

## INFORMATION TO USERS

This dissertation was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

### **University Microfilms**

300 North Zeeb Road  
Ann Arbor, Michigan 48106

A Xerox Education Company

73-5359

DesCHAMPS, William Bert, 1939-  
A CASE HISTORY OF THE DEVELOPMENT AND  
IMPLEMENTATION OF THE NINE-WEEK COURSE CONCEPT  
AT BESSER JUNIOR HIGH SCHOOL IN ALPENA, MICHIGAN.

Michigan State University, Ph.D., 1972  
Education, curriculum development

University Microfilms, A XEROX Company, Ann Arbor, Michigan

©Copyright by  
WILLIAM BERT DESCHAMPS

1972

A CASE HISTORY OF THE DEVELOPMENT AND IMPLEMENTATION  
OF THE NINE-WEEK COURSE CONCEPT AT BESSER  
JUNIOR HIGH SCHOOL IN ALPENA, MICHIGAN

By

William B. DesChamps

A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1972

PLEASE NOTE:

Some pages may have  
indistinct print.

Filmed as received.

University Microfilms, A Xerox Education Company



## ABSTRACT

### A CASE HISTORY OF THE DEVELOPMENT AND IMPLEMENTATION OF THE NINE-WEEK COURSE CONCEPT AT BESSER JUNIOR HIGH SCHOOL IN ALPENA, MICHIGAN

By

William B. DesChamps

The primary purpose of this research was to present a documentary of what has been done to restructure the Besser Junior High School curriculum. An attempt was made to focus on the development of the program as well as the results of that program.

Since the success of any program depends on the people involved emphasis was placed on the involvement and interaction of various individuals and groups.

Chapter II is a product of the author's attempt to analyze and recover the general nature of the dialogue that was preliminary to change and the collective philosophy that appeared to have emerged from that dialogue.

Chapter III traced the organization for change in detail from the original action items through to the final approval of the new program by the Alpena Board of Education for the 1971-72 school year.

William B. DesChamps

Chapter IV contrasts structural aspects of the old program with the new program at Besser Junior High School.

Chapter V outlines the method by which students selected the courses of their choice. This chapter also includes a discussion of the scheduling procedure, problems that surfaced during the enrollment procedure and some proposed solutions to those problems.

Chapter VI is an attempt to foresee the impact of the new program on the administration, curriculum committees, and grade levels in the Alpena Public School system; the countervailing forces resulting from these groups are also dealt with. Both philosophical and structural aspects were treated in this chapter.

Chapter VII was directed at finding some measure of validity for this case study. Several people who were involved in the development of this program at Besser Junior High School were asked to read and comment on the accuracy of this case study from their own perspectives.

Chapter VIII lists several areas that could require further study sometime in the future. These studies include evaluation of various aspects of the community in general and the school system in particular.

## DEDICATION

To Dawn, my wife, whose love, encouragement, and patience throughout this endeavor were both invaluable and necessary.

To Kimberly and Billy, my placable offspring, whose boundless energy was a constant source of inspiration.

To my Father and Mother, whose faith and encouragement never vacillated.

To my Grandmother, whose life of hard work, integrity, and devotion to her family I will always look to in times of doubt.

## ACKNOWLEDGMENTS

My graduate committee was composed of four very distinctive people. Each of the four gentlemen contributed significantly to the design or improvement of this particular case study. To Dr. Dale V. Alam, my major advisor, I extend special appreciation for allowing me to try something a little different in a case study and also for allowing me the privilege of designing, what has been for me, a very rewarding course of study. When I first applied to Michigan State University I knew what I wanted, he assisted me in pursuing my objectives. I would also like to thank Dale for doing much of the leg-work which I could not do due to having lived a good distance from campus.

To Dr. Charles Blackman, who is the best "sorter of information" I have ever known, I owe a special thanks for his support and for filling in for Dr. Alam whenever I needed help.

To Dr. James McKee, my minor advisor, I am very grateful for his having exposed me to a sociological method which provided the format for this case study. I

especially appreciate this man for having taken time from his very busy schedule to provide me with support when I truly needed it.

To Dr. Walter Scott I am very appreciative of his willingness to replace a committee member and become involved during the final stages of my doctoral program. I believe Dr. Scott provided considerable input which improved this case study.

To Paul Bray, Norm Frey, Art Merritt, Joel Osborne, Jere Standen, and Horace Webb, I extend my appreciation for taking time to read and respond to the accuracy of this case study.

And last, but certainly not least, I cannot forget to mention the humaneness of Virginia Wiseman, secretary to the Dean of Graduate Affairs, who provided invaluable assistance throughout the course of my study at Michigan State University.

## TABLE OF CONTENTS

	Page
PREFACE . . . . .	1
 Chapter	
I. INTRODUCTION . . . . .	10
The Problem . . . . .	10
Purposes of This Study . . . . .	13
Need for Study . . . . .	14
Plan for the Study . . . . .	16
Definition of Terms . . . . .	17
II. THE SEED OF CHANGE . . . . .	20
Factors Affecting Change . . . . .	20
Dialogue . . . . .	26
Emergent Philosophy . . . . .	28
III. ORGANIZING FOR CHANGE . . . . .	33
The Administration Becomes Involved . . . . .	33
Other Events Affecting Change . . . . .	36
The First Organizational Meeting . . . . .	38
The Board of Education Becomes Involved . . . . .	44
The Visit to Howell High School . . . . .	45
The Visit to Ring Lardner Junior High School in Niles . . . . .	48
Summary of Howell, Ring Lardner, and Besser Proposed Programs . . . . .	49
A Besser, Thunder Bay, Central Administration Meeting . . . . .	60
A Besser Central Administration Meeting . . . . .	61
Representatives from Howell and Niles Visit Alpena . . . . .	63

Chapter	Page
The Administration Supports the Besser Program . . . . .	63
The Presentation of the Two Mini-Course Proposals to the Board . . . . .	64
IV. THE RESULTANT PROGRAM . . . . .	69
The Achievement of Objectives . . . . .	69
A Comparison of the Basic Requirements of the Old Eighth Grade Program and the New Eighth Grade Program . . . . .	77
A Comparison of the Basic Requirements of the Old Ninth Grade Program and the New Ninth Grade Program . . . . .	86
V. ENROLLMENT AND SCHEDULING . . . . .	97
Course Selection Procedure . . . . .	97
Scheduling Procedure . . . . .	100
Problems and Proposed Solutions in the Enrollment and Scheduling Procedures . . . . .	103
VI. THE FUTURE OF THE PROGRAM IN ALPENA PUBLIC SCHOOLS . . . . .	109
What Must Happen for the Program to be Considered a Success? . . . . .	109
Unfinished Business . . . . .	110
The Affects of the New Program on Other Alpena Secondary Schools . . . . .	112
The Affects of the Besser Program on the Administration . . . . .	113
The Affects of the Besser Program on Curriculum Committees . . . . .	113
VII. COMMENTS OF OTHERS INVOLVED . . . . .	116
Questionnaire . . . . .	117
Comments of Paul Bray . . . . .	118
Comments of Norm Frey . . . . .	119
Comments of Joel Osborne . . . . .	121
Comments of Jere Standen . . . . .	122
Comments of Horace Webb . . . . .	123
Comments of Arthur Merritt . . . . .	124

Chapter	Page
VIII. FUTURE STUDIES . . . . .	125
Who to Evaluate? . . . . .	125
What to Evaluate? . . . . .	126
When to Evaluate? . . . . .	127
Other Areas of Concern . . . . .	127
BIBLIOGRAPHY . . . . .	128
APPENDICES	
Appendix	
A. Teacher and Student Suggestions for Change . . . . .	130
B. Course Selection Guide . . . . .	133
C. Course Preference Survey . . . . .	189
D. Enrollment Sheets . . . . .	203
E. Courses that were Eliminated as a Result of the Second Total Tally . . . . .	206
F. Enrollment and Scheduling Flow Chart . . . . .	208



# LIST OF TABLES

Table	Page
1. Seventh Grade Requirements . . . . .	50
2. Eighth Grade Requirements . . . . .	51
3. Ninth Grade Requirements . . . . .	52
4. A Comparison of the Basic Requirements of the Old Seventh Grade Program and the New Seventh Grade Program . . . . .	71
5. A Comparison of the Basic Requirements of the Old Eighth Grade Program and the New Eighth Grade Program . . . . .	77
6. A Comparison of the Basic Requirements of the Old Ninth Grade Program and the New Ninth Grade Program . . . . .	87

## PREFACE

Traditionally doctoral dissertations in education have been written in the third person. The reason for this tradition, like many other traditions in education, has probably long since been forgotten. I chose to deviate from this traditional format and to write my dissertation in the first person and I suggest that in any case study in which the author was directly involved with the topic being described, he should consider this method. There are many excellent examples of first person case studies in the field of sociology.

Writing in the first person can provide many valuable insights that a perceptive reader might be able to transfer to his own particular life experience which might otherwise be lost in translation. Furthermore, many of the case studies I have read from the field of sociology which were written in the first person were much more readable than those in education which were written in the third person.

All too often in education, and especially in the area of curriculum development, we tend to focus on

principles, results, and ends and too seldom do we give our attention to people, philosophy, and means, which, in my opinion, should receive highest priorities in education. By having written my thesis in the first person I had hoped to deal more effectively with people, philosophy, and means with regard to the curriculum changes that took place at Besser Junior High School. I had also hoped that the use of the first person would help me to put more of myself into this study.

In order to assist the reader of this dissertation I would like to make it clear, from the beginning, where I stand philosophically. The simplest way for me to do this is to list a number of quotes in a few areas that have helped me to develop a philosophy of education. Knowing my philosophical roots should enable the reader to detect more easily any biases which I have consciously or unconsciously written into this paper.

#### About Change

Conformity, however pandemic, is not at the root of anything, it is a symptom of certain prevalent social conditions--Edgar Z. Friedenberg.

Revolutions are not made; they come. A revolution is as natural a growth as an oak. It comes out of the past. Its foundations are laid far back--Wendell Phillips.

Whatever guise it may wear, dogma claims finality. In its own domain it holds that its word is the last word, and any challenge of that word is heresy--Allen Wheelis.

As change is the essence of the instrumental process, so standing pat is the essence of the institutional process--Allen Wheelis.

Tradition is as neurotic as any patient; its outgrown fear of deviation from its fortuitous standards conforms to all the usual definitions of the psychopathic--Ruth Benedict.

#### About Growth and Development

It is essential that a child's life not be ruled by the adult's need for efficiency. Efficiency is the enemy of infancy. It is too costly in terms of the child's emotional economy. It drains the child's resources, prevents growth, stifles interest, and may lead to emotional bankruptcy--Hiam Ginott.

Growth which depends on continuity of meaning is usually arrested by our institutions. [Therefore] developmentally speaking, [they] ought not be there at all. To promote normality is to arrest growth, this is a tragedy--Edgar Z. Friedenberg.

The grade is an administrative device that does violence to the growth and development of the individual--B. F. Skinner.

About Education in General

You cannot step into the same river of thought twice because neither you nor it is the same--Bill DesChamps [I think].

[In our culture] success is obsessive and limited to the few, [therefore] a greater and greater number will be liable to the extreme penalties of maladjustment--Ruth Benedict.

Admittedly, a student who knows a foreign language can do more than a student who does not. However the same could be said about any subject--Richard Renfield.

[Children] must begin by learning self-esteem rather than self-hatred, by learning the joy of knowing rather than the fear of trying. To learn these things infinitely more vital than to learn, for regurgitation's sake, whatever else one may be told to learn--Richard Renfield.

Herbert Spencer's question "What knowledge is of most worth?" is no longer the right question, and perhaps never was. Not only is the knowledge that is of great worth to people too vast for them ever to acquire, but the knowledge that is likely to be of great worth to a given individual in the circumstances of his particular life is largely unforeseeable--Richard Renfield.

Children are curious about the world. We must learn to respond to their curiosity, rather than tell them

what to be curious about . . . we would then be cooperating with nature rather than fighting it--Richard Renfield.

We know too much for one man to know much, we live too variously to live as one, our histories and traditions, the very means of interpreting life, are both bonds and barriers among us--J. Robert Oppenheimer.

The usual approach in curriculum development presumes that somewhere "out there" is a program, a method, an organizational scheme which fits all youngster's educational needs. No such programs, methods, or organizational patterns ever did or ever will exist. In other words, there are no group answers to the unique needs of individual learners--Jack Frymier.

I want to be like her when I grow up. I want her to be like her when she grows up [speaking of a 21 month old friend]--Re. John M. Culkin.

