

AN INVESTIGATION OF THE IMPACT OF THE UNIVERSITY OF BRITISH
COLUMBIA'S FOREIGN LANGUAGE REQUIREMENT ON ENROLMENT IN
SECONDARY ART AND BAND COURSES

by

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ABSTRACT

Since 1979, the British Columbia Music Educators Association has stated in its journals and newsletters, concern about the declining number of secondary students electing to enrol in music courses. It was thought that one source of the decline was the number of courses required for admission to the University of B. C. and other post-secondary school institutions.

The U. B. C. Senate Admissions Committee has received many letters and briefs from the B. C. M. E. A., the B. C. Teachers' Federation and its Professional Specialist Associations protesting the recent inclusion of a foreign language entrance requirement. The protests were based on the assumption that an increase in the number of courses required for admission to U. B. C. would have a negative impact on music programs as well as other subjects not recognized by the University for admission purposes. The Senate Committee noted that the letters and briefs did not include hard facts to support these assumptions.

In response to the Senate Committee's observations this investigation was designed to determine statistically if an association exists between University prerequisites and secondary school course selection and if this relationship has a significant

impact on music programs.

The investigation did reveal a strong association between the University of B. C.'s foreign language requirement and enrolment in secondary school French and Art courses. Enrolment in secondary school music programs did not seem to be affected by the University's admission policy or by the changes in graduation requirements by the provincial government's Ministry of Education.

The results of the investigation are important because they provide insight into the relationship between secondary school curriculum organization, secondary school programming and entrance requirements to B. C. universities. The results also suggest that music educators should investigate other possible sources of the current decline in enrolment in music courses.

Examiners



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CHAPTER I
INTRODUCTION TO THE INVESTIGATION

Background

Since the re-introduction in 1977 of a foreign language entrance prerequisite to the University of British Columbia by its Senate Admissions Committee, concern has been expressed by music educators that British Columbia secondary school students are unable to include music courses in their timetables because of academic pressure to maintain above average or better grades and because of increased university prerequisites (Tupman, 1979). The possibility of an association between enrolment in secondary school music courses and university entrance requirements has been the subject of numerous briefs and letters submitted to the Ministry of Education and the University of British Columbia protesting the increase of prescribed prerequisites (Piller, 1981; Trowsdale, 1980).

The Impact of University Prerequisites on School Music Courses

The proposed entrance requirements seemed to be so restrictive that secondary school students who plan to enrol in such faculties as Agricultural Science, Applied Science, Science, Physical Education, Forestry, Nursing, Dentistry or Medicine are not able to include a music course in their grade 11 program. Nursing and Science, for example, would require a grade 11 and 12 timetable similar to that in

Table 1.

Before the new prerequisites were introduced, students could elect to take a music 11 course instead of French 11.

Need for the Study

The re-classification of French as an academic prerequisite also impacted on the number of electives available to students in Grades 9 and 10. Time that might be used in music classes is now being used to qualify for French 11 by completing French 9 and 10. It was on this basis that the Burnaby Music Educators Association, along with other Provincial Specialist Associations and related groups such as the Arts Action Committee and the Arts in Education Council, assumed that the University's restrictive entrance requirements were having a negative influence on enrolment in secondary school music programs (BCMEA Newsletter, 1981).

Historical Background

In 1965 and 1972, the Ministry of Education introduced changes to the curriculum organization for senior secondary schools (Administrative Bulletins, 1965, 1972). These changes were designed to encourage students to explore a wider range of vocationally oriented courses (Johnson, 1982). In spite of these changes, enrolment in Burnaby secondary school music programs continued to decline. In 1967, two years after the introduction of the Academic-

Table 1

Example of a Grade 11 and Grade 12 Program Leading to the
Faculty of Forestry, Nursing, Science or Engineering
at the University of B. C. 1984

Grade 11	Grade 12
1. English 11	1. English 12
2. Social Studies 11	2. Physics 11
3. Physical Education 11	3. Biology 12
4. Chemistry 11	4. Algebra 12
5. Biology 11	5. Chemistry 12
6. Algebra 11	6. Elective
7. French 11	7. Elective

Technical program, a total of 1,237 students elected to take a secondary school Band course (Form K, 1968). This number was reduced to 594 by 1982, ten years after the current curriculum organization chart was introduced to B. C. secondary schools. The projected enrolment for the 1984-1985 school year indicated that the decline would continue resulting in the closure of music programs in some secondary schools, forcing students interested in music to attend a magnet school (Lapthorne, 1983). The Association responded to this threat by expressing its concern for the loss by pointing out to the Music Supervisor that closure of music programs would not only deny the music teacher the opportunity to pursue his or her career but, more importantly, students in these schools would not have access to an essential element of a basic and complete education (Stigings, 1982).

During the 1982-1983 school year, the Burnaby Music Educators Association held a series of meetings with the Music Supervisor to plan strategies to combat the threat of classroom closures.

The sources of the decline were discussed and attributed to a) the current economic restraint program implemented by the provincial government, b) the state of the economy, c) the back-to-the-basics movement, d) the general decline in school population, e) marketing techniques and f) the increased pressure imposed on students to meet university entrance requirements. The Association and the District Music Supervisor elected to concentrate on the latter

two sources because the remaining sources were too complex and seemed to be beyond control of the average individual or organization.

The Music Supervisor agreed to investigate ways and means of improving marketing techniques and the Association agreed to continue its investigation of the possible impact of university prerequisites on secondary school electives. The writer agreed to assume the responsibility for the latter point, and this investigation constitutes the body of the present thesis.

Hypothesis

Whereas the University of British Columbia's entrance requirements have been described as restrictive and partially responsible for the decline in the number of Burnaby secondary school students electing to enrol in music courses, there did not seem to be any data to support this claim. Therefore, the purpose of this study was to investigate the accuracy of this claim, namely that the association between secondary school course selection and university entrance requirements has a impact on enrolment in music classes.

Limitations

The data for the descriptive study presented in Chapter 4 are limited to Secondary School students enroled in Burnaby schools between 1967 and 1983. The data are not drawn from the same population and are analyzed in terms of association rather than cause

population and are analyzed in terms of association rather than cause and effect. The percentages for 1982 and 1983 are for one semester only.

The electives used in the study are confined to courses in French, Art, Band, and Algebra. "Band and other music" courses are referred to from time to time. The numbers of students enrolled in other music courses such as Choir, Stage Band, General Music, and Guitar were insignificant by themselves; therefore, the enrolment has been included with Band.

Definition of Terms

Academic courses: those courses that have been traditionally considered predictors of academic success at universities. Generally these courses include English, Sciences, Mathematics, History, etc.

Admissions policy: refers to the Secondary School prerequisites required by universities. The term "admissions policy" is used synonymously with "university prerequisites" in this study.

Art: although Secondary School offers many different forms of Art courses, Art in this study refers to a specific course with its own aim and objectives.

Constant: those secondary school courses that are required of all

students by the Ministry of Education.

Elective: any course that is not a Constant is an Elective. In the Senior Secondary School certain restrictions are placed on the choice of electives.

Free Elective: an Elective without restrictions.

Magnet Schools: schools that specialize in a selected subject area. For example, a magnet school might specialize in Music and attract all music students in a district.

The University: refers specifically to the University of British Columbia.

Universities: includes Simon Fraser University, The University of British Columbia, and the University of Victoria.

The Nature of the Study

Chapter II will review selected literature related to the historical acceptance of music as a part of education in Western societies. It will also include references to empirical research that suggest music education can have a positive impact on learning in general. The chapter concludes with a summary of the Music Educators

National Conference's position on the role of music in the total education of children in music education.

Chapter III discusses the relationship between the Ministry of Education's graduation requirements and the University of British Columbia's admissions policies. The relationship is examined for its impact on music education and other electives.

Chapter IV presents a nonparametric descriptive study designed to determine if an association exists between the University's admission policy and selected Secondary School electives.

The final chapter will discuss the results of the descriptive study presented in the previous chapter. The chapter will conclude with a summary and recommendations concerning the need for further research into the problems presently being encountered in Music Education in District 41, Burnaby.

CHAPTER II

A REVIEW OF SELECTED LITERATURE RELATED TO
NON MUSICAL OUTCOMES OF MUSIC EDUCATIONThe Results of Two ERIC Searches

An extensive review of the literature, which included two ERIC searches and a review of recent dissertations failed to produce any information useful to the study. The decision by the University of Victoria, the University of B. C. and Simon Fraser University to reinstate a foreign language admission requirement was also investigated as a possible source of literature germane to the study. It seems that the three Universities based their decision on opinion rather than hard data (Finnigan, 1977; McMillan, 1983).

While searching for literature to support this study, the author discovered numerous articles, investigations, and dissertations related to non music results of Music Education. The following review of the literature contains selected studies that provide additional support to the belief that music is an important part of a public school education.

Review of the Literature Indirectly Related to the Study

Historically, music instruction in one form or another has been an important part of education of the young in Western society (Klotman, 1977). The role of music in terms of educational outcomes

has been considered by politicians, educators, religious leaders, philosophers, throughout history (Music Educators National Conference, 1977). Plato, in the fourth century, B.C., stated that education in music, as long as instruction on how to play the flute was not included,¹ was absolutely essential because "rhythm and harmony find their way to the inmost soul and take strongest hold upon it." (Shorey, 1945, pp. 257-258). Plato was thinking about the moral training of the guardians of the state. Martin Luther encouraged music in the 16th Century as a school subject because he felt it was second only to the word of God. Aristotle, Augustine, Locke, Pestalozzi, Froebel, Mann, Spencer, Ruskin, and Jacques-Dalcroze are other examples of western philosophers who discussed the relationship between music and education (Glenn & Turrentine, 1968). During World War II one Canadian University president stressed that music was needed during wartime as a source of inspiration (Wood, 1940). Wood's article continues with a battle cry from the Arts:

Such a viewpoint ... (that the Arts are a luxury during the war) ... is as false as it is dangerous. Art is the highest form of self-expression, art implies the triumph of the individual. These are the things for which we and our cultured allies are fighting. It is in a sense Arts versus Totalitarianism, the artist against the brute, creation against destruction."
(p. 22)

¹ "Plato held strong views on the moral effect of various sorts of music. The flute is enervating and demoralizing. The lyre on the other hand, may be made a useful vehicle of education." (Shorey, 1945, p. 108).

It is not difficult to find literature that discusses the effects of music on education as a whole (Wolff, 1978). The March 1940 issue of the Canadian Music Magazine has been selected to illustrate some commonly accepted relationships between music and its influence on nonmusic learning. This particular issue was chosen for the following reasons:

1. it contains a good deal of material touching on school music, pre-school music and orchestras as they apply to the beginner (p. 2)
2. it contains a charm that is difficult to ignore.

Christopher Wood, the editor of the magazine, states that music is a superior school subject because it trains the mind and parts of the body. He believes that it is "unequaled by any other subject with the exception of mathematics" (p. 3). He concludes his remarks by commenting that music educators must not overlook the aesthetic nature of music. Another article in this issue written by Mae E. Mason is a little more specific about why music education must be part of a child's schooling. Her reasons are

to provide for adequate leisure time, to help keep their balance in the midst of war, to produce more singing mothers, to produce more girls and boys playing instruments, to encourage better listening skills and to create more homes where parents and children, together, make fuller and more precious the life that moves in our Dominion. (pp. 7-8)

Gemeinhardt Report

The Gemeinhardt Report on parental attitudes towards their children being involved in band programs provides a more recent list of nonmusical outcomes of music education (Instrumentalist, May 1982):

Benefits a Child Receives by Being in a Band Program

Band provides a sense of accomplishment

Band is learning a responsibility

Band provides teamwork experience

Band teaches discipline

Band provides self-esteem and satisfaction

"Good group of kids in band"

Band is fun

"No one sits on the bench in band"

Band provides a child the opportunity to gain an identity

Band teaches deep appreciation of music as an art form

Band provides lasting friendships

Band provides a variety of activities

Band teaches young people to learn to make choices

Band provides an opportunity to learn leadership qualities

Band helps young people overcome shyness

Band provides better parent-child relationships.

As cited earlier, Wolff stated that there is a good deal of literature that is anecdotal in nature to support the influence of music on educational outcomes. The following quotation, she believes, is typical:

Arts-in-education programs can contribute in a number of ways to the education of every child, including the improvement of instruction in the basic skills of reading, writing and arithmetic ... The arts ... can be notably successful in motivating children to learn in all subjects and in helping them to understand and enjoy the process. (The Status of the Arts in Education, 1976, p. 2)

The philosophical basis of music education in the total development of the child has been supported by empirical research related to the "acquisition of traditional academic skills such as mathematics and language skills, intellectual knowledge, and problem solving skills" (Weinstock, 1981, p. 5). The British Columbia Committee on Arts and Education concurs with Weinstock but adds a warning:

The Arts in B. C. are in danger of being relegated to the bottom of the priority list at a time when **current** studies show that through them **the whole learning process** can be stimulated and enriched, and the creative thinking on which our society increasingly depends can be more effectively developed. (B. C. Committee on Arts and Education, 1979)

The Effects of Music and Arts Education on Social and Intellectual Development

Hanshumaker (1980) and Wolff (1978) have written articles reviewing the literature related to nonmusical outcomes of music and

identified under the following headings:

- I. Music Education and Cognitive Learning
 - A. general transfer
 - B. specific transfer
 - C. effects of Kodaly method
 - D. music and language arts
 - E. visual discrimination studies
 - F. aural discrimination
 - G. music and mathematics
 - H. music and social studies.

- II. Music Education as a Factor in Social and Emotional Growth
 - A. changes in self concept
 - B. changes in personality

- III. Music Education and Physical Growth and Learning

Hanshumaker does not restrict his review to music education and includes education in art, drama, and dance. His headings are more general in nature when compared to Wolff's. His headings are:

- I. Language Development and Reading Readiness

II. Reading and Mathematics

III. Personal and Intellectual Characteristics

- A. learning behavior and attitude
- B. creativity
- C. socialization
- D. intellectual development and achievement.

