing of rote singing, sight-reading, and writing for North American schools. Of particular value are sections on lesson planning, music pedagogy, and the song/games material.

- > Choksy, Lois, and David Brummitt. 120 Singing Games and Dances for Elementary Schools. Englewood Cliffs, N.J.: Prentice-Hall, 1987. A comprehensive collection of games and dances for use in the classroom. ranging from line/circle play and party games to traditional square dances.
- > Choksy, Lois, et al. Teaching Music in the Twentieth Century. Englewood Cliffs, N.J.: Prentice-Hall, 1986.

A comprehensive overview of the four major approaches to music teaching - Jacques-Dalcroze, Kodály, Orff, Comprehensive Musician-ship presented by a leading authority on each approach.

> Fowke, Edith. Sally Go Round the Sun. Toronto: McClelland and Stewart, 1969.

A collection of rhymes, rounds, nonsense songs, and riddles.

Ring Around the Moon. Toronto: McGlelland and Stewart,

A collection of rhymes, rounds, nonsense songs, and riddles.

> Frazee, Jane. Discovering Orff: A Curriculum for Music Teachers. New York: Schott, 1987.

The most comprehensive book on the Orff process, dealing with media, pedagogy, and theory related to the elemental style. As well, the book contains a sequence of skills and concepts for Grades 1-5.

materials: Primary Music: A Teaching Guide, Games and Movement, and The Kodály Context. Available from the Provincial Public Libraries Board.

- > Szónvi, Erzsébet, Bicinia Americana, Willowdale, Ont.: Boosey & Hawkes, 1984.
- A collection of 22 traditional North American children's songs arranged for two-part singing in the classroom.
- > Tacka, Philip, and Susan Taylor-Howell. Sourwood Mountain.
- > Taylor-Howell, Susan. The Owl Sings. Whitewater, Wis.: Organization of American Kodály Educators, 1986 and 1991. Two collections of North American and English songs arranged in two and three parts for classroom use.
- > Wood, Donna. Move, Sing, Listen, Play. Toronto: Gordon V. Thompson,

A storehouse of musical and pedagogical information for early childhood and primary school education.

- > Johnston, Richard. Folk Sones North America Sines. Toronto: Kirby. An anthology of 411 folksongs designed for pedagogical use. The songs
- are indexed according to form, range, scales, phrase lengths, time signatures, subject, geographic source, etc.
- > Malloch, Jean. Tous Ensemble. New York: Doubleday, 1986. Guide and cassette tapes of French music and language program, planned and performed to support the Denartment's musical objectives.
- > Malloch, Jean. Chime In: Teacher Resource Guide, Don Mills, Ont.: Collier Macmillan Canada, 1983. A collection of poems and songs to be used as the basis for a nonprescriptive, integrated program. Each theme is introduced by a poem or song, then expanded through activities related to language, mathematics, art, drama, environmental studies, music, and physical education.
- > Musicanada Resource Centre 3. Toronto: Holt, Rinehart and Winston of Canada, 1983. Supplementary materials: additional listening lessons (recorded examples are in the original collection subsidized by the Department), part singing guidelines, games, choral and conducting techniques, evaluation suggestions, student worksheets in blackline master format,
- > Pottie, Kaye, and Vernon Ellis. Folksongs of the Maritimes. Halifax: Formac Publishing, 1992. A collection of 90 Maritime folksongs based on the collections of Helen Creighton and other distinguished Maritime folklorists. For each song, there is a brief introduction, chording information, the melodic line, and words to all verses. A teachers' guide is also available from the publisher.
- > Primary Music Methods K and 1. A video cassette showing concepts of the Kindergarten and Grade 1 Music Program for teachers and administrators. Available from the Learning Resources Distribution Centre.
- > The Song Collection: Strategies for Fluency. A video cassette illustration

Appendix B: Elementary Learning Resources

Government of Newfoundland and Labrador. (1998 - 1999). <u>Program of studies.</u> St. John's, Newfoundland.

Learning Resources

Authorized

- > Elementary Music: Curriculum and Teaching Guide
- > Games and Movement
- > The Kodály Context (out of print)
- > Musicanada, Vols. 4, 5, and 6
 - · student text
 - · teachers' edition
 - cassettes
 piano accompaniments
- > Sing the Sea
- > Twelve Songs of Newfoundland
- > Song Collection, Grades 4, 5, and 6

Recommended

- Bacon, Denise. 185 Unison Pentatonic Reading Exercises, Newton, Mass.; Kodály Centre of America. 1978.
 - Reading exercises, grouped in order of melodic expansion, presented in both solfa notation and staff notation.
- > Choksy, Lois. The Kodály Method. (See Primary Section.)
- Choksy, Lois, and David Brummitt. 120 Singing Games and Dances. (See Primary Section.)
- Choksy, Lois, et al. Teaching Music in the Twentieth Century. (See Primary Section.)