The knowledge explosion gives hope. It may eventually overwhelm those who suffer from a compulsion to plan curriculum. They may lose faith in their assumed ability to shrink the world's knowledge down to manageable size. The schools, set adrift in a turbulent ocean, will no longer be able to ladle out a tidy pool of knowledge and to define their activities in terms of subject matter--Richard Renfield.

Because learning involved perception and because both the process and the product of perception are unique,

any efforts to promote identical learnings are doomed to failure--Jack Frymier.

The basic defect [in curriculum] is not in the carrying out of the system; the basic defect is the system itself. People will just not fit efficiently into the curricular molds which we in our wisdom, even our loving wisdom, plan for them--Richard Renfield.

As an additional aid to the reader I will attempt to place this Besser Junior High School curriculum change into perspective. Since this dissertation was directed at people interested in the field of curriculum perhaps the ways different groups of people perceive curriculum in Alpena should be examined briefly. There are probably as many different notions of curriculum in Alpena as there are people. But there seem to be certain dominant characteristics within various groups in the community of Alpena.

The Board of Education, a majority of laymen in the community, and unfortunately a few teachers and virtually all administrators see curriculum as something you may purchase in the form of a textbook. Most Alpena teachers think of curriculum as a composite of textbooks, libraries, audio-visual equipment, methodology, goals, etc.; all of which are based on the existing framework or lack of framework in the various subject areas.

In my opinion the Besser Junior High staff was unique in the sense that we realized that in order to bring about what we felt were really significant changes we had to go beyond our own subject areas in order to affect the structure which governed us all. This led to the development of a collective philosophy which determined the program with which this dissertation deals. As far as I know Besser Junior High is the only school in the Alpena Public School system where the staff played an integral role in bringing about fundamental change within their school's basic curricular structure. In most other schools curriculum was determined by "someone" "some time ago" and in most cases the philosophy on which their curriculum is founded is vestigial. Yet a majority of people involved with educating young people continue to blindly defend their curricula. In my opinion it is this kind of thinking that must be overcome before people in education may bring relevance into the school systems. We must provide for change in the design of our curricula. We must realize that the need for change is continuous. Until we realize that many, if not all, of our curricula are a part of the problem we will never become a part of the solution.

As the reader proceeds through this dissertation it would be helpful if he were to selectively transfer the principles and methods illustrated in this thesis.



In my opinion, most principles and methods are not automatically, in practice, applicable to any social setting. Schools are social institutions which are consequently responsive to community pressures. These local counter-vailing forces must be understood if they are to be used to affect change.

It should be helpful for the reader of this study to critically examine the roles played by various individuals and groups. The reader should also be aware that the level of involvement in curriculum change, which is dependent on personnel, obviously will be school specific as are tactics and interaction. For this reason I do not believe it would be practical to delineate the specific principles which were used in this curriculum development since each setting is unique. As the people, philosophy and setting differ from one school system to another, or for that matter from one school to another within the same school system, so must the means for change differ. As the reader analyzes this dissertation he should examine the roles of various individuals and groups in curriculum development. Teachers, administrators, boards of education, education associations, students, curriculum committees, schools, and departments, to mention a few, all played parts in the development of a new curriculum at Besser Junior High School. These roles must be modified, expanded, and/or eliminated in order to affect change in

another setting. It is important that one not restrict their thinking to what has happened at Besser. I suggest that the reader go beyond this and ask what could be done in his school, or school system, since so little has been tried.

## CHAPTER I

### INTRODUCTION

#### The Problem

##### Need for Change

Prominent educators, as well as leaders in other related fields, are expressing concern over the need for change in the schools of the United States. Few facets of our educational system remain untouched by the critical thinking of these people.

Richard Renfield (1969) believes that the system fails by trying to fix people into curricular molds which they just will not fit; Allen Wheelis (1958) used his background in psychoanalysis to illustrate the conflict between institutions and individuals and how institutions resist the change which he claims is needed by the individual; Edgar Z. Friedenberg (1959) and Paul Goodman (1962) feel that compulsory attendance serves as a bill of attainder against a particular age group which is therefore not allowed to participate fully in freedom guaranteed by the state; in another work Friedenberg (1963) supports

Wheelis' analysis of the conflict between individuals and institutions and he goes a step further:

Growth which depends on continuity of meaning is usually arrested by our institutions, [therefore] developmentally speaking, [they] ought not be there at all. To promote normality is to arrest growth, this is a tragedy.

Hiam Ginott (1965) likewise claims that in terms of development we should make ourselves increasingly dispensable to children. Jerry Farber (1969) and Jerome H. Skolnick (1969) feel that priorities are out of order when the classroom fosters learning how to follow orders mindlessly and how to surrender one's sovereignty to an institution.

Jack Frymier (1970) and J. Abner Pedderwell (1939) believe our method of curriculum design is based on outdated premises; Friedenberg (1963) and Renfield (1969) feel that there is a virtual infinity of worthwhile subject areas and that it is unthinkable that schools should limit perceptions and responsiveness in so many directions by limiting "subject areas"; John Keats (1963), John Holt (1967), and A. S. Neill (1960) attack the artificial environment in our schools. Students are not allowed to satisfy their own curiosity but must learn to satisfy teachers, parents, principals, and college entrance authorities.

In today's society education is most responsive to tradition. Ruth Benedict (1934) frankly points out that:

Tradition is as neurotic as any patient; its out-grown fear of deviation from its fortuitous standards conforms to all the usual definitions of the psychopathic.

### Besser's Effort to Change

This entire thesis is a step-by-step illustration of the development of a relatively drastic curriculum change for Besser Junior High School in Alpena, Michigan. Rather than prematurely belaboring details I will attempt to explain this curriculum change in Alpena as both significant and important.

There are at least as many ways to effect curriculum change as there are curricula. Each change is unique due to the uniqueness of each different environment and the different people operating on their environments.

My personal concern in this group endeavor was not to change what was to be memorized but to try to affect the way people think; to get teachers and other members of the community asking fundamental questions about their educational philosophy. Szent-Gyorgi (1964) stated a similar concern with regard to relevance:

It is a widely spread opinion that memorizing will not hurt, that knowledge does no harm. I am afraid it may. Dead knowledge dulls the spirit, fills the stomach without nourishing the body. The mind is not a bottomless pit, and if we put in one thing we might have to leave another out. By a more live teaching we can fill the soul and reserve the mind for the really important things. We may even spare time we need for expanding subjects.

Jack Frymier (1970) states it much more eloquently than I with regard to curriculum change:

The usual approach in curriculum development presumes that somewhere "out there" is a program, a method, an organizational scheme which fits all youngster's educational needs. No such programs, methods or organizational patterns did or ever will exist. In other words there are no group answers to unique needs of individual learners.

We must begin to provide alternatives for the young people in our schools; this was rudimentary to the development of the Besser program. We had hoped to encourage exploration by students in our school. Children are naturally curious; we tried to respond to their curiosity, rather than tell them what we want them to be curious about; this was our attempt to cooperate with nature rather than fight it. The Besser program will certainly provide more options and hopefully encourage students to explore.

You are about to begin reading, from my vantage point the story of how we, at Besser, brought about change in our curriculum. This is certainly not the total solution but we feel it is a step in the right direction. Realistically it was a pretty big change in the eyes of the community; as much as we felt they would accept, and even then, with considerable reluctance and skepticism.

#### Purposes of This Study

The primary purpose for writing this case history is to present a documentary of what has been done to modify and to restructure the Besser Junior High School

curriculum. All too often we in education focus on the results of program development and too seldom do we focus on the development of the program. I intend to include both aspects in this case history.

For some readers this case history will serve as something an ex-classmate of mine referred to as the "nuts and bolts" for initiating change; for others this may serve as a yardstick which may be used to evaluate the Besser Junior High program or to contrast this program with other junior high programs.

Since the success of any program depends on the people involved, in the development of this case history consideration will be given to the interaction between various individuals and groups.

#### Need for Study

In my opinion the need for this study is threefold. As a teacher directly involved in this curriculum change the first reason is personal. I have long advocated that in education we have been running on inertia. We are so busy that we have not stopped long enough to ask why we are doing what we do nor how the curriculum got where it was yesterday at Besser. This study is my personal attempt to gain parity with tradition.

Secondly, I believe that the scientific model most frequently used in studies in education is a "cop out." We act as though learning is a group phenomenon;

as though we were dealing with dice rather than people. The scientific study, as used in education today, usually deals with group measurements: means, modes, medians, etc. Unfortunately the characteron<sup>1</sup> we ultimately end up describing may be very unlike anyone in the study.

This external composite Frankenstein does not tell us anything about the real stuff of education; the internal processes of an individual. Most teachers do not even know how to teach individuals; we were trained to teach groups.

I reject the group scientific model in education. I think we would learn more from a model used by sociologists, the micro-sociological descriptive approach. This model requires that the researcher become a part of the small group being studied, live and work with the group and then describe what he has observed. Conclusions are drawn in the mind of the reader; the researcher in this study is a reporter and an interpreter.

Thirdly, results of this study may be of value to other schools attempting to initiate a similar program; this study of development, implementation and philosophy will be available to them.

---

<sup>1</sup>A word I coined which describes a person who would fit all the medians, means, modes, etc. of the scientific group study.



### Plan for the Study

Chapter II, THE SEED OF CHANGE, deals with a number of factors, as I see them, which helped to set the stage for modifying and restructuring the Besser Junior High School curriculum. An attempt was made to recover the general nature of the dialogue and the collective philosophy that emerged from that dialogue.

Chapter III, ORGANIZING FOR CHANGE, traces the organizational development from the original action items which were initiated by a small group of teachers through the final approval of the program for the 1971-72 school year by the Alpena Board of Education. The dates of various organizational phases, the original proposal, and informational items as presented to the Board of Education by the administrators involved is included in this chapter.

Chapter IV, THE RESULTANT PROGRAM, contrasts structural aspects of the old program with the new program by "grade level" (i.e., old courses, new courses, units required, required units, and departmental requirements). Each of the new courses is listed by department in this chapter.

Chapter V, ENROLLMENT AND SCHEDULING, outlines the method by which students selected the courses of their choice, the scheduling procedure, and the problems that arose during the enrollment procedure along with some proposed solutions.

Chapter VI, THE FUTURE OF THE PROGRAM IN ALPENA PUBLIC SCHOOLS, is an attempt to deal with structural and philosophical affairs which will require more thought and work in the future. I also try to project the impact of the administration, curriculum committees and other schools and grade levels on this program in the Alpena Public School system; countervailing forces, resulting from these groups, are also dealt with in this chapter.

Chapter VII, COMMENTS OF OTHERS INVOLVED, is an attempt to determine the credibility of this case study. Several of the people involved in the study will read the case study or parts of the case study and make comments on its accuracy or inaccuracy from their perspective.

Chapter VIII, FUTURE STUDIES, lists some of the areas that could require further study with regard to the effectiveness of the program, the impact of the program on the various segments of the schools and the community, and achievement of long-range and short-range goals.

#### Definition of Terms

The following definition of terms applies throughout the remainder of this case study.

Elective.--A course which a student may choose to take or not to take; a course which is not required.

Mini-course.--A nine-week course which meets for approximately 47 minutes a day, five days a week (syn-unit).

New Program.--The method of organizing the Besser Junior High curriculum into nine-week modules of time rather than into the traditional semester or year plan, the reduced requirements, the wider variety of classes available to the students and the quasi-elimination of grade levels in some areas.

Old Program.--The method of organizing the Besser Junior High curriculum into the traditional semester or year plan, traditional requirements, a small number of classes available to the students, and the notion of grade levels.

Quarter.--See Shift.

Required Unit.--A course which all students must take before completing a particular grade level; students may not elect other courses in lieu of the required units.

Shift.--A nine-week time period in which seven courses (units) may be taken. At the end of a nine-week period a new slate of courses (new shift) goes into effect for each student and each teacher (syn--quarter, term).

Staff.--The group of people working at a particular school (i.e.--principal, secretary, teachers, and anyone else involved with instruction in that particular school.

Term.--See Shift.

Unit.--See Mini-course.

Unit Required.--A requirement which dictates that all students must take a course within a general subject area before completing a particular grade level; students may then elect these courses within the prescribed subject area.

## CHAPTER II

### THE SEED OF CHANGE

#### Factors Affecting Change

As I see it there are basically four factors that affected the structural changes at Besser Junior High School:

1. The first factor in my opinion, was the failure of the traditional structure to accomplish the things that most Besser Junior High teachers felt should be accomplished in a junior high school. The pervasive, well-verbalized collective philosophy of junior high teachers in the Alpena Public School system prior to the change was that the junior high years should be years spent when students are not only allowed but encouraged to explore different areas within the curriculum. The basic structure of the curriculum prior to the change did not allow this philosophy of the junior high teachers to emerge.