Although both writers limit their reviews to experimental research, their selection of sources is quite different. Of the 49 studies cited by Wolff, only 5 are duplicated by Hanshumaker, providing the reader with 79 studies from which conclusions can be formulated concerning any relationship between music and nonmusic outcomes. The two writers more or less agree that the studies they reviewed suggest a positive relationship. Their conclusions are compared as follows:

HANSHUMAKER

WOLFF

- | | |
|--|---|
| 1. Arts instruction has no negative effect on intellectual or social development or achievement. | 1. Music education may have a measurable effect on the development of cognitive skills. |
| 2. Arts instruction has a significantly positive effect on basic language development and reading readiness. Kodaly mentioned favorably. | 2. Music education may have an effect on general and specific transfer. Kodaly mentioned favorably. |
| 3. Arts instruction, other than Kodaly, does not affect reading or mathematics achievement | 3. Music may have a relationship between mathematics and social studies. |

HANSHUMAKER

WOLFF

but might be used as a positive reinforcing agent.

- | | |
|---|---|
| 4. Arts activities have a positive effect on the development of creativity. | 4. Academic achievement by low achievers might benefit from music education. |
| 5. Arts education has a significant influence on social development. | 5. Self concept of Junior High students might be enhanced by music education. |
| 6. Arts education has a significant influence on personality. | 6. Elementary school-aged children might experience positive changes in personality due to music education. |
| 7. Arts activities improve school climate. | 7. Music education seems to improve school climate. |
| 8. Physical health and growth not mentioned. | 8. There might be some relationship between music education and physical health and growth. |

Wolff, like Bennett Reimer (1966), is concerned about the validity of the available studies due to uncontrolled variables and incomplete reporting procedures. She concludes her review stating that "it may be said with safety that definitive evidence of the nonmusical outcomes of music education is yet to be provided" (p. 21).

Hanshumaker, rather than criticizing the literature he selected, provides the reader with the following directions for future research:

Directions for Research

1. Because of the limited number of studies related to the arts on social and intellectual development, no area of

interest should be eliminated at this time due to prior research.

2. Studies attempting to assess the effects or relationships between the arts and reading or mathematics achievement do not appear to be promising avenues for research except as such studies may further support initial findings which indicate that the arts have no negative impact on mathematics or reading achievement.
3. Very little research has been done assessing the effects of arts instruction on critical aspects of the development of junior and senior high school students.
4. Initial studies indicate that the Kodaly approach to music instruction should be thoroughly investigated for its effects on all aspects of social and intellectual development.
5. Many of the studies identified here should be replicated with different populations in different parts of the country.
6. Since the overwhelming bulk of research is conducted by doctoral candidates, dissertations which replicate or refine existing studies should be encouraged by doctoral advisers.
7. Ways should be found to encourage comparative or

experimental research in drama and dance or movement since such studies are woefully lacking.

8. Most of the research consists of extremely short term studies. Therefore foundation and government support for long term research should be actively encouraged by MENC and other arts education organizations.
9. Arts education organizations should actively seek foundation and government support for the replication of promising existing research models and for new research of important items identified by arts education.

Selected Studies that Suggest a Positive Relationship Between
Music Education and Nonmusical Outcomes

One of the most supportive studies of the relationship between music and its effect on nonmusical outcomes was produced by Jorga P. Turnipseed (1976). Her study was centered upon auditory acuity. The first grade children used in her experimental group scored significantly higher than the control group in reading, language arts and mathematics. They also missed fewer school days and made more gains in auditory discrimination, originality and flexibility. Turnipseed was one of the few researchers who was not severely criticized by Wolff for poor design or incomplete reporting.

A study entitled, "The Effects of an Integrated Physical

Education Program in Changing Early Childhood Perceptual Motor Performance" by Judy Brown (1981) suggests that physical education classes that have been integrated with Kodaly and Dalcroze concepts can have a positive influence on movement exploration and experimentation. Brown's results are supported by Churchley and Docherty (1980).

The first study cited in this section of the review of the literature used classical music as the independent variable. The second study used Kodaly and Dalcroze concepts and applied them to the experimental group. The following study uses a guitar as the vehicle to cause a change.

S. R. Eisenstein (1974) was interested in measuring the effect of guitar lessons on low level readers. Eisenstein's experimental group consisted of twelve students ranging between seven and seven and half years old. He administered guitar lessons for twenty minutes, three days per week for one month. Even though five of his subjects dropped out of the experiment Eisenstein concluded that guitar lessons can be an effective contingency for reading behavior and possibly other academic subjects also. Similar results were found by Gordon (1979).

Nicholson (1972) attempted to determine the extent to which music can improve the ability of first grade slow learners in the development of certain reading readiness skills. She wanted to discover if music could be useful in increasing attention span. It is her opinion that "anything that combats interference or distraction and forces attention to the task at hand increases one's ability to

remember" (p. 27). Nicholson used instruction in melody, rhythm, metre, and listening skills in music to increase the attention of her subjects in the experimental group. Four subproblems were related to the instruction:

1. attention span
2. concepts of high and low, loud and soft, heavy and light, fast and slow
3. letters of the alphabet
4. discrimination of selected paired groups of letters.

At the conclusion of the experiment, a post test design, the experimental group measured significant gains on at least the .001 level on all the problems measured. Nicholson concluded that music can improve the ability of slow learners in the recognition of the alphabet and reading readiness skills and that her findings were of immediate value to teachers. This study suggests a positive transfer of learning between music and reading. However, it has been severely criticized for incomplete reporting procedures and lack of control of variables that might have had an effect on the dependent variables (Wolff, 1978). Zinar (1976) challenged Nicholson's reference to the "good" general music program administered to the control group. A good general music program should have incorporated the same or at least similar strategies used for the experimental group.

Although Nicholson's study is of limited value because of its incomplete reporting procedures, uncontrolled variables, and the lack of a pretest, the results are encouraging. Her conclusions are related to Jean Piaget's principle of conservation (Regelski, 1975). In the Nicholson study the conservation

refers to an individual's ability to retain the invariant qualities of a particular stimulus [the music instruction] when the stimulus field [reading] has been changed. (Zimmerman, 1970, p. 49)

Both Wolff and Nicholson agreed in their reviews of the literature that the Kodaly system of music education had a positive influence on nonmusical outcomes. A study of the nonmusical outcomes of the Kodaly music curriculum compared the performance of two matched groups of primary children (Hurwitz et al., 1975). One group (designated the experimental group) had had seven months of Kodaly based instruction. None of the children in either group had any intellectual, social or physical handicaps. The comparison of the two groups indicated that the children who received the Kodaly instruction performed more effectively on reading tests. The researchers concluded that

The Kodaly music instruction program is obviously not a panacea for all learning problems. It seems clear, however, that some important benefits may be derived. It is an important aim of future analysis and experimentation to discover more fully what these benefits might be. (Hurwitz et al., 1975, p. 173)

Studies that Suggest Music Education Can Be a Source of Positive
Reinforcement on Nonmusical Outcomes

Madsen (1981) used music lessons and books as rewards to reinforce academic tasks. The task used in this experiment was mathematics. His subjects were a grade three class randomly selected from a public school system. The music lessons were presented by closed circuit television and were pre-programmed. The results indicated that both the books and the music lessons served as positive reinforcement based on the gain in mathematics tests scores. The music provided more gains than the books. However, the use of the television and a private view station for the music lessons might have had a positive impact on the gain (Madsen et al., 1976).

B. S. Hood III (1973) discovered a significant difference in attendance between students who received daily music instruction and those that did not. He used a pretest-posttest experimental design on sixty average grade three students randomly selected from a school district. The control group of thirty students received thirty minutes per day. The experimental group made significant gains in personality and improved attendance compared to the control group. The study concludes that the experimental group students and their teacher reacted favorably to the program.

Gordon (1979) found that instrumental music instruction is an excellent reinforcer for increased reading behavior. He concluded that children will endure an unpleasant activity if rewarded with a

music activity. One might question that reading should be an unpleasant task. Gordon also suggests that music should be a significant part of a child's education because of its motivational value. This opinion is shared by Wright (1977).

Wolff (1979) designed a study to determine the extent to which general music instruction would affect:

1. reading achievement
2. mathematics achievement
3. perceptual skill development
4. creative thinking
5. absenteeism.

The results of this study are inconclusive. Slight significant gains were made in the five areas measured, but not sufficient to provide strong support for music education based on nonmusical outcomes. The conclusions were sufficient, however, to conclude that music can be responsible for a number of beneficial outcomes related to the five areas listed above and therefore might be used as a guide for future research efforts.

Summary

The literature suggests that the inclusion of music as part of a child's education can be justified from a historical and empirical perspective. The historical literature reviewed was philosophical in nature and was limited to non aesthetic or non musical outcomes. The empirical literature suggested that music education might have a positive influence on learning in other disciplines. No attempt was made to discuss the aesthetic issues related to music education.

CHAPTER III

A COMPARISON OF THE BRITISH COLUMBIA MINISTRY OF EDUCATION SECONDARY SCHOOL CURRICULUM ORGANIZATION WITH THE ADMISSION POLICIES OF THE UNIVERSITY OF BRITISH COLUMBIA BETWEEN 1962 AND 1983

The University Program, 1962

In 1962, B. C. public school students were required to complete 120 credits or approximately twenty-four courses through grades 9 to 12 in order to graduate with a Dogwood certificate. Each course, with the exception of Physical Education and Guidance, was worth five credits. Most secondary schools during this period were on a five by seven timetable which meant that students could take seven courses per year and earn up to thirty-five credits. By the end of Grade 12, a student could receive a Dogwood graduation certification with one hundred forty credits, twenty more than required by the Ministry of Education. Although Principals and Counsellors had the responsibility of ensuring that students who carried

thirty five credits in each of Grades 9, 10 and 11 achieve as high a standard as possible and select a challenging Grade 12 programme even though they may not require the additional credit (Administrative Bulletin, 1962, p. 5),

a reasonable amount of flexibility in the selection of electives was permitted. The twenty additional credits could be used for a study period or more courses in music. Table 2 indicates that eighty-five credits were assigned as Constants, leaving a total of thirty-five to

Table 2

Prescribed Courses and Credit Requirements for Graduation, 1961

University Programme		
Credit	Required Courses	Constant Subjects
20	En 10, 20 or 21, 30 or 31, 40	English
15	SS 10, 20, 30	Social Studies
8	* PHE 10, 20, 30	Physical and Health Education
7	* G 10, 20, 30	Guidance
15	Ma 10, 20, 30	Mathematics
10	Sc 10, 20	Science
10	Fr 10, 20	Languages and Non-Academic
	Ge 10, 20	Subjects
	La 10, 20	
	Sp 10, 20	
<hr/>		
85		
<hr/>		
		Electives
<hr/>		
35	Agriculture	
	Art	
	Commerce	
	Drama	
	Home Economics	
	Industrial Arts	
	Music	
	Vocational	
	Elective courses in the	
	constant subjects	
	named above	
<hr/>		
120		

A,B) Effective September, 1961, and the following years.

C) Two courses in one and the same language to be selected.

fifty-five credits for electives. Usually this enabled students to take seven to eleven electives. There were some restrictions however.

In order to graduate on the University Program students were expected to complete seventeen Constants or required courses and seven out of a possible eleven electives. At least three electives had to be used to complete a "Major" in particular fields of study. For example, completion of Science 10, 20, Physics 91 and Chemistry 91 constituted a Science Major; Mathematics 10, 20, 30, 91 constituted a Mathematics Major; English 10, 20, 30, 40 and 91 constituted an English Major (Table 3).

Electives Available for Music

The seven unrestricted electives could have been used for music courses or courses from any of the subject areas listed in the box on the left of "ELECTIVES", Table 2.

In 1962, the Ministry of Education and the Senate of the University appeared to have agreed upon what public school courses embodied an academically oriented program. The University's 1962 Calendar stated that the minimum academic qualification for admissions was, "High School Graduation, (University Programme) of the Province of B. C. or its equivalent" (p. 77). The recommended prerequisites for its various faculties were published in the Ministry's Administrative Bulletin. Using the Bulletin as a guide, the University Program Constants and the Major in Mathematics, English

Table 3

Example of a B. C. High School University Program Leading to
Entrance to the Faculty of Engineering, U. B. C., 1962

					Grade				
					9	10	11	12	
	1	En 10	En 20	En 30	En 40				
S u b j e c t s	2	SS 10	SS 20	SS 30	Chem 91				
	3	PE/GUI 10	PE/G 20	PE/G 30	Eng 91				
	4	Ma 10	Ma 20	Ma 30	Ma 91				
	5	Sc 10	Sc 20	Ph 91	Elective				
	6	Fr 10	Fr 20	Elective	Elective				
	7	Elective	Elective	Elective	Elective				
						1	2	3	4

No of Electives = 7

and Science, the course selection outlined on Table 3 would have been suitable for many of the University's faculties including Architecture, Engineering, Pre-Medicine and Home Economics. Basically, all that was required to enter the University was graduation on the University Program. The electives not required by the Majors were more or less free to be used as the students saw fit to use them.

Although only one elective in Grade 9 and 10 was available to University Program students, some flexibility was encouraged. For example Constants such as P.E. 20 and 30 could be postponed from Grades 10 and 11 to Grades 11 and 12. The opportunity to include courses usually taken in Grades 9 and 10 as part of a four year high school graduation program could have been an advantage for music programs (Table 4).

Tables 2 and 3 can also be used to point out one of the disadvantages to music programs caused by Program Constants, Majors and admission to the University. In Grades 11 and 12, for example, five courses were required Constants, four to complete the Major and/or satisfy the University's course suggestions to students. Table 2 shows that eight subject areas plus all the courses related to those subjects and additional courses from the Constant subject areas were competing for the remaining electives. Industrial Arts, for instance, could be divided into five courses: Woodwork, Metalwork, Electricity, Drafting, Automotives. The number of courses available to students,

Table 4

An Example of a University Program Combining Music,
University Prerequisites and Flexible Scheduling

		Grade				
		9	10	11	12	
N o. o f C o u r s e s	1					
	2				Ma 91	
	3	C O N S T A N T S				Chem 91
	4			Latin 91	En 91	
	5			Ph 91	PE 30	
	6			Music 33	Music 93	
	7	Music 11	Music 22	Music 20	Music 30	
		1	2	3	4	
No. of Electives = 8						

plus the vast number of courses from other school subject areas, should have had an impact on enrolment of University Program students who wanted to enrol in music programs.