Teachers' Guide.

This casserte tape and teachers' guide was produced by the Department of Education to present the folk songs in The Atlantic Edge (Grade 5 social studies text) in a social and natural context. The songs are recorded by Anita Best and the guide contains teaching suggestions, notes on the songs, and hiblioremblical and discoerabinical information. Available from the

> Fowke, Edith, and Alan Mills. Singing Our History. Toronto: Doubleday, 1984.

A Canadian folk song collection that traces the history of Canada through folk songs.

Frazee, Jane. Discovering Orff: A Curriculum for Music Teachers. New York: Schott, 1987. (See Primary Section.)

Provincial Public Libraries Board.

- Johnston, Richard. Folk Songs North America Sings. (See Primary Section.)
- Kulich, Birthe, and Joe Berarducci. Wind Songs Method for the Recorder. Vancouver: Empire, 1985.
 A series of six instruction books, progressing from beginning steps to

A series of six instruction books, progressing from beginning steps to consort playing. The series uses many folk songs already in the student's repertoire, reinforcing reading in solfa and rhythm syllables. Suggestions for instrumental accompaniments are also provided.

Musicanada Resource Centre (4, 5, and 6). Toronto: Holt, Rinehart and Winston.

Supplementary materials: additional listening lessons (recorded examples are in the set of recordings subsidized by the Department) part singing guidelines, games, choral and conducting techniques, evaluation suggestions, student work sheets in black line master format.

Pottie, Kaye, and Vernon Ellis. Folksongs of the Maritimes. Halifax: Formac Publishing, 1992. A collection of 90 Maritime folksongs based on the collections of Helen

Creighton and other distinguished Maritime folklorists. For each song, there is a brief introduction, chording information, the melodic line, and words to all verses. A teachers' guide is also available from the publisher.

> The Song Collection: Strategies for Fluency.

A video cassette illustrating numerous ways to use *The Song Collection* to enhance music reading accuracy and fluency. Produced by the Department of Education using Newfoundiand and Labrador music teachers and classes. A valiable from the Provincial Public Libraries Board

➤ Songs for Elementary Levels. An audio cassette containing 36 songs from authorized resource materials: Elementary Music: A Teaching Guide, Games and Movement, and The Koddiy Context.

- Szőnyi, Erzsébet. Bicinia Americana. Willowdale, Ont.: Boosey & Hawkes, 1984. (See Primary Section.)
- Tacka, Philip, and Susan Taylor-Howell. Sourwood Mountain. Taylor-Howell, Susan. The Owl Sings. Whitewater. Wis: Organization of American Kodály Educators, 1986 and

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Appendix C: Intermediate Learning Resources

Government of Newfoundland and Labrador. (1998 - 1999). <u>Program of studies.</u> St. John's, Newfoundland.

Authorizo

- > Intermediate Music: Curriculum and Teaching Guide
- > 185 Unison Pentatonic Reading Exercises (half class set)
- > Folk Songs North American Sings
- > Musical Reading and Writing (one student text and teacher manual)
- > New Pathways to Art Music Listening
- > Reflections of Canada, Volume 1 (half class set)
- > Sing the Sea
- > Sing, Silverbirch, Sing
- > Teaching Music in the Twentieth Century
- > Instrumental Music: An Administrative and Curricular Guide

Tutor books for instrumental programs should be ordered by schools. The following books are approved for a 40% subidy. To review the reimbursement, submit Itemized invoices that are marked "paid" by the supplier to the Learning Resources Distribution Centre. These must be received before January 31, 1999, in order to guarantee subsidy.

- > Band Today
- > Technic Today
- > Alfred Basic Band
- > Individualized Instructor
- > 1 Recommend
- ➤ I Recommend
 ➤ Best in Class
- > Yamaha Band Student, First Edition
- > Essential Elements for Band
- ➤ Sounds Spectacular for Band
- > All For Strings
- > All For Strings
- > Essentials for Strings
- > Young Strings in Action
- > Creative Guitar

Recommended

- > Barron, John, Ed. Reflections of Canada, Volumes 2 and 3. Oakville, Ont : Frederick Harris, 1985.
 - These volumes contain excellent material for classroom and concert use. Volume 2, The Raftsmen, contains Canadian folk songs for part singing while Twax in the Moon of Wintertime, Volume 3, has 4-part arrangements.
- Choksy, Lois. The Koddly Context. Englewood Cliffs, N.J.: Prentice-Hall, 1981.
 A pedagogical guide and song book for developing musical literacy. The sections on the older beginner, listening strategies, choral training, and curriculum/lesson planning are recommended for intermediate music-teachers.
- > _____. The Kodály Method. 2nd ed. (See Primary Section.)
- Choksy, Lois, and David Brummitt. 120 Singing Games and Dances. (See Primary Section.)
- Kulich, Birthe, and Joe Berarducci. Wind Songs Method for the Recorder Vancouver: Empire, 1985. (See Elementary Section.)