2. The second factor was the Besser Junior High School staff. This change would not have taken place if it were not for the teachers and the principal at Besser Junior High. The staff had to be receptive to the original idea or it could not possibly have been implemented; they started the ball rolling, kept it rolling and in less than nine months from the time the first formal action was taken (December 7, 1970) the New Program was in effect at Besser Junior High School (September, 1971).
3. Another factor, I believe, was the impact which Dale Alam's humanitarian philosophy had on a number of people, either directly or indirectly, in the Alpena Public School system.

In the summer of 1970 Dr. Dale Alam brought a course to Alpena which was designed to deal with curriculum. The course was free and open-ended and attempted to provoke thought and discussion. Over this period of time the people enrolled in the course were challenged to either construct or reconstruct their educational philosophy under the scrutiny of an instructor who operates under the influence of a humanitarian philosophy. These people in turn elicited similar types of probing,

with regard to answering some very fundamental philosophical questions.

There is probably no way of determining which people involved in the course entered that course with a similar type of philosophy and consequently changed very little. Perhaps the course just provided an opportunity for people to diagnose such a philosophy and then to either accept or reject it. In either case, people who ultimately accepted this philosophy had the opportunity to identify with one another and realize the potential for developing a mutual support system centered around this type of philosophy.

Whatever the case may be, people sympathetic to the humanitarian ideals had considerable impact on promoting the structural change; several of these people did have contact with Dr. Dale Alam (Jere Standen, Jon Hopkins, Jan Hopkins, Connie Dierking, Bill DesChamps).

4. The fourth factor, the inservice program resulting from the 1970 teacher strike in Alpena, may be viewed as a ramification of the third factor.

The teacher strike, which lasted from September 1, 1970 to September 27, 1970, provided an opportunity for Alpena Public School teachers to meet en masse with a program designed entirely

by teacher representatives. These teacher representatives were given the authority to plan activities intended to serve as inservice activities and at the same time was to act as a tactic to keep teachers united as a group throughout the strike.

The title given to this committee was the Alpena Education Association Inservice Planning Committee. The Committee consisted of eight volunteer members:

Richard Bellas	counselor	Alpena High
Janet Gapczynski	elementary	Sunset School
Janet Hopkins	mathematics	Besser Junior High
Jon Hopkins	music	traveling elementary
Joe Marciniak	art	Alpena High
Gene Reimann	art	Alpena High
Gordon Snow	elementary	Lincoln School
Bill DesChamps	science	Besser Junior High

This committee chose to put emphasis on providing a wide variety of activities in order that each teacher involved might find something of value to him. A high priority was given to providing speakers and events that would generate discussion of educational philosophy.

From this program of inservice activities I believe that two subfactors could have had a definite bearing on the philosophy that emerged at Besser Junior High School:

- a. The fundamental design of this type of inservice program must have had an effect on



teachers in attendance (many teachers indicated to the Inservice Planning Committee members that this type of structure provided the best inservice program that they had ever attended). Teachers in general seemed to like the idea of many alternatives, a variety of interest areas, voluntary attendance of seminars, etc.

The affect I am assuming here is the transfer from a situation where teachers are provided with a wide variety of options to a situation where teachers are the providers of many options to those pupils or students in their charge.

- b. The second affect this particular inservice program seemed to have had on Alpena teachers did not arise from the general structure of the inservice program but from the impact the speakers and their logic had on the entire Alpena Public Schools staff.

The speaker I suspect had the greatest impact on the educational philosophies of most teachers was Patricia Montgomery the owner and director of "Clonlara, a Free School" located in Ann Arbor, Michigan.

Mrs. Montgomery made a very dynamic presentation. She stood in front of approximately

350 K-14 Alpena teachers and vigorously challenged the types of things happening in the Michigan Public Schools and had the audacity to use her school as the yardstick of what schools should strive toward. She provided arguments, rationale, resources, and examples. Admittedly, many teachers were very uneasy during this confrontation with Mrs. Montgomery's ideals. At the conclusion of her 1-1/2 hour presentation she was given a standing ovation by the teachers whose methods she was criticizing. In many teachers' opinions this was the high point of the inservice activities.

After her presentation to the entire staff Mrs. Montgomery spent about seven hours talking to teachers in small groups. In this type of setting several teachers had the opportunity to examine her philosophy at a closer range and to interact with her and to contrast educational philosophies.

There is little doubt, in my opinion, that the first and second factors I have listed above are the two most important factors in affecting change. The third and fourth factors may very well not have been factors at all. My reasons for including factors 3 and 4 as causes

affecting change at Besser Junior High is, in all honesty, merely a description from my perspective. Although I firmly believe that these causal factors are well founded I must not deny the possibility that I may have over-emphasized the importance of these factors since I know of both of them in advance and had placed a great amount of hope in their success in making teachers examine their educational philosophies.

#### Dialogue

The factors I have mentioned, along with any other factors which may not have been obvious to the author, promoted a tremendous amount of dialogue within the confines of Besser Junior High School.

Dialogue on the subject began with the teachers. Short on-the-street, in-the-hallway, over-the-phone, and in-the-bar discussions were the first traceable kinds of dialogue that took place. Obviously one can turn to the intrinsic changes that may have taken place within individuals that may or may not have affected their personal philosophies with regard to their readiness for accepting change. But I chose to avoid probing roots that plunge that deep. I opt rather to declare those kinds of things that lend themselves to interaction between people.

I think the influence of Dale Alam and Patricia Montgomery provided the impetus for these casual discussions to gravitate toward a system-wide movement to

affect change in our methods and philosophy of education. Teachers throughout the Alpena Public School system became involved in discussions concerning the impact which they might have in promoting change. These discussions became more frequent, more open, and more pervasive.

At Besser Junior High School the early discussions focused on philosophy. What should schools be like? What are the functions of schools? Are schools doing what they say they are doing? What is the purpose of a junior high school? Many questions were also raised concerning "free schools" and what could be learned from them.

Gradually the dialogue began to turn toward the practicality of these philosophical propositions. What can we, as teachers at Besser Junior High School do right now to make this a better school? This question became the focal point of a small group of teachers. Several suggestions were discussed at length.

After several weeks of discussion the concept that seemed dominant in this group was the short course concept (nine-week courses in lieu of the semester system). It was at this point that these teachers opened the dialogue to the students. The Besser Junior High students reacted very favorably toward this concept. When I compiled a list of courses suggested by students and teachers in early December there was, as expected, a tremendous variety of

courses. Also as was anticipated there was a swing toward more practical kinds of subject matter (see Appendix A).

It was the middle of December when the Besser Junior High staff became aware of a similar program being considered at Thunder Bay Junior High. The Thunder Bay Junior High staff had begun studying the possibility of 10-week courses in the elective areas (music, art, home economics, and industrial arts). We were led to believe that their proposal was being seriously considered by the administration. This fact alone was enough of a prod to convince the doubters in the small Besser group that we should pursue our study, get it legitamitized by the administration, and begin organizing for change.

The pre-organizational dialogue at Besser was exclusively within the subsets of teachers and students. At this time the administration had not yet entered the picture.

#### Emergent Philosophy

The four factors which I perceive as having affected change along with the pre-action dialogue resulted in what I refer to as the emergent philosophy. The term emergent philosophy refers to the general collective philosophy which resulted in the changes that took place in the Besser Junior High School curriculum.

On December 15, 1970 the same small group of Besser teachers met and laid down the fundamental philosophy that was to become what I refer to as the emergent philosophy. It may be categorized as eight basic concerns?

1. The present curriculum structure at B.J.H.S. should be restructured to better meet the needs of each individual student.
2. The quantity of required material in the curriculum is unnecessary. The "dead wood" in the curriculum should be eliminated.
3. Each teacher should be allowed to become involved in the development of course offerings.
4. Provisions must be made for student involvement in determining school events (i.e.--courses, assemblies, workshops, seminars, etc.).
5. Student feedback should be encouraged in all aspects of the school operations.
6. The grade level is restrictive to the developmental process. Since each student is unique he should be allowed and encouraged to proceed at his own pace. Grade level restrictions should be reduced.

7. The Besser Junior High staff should attempt to restructure the curriculum with regard to requirements and duration of courses.
8. Any program that is initiated at Besser Junior High School in the future should remain experimental in order that the curriculum becomes a vehicle which allows change, not a roadblock which prohibits change.

These eight basic points represent a rather extreme departure from the concept of curriculum that was predominant in the Alpena Public School system and the community at large at the time of this study. The notion that there is a special bank of knowledge from which all students must make their withdrawals was challenged. The emergent philosophy certainly did not destroy that notion but it did take it from the realm of sacred cattle which must not be tampered with. A considerable amount of material that had traditionally been in the junior high curriculum was identified by a consensus among teachers as unnecessary for all students and consequently should be eliminated and replaced with more options for the students.

The feeling that a reduction in curriculum requirements could result in an increased number of options for students it was hoped would have the following effects:

1. To make the junior high program more exploratory in nature.
2. To reduce disciplinary action against students as a result of students being, in large part, where they chose to be.
3. To make the junior high program more responsive to student needs.

Increased student and teacher involvement in development, evaluation and redevelopment of curricular activities was a primary objective to all those involved in the very "stuff" of education.

It was felt that any actual structural changes should result in the implementation of the aforementioned philosophy. Furthermore it should result in a different emphasis with regard to accountability. The shift in accountability would be from accountability to the institution to accountability to the students. Schools must become more accountable to those for whom the schools were supposedly designed.

Finally, in order to learn from mistakes of the past and to avoid making those same mistakes in the future we must deemphasize the traditional rigidity of the curriculum. We must realize that results from curriculum studies and/or curriculum committees should not endure as though they were carved in marble; they must



constantly be under scrutiny and if and when they require change, methods of change should be accessible.

This emergent philosophy includes an interesting mixture of idealism and pragmatism. The mixture of ingredients, in practice, were found to be quite successful in laying the philosophical foundations for a new more relaxed structure.

## CHAPTER III

### ORGANIZING FOR CHANGE

#### The Administration Becomes Involved

I have chosen December 7, 1970 as the arbitrary date on which a few teachers at Besser Junior High began thinking in terms of organizing their efforts for change. My reasons in chronological order for having selected this date as the beginning of an action project are as follows:

1. It was on December 7 that I approached Horace Webb (Besser Junior High Principal) with the following questions:
  - a. Would it be possible for the science and English departments to offer an interdisciplinary course entitled Science Fiction?
  - b. Would it be possible for the science department to offer a course called Science and Human Values?
  - c. Could a course in furniture refinishing be offered if the industrial arts people were interested?

In each case the answer was that we could proceed with the studies required for implementation and if the end product of the study were satisfactory, he would help us try to initiate the courses for the 1971-72 school year.

2. Shortly after this conversation with the principal, Paul Bray, a first year English teacher who was responsible for initiating this discussion on the Science Fiction course offering, and myself sat down during our common preparation period and began discussing how we could be assured that this course would be available to the students that would choose to take it. At that time we had to admit that there was little chance of interested students having time to elect this course as a part of their regularly scheduled classes under the existing curriculum structure since there was so much that "the curriculum" required. Paul and I agreed that the Science Fiction course was as legitimate as much of the material that "the curriculum" required. The problem then became how do we affect the curriculum which is so rigid that we cannot initiate a new course which has a very high student interest?

We felt that some curriculum requirements must be eliminated in order to fully implement such a

course. We concluded that the nine-week course concept (a topic of much discussion at Besser between October and December) might be an answer to several of our questions. It would be much easier to eliminate or amend nine weeks of "the curriculum" than 18 or 36 weeks.

3. As a result of this discussion between Paul Bray and myself I again approached Horace Webb and asked him if he would consider going further and consider a change from the traditional semester (18 week) organization to the nine-week structure. His response was again affirmative.
4. Directly following this informal discussion with Horace Webb; Paul Bray, Joel Osborne (Math Department Chairman and administrative intern), Jere Standen (English Department Chairman), and myself discussed the potential of moving in this direction and decided that we should set up a meeting for all interested teachers on the earliest possible date. The date set for the first meeting was December 15, 1970. The meeting site was the wine cellar in Joel Osborne's home.

Prior to the time of the meeting we had agreed to explore our own subject areas in more detail and be prepared for some action items at the upcoming meeting.

Other Events Affecting Change

In the meantime other events were taking place that undoubtedly were to have an impact on the program we had been discussing at Besser Junior High.