Curriculum Reorganization, 1967 - The Academic-Technical Program

The introduction of the Academic-Technical Program in 1967 and subsequent modifications to the University's admissions policy eased the competition for students by Subject areas not classed as Constants or given academic recognition by the University. The new curriculum contained many significant changes that might well have had a positive influence on B. C. schools' music departments.

Perhaps the most significant change was the separation of Grades 8, 9, and 10 from Grades 11 and 12. Two new institutions, the Junior Secondary School and the Senior Secondary School, replaced the High Schools. Both institutions had separate curriculum charts and separate promotional policies.

The Junior Secondary School curriculum required that Grade 8 students take courses that could be considered traditionally as academic. Students in Grade 9 and 10 would branch out into an academic or non-academic program. The number of courses required for the last two grades was increased from seven to eight. A Junior Secondary School music student's University preparation program would have been similar to that in Table 5.

The elective in Grade 8 was probably limited to either Art or

Table 5
Course Selection - University Preparation

Grade 8	Grade 9	Grade 10
English 8	English 9	English 10
Soc. Studies 8	Soc. Studies 9	Soc. Studies 10
Physical Ed. 8	Physical Ed. 9	Physical Ed. 10
French 8	French 9	French 10
Mathematics 8	Mathematics 9	Mathematics 10
Science 8	Science 9	Science 10
Band 8	Band 9	Elective
Elective	Elective	Elective

Drama. The additional elective added to Grade 9 and 10 should have made other music courses more accessible for students who did not want to take courses from other subject areas.

The new Senior Secondary School curriculum chart introduced the Academic-Technical Program with its three specialty areas: Humanities, Sciences, Technical. Graduation on an Academic program was based on the successful completion of ten courses chosen from General Education Constants, Program Constants and Program Specialties (Administrative Bulletin, 1967). There was a reduction in the number of electives and Grade 10 courses were no longer directly considered for graduation which decreased some of the flexibility associated with the old University Program. Table 6 outlines the requirements for the Academic-Technical Program.

The Impact of the 1967 Curriculum Organization on Electives

The number of electives for Senior Secondary Schools (Grades 11 and 12) was reduced from six to four or five, depending on the Specialty chosen. In the larger Senior Secondary Schools Academic students could choose their electives from a list of fifty courses, not including additional Arts and Science courses that could also be taken as electives (Table 6). Courses that were not Constants or considered academic relied mainly on their ability to attract students on merit or interest alone. Musically oriented Academic students could find some additional time for music courses by completing the

Table 6

Courses Required to Complete the Academic Technical Program

Senior Secondary Programme	Academic & Technical Programmes		
General Education Constants	ENGLISH 11 and 12 SOCIAL STUDIES 11 GUIDANCE & PHYSICAL & HEALTH EDUC. 11		
Programme Constants	MATHEMATICS 11 One of: BIOLOGY 11, CHEM. 11, PHYSICS 11. *One of: FRENCH 11, GERMAN 11, LATIN 11, SPANISH 11. *(A course in a Specialty in another programme may be substituted if a Technical Specialty is chosen.)		
Programme Specialties	SPECIALTIES		
	Arts (Humanities)	Sciences	Technical
	Three courses se- lected from sepa- rate groups below, at least two cour- ses of which must be numbered 12 and be examinable: 1) Language 12 2) History 12 <u>or</u> Geo. 12 3) Eng. Lit. 12 4) Ma. 12 5) Another Lang. 11 <u>or</u> 12, <u>or</u> Beginners' Lang. 11 (German, Latin, Russian, Spanish or Italian 6) History 12 <u>or</u> Geo. 12 <u>or</u> Law 11 <u>or</u> Ec. 11 (not taken under #2 above)	Three Courses: 1) Math. 12 2) One of: Biology 12 Chem. 12 Physics 12 3) One additional science chosen from: Biology 11, 12. Chem. 11,12. Physics 11, 12.	Three courses: 1) Math.12 2) Biology 12 <u>or</u> Chem.12 <u>or</u> Physics 12 3) One course not taken as a Prog. Constant, numbered 11 or 12 from a Specialty in a Prog. other than the Aca- demic & Technical

Technical Specialty rather than the Arts and Science Specialty. Band 11, for example, could be taken in lieu of French 11 and Band 12 could be used as one of the Technical Specialty requirements (Table 6). This Specialty was accepted for admission by the Senate of the University at the time.

Even with one less elective and with program selection restrictions for students who elected the Academic-Technical Program, Music courses should have benefited from the new curriculum. Students who chose the Arts and Science Specialty Courses and those students who opted for the Technical Specialty could elect six. The music courses in the Visual and Performing Arts Specialty are listed in Table 7.

Although the U. B. C. Senate and the B. C. Ministry of Education still appeared to be in relatively close harmony with the relationship between the Academic-Technical Program and University entrance requirements, a number of significant differences could be observed.

The 1967 Administrative Bulletin did not make any direct references to the University, nor did it publish faculty-suggested prerequisites as it had done in the past. The purpose of the new Academic-Technical Program was "to provide the basic preparation necessary for continuing education in such institutions as universities and technical institutes" (Administrative Bulletin, 1967, p. 32). The "Technical" program opened up a wide range of courses available to students in their last two years of public education.

Table 7

Courses Required to Complete the Visual and Performing Arts Program

Visual and Performing Arts Programme		
ENGLISH 11 and 12 SOCIAL STUDIES 11 GUIDANCE & PHYSICAL & HEALTH EDUC. 11		
A course numbered 11 from another FINE ARTS SPECIALTY <u>or</u> from another PROGRAMME GENERAL BUSINESS 12		
ART	SPECIALTIES MUSIC	THEATRE
Six courses: 1) Art 11 2) App. Design 11 3) One of the following: a. Drawing & Painting 11 b. Commercial Design 11 *c. Graphic Design 11 4) Art 12 5) App. Design 12 6) One of the following: a. Drawing & Painting 12 b. Commercial Design 12 *c. Graphic Design 12	Six courses: 1) One of the following: a. Band 11 b. Orch. 11 c. Chorus 11 2) Musicianship 11 3) Instrumental Survey 11 4) One of the following: a. Band 12 b. Orch 12 c. Chorus 12 5) Musicianship 12 6) Instrumental Survey 12	Six courses: 1) Acting 11 2) Stagecraft 11 3) Theatre 11 4) Acting 12 5) Stagecraft 12 6) Writing & Directing 12

One of the reasons for the new program was a new attitude within the Department of Education, based on federal aid for education leading towards eventual employment (Johnson, 1982). The University responded to the new Bulletin by publishing in its Calendar "advised" prerequisites to its various faculties. The most significant change in the University's response to the Ministry's program is found in the following quotation:

Graduates in the Arts and Science specialties will be required to have a second language to the "11" level. Graduates in a Technical Specialty must have credit for a second language to the "10" level. University courses in French will in general anticipate a background to the "11" level. (U. B. C. Calendar, 1968, p. A 30).

The University adopted the Arts and Science Specialty as a general prerequisite; however, a second language, usually French, became the first specific requirement for all prospective students. This effectively committed Grades 9 and 10 candidates to a course similar to French 9 and 10. Grade 11 students had the option of electing the Technical Specialty which would give them an additional elective in lieu of French 11 that might have been used for a music course. However, it is interesting to note that even though the University required the completion of at least a Grade 10 level second language, the successful completion of this course did not appear on the Academic-Technical Program graduation transcript. The only way the University could police this requirement was to rely on the

co-operation of the Senior Secondary Schools to ensure that students on the Technical Specialty did indeed meet the University's language 10 requirement. It was a common practice during this period for Senior Secondary Schools to offer French 10 to students in Grades 11 and 12.

The Supplement to the 1967 Academic-Technical program

In 1968 the Ministry introduced a supplement to the 1967 Administrative Bulletin. The purpose of the supplement was to give advance notice concerning modifications to the Arts (Humanities) and Technical Specialties. The intent of the modifications was:

1. To increase the choice of studies within two of the three specialties in the Academic and Technical Program.
2. To facilitate the possibility of a transfer of specialties at the end of Grade XI.
3. To give official recognition and encouragement to the electing of non-academic studies in the Technical Specialty, particularly those other than industrial.

These modifications should have had a positive impact on the number of students enrolled in music courses.

Students in the Arts (Humanities) Specialty could now include a

course numbered 12 from the Visual and Performing Arts Specialty. The subject areas and their courses are listed in Table 8. This meant that music students could use Band 12 or another music course numbered 12 as part of a university entrance program. It also meant that the elective normally taken for Band could be used for an additional music course.

The Technical Specialty was more restrictive in that students had fewer options with which they could select their courses. However it included two music courses (Table 9) and enabled students to combine a music concentration with a university entrance program.

Students on the Academic-Technical, Visual and Performing Arts Specialty also had the option of substituting a course from another Specialty area in lieu of French 11. A student with a strong interest in music could have selected a program similar to that in Table 10.

Although, as cited earlier, the University still required French 10, the official transcript issued to school graduates did not include Grade 10 courses. This probably created a problem for the University and might account for it quietly dropping a second language as an entrance requirement by 1972 (U. B. C. Calendar, 1972, p. 17).

The Introduction of the Current Curriculum Organization

In 1972 the Ministry introduced the current Curriculum Organization Chart (Table 11). The Academic-Technical program was replaced by the Selected Studies and the Combined Studies Programs.

Table 8

Arts (Humanities) Specialty

Three courses selected from separate groups below, at least two courses of which must be numbered 12 and be examinable

1. Language 12
 2. History 12 or Geography 12
 3. English Literature 12
 4. Mathematics 12 or a Science 11 or 12 not taken as a Programme Constant
 5. Another Language 11 or 12 or Beginners' Language 11 (German, Latin, Russian, Spanish or Italian)
 6. History 12 or Geography 12 or Law 11 or Economics 11 (not taken under #2 above)
 7. A course numbered 12 from the Visual and Performing Arts Specialties
-

Table 9

Courses Required for the Academic Technical Program,
Visual and Performing Arts

(Visual and Performing Arts)

1. Ma. 11
 2. A Science 11 or a Language 11
 3. Art 11 or Musicianship 11
-

Three Courses:

1. A Science 12 or a Language 12
 2. Eng. Lit. 12 or History 12
 3. A course numbered 12 from the Art or Music Specialty
-

Table 10

An Example of an Academic Technical, Visual and Performing Arts
Specialty, Course Selection for Grade 11 and Grade 12

1967	
Grade 11	Grade 12
1. English 11	1. English 12
2. Social St. 11	2. Physics 12
3. Choir 11	3. Literature 12
4. Math 11	4. <u>Band 12</u> C
5. <u>Musicianship 11</u> A	5. P.E. 11
6. Physics 11	6. <u>Choir 12</u> D
7. <u>Band 11</u> B	7. <u>Instrumental Survey 11</u> E

Table 11

Partial Curriculum Organization Chart For British Columbia Senior Secondary Schools (1972)

General Education Constants (Required of all students)			
1.	English 11, English 12, Social Studies 11, Physical and Health Education and Guidance 11		
2.	Selected Studies Programmes Requirements	No of Courses	<u>or</u> Combined Studies Programmes Requirements
	(a) 4 courses selected from one grouping in the chart below and	4	(a) * 5 - 7 courses selected from the the chart below and
	(b) 2 courses numbered 12 selected from the grouping chosen in (a) above and	2	(b) 3 courses numbered 12 selected from the chart below and
	(c) 1 course numbered 12 selected from any grouping in the chart below and	1	
	(d) * 1 - 3 additional courses	1 - 3	
	Total of Courses Selected (A minimum of 8 courses required for Graduation)	8 - 10	Total of Courses Selected (A minimum of 8 courses required for Graduation)

Table 11 (Continued)

Total of Courses (A Minimum of 12) Required for Graduation				
Arts and Sciences	Commercial	Industrial	Community Services	Visual and Performing Arts
Wr. 11, Lit 12	Ty. 11	Drf. 11, Drf. 12	Fd. 11, Fd. 12A	Ar. 11, Ar. 12
Fr. 11, Fr. 12	Sh. 11A	Ip. 11	Fd. 12B	AD. 11, AD. 12
Ge. 11, Ge. 12	Sh. 11B	ISc. 12	Tx. 11, Tx. 12A	CD. 11, CD. 12
BGe. 11, La. 11	OP. 12	Cst. 11, Cst. 12A	Tx. 12B	GD. 11, GD. 12
La. 12, BLA. 11	OO. 12	Cst. 12B	Mgt. 11	Mu. 11, Mu. 12
Sp. 11, Sp. 12	SP. 12	Mx. 11, Mx. 12A	HIS. 12	Ba. 11, Ba. 12
BSp. 11	BM. 12	Mx. 12B	CC. 12	Cho. 11, Cho. 12
BIT. 11, BRu. 11	Bk. 11, Bk. 12	El. 11, El. 12	CR. 12	Orch. 11, Orch. 12
Ma. 11, Ma. 12	Ac. 12	Elx. 12	GB. 11, GB. 12	InS. 11, InS. 12
Bi. 11, Bi. 12	GB. 11, GB. 12	GM. 11	GM. 11	Act. 11, Act. 12
Ch. 11, Ch. 12	GM. 11	GB. 11, GB. 12		St. 11, St. 12
Ph. 11, Ph. 12				Th. 11, WD. 12
Ec. 11, Law 11				GB. 12, Wr. 11
Geo. 12, Hi. 12				DP. 11, DP. 12

All courses numbered 11, 11A, 11B, 12, 12A, 12B, and locally developed, Provincially approved courses may be selected provided that they do not replace the selected courses numbered 12. (maximum = 2)

The new organization was significant because it placed a stronger emphasis on individual needs and placed less importance on an "academic" program per se. The new philosophy stated that "every child in the province will have the opportunity to develop to his fullest potential not only as an individual but also as a member of society" (Administrative Bulletin, 1972, p. 1). The philosophy was also expressed in operational goals. The more important ones were:

1. Providing all pupils with the means of acquiring literacy.
2. Providing all pupils with the basic tools for continuous learning including knowledge; e.g., facts, concepts, generalizations; as well as skills: e.g. auditory, visual, tactile, manipulative, intellectual and aesthetic.
3. Providing all pupils with the guidance for becoming social beings and for developing their own integrated system of values.