Music (Exploring Music)

Authorized (Grades 7-9)

- > Exploring Music (with teachers' guide)
- > Canada: It's Music (with teachers' edition)
- > Canada: It's Music (audio cassette)

Audio Cassettes (one per school)

- > Threnody
- > Favourite Newfoundland Folk Music
- > All the Best Folk Music
- > The Orchestra
- > Musical Storms/Musical Battles
- > Water Music/Marches

Video Cassettes (one per school)

- > From Ping to Bong
- > It's All Done with Strings
- > What's in a Horn?
- > Discovering Electronic Music
- > The Last Run
- > Broadcast Music in Newfoundland and Labrador
- > Musicians in the Community

Note: The following videos are available on a loan basis from the

- Provincial Public Libraries Board:
- > The History of Rock, Part 1
- > The History of Rock, Part II > An Audio Visual History of Canadian Folk Music
- > History of Jazz
- > How an Audio Recording is Made

Film Strip (one per school)

> Studio Sounds

Recommended

> Labrador Songbook. Fredericton, NB.: Goose Lane Editions, 1993. This collection of 138 songs has been researched and edited by the Labrador East Integrated School Board. The songs are arranged thematically with an index of songwriters and researchers. The songs are presented with words, guitar chords, and the tune notated for voice and piano. The songs are representative of all geographical regions of Labrador and include four languages: Inuktitut, Innu-Amin, English, and French.

> Labrador: A Proud Heritage

This filmstrip kit includes three filmstrips and two cassette tapes. It focuses on the people of Labrador, past and present, and their relationship to the sea and the land. The music and art of Labrador are highlighted.

- This kit was produced by the Labrador East Integrated School Board.

> Rufus Guinchard

This video begins with Rufus' reflections about his early life and proceeds with lively scenes of his fiddle playing, as well as scenes which tell his story in words and pictures. A teacher's guide contains suggested activities and background information specifically for Exploring Music as well as other levels of the curriculum.

Appendix D: Specific Outcomes Applied Music 2206/3206

Government of Newfoundland and Labrador. (1995). Course description: Applied Music 2206 and 3206. St. John's, Newfoundland.

CORE COMPONENT - THEORY

It is expected that students will demonstrate the following through:

· PERFORMING

· WRITING

	2206	3206	
Notation			
	· note values · note names · clefs	continued development and refinement non-traditional notation as appropriate	
Rhythm/Meter			
Differences in Notes and Equivalent Rests	· whole, half, quarter, eight, sixteenth, dotted notes	continued development and refinement	
Fundamental Meters	· 2436 4448	· 3 2 3 4 8 2 2 2 (others as appropriate)	
Rhythmic patterns	 basic combinations of the above note values and equivalent rests, including syncopation 	extended patterns, may include traditional jazz patterns, improvised patterns	
Melody			
Tonality	· major/natural minor	chromatic; harmonic and melodic minor (other systems as appropriate)	
Key Signatures and Scales	· major/minor up to 2♯, 2♭	· major/minor up to 4\$, 4\$ (others as appropriate)	
Intervals	· major/minor 2nd/3rd, unison, perfect 4th/5th, octave	· major/minor 6th/7th	
Melodic Construction	 principles of melodic construction, e.g., steps/skips, direction, repetition/contrast 	create and play simple melodies improvisation	
Transposition	· basic knowledge	transpose, write and perform simple melodies	

Harmony		The state of the s
Intervals	· unison/octave, 3rd, 5th	· 4th, 6th, 2nd, 7th
Chords .	chord construction (M/m) primary triads (I, IV, V) pop/jazz chord symbols	construct V7 inversions (others as appropriate)
Harmonic Progression	basic progressions/ improvisation	more advanced and as appropriate
Principles of Harmonization	· cadences (simple)	
Form		
	fundamental principles of phrase construction and compositional form	small forms (e.g., AB, ABA) other forms and/or non-traditional forms as appropriate
Terms and Signs		
	basic and fundamental	· more advanced and as appropriate