1. On December 8, 1970 Ron LaBarre, principal of the other Alpena junior high school (Thunder Bay Junior High School), gave his Monthly Report to the Superintendent concerning activities at Thunder Bay Junior High School. This Monthly Report to the Superintendent is included in the Superintendent's report to the Alpena Board of Education. The portion of LaBarre's report I refer to, listed in Section C, Exhibit #1, Report of the Superintendent of Schools, indicated that a committee was being formed to investigate the notion of mini-courses and what part they might play at Thunder Bay Junior High School in 1971-72 school year. LaBarre's report read as follows:

Mini-courses

Faculty and administration believe that our junior high students do not have a sufficient selection of elective courses. This is especially true of non-college bound students. A possible solution is to offer a greater variety of courses for shorter periods of time. Courses should run for six or nine weeks or a semester instead of an entire school year. Students would receive greater flexibility in choosing courses with the opportunity of exploring areas or units currently not available. This approach, called the mini-course concept, is currently being explored by our staff. Administration and interested teachers have formed a committee chaired by Delbert Beyer, Assistant

Principal. If a plan develops that has merit, we will seek approval and attempt to implement this plan for the 1971-72 school year.

2. On December 10, 1970 the Science Curriculum Study Committee had set up a meeting for all secondary physical science teachers. Besser physical science teachers in attendance at that meeting were Don Zielinski, Science Department Chairman, and myself. We indicated that the Besser Science Department felt that the Junior High Science Curriculum was literally log-jammed with "dead wood" and that it was our duty to admit to this fact and then to try to eliminate this material which was simply not functional for most students.

In an attempt to remain as fundamental as possible we posed the following question, "What skills and knowledge in science must kids, matriculating from the junior high level to the senior high level, be able to exhibit?" The consensus was that there was probably very little that must be required of all students in junior high science.

The high school teachers involved (Bill Shuler, Science Department Chairman and Adolph Brosz, chemistry teacher) indicated that the most beneficial to most students entering high school science courses were the abilities to "follow directions and to observe." All teachers present

at this meeting agreed that most students could develop these abilities without any formal instruction in junior high science.

#### The First Organizational Meeting

At a Besser staff meeting on December 14, 1970 it was announced that there would be a meeting on December 15, the following day, at the residence of Joel Osborne concerning this idea of nine-week courses at Besser Junior High School. This was the first time the entire Besser staff was made aware that there was a group of people interested in exploring the nine-week course concept. The announcement promoted considerable discussion at that meeting and thereafter.

On December 15, 1970 the following ten teachers met in Osborne's wine cellar to discuss the formulation of nine-week courses at Besser:

Bernard Fish	Mathematics
John Heath	Mathematics
Joel Osborne	Mathematics Department Chairman
Jere Standen	English Department Chairman
Paul Bray	Social Studies and English
Don Zielinski	Science Department Chairman
Jim Wilcox	Science
Ed Rutherford	Science
Dick White	Science
Bill DesChamps	Science

The meeting was extremely productive. It was felt that the results of this meeting should be presented to the Besser general staff for examination. Our plan was then to put the results of this meeting on paper for the entire staff to examine at a special meeting to be held December 21, 1970. I was appointed to prepare and make the report at that meeting.

The sheets that were distributed at the December 21, 1970 meeting summarized the results of the small group meeting and categorized the material in three sections:

1. 1971-72 Recommendations for Restructuring the Besser Junior High Curriculum:
  - a. Four nine-week courses replace the traditional 36-week course.
  - b. Certain subject areas allow students to take classes across "grade levels."
  - c. Any curriculum change at Besser should remain experimental ad infinitum in order that change might be easily implemented.
  - d. Time and space be provided for student initiated courses, seminars, assemblies, workshops, etc.
  - e. Student feedback be encouraged in developing, eliminating and restructuring curriculum and specific courses.
  - f. The Besser faculty work toward implementation of some form of curriculum similar to the following Arbitrary Restructuring Outline.
  - g. The number of units required for graduation be reduced.



- h. Each teacher participate in developing meaningful electives for the 1971-72 school year.

2. Arbitrary Restructuring Outline<sup>1</sup>

Each course would last for one nine-week period. If we continue to have seven class periods per day, then each nine-week period would provide a maximum of seven units per nine-week period (one shift) which would amount to 28 units per year (four shifts). The small group recommendations for restructuring are compiled below:

Seventh Grade:

Phys. Ed.	
English	12 required units
Social Studies	
Mathematics	4 required units
Science	2 required units (electives)
	<u>18</u> units (2 electives)

Eighth Grade:

Phys. Ed.	10 units not required
English	8 required units
U.S. History	4 required units
Mathematics	4 required units
Science	2 required units (electives)
	<u>18</u> units (14 electives)
	(10 units not required)

Ninth Grade:

English	4 required units (electives)
Social Studies	4 required units (electives)
Mathematics	2 required units
Science	2 required units (electives)
Health Ed.	
Phys. Ed.	4 required units (electives)
	<u>16</u> units (14 electives)
	(12 units not required)

3. Possible Course Titles for Electives:

Music (many)  
Journalism  
Industrial Arts (40 possible)  
Creative Writing

---

<sup>1</sup>This outline does not show the change of curriculum which was understood by the Besser teachers. It merely shows the material which was presented for consideration by the Besser staff. For a contrast see Tables I-IV.

Science Fiction  
Home Economics (many)  
Drama  
Racism  
Urban Life  
Rural Life  
Suburban Life  
Drugs  
Individual Differences  
Political Action  
Human Relations  
American Foreign Policy  
American Domestic Policy  
Civil Liberties  
Independent Study  
Student-initiated courses, workshops, assemblies,  
seminars  
Student Rights  
Black History  
Chicano History  
Lapidary  
Mythology  
Speech  
Advertisement Writing  
Business Letter Writing  
Michigan Geology  
Geomorphology  
Paleontology  
Parasitology  
Entomology  
Mycology  
Embryology  
Sex Education  
Drafting  
Print Making  
Painting  
Minority Peoples  
General Psychology  
Learning Theories  
Sociology  
Population  
Pollution  
Human Ecology  
A World Community  
Open vs. Closed Societies  
Cultures  
Languages  
Consumer Science  
Contemporary Novels  
Institutions in America  
Values  
Great Issues

Light  
Sound  
Heat  
Electricity  
Magnetism  
Mechanics  
Force and Work  
Simple Machines  
Chemistry  
Force and Motion  
The Human Body  
Photography  
Typing  
Sketching Sculpture  
Sculpture  
Weaving  
Collage  
Rocketry  
Jewelry  
Oceanography  
Design (many)  
Meteorology  
Federal Government  
State Government  
Local (City) Government  
History of Michigan  
Ceramics  
Crafts (many)  
Drawing (many)  
Basic Communication  
Drama  
Short Stories  
Poetry

This was the first proposal presented by the study group to the entire Besser staff. There was lengthy discussion with regard to the advantages and disadvantages of such a program. It was felt that the program, as proposed, had considerable merit. But, on the other hand, most teachers also felt that the administration would be unreceptive to such a drastic change.

During this meeting it was mentioned that Thunder Bay Junior High staff, unknown to most of us until early

December, was attempting a similar program in the elective areas. To some teachers this provided all the impetus that was needed to join the push for examining the possibility for initiating our program as proposed to the Besser staff.<sup>2</sup>

As a result of this meeting, the unanimous agreement between teachers and the enthusiasm exhibited by those same teachers in reaction to the proposed program, Horace Webb, Besser Principal, agreed to pursue this matter further. He was to set up a meeting between the Besser staff and the administrative decision-makers.

The receptiveness and resultant enthusiasm of the Besser teachers for this program made it unnecessary for any "sell job" to the teachers. This enthusiasm was to be one of the primary selling points which was to be used to convince the administration and the Alpena Board of Education of the possibility of success of such a curriculum change.

The Christmas Vacation extended from December 23, 1970 to January 4, 1971, during this time there was a lapse in formal action. Upon return from this vacation the teachers' enthusiasm was still evident. Several informal discussions were arranged between Horace Webb, Besser Principal, and the administrative decision-makers. These informal discussions resulted in an administrative meeting

---

<sup>2</sup>Many Besser teachers feel that their school is not provided with the financial backing, nor any other kind of backing for that matter, that Thunder Bay enjoys.

which directed a searching out of any nearby school districts which were operating similar programs.

By January 11, 1971, two school systems that employed structures similar to our proposal were located: Howell, Michigan and Niles, Michigan. The administration decided to send a group of observers to examine these programs. Since both Besser Junior High and Thunder Bay Junior High were considering the shortened course concept and each school had different goals in mind, it was directed that both junior high schools be represented in this group. The people asked to make this trip were:

Myron Blixt, Curriculum Director  
Horace Webb, Besser Junior High Principal  
Del Beyers, Thunder Bay Junior High Assistant  
Principal  
Bill DesChamps, Besser Junior High science  
teacher

Arrangements were made for this group to visit Howell High School on Thursday, January 14, 1971 and Ring Lardner Junior High School in Niles, Michigan on Friday, January 15, 1971.

#### The Board of Education Becomes Involved

On January 12, 1971 the Alpena Board of Education was made aware for the first time that the Besser staff was studying the present junior high curriculum and that this study would result in recommendations to the Board.

The Board was made aware of our general curriculum study via the Monthly Report to Superintendent from Horace Webb, Besser Principal in Section C, Exhibit #1 of the Report of Superintendent of Schools. The report read as follows:

Curriculum Study

The faculty has completed a partial study of our present curriculum and has prepared several basic recommendations for adoption next fall. Subject to approval for adoption, a more detailed study and complete recommendation will be forthcoming following tentative administrative approval for the experimental program.

The Visit to Howell High School

On January 15, 1971 the group selected to make the visitation departed for Howell, Michigan. Much discussion took place enroute concerning the mini-course concept. Since representatives from both junior highs in Alpena were present considerable time was spent contrasting the mini-course proposals at the two schools. Besser was considering implementing nine-week courses in all areas, both required and elective, whereas Thunder Bay was only considering the elective areas.

Del Beyers, Thunder Bay Assistant Principal, perceived the following reasons for Thunder Bay focusing on the elective areas:

1. Thunder Bay is considerably larger than Besser and as a result it is much more difficult to develop communications within their school.

2. Partly as a result of communication problems consensus could not be reached with regard to implementing mini-courses in the "academic" areas. A significant number of teachers opposed this concept not so much because they resisted change but because they had not had the opportunity to gain a thorough understanding of the mini-course concept and the things that could be done with that kind of structure.
3. The people within the elective areas had a meeting on the mini-course concept and found that they had consensus within these areas. It was then decided that the teachers in the elective areas would pursue their goal of implementing mini-courses.

I think that Beyers' perceptions were accurate and I agree with the solution the Thunder Bay staff arrived at with regard to implementation of the mini-course concept at Thunder Bay.

From this discussion it was also very evident that the entire Thunder Bay staff felt that the Besser proposal coupled with the tentative time schedule was grossly impractical. They felt that there was not sufficient time to study and make the necessary preparations for implementation of the proposed program by September of 1971. Perhaps if Besser had been the size of Thunder Bay they may

have been correct but the Besser staff is relatively small (approximately 40 teachers) and very cohesive, therefore, communication and interpersonal dialogue is not the problem it seemed to be at Thunder Bay.

Upon arrival at Howell High School we had the opportunity to talk with people who were directly involved in the development and implementation of the Howell Program. The people from Howell with whom we conversed were:

Will Christopherson, Guidance Director for  
Junior-Senior High Schools  
Elon Kleinau, Unit Step Coordinator  
John Kremkow, Administrative Assistant

We spent approximately two and one-half hours listening to their description of their Unit Step Program in operation in their secondary schools and directing questions at them concerning their program. Dialogue included both theory and practice. This meeting was very productive in the sense that many of our questions had been answered and we now had grounds for comparison of programs.

A question that was raised to each of the three Howell administrators was "Since the teachers at Besser Junior High initiated this program in Alpena, are very enthusiastic, and have the support of our principal, do you feel that it would be possible to implement our program, which is very similar to yours, by September 1971?" In each case the answer was emphatically affirmative. They added that they felt that this was the only way that such



a program could be implemented in such a short time, with the support and involvement of the teachers.

The Visit to Ring Lardner Junior  
High School in Niles

On Friday, January 15, 1971 the group from Alpena visited Ring Lardner Junior High School in Niles, Michigan which used the Howell program as one of the models for their own Unit Step program. In the discussion at Niles we concentrated our discussion more on practice than on theory. The person who hosted us in Niles was James Bennett, Ring Lardner Principal.

This Niles visitation increased our grounds for comparison of programs. At the time Horace Webb, Besser Principal and I agreed that the Besser staff had foreseen many of the problems that were encountered at Howell and Niles. We did not see any of these problems as being too serious to overcome. We were also pleased to find out that both Howell and Niles personnel were willing to provide us with the benefit of their experience and any other technical advice that we deemed necessary. John Kremkow and James Bennett both agreed to travel to Alpena to discuss their programs with both junior high staffs if the administration in Alpena were to request their services.