The objectives of the Secondary School Curriculum Organization did not make any direct reference to an academic course of studies or university entrance requirements (Administrative Bulletin, 1972). Students now had the responsibility to "select for themselves educational goals and patterns of study in accord with their proven

interests and abilities" (Administrative Bulletin, 1972, p. 3).

The University responded favorably to the new philosophy and admitted students who had a C, C+ or better average on the courses that were traditionally considered "academic", such as the courses outlined under the title "Arts and Science", Table 11. Students were advised to match their school courses with whatever Faculty in which they wished to enroll. Applied Science students, for example, were advised to take Chemistry 12, Math and Physics 12.

The period between 1972 and 1978 should have been one of growth for secondary school music programs because of the increased electives created by the Combined Studies and Selected Studies Programs. The latter program was, in effect, the four constants and eight to ten electives. The "mix and match" nature of the Combined Studies enable it to be just as academic as the Selected Studies Program, Arts and Science specialty. It was probably difficult for the University to determine which one of the example programs in Table 12 has more academic merit than the other.

The Impact of the Selected Studies and Combined Studies Program on University Prerequisites

The universities seemed to be left on their own as far as determining what constituted academic qualification necessary for admission. The only relationship between university expectations and the Ministry of Education's philosophy of education seemed to be the

Table 12
Sample Course Selections

Combined Studies	Selected Studies
Grade 11	Arts and Science Grade 11
1. English 11 2. Soc. Studies 11 3. P. E. 11 4. Algebra 11 5. Physics 11 6. Band 11 7. Choir 11	1. English 11 2. Soc. Studies 11 3. P. E. 11 4. French 11 5. Law 11 6. Biology 11 7. Foods 11
Grade 12	Grade 12
1. English 12 2. Algebra 12 3. Physics 12 4. Beginners German 11 5. Band 12 6. Choir 12 7. Musicianship 12	1. English 12 2. History 12 3. Literature 12 4. Beginners Spanish 11 5. Foods 12 6. Art 11 7. Choir 11

Arts and Science Specialty. Perhaps this is the reason that in 1978, the University announced the following changes in admission requirements:

A. 1978 Winter Session

A C+ average will be required and calculated on the ten courses including English 11, English 12, Social Studies 11 and "all prescribed subjects for the university studies being sought. Grade 12 courses will, where relevant, receive priority over Grade 11 courses."

B. Changes in Admission Requirements:

(a) for Winter Sessions 1979-80, and 1980-81

- included in the ten-course calculation must be three courses numbered "12", selected from the "Arts and Science" category in the secondary school curriculum.

(b) for Winter Session 1981-82

- secondary school graduation must include the following ten courses:

1. English 11
2. English 12
3. Social Studies 12
4. Algebra (Mathematics) 11
5. French 11 or a foreign language 11
6. a Science 11
- 7-8-9-10. four courses, from the "Arts and Science" category of the secondary school curriculum.

The Impact of University Prerequisites on Electives

Although it appeared that the University required only ten specific courses for admission, the number was actually eleven. The 1981 - 1982 entrance requirements omitted one of the public school constants required for graduation: Physical Education 11. Students without a graduation certificate were not eligible for admission to

the universities. The net effect of the 1981 - 82 entrance requirements should have had a detrimental influence on enrolment in secondary school music classes for two reasons:

1. The number of electives available for music in the Senior Secondary School was reduced from four on the Selected Studies and ten on the Combined Studies to three regardless of Program selected.
2. Reinstating French 11 as an entrance requirement meant that class time that might have been used for a Music 9 or 10 course had to be used for French 8 and 9 as these courses were prerequisites for French 11.

By 1982, it seems as if the University opposed the philosophy and objectives of the Ministry of Education and imposed its own academic graduation program on B. C. secondary schools. The University's entrance requirements did not give much of an opportunity "to select for themselves educational goals and patterns of study in accord with their proven interests and abilities" (Administrative Bulletin, 1982, p. 3). The decision to enter the University must be made by the end of Grade 8 in order to obtain the necessary prerequisites for Senior Secondary courses. The average age of a Grade 8 student is 13 years, a difficult age to have set "goals and patterns" to meet expectations four to five years in the future. The differences between the

University's Secondary School graduation expectations and those of the Ministry of Education's are reflected in the following quotation:

Most boys and girls, and especially those with whom we are concerned, want their education to be practical and realistic. They feel a good deal better if they can see that it is vocational. They like to have some say in choosing what they shall learn. We believe that these four words - practical, realistic, vocational, choice - provide keys which can be used to let even the least able boys and girls enter into an educational experience which is genuinely secondary. (Administrative Bulletin, 1972, p. 4)

Summary

The comparison of admission requirements to the University of British Columbia with Secondary School graduation requirements indicates that until 1967, the two institutions seemed to be in agreement over which Secondary School program was academic. After 1967, the Ministry seemed to have altered its philosophy and moved towards a more eclectic approach to curriculum organization. Although the University continued to accept the Arts and Science Specialty as a basis for admission, it appeared that they were on a divergent course, moving further apart from the Ministry. As of 1983, the University has, in a sense, imposed its own graduation requirements on Secondary School students who plan to enter that institution. The University no longer recognizes all the Ministry's Constants and requires a chosen set of required courses to meet minimum entry requirements plus

additional prerequisites for its many faculties.

It now appears that the province's other major universities, Simon Fraser and the University of Victoria, are modelling their admissions policy after the University of British Columbia's. The impact of these changes will have a negative effect on enrolment in electives in Secondary Schools. It seems logical that if the Universities are restricting course selections by requiring certain courses for admission purposes, the students who wish to enter their institution have no alternative but to take these courses instead of electing courses in keeping with the Ministry's philosophy and objectives of education.

The apparent lack of concern for the effect that Ministry constants and University entrance requirements have on public electives, particularly in music, is a major concern of the B. C. Music Educators' Association. The recent implementation of another educational constant, Consumer Education, and recent changes to admission requirements by the University of British Columbia, Simon Fraser University and the University of Victoria have added to the problem of maintaining music courses in B. C. public schools.

CHAPTER IV

A DESCRIPTIVE INVESTIGATION TO DETERMINE THE POSSIBILITY OF AN ASSOCIATION BETWEEN THE ADMISSIONS POLICY OF THE UNIVERSITY OF B. C. AND ENROLMENT IN SECONDARY SCHOOL BAND, ART AND FRENCH COURSES

Until the early 1970's Burnaby Secondary Schools had sufficient numbers of students taking French to warrant French Department Heads for administrative and pedagogical purposes. By 1975, three or four years after the University changed its second language requirement for admission, the numbers of students in French decreased to the point where fewer teachers were required and Department Heads were no longer necessary. Conversely, enrolment in Visual and Performing Arts courses increased enough to justify the creation of two separate departments, each with its own Department Head. Shortly after 1978, when the University announced its intention to reinstate a second language entrance requirement by 1982, an increase of enrolment in French and a decline in enrolment in Band and Art was observed by and responded to by the Burnaby Music Educators Association (B. C. Music Educator, Fall 1981). The Association along with other music educators from other Districts suspected that a relationship existed between the University's 1982 admission policy and enrolment in Music programs (Trowsdale, 1981). Their concern was that the new admissions policy published in the 1979 University calendar was one of the causes of declining enrolment in Secondary School Performing Arts departments.

Declining Enrolment in Band Related to Admission to U. B. C.

In order to test the validity of this assumption, the author interviewed all Grade 11 students in 1982 and 1983, in one Burnaby Secondary School, who elected to discontinue Band and/or Choral Music in Grade 12. With one exception, these students maintained that they could not keep up with the demands of the music program and prepare themselves for the University. The consensus was that in order to keep "all doors open" for future post-secondary education, it is necessary to meet the University's minimum entrance requirements and the required and suggested prerequisites (see Appendix A). The results of these interviews correspond with the opinions of the parents interviewed for the Gemeinhardt Report. The Report states that "conflicts with other activities leads the list of reasons children drop out of band" (p. 42). Increased entrance requirements by the University seemed to conflict with time for music courses.

French was the only subject that had its academic status temporarily removed by the University and therefore could be used to test the assumption that the University's admissions policy had an impact on Secondary School course planning. French enrolment was used by the author in a pilot study to determine whether or not a relationship between course selection and the University's admission policy was worth investigating. A questionnaire designed to gain insight into why students elect French was distributed to fifty Grade 9 Mathematics students and fifty Grade 10 Mathematics students from

one Junior Secondary School in Burnaby (see Appendix B). Thirty two Grade 9 students indicated they took French because it was required by the University. Twenty of these students reported that they would take French regardless of post-secondary institution expectations. Thirty eight Grade 10 students reported that French was a part of their program because of University requirements. Only six of these students would continue studying the language if it was not required by the University.

The results of the pilot study and a subsequent random sampling of two hundred Grade 11 and 12 Progress Record Cards for the 1982-1983 school year from one Senior Secondary School to determine drop out trends in French 9, 10, 11 and 12 suggested that a relationship between enrolment in French was connected to the University's entrance requirements. The author hypothesized that this relationship had an impact on enrolment in Band and other Visual and Performing Arts courses. The following investigation was designed to test the validity of the hypothesis.

The Nature of the Investigation

The investigation has two distinct but related parts. The first part visually establishes by means of graphs the impact the University's 1971 and 1978 admissions policy seems to have on Art, Band and French. The second part attempts to determine statistically that an association is possibly one of the causes for the current

decline in enrolment in Band, Art, and other Visual and Performing Arts courses.

Part I of the Investigation

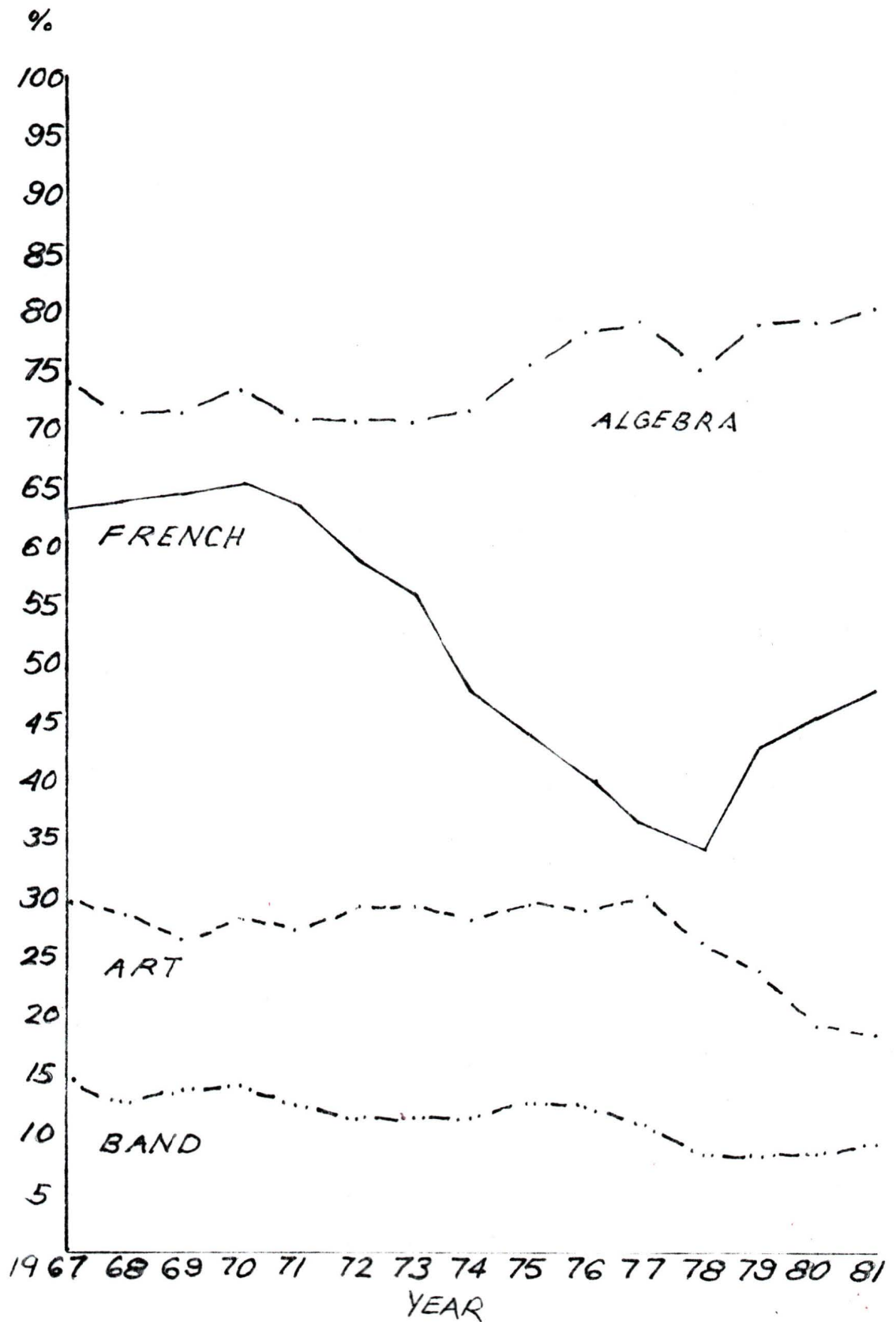
Subject sources. All District 41 Junior and Secondary School students enrolled between 1967 and 1983 in Grades, 8, 9, 10, 11, and 12 Art, Band, Algebra, French and other music courses were used in this part of the investigation. The data, which represent tens of thousands of students, were collected from the Ministry of Education's Form K, Form 2001 obtained from the Burnaby School Board office and Education Data Services, Division of Communications, B. C. Department of Education in Victoria.