While enroute back to Alpena the four members of our group summarized the materials gathered from the two

school systems we visited. Now Horace Webb and I were more convinced than before that the Besser staff could implement our proposed program by September 1971.

Summary of Howell, Ring Lardner, and  
Besser Proposed Programs

Howell Secondary Schools--  
Howell, Michigan

Name of Program: Unit Step

Time Required for Implementation: 1 year, grades 7-12

Purposes of Program: (1) to modulate the curriculum  
and meet student needs  
(2) to create a vehicle for  
change in the public school  
curriculum as opposed to  
being an end in itself.

Definitions: (1) unit--an 8-week course (1 period per  
day)  
(2) shift--high school--an 8-week class  
schedule (6 periods per day);  
junior high--an 8-week class schedule  
(5 periods per day)

Ring Lardner Junior High--  
Niles, Michigan

Name of Program: Unit Step

Time Required for Implementation: 6 months in one  
junior high school

Purpose of Program: Same as Howell Secondary Schools.  
Since Ring Lardner took Howell's program and  
adapted it, they are very similar.

TABLE 1.--Seventh Grade Requirements

Department	Howell (25)	Ring Lardner (32 Units)	Besser (28 Units)
English	Do not have this schedule available for the Howell Seventh Grade--assume that it is very similar to the schedule that Niles is operating under. (Since 8th and 9th are very similar.)	4 required units, do not change teachers each unit-home base	
Social Studies		3 required units and 1 unit required (elect)	12 required units of these three English, Social Studies, Phys. Ed.
Phys. Ed.		2 required units	
Mathematics		4 required units (3 levels)	4 required units (lab., reg., acc.)
Ind. Arts Occup. Arts Home Ec.		2 required units (home ec. & Ind. Arts)	0
Art		2 units required during the 3 years	0
Foreign Language		4 required units (French)	0
Science		4 required units	2 required units

TABLE 2.--Eighth Grade Requirements

Department	Howell (25)	Ring Lardner (32 units)	Besser (28 units)
English	2 required units and 2 units required (elect.)	2 required units and 2 units required (elect.)	$1\frac{3}{5} \times 4 = 6\frac{2}{5}$ required units could chg.
Social Studies	4 units required (elect.)	3 required units and 1 unit required (elect.)	4 units required (elect.)
Phys. Ed.	2 required units and 2 units required (elect.)	2 required units	$\frac{2}{5} \times 4 = 1\frac{3}{5}$ required units
Mathematics	3 required units and 1 unit required (elect.)	4 required units 3 levels	4 required units (lab, re., acc.)
Science	8th and 9th sometime 5 required units and 3 units required (elect.)	8th and 9th sometime 5 required units and 3 units required (elect.)	2 units required (elect.)
Ind. Arts, Home Ec., Occup. Arts, Teen Activities	1 required unit and 1 unit required (elect.)	2 required units	0
Art	0	2 units required during the 3 years	0
Foreign Language	0	4 required units (French)	0

TABLE 3.--Ninth Grade Requirements

Department	Howell (25 units)	Ring Lardner (32 units)	Besser (28 units)
English	1 required unit and 3 units required (elect.)	4 units required (elect.)	4 units required (elect.)
Social Studies	4 units required (elect.)	2 required units and 2 units required (elect.)	4 units required (elect.)
Phys. Ed.	2 units required (elect.)	4 required units	1-3/5 required units
Mathematics	3 required units and 1 unit required (elect.)	4 required units (3 levels)	2 required units
Science	8th and 9th 5 required units and 3 units required (elect.)	8th and 9th 5 required units and 3 units required (elect.)	2 units required
Ind. Arts Teen Activities	2 units required (elect.)	2 required units?	0
Health	0	0	2-2/5 units required
Art	0	2 units required during the 3 years	0

Mechanics of Unit Step  
Program

1. A. Howell H.S.--five 8-week shifts with 6 units each shift (30 units/yr.)  
B. Howell Jr. High--five 8-week shifts with 5 units each shift (25 units/yr.)  
C. Niles Jr. High--four 9-week shifts with 8 units each shift (32 units/yr.)  
D. Besser Jr. High--four 9-week shifts with 7 units each shift (28 units/yr.)
2. At each of the 3 schools a master schedule is made for the entire year at the beginning of each year. All 3 schools at the time of this study intend to move toward scheduling just prior to the beginning of each shift similar to the way students register for courses in college.
3. Procedures for establishing courses are available from both Howell and Niles.
4. In all 3 schools methods of evaluation are in large part determined by departmental decision (either A, B, C, D, E, OR credit, non-credit).
5. Both Howell and Niles personnel indicated that the Jr. High seems to be the best placed to initiate such a program.
6. Howell had just adopted new curricula and found few problems in adapting them to the Unit Step Program.
7. The people in Niles felt that the five 8-week shifts did not fit their needs and thus went to four 9-week shifts (same as Besser Proposed).
8. In Niles: music, art, language, phys. ed., and ind. arts mark with credit, non-credit; other courses use A, B, C, D, E.
9. In Niles they found that since 7th graders have fewer electives available to choose from that it is better to schedule the 7th graders first.

10. Personnel from both schools found that scheduling is is much easier if courses require as few pre-requisites as possible.
11. A Howell High School student must complete 75 units (60 academic and 15 electives) of a possible 90 units in order to graduate.

Advantages of Unit Step Programs in Niles and Howell

1. Program allows school to adapt to students' needs.
2. Program provides a more responsive vehicle for change in the public school curricula.
3. Makes Jr. High program truly more exploratory in nature by encouraging students to sign up for courses in which they are not necessarily proficient (only fail 8 weeks).
4. Shorter duration of courses allows more immediate resolution of student-teacher conflicts.
5. Jr. High students can complete graduation requirements at some time other than the end of the school year.
6. Students, in most cases, are in particular classes because they elected to be there.
7. This program definitely increased the teacher and student involvement in curriculum planning.
8. This program greatly reduces the amount of time required to add or delete courses.
9. In Howell, "poorer students, according to our records, are doing a better job."
10. Teachers are more receptive to teaching slower sections due to the decreased duration of the courses.
11. The program created better interaction between elementary, junior high, and senior high teachers.
12. Teaches kids to make wiser decisions in course selections.

13. Allows for simple transition to the extended school year concept.
14. Decreased discipline problems.
15. Easier to implement independent study for students.
16. Students, each shift, get between 50-60 per cent of the courses they choose (by computer); 60-70 per cent after adaptations are made.
17. Encourages multi-media approach (paperbacks, newspapers, T.V., resource people, films, etc.).
18. Greatly increases flexibility in curricula.
19. Smaller teacher turn-over under this program.
20. Involves teachers in guidance of students with regard to course selection.
21. Greatly increases the number of courses from which students can select.
22. Teachers are involved in setting up master schedules (shift board).
23. Allows students to cross grade levels.
24. Could eliminate "failing a grade"--only fail a 9-week unit (or shift).
25. Makes schools more relevant to students.

Disadvantages of Unit Step Programs in Niles and Howell

1. May require new school board policy for early and late graduations.
2. Teachers do not have a room of their own.
3. Counselors assumed scheduling problems and therefore could spend less time with problems of individual students.
4. Increased cost in computer scheduling of students by \$1.25/student.



5. Increased cost, in Howell, by requiring addition of a Junior-Senior High Coordinator.
6. Would necessitate development of a new reporting technique for student progress.
7. Increases number of teacher preparations, in some cases.
8. In Howell (high school) a more detailed explanation of records were necessary for college admissions people.
9. In Howell, student transfers at semester did not mesh with their 8-week shift (should not be a problem with a 9-week shift).

Transition from Old Program  
to Unit Step

1. Limited availability of school plant was no more a factor than before.
2. Did not significantly affect the number of staff members required.
3. Howell personnel anticipated no problems with state testing programs.
4. In Niles students elected more art and vocational units.
5. Besser can benefit from the Howell and Niles experimentation.
6. This type of program could, in the future, facilitate a change in selection procedure of teacher applicants (could require teachers with a more liberal background rather than a specialist).

STANDARD FORM FOR WRITING COURSE DESCRIPTIONS

COURSE NUMBER	COURSE TITLE		CREDITS
SHIFTS COURSE IS OFFERED		DEPARTMENT CREDIT(S) COULD BE RECEIVED IN	
PREREQUISITES	LEVEL OF DIFFICULTY (circle one) 1 2 3 4 5	(circle one) COURSE REQUIRED ELECTIVE	
COURSE DESCRIPTION			
TEXT REQUIRED			

Unit Evaluation from  
Howell, Michigan

The following excerpts of pertinent questions and student replies are taken from a survey conducted last year at Howell Junior High School, Howell, Michigan. The questionnaire was designed to have the student evaluate the existing Unit Program. Student replies are reflected as a Yes or No to each question.

<u>YES</u>	<u>NO</u>	
96	213	Unit Step has broken up courses into too many parts for the parts to mean anything.
250	54	Unit Step has made it easier to study a subject and know what to do or what to learn.
188	115	Unit Step has given me higher grades in the subjects.
248	60	Unit Step has caused me to like some subjects more than before.
97	211	Unit Step has caused too many changes in "going to school."
167	139	Unit Step has made me like going to school more than before.
111	193	Unit Step makes it harder to get to know the teachers.
86	224	Unit Step forces me to have to get used to too many teachers.
194	114	It is easier to "live with" teachers I don't like under Unit Step.
198	101	Unit Step has helped me learn and understand more about the world around me.
98	214	Unit Step has given me more homework to do.
246	60	Unit Step has helped me meet more students.

<u>YES</u>	<u>NO</u>	
71	231	Unit Step has caused me to be more confused in school.
201	101	Unit Step has made me more interested in school and to learn more about things.
34	265	Unit Step should be dropped from the junior high.
253	44	It is easier to use only chapters in a big text book than using the whole book and studying chapter by chapter.
231	45	Students appear to be happier under Unit Step.
228	74	Most of the courses I have taken I chose.

On January 18, 1971 the Monday following the return of the group of four that visited Howell and Niles this summary of material was distributed to the Besser staff at a Besser staff meeting. A lengthy discussion followed in which even more enthusiasm was generated resulting in renewed drive by the Besser staff to implement this program by September 1971.

At the conclusion of this meeting most of the Besser teachers were convinced that we had enough evidence, involvement and enthusiasm to convince the administration and the Board of Education that we could make this program work. Many of us had already begun to prepare course descriptions, now more had indicated that they were going to begin writing course descriptions in their subject areas. A standard form was provided with the Summary materials on which to begin writing these descriptions in order that all necessary information would be included.

The developmental aspect was now in full swing at Besser Junior High. With perhaps a few exceptions that were not evident, there was total teacher involvement. Every Besser teacher was contributing to making this change in structure become a reality.

A Besser, Thunder Bay, Central  
Administration Meeting

On Saturday, January 23, 1971 the decision-makers from Central Office requested a meeting with teachers from Besser and Thunder Bay. At that meeting it was made very clear that the two junior highs had set their sights on different goals. It was also quite evident that neither school was willing to compromise their program at that time. Representatives from the two schools were very effective transmitters of the program and enthusiasm at their respective schools. Lawrence McConnell, Superintendent was quick to recognize this enthusiasm and state his intention to capitalize on this situation. Although McConnell did not want to "dampen enthusiasm" he expressed his concerns with certain aspects of the proposed program at Besser: the time table, the impact of this proposed program on the various curriculum committees, and the notion that the two junior high schools proceed along different paths. Teachers from both schools respected his concerns.

By the end of this meeting most people involved felt that it looked much more promising for the Thunder Bay program than for the Besser program. It seemed that there was a definite advantage to not tinkering with the "academic" subjects. Even though the Besser program was subjected to more scrutiny at this meeting the Besser contingent did feel that we had shown that our program did have sufficient merit to deserve nothing less than very serious consideration.

This meeting was the first time the entire Besser teaching staff was involved, through representatives, in dialogue with the decision-makers concerning the proposed changes. I was elated over this encounter as I felt that they were listening but testing our sincerity and enthusiasm.

#### A Besser Central Administration Meeting

On Monday, January 25, 1971 the results of that meeting were conveyed to the Besser staff at a building meeting. The Besser teachers were not satisfied with the results of that meeting and requested another meeting, as soon as possible, in hopes of gaining more concrete answers with regard to the intent of the administration. We felt that it was the proper time to put the administrative position on this matter under scrutiny.

As a result of this Besser staff meeting another meeting was arranged on Friday, January 29, 1971 at the Besser Junior High Library. This meeting was to focus on the Besser proposal. Alpena Public School personnel present at that meeting were:

Lawrence McConnell, Superintendent  
John Darnton, Assistant Superintendent of  
Instruction  
Horace Webb, Besser Principal  
Jere Standen, Besser English Department Chairman  
Joe Mischley, Besser Social Studies Department  
Chairman  
Joel Osborne, Besser Mathematics Department  
Chairman  
Bob Strong, Besser physical education teacher  
Bill DesChamps, Besser science teacher  
Ron LaBarre, Thunder Bay Principal  
Kathy McDonald, Thunder Bay English Department  
Chairman and Chairman of the English  
Curriculum Study Committee

This was the first meeting in which there was a considerable amount of confrontation. Tempers flared, practicality encountered theory, teachers encountered administrators, Besser staff clashed with Thunder Bay staff and subject areas clashed but through it all the philosophy that the Besser Program was supporting prevailed.

Everyone involved in that meeting from Besser felt that this particular meeting was a milestone in our attempt to implement our program. I think the administration now had further proof of the teachers' conviction and the teachers recognized the importance of this kind of persistence and dialogue.

Nothing was really settled at that meeting but I walked away feeling that the Besser staff had been very convincing and that we had satisfied their concerns. I was convinced, in my own mind, that our program stood a very good chance of being approved.

Even though I was very high on the chances of our success a few of the Besser teachers were beginning to wonder if this were not just "another study which the administration would file in the waste basket."

Representatives from Howell and  
Niles Visit Alpena

February 8, 1971 had been designed as an inservice day. It had been negotiated that the morning was to be set aside for building level concerns, what was to be done with the afternoon time was not negotiated. Consequently Myron Blixt, Curriculum Director, had made arrangements for representatives from Niles and Howell to visit Alpena and speak to all interested junior high teachers on that afternoon.

John Kremkow, Howell Administrative Assistant and James Bennett, Ring Lardner Junior High Principal (Niles) were the administrators who were representing their school systems and had played important parts in the development and implementation of Unit Step programs in their respective school systems.



Each of the men were allotted time to explain their own programs and the advantages and disadvantages of switching to this type of program. They then opened the floor to questions.

Throughout their stay both men were extremely enthusiastic about what this type of structure change enabled them to do that they had not been able to do prior to the change. They both indicated that the advantages far outweighed the disadvantages.

In all honesty, most of the information made available by the two men had already been thoroughly discussed by members of the Besser staff. We had already been convinced. So, in my opinion, the primary benefits of this presentation were the impact of the speakers on the administration and the Thunder Bay teachers and the enthusiasm these men showed for their Unit Step programs.

#### The Administration Supports the Besser Program

On that same day at 4:00 p.m. another meeting had been arranged between the Besser staff and the administration in order to decide what was to be presented to the Board at their regularly scheduled meeting the following evening. It was at this meeting that decisions and compromises were made that resulted in an agreement in what I shall call the Resultant Program. The details of the Resultant Program are presented in Chapter IV.

The administration was now in support of the Besser proposal (with modifications). It now became their task to convince the Board of Education that this change in curriculum should take place.

The Presentation of the Two Mini-Course  
Proposals to the Board

On February 9, 1971 the Board of Education met and listened to a mini-course presentation by the principals of the two junior high schools. The following three statements were taken from the report of Superintendent of Schools to the Board which is made available to all Board members and citizens who attend the Board meetings.

Presentation

The presentation this evening will be made by Mr. Horace Webb, Principal of Besser Junior High School, and Mr. Ron LaBarre, Principal of Thunder Bay Junior High School. These gentlemen will discuss the proposed mini-course structure being developed for the two junior high schools which will provide flexibility within the curriculum and a greater opportunity for students to explore areas of interest within both of these schools.

Section A: Background Information about Items  
Requiring Action

1. Offer Mini-courses at Junior High Level

The first agenda item this evening relates to the presentation. The effectiveness of mini-courses within the junior high school will be enhanced by a change in one board adopted requirement at the ninth grade level. Currently students are required to take physical education in the 7th, 8th, and 9th grades. Since this particular requirement was adopted by the board, a physical education requirement has been adopted at the senior high school level. Consequently, it would be appropriate to convert the ninth grade physical

education to an elective to allow students an additional opportunity to gain experience in mini-courses of their interest.

Recommendation: That the Board of Education approve the elimination of the required physical education course at the ninth grade level.

Monthly Report to Superintendent  
Thunder Bay Junior High School

Mini-courses

Under the leadership of Mr. Beyer, our staff has continued its work of developing mini-courses in the elective areas for the 1971-72 school year. In an effort to provide us with additional insight, Mr. Beyer, Mr. Webb, Mr. Blixt and Mr. DesChamps attended schools in Howell and Niles, Michigan where the mini-course concept is presently being utilized. From our standpoint, all systems are go for incorporation of mini-courses in elective areas.

The report made at this board meeting by Horace Webb and Ron LaBarre was very comprehensive. As a teacher intimately involved in helping to develop this program, I must say that they were able to treat all aspects of the implementation of this program fairly. Where there were disadvantages, they were mentioned. The proposal was certainly not candy-coated.

The Board voted to accept the recommendation as made by the Superintendent, to eliminate the required physical education course at the ninth grade level. The board did not vote to approve the mini-course concept per se but since the rationale for such a decision was to "allow students an additional opportunity to gain experience in mini-courses of their interest" we at Besser assumed that this was our approval to move toward implementation.

Between February 10, 1971 and early March 1971 many small building meetings and departmental meetings were held at Besser. Most of this time was spent developing course descriptions which would fit within the curriculum as modified on February 8, 1971.

All course descriptions were collected from the various departments on Thursday, March 4, 1971. By Wednesday, March 10, 1971 the course descriptions had been typed and incorporated into a Course Selection Guide (see Appendix B) which was to be distributed to each student in order to assist them in selecting courses for the 1971-72 school year. Chapter V explains the mini-course selection procedure used at Besser.

On March 9, 1971 the Board of Education held their first regularly scheduled March meeting. Both junior high principals included their reports on the status of mini courses implementation at their respective schools. Below are the two excerpts from the March 9, 1971 Report of the Superintendent of Schools:

Monthly Report to Superintendent  
Thunder Bay Junior High School  
Unit Course Program

A great deal of time and effort has continued in the development of the unit course approach for selected areas of our junior high curriculum. Our staff is engaged in establishing approved courses to be offered to students and, hopefully, we will be ready the latter part of March to present parents and students with registration information for the following school year. As a result of the Board presentation made by Mr. Webb and me, we have been granted a relaxing of some ninth

grade requirements with the hope that this will provide us with additional flexibility necessary for the unit course approach. It is obvious to me that this concept will provide an interesting challenge in scheduling which should occupy any potential free time one might expect during the summer.

Monthly Report to Superintendent  
Besser Junior High School  
Unit Step Program

Following the school board's approval of the Unit Step Program for the junior highs next year, work has progressed at this point to where the catalog of courses to be offered is being readied as well as an initial course tally sheet to survey student interest in all courses. Work is also progressing on an acceptable form to be used for key punching at the community college and for procedures for use of the computer at Oakland Schools. Scheduling of present eighth, seventh, and sixth graders should begin in late March.

Even though the Board of Education never formally approved the mini-course concept with the relaxation of requirements suggested by the Besser staff, we interpreted a lack of reaction by the Board of Education to the above statements as final approval of the respective junior high programs.

## CHAPTER IV

### THE RESULTANT PROGRAM

#### The Achievement of Objectives

Of the eight recommendations originally proposed to the Besser staff (see page 39) by the ten teachers who first met to initiate the recommendations, all of the recommendations were achieved to some degree.

1. Four nine-week courses did replace the 36-week courses.
2. Most subject areas allowed students to take classes across "grade levels."
3. This curriculum change at Besser is expected to remain experimental in order that more changes might be more easily implemented.
4. In the future time and space is expected to be provided for student initiated courses, seminars, assemblies, and workshops.

5. Student feedback is encouraged in developing, eliminating and restructuring curriculum and specific courses.
6. The Besser staff has worked very hard toward implementation of the form of curriculum similar to that proposed in the Arbitrary Restructuring outline (see page 40).
7. The number of units required for graduation has been reduced.
8. Almost every returning teacher has participated in developing meaningful electives for the 1971-72 school year.

The most meaningful changes resulting from this curriculum study are: the reduction of units required for graduation and the right which was granted to students to select classes across "grade levels." Both of the aforementioned changes were implemented as a result of the basic structural changes from 36-week courses to 9-week courses. The New Program for the 1971-72 school year will allow students to select more electives in areas of their interest.

A Comparison of the Basic Requirements of the  
Old Seventh Grade Program and the  
New Seventh Grade Program

TABLE 4.--A Comparison of the Basic Requirements of the Old Seventh Grade Program and the New Seventh Grade Program

Course	Old Program		New Program	
	Units Required	Electives	Units Required	Electives
Science	4	0	2	2
Mathematics	4	0	4	0
English				
Social Studies	12	0	12	0
Physical Ed.				
Electives	*	8	+	10

\*Must select two courses from five non-academic areas.

+Must select ten courses from many possibilities in both academic and non-academic areas (two of the ten courses must be science courses).

The primary reason for not providing more electives for seventh grade students was the feeling of most seventh grade teachers that the average seventh grade student was not yet prepared to make wise elections. Furthermore, the seventh grade teachers felt that the seventh grade should be devoted to helping the seventh grade students make the transition from a situation where all their courses were predetermined for them to a situation where they would be free to select the courses of their choice. In the eighth



grade more electives would be made available and in the ninth even more electives would be provided.

### Seventh Grade Science<sup>1</sup>

In the seventh grade the most radical changes were made in the area of science. Seventh grade students would no longer be required to take 36 weeks of earth science. The nine-week course concept made it possible to eliminate one-half year of required earth science. Under the New Program all seventh grade students are required to take two specific nine-week earth science courses: 0400 Environmental Lab and 0401 Weather. The two remaining nine units are elective; each seventh grade student must elect any two of the nine-week courses provided. Consequently, even though seventh grade students are still required to take a year of science, they now have the option, at least for one-half year, to select science courses in areas of their interest.

Listed below are the science courses from which seventh grade students make their elections:

---

<sup>1</sup>For course descriptions, see Appendix B, Course Selection Guide which was distributed to all Besser Junior High students to assist them in selecting courses.

- 0402 Science--A way of knowing
- +0403 Alpena Fossils
- +0404 Insects
- +0405 Aircraft
- +0406 Oceanography & Limnology
- +0407 Astronomy
- ++0408 Amphibians & Reptiles
- ++0409 Conservation Seminar
- ++0410 Pollution Seminar
- ++0411 Rocks, Minerals, Gem Polishing
- ++0412 Wildlife Seminar
- ++0413 Ornithology
- ++0414 Independent Study

### Seventh Grade Mathematics<sup>2</sup>

In seventh grade mathematics there were essentially no changes. In the past students were tested in the sixth grade to determine their entry level into seventh grade mathematics. Students were then tracked to one of three levels: Laboratory Math (designed for "slow" 7th grade students), Regular Math (designed for "average" 7th grade students), and Accelerated Math (designed for "exceptional" 7th grade students). Under the New Program the same material is offered in four unit blocks (36 weeks).

The courses offered seventh grade students are:

- 0300 Math--7
- 0304 Lab Math 7
- 0310 Math 8 (accelerated track)

---

+Courses also open to eighth grade students.

++Courses also open to ninth grade students.

<sup>2</sup>For course descriptions, see Appendix B.

In addition to the required seventh grade mathematics, seventh grade students are offered one elective which is also open to eighth and ninth grade students:

0305 Logic and Inquiry

Seventh Grade Language Arts  
(English) Social Studies  
Block and Physical Education<sup>3</sup>

There were essentially no changes in the Language Arts (English) Social Studies block nor in Physical Education. Under the New Program three class periods each day are still allocated for seventh grade block and Physical Education of the 15 class periods (Physical Education classes meet for a single class period two days of each week). In other words each seventh grade student is still required to take 12 units of the Language Arts (English) Social Studies block and Physical Education. Additional electives offered to seventh grade students in these areas are listed below:

- Language Arts
- 0104 Reading Improvement
- 0106 Reading for Fun
- +0107 Vocabulary--Basic
- +0108 Vocabulary--Enrichment
- +0109 Reporting--Oral and Written

---

<sup>3</sup>For course descriptions see Appendix B.

+Courses also open to eighth and ninth grade students.