Graphic Presentation

Table 13 represents the percentages of all Junior and Senior Secondary school students enrolled in Art, Algebra, Band and French between 1967 and 1981. The graph is useful because it provides visual insight into the overall patterns of student course selection in these subjects. It also contains information related to the University's attitude towards French as an academic requirement and indicates the dates of the last two Ministry of Education's curriculum charts. The graph's value in predicting any association between the University and student course selection is limited because Grade 8 has been included. French 8 and Mathematics 8 (Algebra) are considered Constants and

Table 13

Percentage of Enrolment in Algebra, Art, Band, French, Grade 8-through 12
1967 - 1981



therefore must be taken by all students. The graph does show a dramatic decline in French enrolment between 1970 and 1978, the period that the University did not have a second language requirement. The Table also reveals an increase in Algebra and a slight increase in Art which suggests some students between 1971 and 1978 might have transferred from French to either of the other two courses. Unfortunately, the percentages for Algebra are contaminated because some of the Junior Secondary Schools' enrolment totals for the late 1970's combined Mathematics (Algebra) and General Mathematics, a non-academic course unacceptable for admissions purposes by the University. All students who did not enrol in French courses had to elect courses from other subject areas. The graph indicates that Music courses were not popular choices.

Table 14 presents a clearer picture of enrolment patterns for Grades 9 through 12 because it excludes Grade 8. Whereas Algebra and French are Constants in grade 8, they are electives in Grades 9 through 12. This graph reveals more accurately the relationship between the University's admission policies of 1971 and 1982 and the decline of Art and French numbers of students. Enrolment in Band and other Music courses does not appear to be affected by admission policies. Tables 16, 17, 18, and 19 tend to confirm this observation.

Table 14

Percentage of Enrolment in Algebra, Art, Band, French, Grades 9 through 12
1967 - 1981

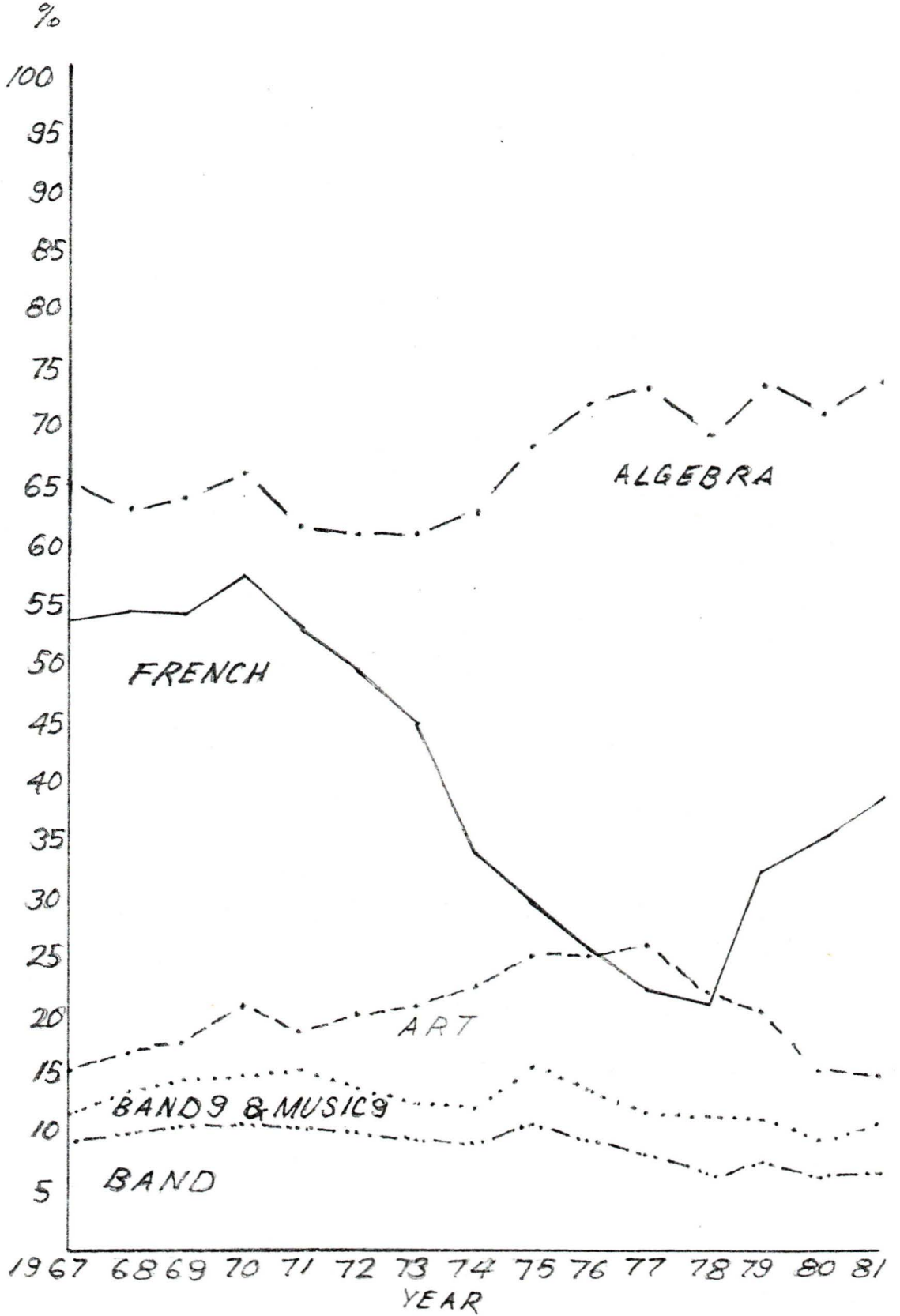


Table 15
Percentage of Enrolment in Art 8 and Band 8
1967 - 1983

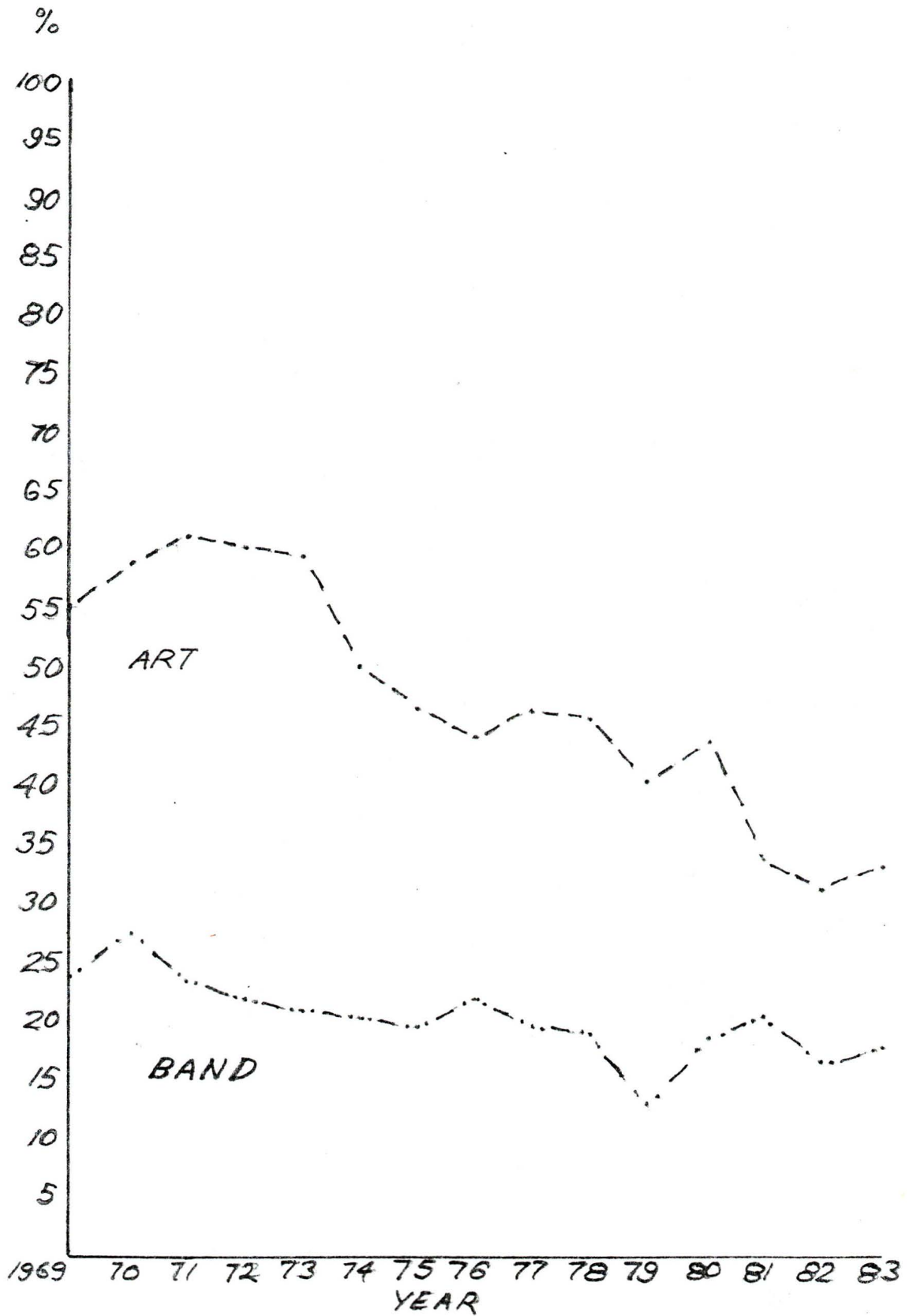


Table 16

Percentage of Enrolment in Algebra 9, Art 9, Band 9, French 9, Band and Music 9
1967 - 1982



Table 17

Percentage of Students Enrolled in Art 10, Band 10, and French 10
1967 - 1981

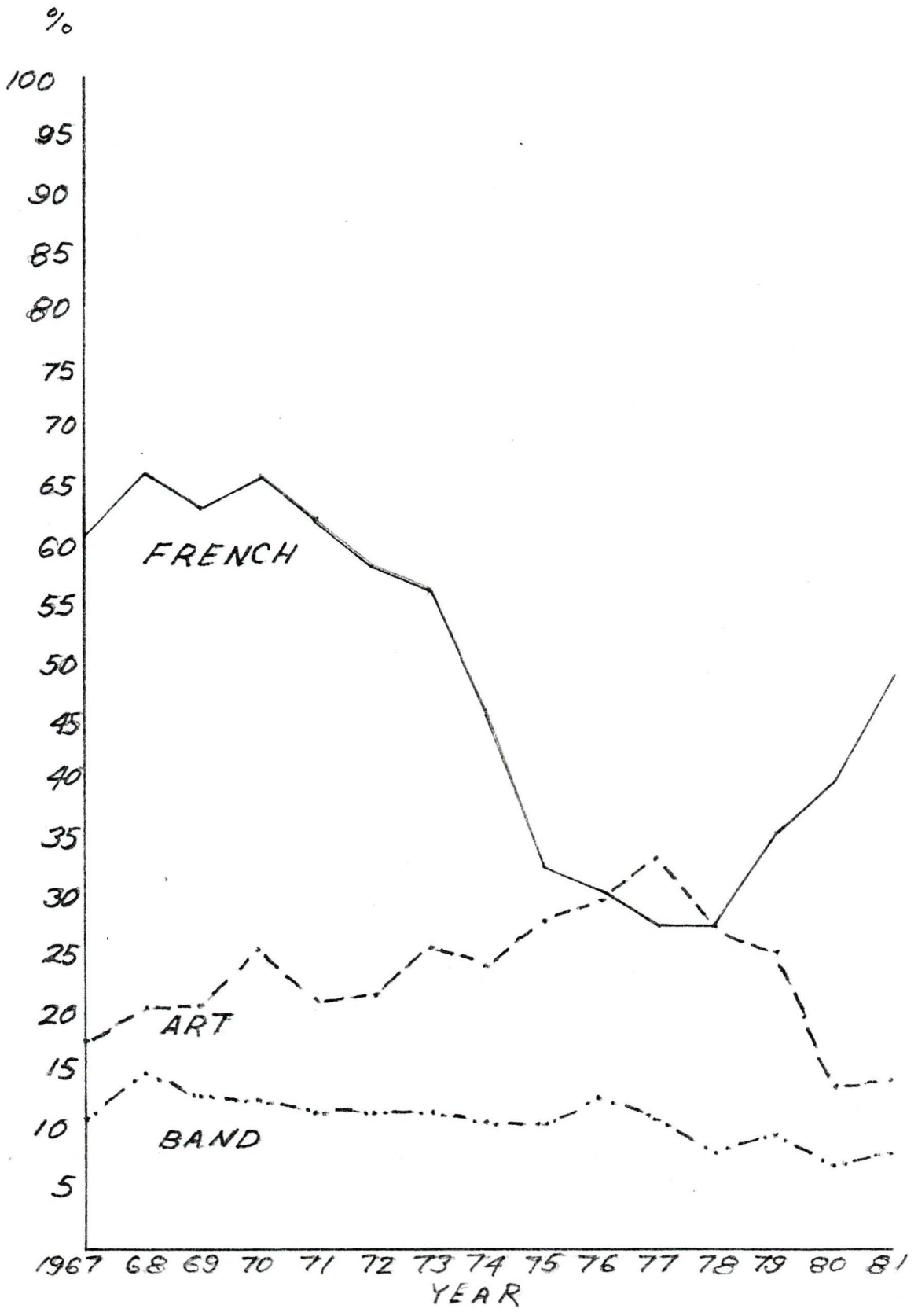
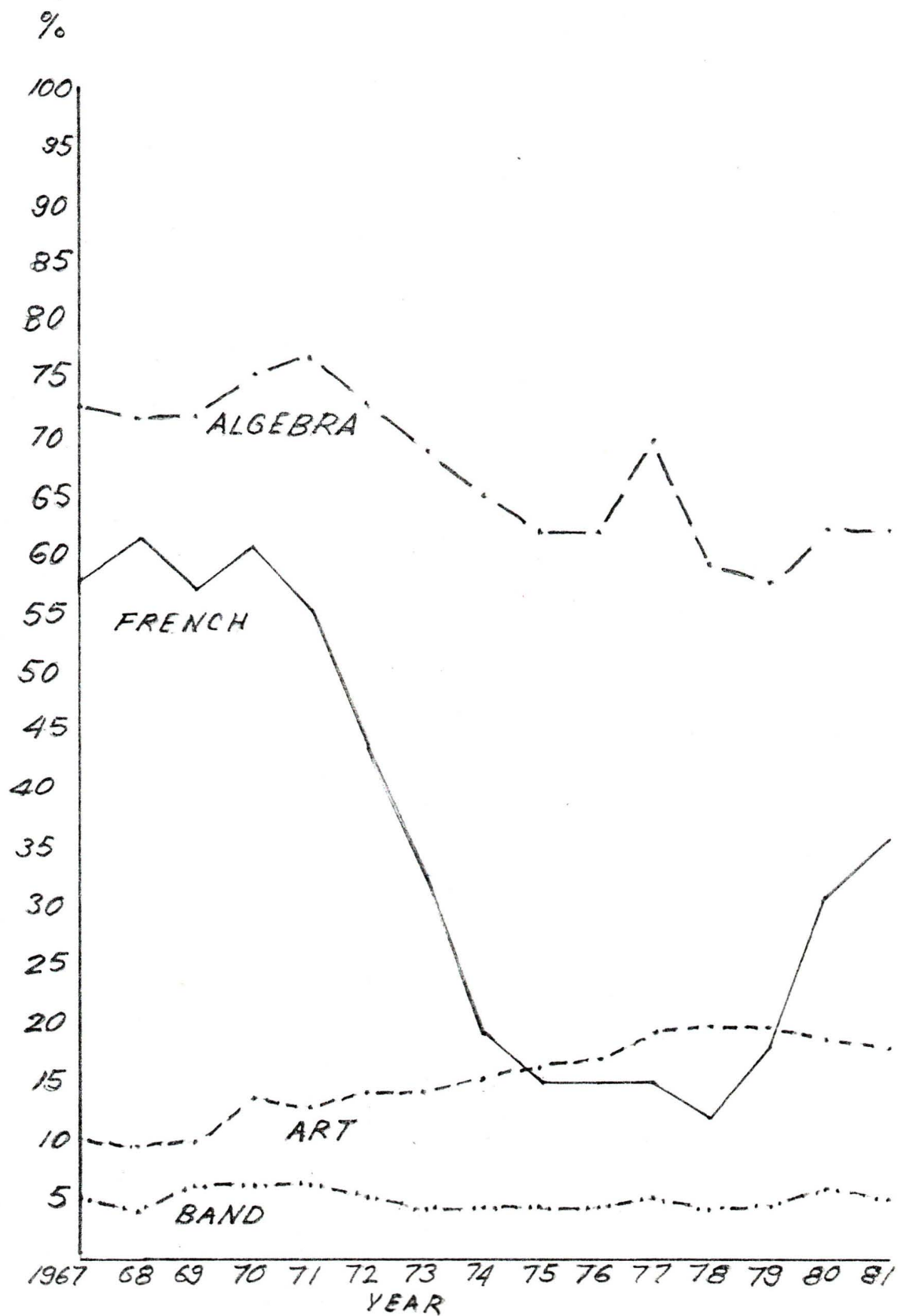