## Social Studies

- +0201 Geography of Latin America
- +0202 Oceania
- +0203 Geography of North America
- +0204 World Religions
- +0205 World Resources, Industry and Agriculture
- +0206 Maps, Graphs, Tables and Charts
- +0207 Independent Study

Other Seventh Grade Electives  
in "Non-Academic" Areas<sup>4</sup>

Under the Old Program seventh grade students had the option to select two 36-week, "non-academic" courses. Under the New Program seventh grade students have the option to elect courses in both "academic" and "non-academic" areas if electives are provided by the department. "Academic" courses have been listed in the preceding sections. "Non-academic" course electives are listed below:

## Foreign Language

- |                  |   |
|------------------|---|
| 0500 French I    | * |
| 0501 French II   | * |
| 0502 French III  | * |
| 0503 French IV   | * |
| 0504 Spanish I   | * |
| 0505 Spanish II  | * |
| 0506 Spanish III | * |
| 0507 Spanish IV  | * |

---

+Courses also open to eighth and ninth grade students.

<sup>4</sup>For course descriptions see Appendix B.

\*Courses must be elected as four-unit blocks.

## Music

- +0550 Beginning Band I \*
- +0551 Beginning Band II \*
- +0552 Beginning Band III \*
- +0553 Beginning Band IV \*
- ++0554 Intermediate Band I \*
- ++0555 Intermediate Band II \*
- ++0556 Intermediate Band III \*
- ++0557 Intermediate Band IV \*
- ++0562 Orchestra I \*
- ++0563 Orchestra II \*
- ++0564 Orchestra III \*
- ++0565 Orchestra IV \*
- 0570 Mixed Chorus I \*
- 0571 Mixed Chorus II \*
- 0572 Mixed Chorus III \*
- 0573 Mixed Chorus IV \*
- ++0574 Vocal Music \*

## Fine Arts

- ++0600 Basic Art Skills
- ++0601 Drawing and Painting I
- ++0602 Drawing and Painting II
- ++0603 Design I
- ++0604 Design II
- ++0605 Printing I
- ++0606 Printing II
- ++0607 Sculpture I
- ++0608 Sculpture II
- ++0609 Ceramics I
- ++0610 Ceramics II
- ++0611 Darkroom Techniques
- ++0615 Photo-Journalism

## Home Economics

- 0700 Who Am I
- 0701 Beginning Sewing I
- 0702 Beginning Sewing II
- 0703 Child Care
- 0704 Basic Foods
- 0705 Special Foods
- ++0706 Clothing Construction I
- ++0707 Home Economics Survey (Boys)
- ++0708 Interior Decorating & Home Furnishing
- ++0709 Creative Crafts in Home Ec.

---

+Courses also open to 8th graders.

++Courses also open to 8th and 9th graders.

\*Courses must be elected as four-unit blocks.

## Industrial Arts

- ++0800 Sketching
- ++0801 Basic Woodworking
- ++0802 Laminating
- +0803 Bench and Wrought Metal
- +0804 Foundry
- +0805 Home Mechanics
- ++0806 Industrial Graphics

A Comparison of the Basic Requirements of the  
Old Eighth Grade Program and the  
New Eighth Grade Program

TABLE 5.--A Comparison of the Basic Requirements of the  
 Old Eighth Grade Program and the New Eighth  
 Grade Program

Course	Old Program		New Program	
	Units Required	Electives	Units Required	Electives
Science	4	0	2	2
English	8	0	3	3
Physical Ed.			2	0
Social Studies (U.S. History)	4	0	4	0
Mathematics	4	0	4	0
Electives	*	8	+	13

\*Must select two courses from five non-academic areas.

+May select 13 courses from many possibilities in both academic and non-academic areas (two of these courses must be in science and three must be in English).

---

+Courses also open to 8th graders.

++Courses also open to 8th and 9th graders.

Eighth Grade Science<sup>5</sup>

Under the Old Program all eighth grade students were required to take a 36-week course in Life Science (four units). Under the New Program eighth grade students are required to take 36 weeks of science but, similar to the seventh grade structure, each eighth grade student is required to take two specific nine-week life science courses: 0415 Cell, Tissues and Tools of Biology; and 0416 The Human Body. The remaining 18 weeks, eighth grade students must elect at least two nine-week science courses from those provided:

- +0403 Alpena Fossils
- +0404 Insects
- +0405 Aircraft
- +0406 Oceanography and Limnology
- +0407 Astronomy
- +0408 Amphibians and Reptiles
- +++0409 Conservation Seminar
- +++0410 Pollution Seminar
- +++0411 Rocks, Minerals and Gem Polishing
- +++0412 Wildlife Seminar
- +++0413 Ornithology
- +++0414 Independent Study
- ++0418 Genetics
- ++0419 Careers in Science Seminar
- ++0420 First Aid
- ++0421 Animal Training
- ++0422 Animal Behavior
- ++0423 History of Life

---

<sup>5</sup>For course descriptions see Appendix B.

+Courses also open to seventh grade students.

++Courses also open to ninth grade students.

+++Courses also open to seventh and ninth grade students.

- ++0424 Ancient Peoples of North America
- ++0425 Ecology
- ++0426 Mammalology
- ++0427 Parasitology
- ++0428 Entomology
- ++0429 Rocks and Minerals
- ++0430 Space Travel
- ++0432 Diseases
- ++0433 Vascular Plants
- ++0434 Non-vascular Plants
- ++0435 Human Behavior Seminar
- ++0436 Careers in Food Production and Natural Resources
- ++0437 Geologic Measurement and Maps
- ++0438 Slide Rule
- ++0439 Ichthology
- ++0440 The Mind

### Eighth Grade Mathematics<sup>6</sup>

Eighth grade mathematics, under the New Program, remains the same and includes the same content in the same order as it did prior to the inception of the New Program except for the basic structural change from 36-week courses to nine-week courses. Seventh grade students are tested prior to entry into the eighth grade and are then tracked to one of the four available four unit block tracks:

- 0304 Lab Math A
- 0310 Math--8
- 0314 Lab Math B
- 0315 Algebra

Once an eighth grade student is placed in one of the four tracks he usually remains in that particular track for the entire school year.

---

++Courses also open to ninth grade students.

<sup>6</sup>For course descriptions see Appendix B.



In addition the four required units of eighth grade mathematics eighth grade students are offered the following nine-week electives:<sup>7</sup>

- 0308 Logic and Inquiry
- +0325 Fractions
- +0326 Integers and Coordinate Planes
- +0327 Metrics and Scientific Notation
- +0318 Business Math
- +0319 Graphing
- +0320 Measurement
- +0321 Fundamental Set Theory
- +0322 Number Sentences and Formulas
- +0324 History of Mathematics
- +0323 Plane Geometry

Eighth Grade Language Arts (English)  
Social Studies Block and Physical  
Education<sup>8</sup>

Under the Old Program all eighth grade students were required to take 36 weeks of Social Studies (one period per day) and 36 weeks of an English-Physical Education block (two periods per day) from which two periods each week were set aside for Physical Education. Under the Old Program the eighth grade, unlike the seventh grade, separated the Language Arts (English) Social Studies block into Language Arts (English) and Social Studies. An example of an eighth grade schedule under the Old Program might be as follows:

---

<sup>7</sup>For course descriptions see Appendix B.

+Courses also open to ninth grade students.

<sup>8</sup>For course descriptions see Appendix B.

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	----- English -----				
2	----- English -----				
3	-----				
4	----- Social Studies -----				

Under the New Program Language Arts (English) Social Studies, and Physical Education are now separate entities in the eighth grade. An eighth grade student is now required to take six units of English, four units of Social Studies and two units of physical education.

#### Eighth Grade English<sup>8</sup>

Each eighth grade student is required to take:

0112 Novel  
0113 Short Story  
+0110 Basic Communication I  
+0111 Composition

In addition to these three required eighth grade English courses each eighth grade student must elect three units from the elective courses provided:<sup>9</sup>

---

<sup>8</sup>For course description see Appendix B.

+Each student has a choice of either of these two courses.

<sup>9</sup>If an eighth grade student elects both 0110 Basic Communication I and 0111 Composition he would be required to make only two additional English elections.

- +0107 Vocabulary Basic
- +0108 Vocabulary Enrichment
- +0109 Reporting--Oral and Written
- ++0115 Pleasure Reading
- ++0116 Practical English
- ++0117 Mass Media
- ++0118 Poetry
- ++0119 Lesson Attack Skills
- ++0120 Science Fiction
- ++0121 Research Writing
- ++0122 Speech I
- ++0123 Speech II
- ++0124 Drama I
- ++0125 Drama II
- ++0127 Speed Reading
- ++0128 Mythology
- ++0129 Journalism I

#### Eighth Grade Social Studies<sup>10</sup>

Each eighth grade student is required to take:

- 0220 Discovery, Growth and Independence
- 0211 Growth of America, 1783-1840
- 0212 Westward Movement Through the Civil War

In addition to the three required eighth grade social studies courses, each eighth grade student must elect one unit from the elective courses provided:

- +0201 Geography of Latin America
- +0202 Oceania
- +0203 Geography of North America
- +0204 World Religions
- +0205 World Resources, Industry and Agriculture
- +0206 Maps, Graphs, Tables, and Charts
- +0207 Independent Study
- ++0213 Citizenship Responsibilities
- ++0214 State and Local History
- ++0215 Personal Economics
- ++0216 History of American Minority Groups
- ++0217 Contemporary Issues

---

+Courses also open to seventh and ninth graders.

++Courses also open to ninth graders.

<sup>10</sup>For course descriptions see Appendix B.

### Eighth Grade Physical Education<sup>11</sup>

The Old Program required all eighth grade students to take physical education for an entire year, two class periods per week which amounts to 1-3/5 units per year (see sample schedule on page 81).

The New Program requires all eighth grade students to take two specific units of physical education: students are not provided elective courses from which to choose their units. The actual time allotted to physical education increases by approximately 25 per cent over the course of a year. Physical education classes now meet five days per week for two shifts (18 weeks).

### Other Eighth Grade Electives in "Non-Academic" Areas<sup>12</sup>

Under the Old Program eighth grade students were required to select two 36-week courses from the five "non-academic" areas. Under the New Program eighth grade students are required to select eight additional units in either "academic" or "non-academic" areas as provided by the various departments. Eighth grade "academic" course electives have already been listed in the preceding sections. "Non-academic" courses are listed below:

---

<sup>11</sup>For course descriptions see Appendix B.

<sup>12</sup>For course descriptions see Appendix B.

## Foreign Language

++0508	Introduction to French	
++0509	Introduction to Spanish	
0510	French II Section I	*
0511	French II Section II	*
0512	French II Section III	*
0513	French II Section IV	*
0514	Spanish II Section I	*
0515	Spanish II Section II	*
0516	Spanish II Section III	*
0517	Spanish II Section IV	*

## Music

+0550	Beginning Band I	*
+0551	Beginning Band II	*
+0552	Beginning Band III	*
+0553	Beginning Band IV	*
+++0554	Intermediate Band I	*
+++0555	Intermediate Band II	*
+++0556	Intermediate Band III	*
+++0557	Intermediate Band IV	*
++0558	Advanced Band I	*
++0559	Advanced Band II	*
++0560	Advanced Band III	*
++0561	Advanced Band IV	*
+++0562	Orchestra I	*
+++0563	Orchestra II	*
+++0564	Orchestra III	*
+++0565	Orchestra IV	*
+++0574	Vocal Music	
++0576	Mixed Chorus I	*
++0577	Mixed Chorus II	*
++0578	Mixed Chorus III	*
++0579	Mixed Chorus IV	*
++0580	Choir I	*
++0581	Choir II	*
++0582	Choir III	*
++0583	Choir IV	*
++0584	Music Appreciation	
++0585	Music Theory	
++0586	Small Ensemble	

---

\*Courses must be elected as four-unit blocks.

+Courses also open to seventh grade students.

++Courses also open to ninth grade students.

+++Courses also open to both seventh and ninth grade students.

## Fine Arts

- +++0600 Basic Art Skills
- +++0601 Drawing and Painting I
- +++0602 Drawing and Painting II
- +++0603 Design I
- +++0604 Design II
- +++0605 Printing I
- +++0606 Printing II
- +++0607 Sculpture I
- +++0608 Sculpture II
- +++0609 Ceramics I
- +++0610 Ceramics II
- +++0611 Darkroom Techniques
- ++0612 Movie Production
- ++0613 Micro and Macro Photography
- ++0614 Photography Art
- +++0615 Photo Journalism

## Home Economics

- +++0706 Clothing Construction I
- +++0707 Home Economics Survey (Boys)
- +++0708 Interior Decorating and Home Furnishing
- +++0709 Creative Crafts in Home Economics
  - 0710 Creative Cooking
  - 0711 Clothing Selection and Care
- ++0712 Specialty Cooking
- ++0713 Home Entertainment and Hospitality
- ++0714 Home Nursing and Child Care
- ++0715 Clothing Construction II
- ++0716 Human Relations
- ++0717 Personal Improvement
- ++0718 Making Time and Money Count
- ++0719 Family Meals

## Industrial Arts

- +++Sketching
- +++0801 Basic Woodworking
- +++0802 Laminating
  - +0803 Bench and Wrought Metal
  - +0804 Foundry
  - +0805 Home Mechanics
- +++0806 Industrial Graphics

---

+Courses also open to seventh grade students.