Table 18

Percentage of Students Enrolled in Algebra 11, Art 11, Band 11, French 11
1967 - 1981



Discussion

Grade 9 is the first year that students have the opportunity to elect to remain in French or choose another course. Choices of electives now include courses from other subjects such as Industrial Arts, Commerce, Home Economics plus Art, Music and Drama. Approximately the same number of students shared by Grade 8 Art, Music and French are shared in Grade 9 by an additional three other subject areas and all the individual courses associated with them. The impact of the competition for students by subject areas becomes apparent when Art and Band on Table 15 are compared with Art and Band on Table 17. The drop in the percentages recorded for Grade 9 was partially due to students opting for other courses.

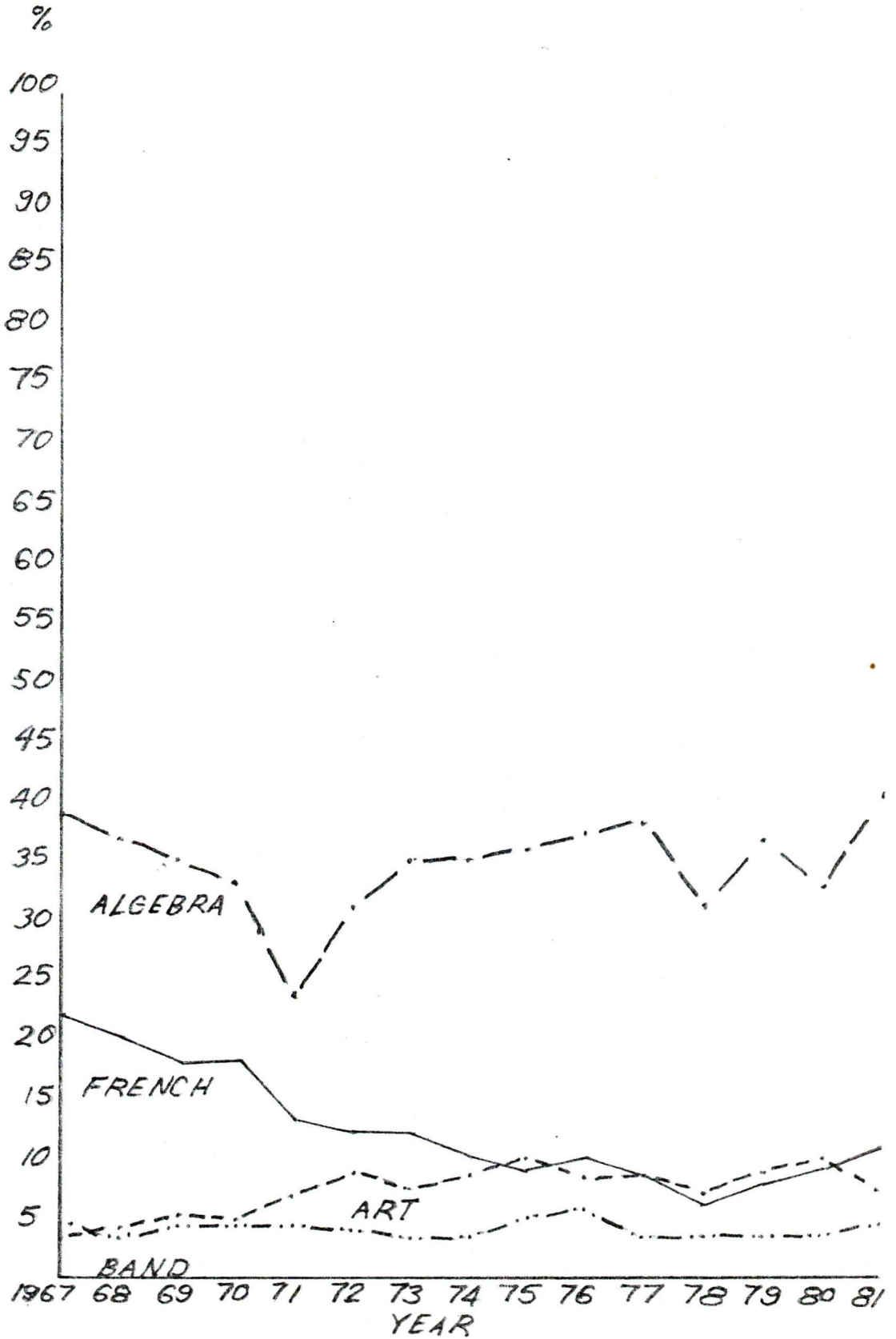
The sudden rise in Algebra between 1976 and 1977 resulted from a change of the Ministry of Education's philosophy towards Mathematics and was not related to student's choice of electives or the University's entrance requirements. Mathematics courses in the Junior Secondary Schools were no longer identified on Form K as either academic or non-academic. The divergent patterns of enrolment experienced by Art and French seem to be associated with the 1971 and 1978 admission policies of the University. Music courses, to a slight degree, might have been influenced by the University's decisions, but it doesn't appear that was the case. The assumption that enrolment in Band and other Music courses increased between 1971 and 1978 was not supported on the graph for Grade 9 (Table 16) or Grade 10 (Table 17).

Grade 10 is a critical year for Senior Secondary School electives. Students by this time are expected to plan a program leading towards entry to a post-secondary institution or a career. Enrolment in electives depends on the number of constants required by the Ministry of Education and, in the areas where students plan to continue their education after graduation, the prerequisites required for entry into the post-secondary institution of their choice. Courses that are not identified as prerequisites by these institutions depend on merit alone to attract students. Table 18 illustrates this point. It appears that when French 11 lost status as a prerequisite its numbers declined to a low of 12 percent of the district Senior Secondary School population. When its status was reinstated the numbers increased. The status of French 11 seems to have impacted on French 12 which is not required by the University but is considered a 'free' academic elective (Table 19).

It is interesting to observe that Band 11 and Band 12 seemed not to have been influenced positively or negatively over the last fourteen years by University prerequisites or enrolment in other school courses.

The graphs presented in this part of the study suggest that the rise and fall of enrolment in Art and in French are associated with the University of British Columbia's admission policy. The current policy seems to be related to the current decline in Art enrolment but related not related to Band or Music enrolment. The number of

Table 19
Percentage of Students Enrolled in Art 12, Band 12, French 12
1967 - 1981



students in Music courses seems to be independent of the University and its prerequisites.

Although declining enrolment in Band appears to be attributable to sources other than the one presented in this part of the investigation, it is important to determine whether or not the graph's visual association of the University's entrance requirements with enrolment in French and Art is valid. Part II of the investigation is a descriptive study designed to determine statistically if such an association exists.

Part II

A Descriptive Study Related to Declining Enrolment in Visual and Performing Arts Courses

Part I of the investigation visually suggested that an association between University prerequisites and Secondary School student course selection might be a possibility. Part II of the investigation will attempt to statistically establish that an association does exist and that it can influence enrolment in two school subjects, French and Art. The null hypothesis is that The University of British Columbia's 1971 and 1978 admission policy is not related to enrolment in French 9, 10, 11, and 12 and Art 9, 10, 11, and 12.

The variables are identified for the sake of clarity as follows:

- A. The Independent Variable is the granting of "academic status" to French courses.
- B. The Dependent Variables are enrolment figures for French and Art between 1969 to 1971, 1975 to 1978 and 1979 to 1981.

The first set of dates represented a four year period when French 11 was required by the University. The second set of dates represented the four year period that French was not required. The last set of dates represented the four year period immediately following the University's advance notice that French 11 or a second language 11 would be required by 1982. The number of students enrolled in the courses used in the study represent enrollment at the end of September for each school year.

Method

The subjects were all District 41 Secondary School students enrolled in Grades 9, 10, 11, and 12 during the sets of dates mentioned in the last paragraph. The students in each set were separated by grade and then divided into two subgroups. The first subgroup consisted of all students in a given grade enrolled in French and all students enrolled in other courses. The second subgroup consisted of all students in a given grade enrolled in Art and all students enrolled in other courses. The number of subjects in each

subset for a given grade was recorded on a frequency table and a Chi Square test applied to

determine whether the observed sample differences signify differences among populations or whether they are merely the chance variations that are expected among random samples for the same population. (Siegel, 1956, p. 174)

The results of the Chi Square tests are listed in Tables 20 - 27.

Conclusion

The null hypothesis was rejected for every sample suggesting that an association does exist between the University's admission policy and Secondary School student course planning. The relationship between French 9, 10, and 11 enrolment with the University's requirements is very strong, which suggests that a significant number of students would not elect to take French if it was not required by the University. The relationship between Art and the University's entrance requirement is also quite strong. It seems that when the University did not require French, some of the students who normally respond to the University's admission policy elected to take Art. The remainder of these students elected other courses not included in this study. Some of them might have elected a music course but not enough to suggest that there is an association with the University's entrance requirements.

Table 20

The Number of Burnaby Students Enrolled in French 9
Compared to Enrolment in all Other Grade 9 Courses
for 1969-1971, 1975-1978, 1979-1982

Year	Number of Students		
	French 9	Not in French 9	Total
1969-1971	7163	2048	9211
1975-1978	3751	4885	8636
1979-1982	4136	2390	6526
Total	15050	9323	24373

$$\chi^2 = 2234.13 \quad P = <.001$$

Null hypothesis rejected

Table 21

The Number of Burnaby Students Enrolled in French 10
Compared to Enrolment in all Other Grade 10 Courses
for 1969-1971, 1975-1978, 1979-1982

Year	Number of Students		
	French 10	Not in French 10	Total
1969-1971	5486	3402	8888
1975-1978	2573	6132	8705
1979-1982	3709	3440	7149
Total	11768	12974	24742

$$\chi^2 = 1899.5 \quad P = <.001$$

Null hypothesis rejected

Table 22

The Number of Burnaby Students Enrolled in French 11
Compared to Enrolment in all Other Grade 11 Courses
for 1969-1971, 1975-1978, 1979-1982

Year	Number of Students		
	French 11	Not in French 11	Total
1969-1971	4607	3820	8427
1975-1978	1200	7141	8341
1979-1981	2157	5067	7224
Total	7964	16028	23992

$$X^2 = 3119.26 \quad P = <.001$$

Null hypothesis rejected

Table 23

The Number of Burnaby Students Enrolled in French 12
Compared to Enrolment in all Other Grade 12 Courses
for 1969-1971, 1975-1978, 1979-1982

Year	Number of Students		
	French 12	Not in French 12	Total
1969-1971	1176	6778	7954
1975-1978	648	6979	7622
1979-1981	733	6687	7420
Total	2552	20444	22996

$$X^2 = 126 \quad P = <.001$$

Null hypothesis rejected

Table 24

The Number of Burnaby Students Enrolled in Art 9
Compared to Enrolment in all Other Grade 9 Courses
for 1969-1972, 1975-1978, 1979-1982

Year	Number of Students		
	Art 9	Not in Art 9	Total
1969-1972	2956	6225	9211
1975-1978	3398	5283	8636
1979-1982	1393	5133	6526
Total	7747	16626	24373

$$X^2 = 556.19 \quad P = <.001$$

Null hypothesis rejected

Table 25

The Number of Burnaby Students Enrolled in Art 10
Compared to Enrolment in all Other Grade 10 Courses
for 1969-1972, 1975-1978, 1979-1982

Year	Number of Students		
	Art 10	Not in French 10	Total
1969-1972	1992	6896	8888
1975-1978	2520	6185	8705
1979-1982	1207	5942	7149
Total	5719	19023	24742

$$X^2 = 325.38 \quad P = <.001$$

Null hypothesis rejected

Table 26

The Number of Burnaby Students Enrolled in Art 11
Compared to Enrolment in all Other Grade 11 Courses
for 1969-1972, 1975-1978, 1979-1982

Year	Number of Students		
	Art 11	Not in Art11	Total
1969-1972	1167	7260	8427
1975-1978	1422	6919	8341
1979-1982	1270	5954	7224
Total	3859	20133	23992

$\chi^2 = 48.95$ $P = <.001$

Null hypothesis rejected

Table 27

The Number of Burnaby Students Enrolled in Art 12
Compared to Enrolment in all Other Grade 12 Courses
for 1969-1972, 1975-1978, 1979-1982

Year	Number of Students		
	Art 12	Not in Art 12	Total
1969-1972	455	7499	7954
1975-1978	591	7031	7622
1979-1982	588	6832	7420
Total	1634	21362	22996

$\chi^2 = 35.5$ $P = <.001$

Null hypothesis rejected

Discussion

The study presented in Chapter IV revealed several pieces of information that could assist Burnaby Music Educators in their quest to keep music programs in their Secondary Schools.

Perhaps the most significant result was the rejection of the null hypothesis that the University's entrance requirements do not have an impact on Secondary School student course selection. The Chi Square tests applied to the numbers of students recorded on the frequency charts suggest that an association does exist and that this association affects enrolment in two of the three electives used in the study. It is possible that other electives from other subject areas are also affected by the University's admission policy and the prerequisites for its various Faculties.

Band was not subjected to the Chi Square test because the graphs failed to visually reveal any significant differences in percentages of enrolment when compared to changes in the University's admission policy and the Ministry of Education's curriculum reorganization.

However, this should not be interpreted to mean that these institutions have not had an impact on Band enrolment. An insignificant association can have a significant impact on a small Band program. For example, about 60 students were enrolled in Band 12 for the 1982-1983 school year, an average of 12 students for each of the five Band 12 programs in the District. If one or two students in each school were not able to take Band because of the University's or

the Ministry's course expectations, the loss would seem significant to the Band teacher and the remaining Band students. However, the study's failure to find an association is important because it suggests that Burnaby Music Educators should look elsewhere in their search to resolve problems in the District's music education programs.

CHAPTER V
RECOMMENDATIONS AND CONCLUSIONS

Strategies to Retain Music Students in
Burnaby School Music Programs

Marlynn Liken (1981) wrote that music educators must take leadership roles, know the facts and develop strategies. Strategies include making the public aware of the concrete value of music education, meeting student needs, developing curriculum and being aware of current trends and research in music education (Karel, 1978). Although all of these strategies are important, Burnaby music educators should concentrate on discovering student course expectations are for Band and other music courses.

It is possible that students drop out of Band 8 because their expectations were not valid or were valid but not met. It is also possible that the massive drop out rate between Band 8 and Band 10 is related to levels of maturity and personal discovery associated with adolescents that invalidate previous reasons for staying in Band. Perhaps students drop out of music programs because they have become aware of the diverse goals of Secondary School education and have elected to put their energy in other directions. It is important for the future of music education to discover why the students who reach Band 12 or any other Music 12 course remained in the program. Why have these students survived the test of time and experience? It is

also important to discover why students drop out, in order to find out if the reasons are external or internal and related to the program. External problems such as unrealistic student expectations can be resolved by planning strategies to educate prospective music students about the aims, objectives, goals, and values of including music courses as part of a Secondary School program. If the students' expectations are realistic and valid the problem is internal and could be difficult to resolve because it involves a possible conflict with the music teacher's expectations. If such a conflict exists it must be addressed.

RECOMMENDATION 1: That Provincial Music Specialist Associations conduct an investigation similar to the one presented in Chapter Four of this study.

It is important, in light of a recent study from the U. S. A., to determine if the trend in Burnaby is unique or typical for the rest of the province. If the University's admission policy and the Ministry of Education's curriculum organization do not affect the current decline in music course enrolment, then B. C. Music Educators should investigate what the Americans are doing so successfully that the percentage of enrolment in instrumental courses is increasing while general school enrolment is decreasing (Instrumentalist, August 1983). The following graphs compare the enrolment trends for both areas (Tables 28 and 29).

Table 28

Participation in Instrumental Music, U. S. A.
1967 - 1984

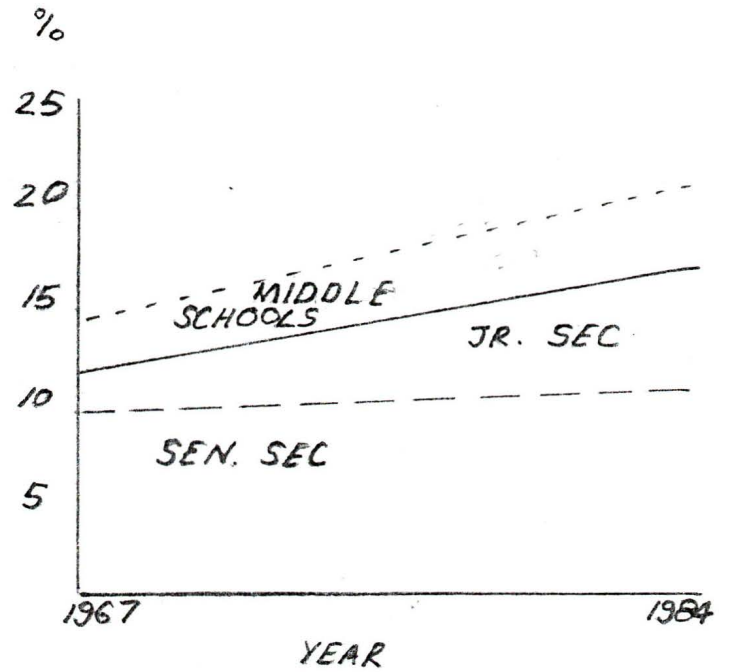
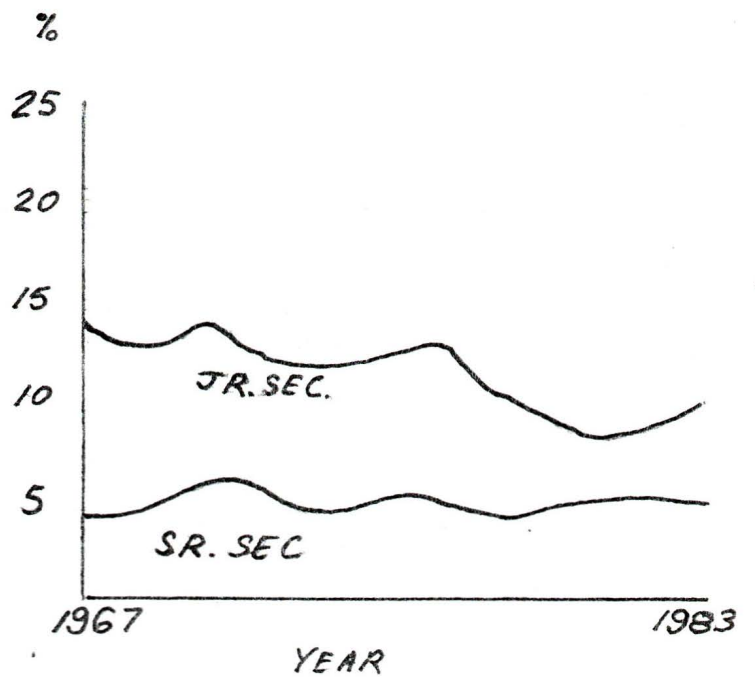


Table 29

Participation in Instrumental Music, B. C. School District 41, Burnaby
1967 - 1983



RECOMMENDATION 2: Burnaby Music Educators should seek strategies to control the rate that students drop out of music programs in Junior and Senior Secondary Schools.

The percentages on the graphs in Chapter 4 indicate a gradual and somewhat erratic decline for Grades 8, 9 and 10 over the last seventeen years. The Senior Secondary schools' percentages have been more or less stable, fluctuating at times around two percent. The information on these graphs suggests that the current decline in music education in Burnaby could be a combination of a decreasing school population and the ability to retain students in the Junior Secondary School. Table 30 collectively presents the pattern of Band enrolment recorded on individual graphs in Chapter 4.

The stability of the Senior Secondary Band programs suggests that declining enrolment is not a result of problems related to nature of programs but are a result of declining District enrolment. The erratic nature of enrolment in Junior Secondary Band programs makes it difficult to generalize that these programs are declining for the same reason.

If half the District's Grade 8 Band students in 1979 stayed in Band until Grade 12, the 1983 Band population would have been increased two and half times from an estimated fifty students to one thirty eight students (Table 31). Declining enrolment in Burnaby Music programs seems to be a result of an inability to effectively retain students.

Table 30

Percentage of Burnaby School Students Enroled in Band 8, 9, 10, 11, 12
Between 1967 - 1983

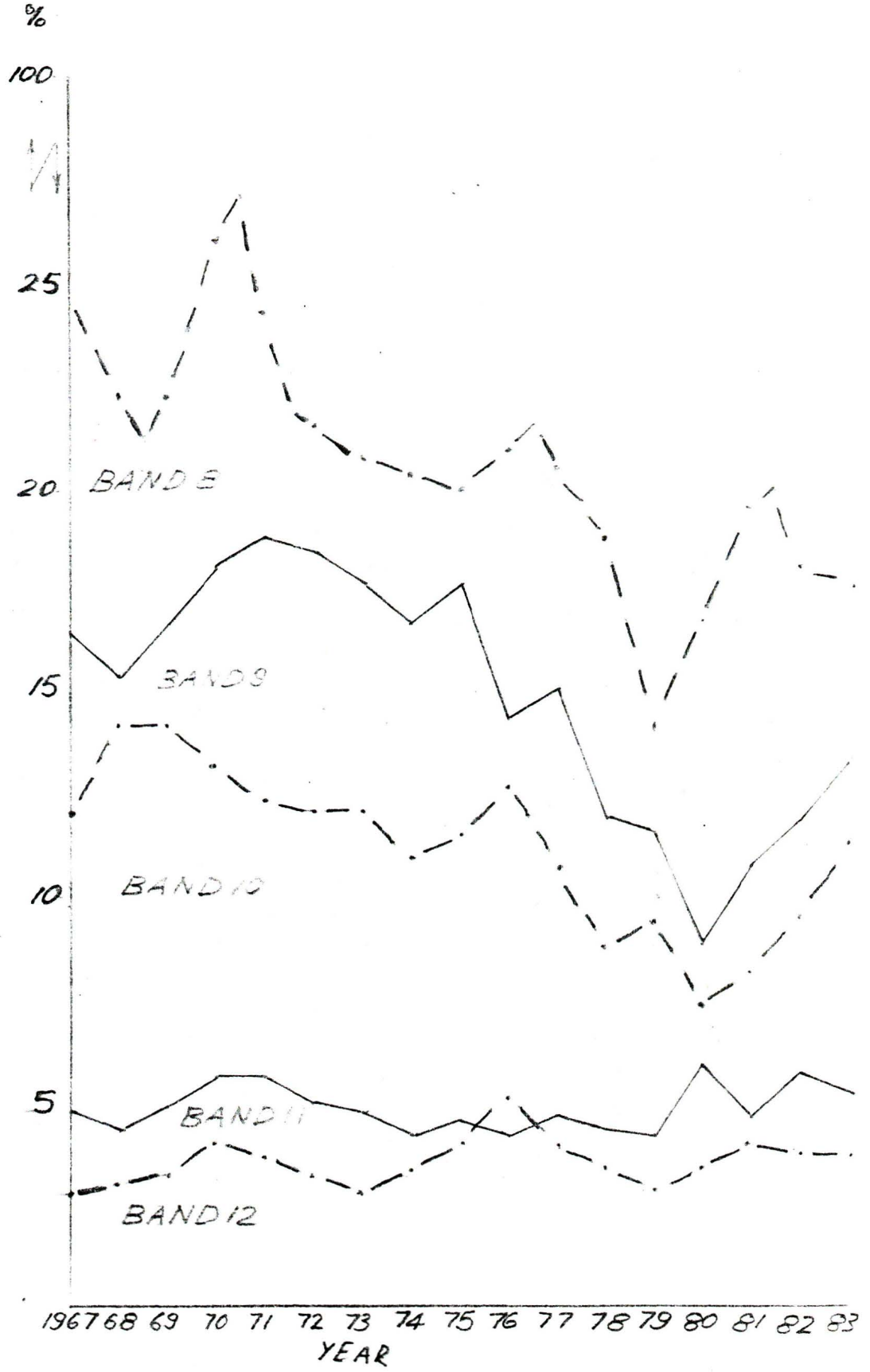


Table 31

Enrolment in Band 8, District 41, Between 1974 and 1983

Year	District 41 Grade 8 Population	Percentage in Grade 8 Band	Actual # of Grade 8's in Band
74	2407	20.3%	489
75	2369	19.3%	462
76	1960	21.8%	427
77	2150	19.6%	421
78	1970	18.6%	366
79	1849	12.3%	277
80	1272	18.4%	234
81	1524	20.5%	312
82	1445 (estimate)	16.4%	237
83	1493 (estimate)	17.5%	261

RECOMMENDATION 3: The issue of student course expectations should be investigated to determine if their expectations are being met and if it is possible to meet their expectations if they are not being met.

The primary purpose of this investigation would be aimed at improving the rate of retention in Secondary School music programs. The investigation could be in the form of a series of printed questionnaires designed to determine

- A. why students enrolled in Band 8
- B. why students drop out
- C. why students stay in.

It would be not difficult to track Band 8 students as they progress through the Secondary School. The questionnaires could easily be distributed at the appropriate time by the District's Band teachers and returned to the Music Supervisor's office for analysis. By identifying last year's Band 8 students and using them for the study, the project could be completed within less than three years and provide the District with more information on the nature of the cause or causes of enrolment decline and insight into how to control it.

RECOMMENDATION 4: That the Burnaby Music Educators' Association campaign to encourage the Senates from the major B. C. Universities to invite teachers from Visual and Performing Arts Departments to meet with them to discuss proposed modifications to University admission's policy.

Unfortunately while old problems remain unsolved new problems surface. It is too soon to measure the impact that the Ministry's

Consumer Education course has had on Band and other music programs. The recent report in a Vancouver newspaper about the effects of government budget cuts for Universities could have serious consequences for Music programs. The newspaper reported that the cuts would result in fewer classes and restricted enrolment (The Sun, August 12, 1983). The Universities could restrict enrolment by adding more prerequisites for admissions which would be at the expense of time for non-academic electives. They could also increase the minimum entry mark from C+ to B which would put more pressure on teachers and students. Some schools in Burnaby have already reacted to the academic expectations of the University by double blocking academic courses.

Double blocking academic courses has the same impact of adding another constant or another prerequisite to a student's program and reducing the number of blocks of time available for electives. One Burnaby Senior Secondary School, for example, double blocks its Algebra 12 Honors course, which means two out of a possible eight blocks of time are required for one course. The extra block given to this course is at the expense of an elective.

RECOMMENDATION 5: That Music Educators in the province become actively involved in a campaign to retain music programs in their school by:

- A. establishing an effective communication network with staff, administration, parents, and the community in order to inform them about the benefits of school music programs

- B. becoming involved in course selection and timetabling procedures used in their school
- C. becoming knowledgeable about post-secondary institution admissions requirements and prerequisites
- D. becoming knowledgeable about vocational possibilities associated with music beyond just teaching and performing
- E. becoming active members of local Teachers' Associations and the Professional Specialist Association for Music Educators.

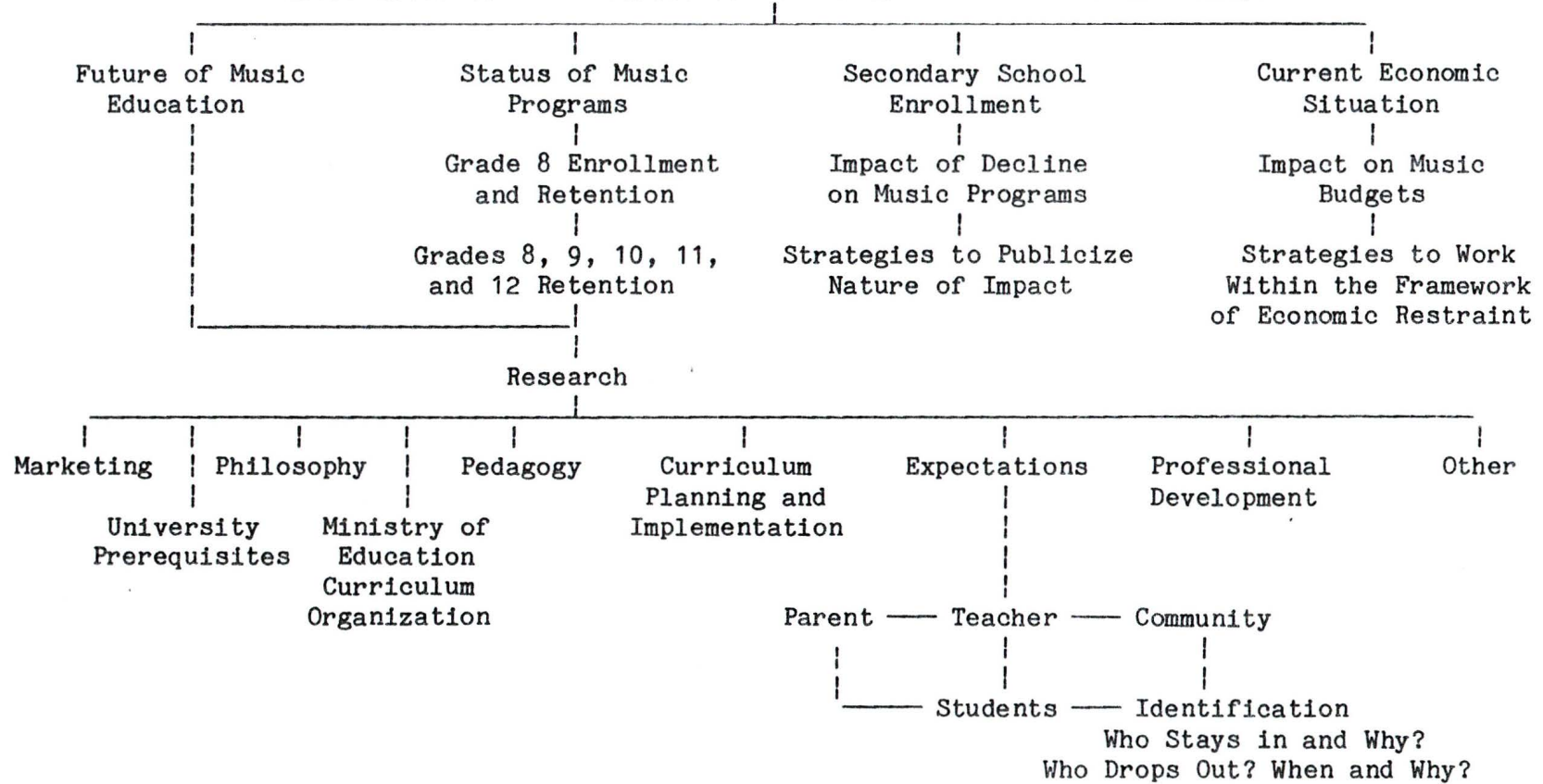
Other Areas for Investigation That Are Not Directly Associated
with the Investigation

Because this investigation failed to establish an association between enrolment in Band with the Ministry of Education and the University, it is necessary for Burnaby Music Educators and their colleagues from other Districts to continue to investigate other sources of problems in order to control the impact of declining enrolment. A number of these sources are presented in the chart on the next page (Table 32).

The problems related to the District's enrolment decline and the current recession are beyond the music educator's immediate control and have been included because these issues must be recognized and reckoned with in order to control their impact on music programs. The need for planning curricula for future music programs must also be recognized but the actual planning should probably be set aside for the time being until the current problems are resolved. There is a danger that if present music courses disappear from school timetables,

Table 32

Problem Areas Affecting Music Education in District 41, Burnaby



it could be difficult in the future to implement new courses in music.

Some of the problems outlined in Table 3 have already been addressed at conferences and seminars sponsored by the British Columbia Music Educators' Association. The planning committees for the last two Provincial Conferences selected, with the approval of the Association's executive, keynote speakers who focused on issues related to marketing, pedagogy, philosophy and community expectations. The 1982 speaker, Dr. Paul Brandwein, stated that because Arts education is under attack, the need for a counter-attack based on a sound philosophy and effective pedagogy is required. Brandwein maintained that music educators must be aware of the issues that affect Arts education in order to prevent it from disappearing from the curriculum. The 1983 speaker, Dr. R. Culver, offered practical advice on surviving the crisis to an appreciative audience, many of whom had just recently experienced cuts in salary and music programs. The Association developed Culver's theme by organizing a day long seminar in May, 1983 on the Gemeinhardt Report. This report emphasized the need for a strong communications network in order to make the public and elected officials aware of the overall benefits of music in schools.

Although the directions for action presented by the Conference speakers and the Gemeinhardt seminars are important for the maintenance and expansion of programs, it will take time to organize and act on their advice. In the meantime, the solution to the

immediate problem, that of declining enrolment, remains elusive. Unless this problem is resolved quickly, the rumors that some selected Burnaby Schools will have to drop music courses from their timetable and transfer students to magnet schools in an attempt to keep music in the curriculum could become fact.

Postscript

In 1972, John Paynter, in an article cryptically entitled, "Time Is Running out", responded to a newspaper article supporting an education that emphasized job seeking skills over an education that concerned itself with "the complete citizen". Paynter, rather than rebutting the article, suggested that music educators become involved in self examination of what part they play in education. He wrote that,

If, in all the current educational debating, we are unable to make a reasonably clear statement of our position, we may well find that we lost what little ground we have gained. Could we not try to make up our minds what it is we are at? And state our objectives as clearly as we can? We have been far too woolly in such matters and it is hardly surprising that few people are really prepared to take us seriously. (Paynter, 1972, p. 3)

Individual music educators should heed Paynter's comments and start thinking about the part they play in education. A strong "grass roots" movement based on sound objectives and philosophy will help keep music from becoming one of "the bits that can so easily be left out" (Paynter, 1972. p. 3).

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APPENDIX A

Example of Specific Requirements and Additional Courses

Program of Studies in:	Secondary School Graduation Must Include:	In Addition if Possible:
Agricultural Sciences*	Algebra 12 two of Biology 11, Chemistry 11, Physics 11 One of: Biology 12 Chemistry 12 Geology 12 Geometry 12 Physics 12	(preferably all three)
Applied Science (Engineering)* A professional four- year program following completion of one year in Science	Chemistry 11 Algebra 12 Physics 11 one more Science 12	Chemistry 12 Physics 12 Geometry 12
Science*	Chemistry 11 Algebra 12 Physics 11 one more Science 12	Other courses chosen from: Biology 11, 12 Computer Science 12 Chemistry 12 Earth Science 12 Geology 12 Geometry 12 Physics 12 Probability and Statistics 12

APPENDIX A (Continued)

Program of Studies in:	Secondary School Graduation Must Include:	In Addition if Possible:
Forestry A professional program. Admission directly from secondary school or following First Year Science (see Science requirements)	Algebra 12 Two of: Biology 11 Chemistry 11 Physics 11 Two of: Biology 12 Chemistry 12 Physics 12	All three recommended
Nursing*	Biology 11 Chemistry 11 Algebra 11 Physics 11	

* Requires an additional "Arts and Science" Course Number 12 to meet entrance requirements.

i.e. Algebra 12	Literature 12	History 12	Physics 12
Biology 12	French 12	Geometry 12	Probability
Chemistry 12	Geography 12	Physics 12	and
Western Civilization 12			Statistics 12

APPENDIX B

The purpose of this questionnaire is to find some of the reasons why students select their elective courses. Your help is very much appreciated. Note that you do not have to sign your name so that your answers will be confidential. Please complete the questionnaire and return it to your counsellor.

1. Circle the grade in which you are presently enrolled.

8 9 10 11 12

2. List the courses you have taken or are taking this year

a. _____	e. _____
b. _____	f. _____
c. _____	g. _____
d. _____	h. _____

3. Put a check () mark beside the courses you are planning to take next year:

English _____	Science _____
Soc. Studies _____	Art _____
P. E. _____	Consumer Ed. _____
Math _____	French _____
Marketing _____	Band _____
Typing _____	Woodwork _____
Metalwork _____	Cooking _____
Sewing _____	Choir _____
Others (Please List) _____	

APPENDIX B (Continued)

4. Which one of the following reasons best describes why you selected your courses for next year. Check one.
- a. I want to qualify for U. B. C. _____
 - b. I want to qualify for S. F. U. _____
 - c. I just want to graduate from school and get a job. _____
 - d. I want to go to B. C. I. T. _____
 - e. I want to go to vocational school. _____
 - f. Other _____
5. Who is the person or persons who had the greatest say about what courses you are going to take next year? Check one.
- a. Your parents or guardian. _____
 - b. Your counsellor. _____
 - c. You, yourself. _____
 - d. Others. Please explain. _____
-
6. What are your career plans after you graduate from Grade 12?
- a. Attend U. B. C. _____
 - b. Attend S. F. U. _____
 - c. Attend a University _____
 - d. Attend a College _____
 - e. Go to B. C. I. T. _____
 - f. Get a job _____
 - g. Go to vocational school _____
 - h. Other _____

APPENDIX B (Continued)

7. What type of job do you think you would like after you have completed all your formal education? Choose one from the following.
- a. Working with things, numbers of objects _____
 - b. Dealing with people as clients, customers or associates in working situations _____
 - c. Doing detailed, organized work, following a regular sequence of activities _____
 - d. Working to improve the social conditions of others _____
 - e. Directing, planning or organizing activities, and/or work resulting in the respect of others _____
 - f. Studying or communicating ideas or information about the subject of of peoplr or animals _____
 - g. Doing work that requires a scientific, technical or analytical approach to facts _____
 - h. Doing abstract or creative work _____
 - i. Working with machines, processes or techniques _____
 - j. Doing work in which you can soon clear clear results _____
8. Did you elect to take French as part of your school program next year? _____

APPENDIX B (Continued)

9. If you answered yes to question #8, put a check beside the reason that best explains why you selected to take French. One check only.

- a. I enjoy studying languages _____
 - b. French is required to enter U. B. C. _____
 - c. The school said I had to take French _____
 - d. My parents and/or my Counsellor said I needed French _____
 - e. Other reasons (explain) _____
-
-

10. What type of mathematics are you taking next year? Put a check mark beside your answer.

- a. regular math _____
 - b. general math _____
 - c. Other (please explain) _____
-

11. Which one of the following reasons best explains why you are taking math? Put a check mark beside your answer.

- a. I need it to get into university _____
- b. I need it for graduation _____
- c. The school said I had to take math _____
- d. My parents and/or my counsellor said I need math _____
- e. I like math _____

APPENDIX B (Continued)

12. Put a check beside the elective areas that are related to the courses you took last year.
1. Commerce (i.e. typing, shorthand, marketing, etc.) _____
 2. Industrial Education (i.e. woodwork, drafting, etc.) _____
 3. Visual Arts (i.e. art, ceramics, Photo, etc.) _____
 4. Performing Arts (i.e. Band, Choir, etc.) _____
 5. Home Economics (i.e. sewing, cooking, etc.) _____
13. Would you like the opportunity to take more courses in the subject areas in question 12? _____
14. If you were given the opportunity to select one job right now, what job would you choose? _____
15. List the courses you are taking next year that you think will not help you with the job you selected in question 14.

Why are you taking these courses? Please explain.

Thank you for completing this questionnaire.


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AN INVESTIGATION OF THE IMPACT OF THE UNIVERSITY OF BRITISH
COLUMBIA'S FOREIGN LANGUAGE REQUIREMENT ON ENROLMENT IN
SECONDARY ART AND BAND COURSES.

Author


(Signature)

R. G. F. McMANUS

Name (in block letters)

April 30, 1984

(Date)