++Courses also open to ninth grade students.

+++Courses also open to both seventh and ninth grade students.

- ++0807 Wood Refinishing and Antiquing
- ++0808 Sheet Metal
- ++0809 Intro. Drawing
- ++0810 Machine Woodworking
- ++0811 Orthographic Drawing and Dimensions
- ++0812 Power Mechanics
- ++0813 Mini Bike Repair
- ++0814 Pattern Development Sectional and Auxiliary
- ++0815 Pictorial Drawing
- ++0816 Machine Drawing
- ++0817 Perspective Drawing
- ++0818 Plastics I
- ++0819 Plastics II
- ++0820 Electricity

A Comparison of the Basic Requirements of the  
Old Ninth Grade Program and the  
New Ninth Grade Program

Ninth Grade Science<sup>13</sup>

The Old Program required that all ninth grade students take 36 weeks (4 units) of physical science. The New Program requires all ninth grade students to take two units (18 weeks) of physical science. Even though two physical science units are required in the ninth grade ninth grade students are free to elect any two of eight physical science courses offered:

- 0442 Mechanics
- 0443 Measuring Instruments of Physics
- 0444 Force and Motion
- 0445 Atomic Structure and the Periodic Table
- 0446 Waves and Their Effects
- 0448 Light
- 0449 Electricity and Magnetism
- 0450 Atomic Energy

---

++Courses also open to ninth grade students.

<sup>13</sup>For course descriptions see Appendix B.

TABLE 6.--A Comparison of the Basic Requirements of the  
Old Ninth Grade Program and the New Ninth  
Grade Program

Course	Old Program		New Program	
	Units Required	Electives	Units Required	Electives
English	4	0	1	3
Social Studies (Civics)	4	0	2	2
Mathematics	4	0	4 or 2	0 or 2
Science	4	0	2	0
Phys. Ed. Health	4	0	0 1	0 0
Electives	*	8	+	18-20

\*Must select two courses from five non-academic areas.

+May select 18-20 courses out of many possibilities in both academic and non-academic areas (three of these courses must be in English, two courses must be in social studies and two must be in mathematics).



In addition to the two physical science courses ninth grade students may also elect from the following list of science courses:<sup>14</sup>

- +0419 Careers in Science Seminar
- +0420 First Aid
- ++0421 Animal Training
- +0422 Animal Behavior
- +0423 History of Life
- +0424 Ancient Peoples of North America
- +0425 Ecology
- +0426 Mammalology
- +0427 Parasitology
- +0428 Entomology
- +0429 Rocks and Minerals
- +0430 Space Travel
- +0432 Diseases
- +0433 Vascular Plants
- +0434 Non-vascular Plants
- +0435 Human Behavior Seminar
- +0436 Careers in Food Production and Natural Resources
- +0437 Geologic Measurement and Maps
- +0438 Slide Rule
- +0439 Ichthology
- +0440 The Mind
- ++0409 Conservation Seminar
- ++0410 Pollution Seminar
- ++0411 Rocks, Minerals and Gem Polishing
- ++0412 Wildlife Seminar
- ++0413 Ornithology
- ++0414 Independent Study
- +0418 Genetics

#### Ninth Grade Mathematics<sup>15</sup>

Under the Old Program all students were required to take a full 36 weeks of mathematics in one of the four

---

<sup>14</sup>For course descriptions see Appendix B.

<sup>15</sup>For course descriptions see Appendix B.

+Courses also open to eighth grade students.

++Courses also open to seventh and eighth grade students.

four available tracks. Under the New Program each ninth grade student is also required to be registered in one of the four available tracks, which are essentially the same as under the Old Program:

0314 Lab Math 9  
 0330 Math 9  
 0335 Algebra  
 0340 Geometry

With the exception of 0330 Math 9, ninth grade mathematics is unchanged. 0314, 0335, and 0340 are all 36 week courses. If a ninth grade student elects 0330 Math 9 he must also elect two additional mathematics units from the courses offered to 0330 Math 9 students:

++0308 Logic and Inquiry  
 +0318 Business Math  
 +0319 Graphing  
 +0320 Measurement  
 +0321 Fundamental Set Theory  
 +0322 Number Sentences and Formulas  
 +0323 Plane Geometry  
 +0324 History of Mathematics  
 +0325 Fractions  
 +0326 Integers and Coordinate Planes  
 +0327 Metrics and Scientific Notation  
 0332 Irrational Numbers and Trigonometry  
 0333 Basic Arithmetic Operations  
 0334 Independent Study

#### Ninth Grade Language Arts (English)<sup>16</sup>

Under the Old Program all ninth grade students were required to take 36 weeks of English. All students

---

+Courses also open to eighth grade students.

++Courses also open to seventh and eighth grade students.

<sup>16</sup>For course descriptions see Appendix B.

were exposed to the same material. Under the New Program ninth grade students are still required to take 36 weeks (4 units) of English but only one of the four units is required of all students; the other three units are electives.

All ninth grade students must take 0133 Short Story II. They must also elect one of the following courses:

0130 Basic Communications  
0131 Composition  
0132 Creative Writing

In addition to 0133 and 0130, 0131, or 0132 each ninth grade student must make two elections from the following courses provided by the English Department:

++0107 Vocabulary--Basic  
++0108 Vocabulary--Enrichment  
++0109 Reporting--Oral and Written  
+0115 Pleasure Reading  
+0116 Mass Media  
+0117 Practical English  
+0118 Poetry  
+0119 Lesson Attack Skills  
+0120 Science Fiction  
+0121 Research Writing  
+0122 Speech I  
+0123 Speech II  
+0124 Drama I  
+0125 Drama II  
+0127 Speed Reading  
+0128 Mythology  
+0129 Journalism I  
0134 Novel

---

+Courses also open to eighth grade students.

++Courses also open to seventh and eighth grade students.

0135 Journalism II Section I	*
0136 Journalism II Section II	*
0137 Journalism II Section III	*
0138 Journalism II Section IV	*

Ninth Grade Social Studies  
(Civics)<sup>17</sup>

The Old Program required all ninth grade students to take the same 36-week Civics course. The New Program also requires the ninth grade students to take 36 weeks (4 units) of social studies but only two units are required of all ninth grade students; the other two units are electives.

All ninth grade students must take:

- 0230 State and Local Government of Michigan
- 0231 National Government and the Constitution

In addition to these two required units each student must elect two units from the social studies courses provided:

- ++0201 Geography of Latin America
- ++0202 Oceania
- ++0203 Geography of North America
- ++0204 World Religions
- ++0205 World Resources, Industry and Agriculture
- ++0206 Maps, Graphs, Tables and Charts
- ++0207 Independent Study
- +0213 Citizenship Responsibilities
- +0214 State and Local History

---

\*Courses must be elected as four-unit blocks.

<sup>17</sup>For course descriptions see Appendix B.

+Courses also open to eighth grade students.

++Courses also open to seventh and eighth grade students.

- +0215 Personal Economics
- +0216 History of American Minorities Groups
- +0217 Contemporary Issues
- 0232 Comparative Governments
- 0233 You and the Law (Civil Liberties)

### Ninth Grade Physical Education<sup>18</sup>

Under the Old Program all ninth grade students were required to take 36 weeks of physical education. Ninth grade physical education classes met one period per day, three days per week for 36 weeks (2.4 units). Under the New Program all ninth grade physical education requirements have been completely eliminated (see page 65). Ninth grade students are now free to elect physical education courses from those provided by the physical education department:

- 0650 Physical Education--Girls I
- 0651 Physical Education--Girls II
- 0652 Physical Education--Girls III
- 0653 Physical Education--Girls IV
- 0660 Physical Education--Boys I
- 0661 Physical Education--Boys II
- 0662 Physical Education--Boys III
- 0663 Physical Education--Boys IV
- 0664 Boy's Individual Fitness
- 0665 Wrestling--Weight Training
- 0666 Badminton--Weight Training
- 0667 Aikida

### Ninth Grade Health

Under the Old Program all ninth graders took Health and Safety two days a week for the one semester (.8 units).

---

+Courses also open to eighth grade students.

<sup>18</sup>For course descriptions see Appendix B.

The New Program has required one unit of health that must be taken by all ninth grade students:

0441 Drugs, Narcotics and Communicable Diseases

The health requirement is the only additional requirement to the Old Program in the entire restructuring process.

Other Ninth Grade Electives in  
"Non-Academic" Areas<sup>19</sup>

Under the Old Program all ninth grade students were free to elect two, 36-week courses from the six "non-academic" areas. Under the New Program students may elect 13 courses with no strings attached. There are no departmental requirements governing these electives. Students may choose any course they desire as long as they have fulfilled the necessary prerequisites. "Academic" course electives have already been listed in the preceding sections, "non-academic" courses are listed below:

Foreign Language		
+0508	Introduction to French	
+0509	Introduction to Spanish	
0530	French III Section I	*
0531	French III Section II	*
0532	French III Section III	*
0533	French III Section IV	*
0534	Spanish III Section I	*
0535	Spanish III Section II	*

---

<sup>19</sup>For course descriptions see Appendix B.

+Courses also open to eighth grade students.

\*Courses must be elected as four-unit blocks.

0536	Spanish III Section III	*
0537	Spanish III Section IV	*
0538	French I Section I	*
0539	French I Section II	*
0540	French I Section III	*
0541	French I Section IV	*
0542	Spanish I Section I	*
0543	Spanish I Section II	*
0544	Spanish I Section III	*
0545	Spanish I Section IV	*
0546	Latin I Section I	*
0547	Latin I Section II	*
0548	Latin I Section III	*
0549	Latin I Section IV	*

#### Music

++0554	Intermediate Band I	*
++0555	Intermediate Band II	*
++0556	Intermediate Band III	*
++0557	Intermediate Band IV	*
+0558	Advanced Band I	*
+0559	Advanced Band II	*
+0560	Advanced Band III	*
+0561	Advanced Band IV	*
++0562	Orchestra I	*
++0563	Orchestra II	*
++0564	Orchestra III	*
++0565	Orchestra IV	*
++0574	Vocal Music	
+0576	Mixed Chorus I	*
+0577	Mixed Chorus II	*
+0578	Mixed Chorus III	*
+0579	Mixed Chorus IV	*
+0580	Choir I	*
+0581	Choir II	*
+0582	Choir III	*
+0583	Choir IV	*
+0584	Music Appreciation	
+0585	Music Theory	
+0586	Small Ensemble	

---

\*Courses must be elected in four-unit blocks.

+Courses also open to eighth grade students.

++Courses also open to seventh and eighth grade students.

## Fine Arts

- ++0600 Basic Art Skills
- ++0601 Drawing and Painting I
- ++0602 Drawing and Painting II
- ++0603 Design I
- ++0604 Design II
- ++0605 Printing I
- ++0606 Printing II
- ++0607 Sculpture I
- ++0608 Sculpture II
- ++0609 Ceramics I
- ++0610 Ceramics II
- +0611 Darkroom Technique
- +0612 Movie Production
- +0613 Micro and Macro Photography
- +0614 Photography Art
- +0615 Photo-Journalism
- 0616 Independent Study

## Home Economics

- ++0706 Clothing Construction I
- ++0707 Home Economics Survey (Boys)
- ++0708 Interior Decorating and Home Furnishing
- ++0709 Creative Crafts in Home Economics
- ++0712 Specialty Cooking
- ++0713 Home Entertainment and Hospitality
- ++0714 Home Nursing and Child Care
- ++0715 Clothing Construction II
- ++0716 Human Relations
- ++0717 Personal Improvement
- ++0718 Making Time and Money Count
- ++0719 Family Meals
- 0730 Summer Job Training
- 0731 Clothing Construction III

## Industrial Arts

- ++0800 Sketching
- ++0801 Basic Woodworking
- ++0802 Laminating
- ++0806 Industrial Graphics
- +0807 Wood Re-finishing and Antiquing
- +0808 Sheet Metal
- +0809 Machine Woodworking
- +0810 Machine Woodworking

---

+Courses also open to eighth grade students.

++Courses also open to seventh and eighth grade students.



- +0811 Orthographic Drawing and Dimensions
- +0812 Power Mechanics
- +0813 Mini Bike Repair
- +0814 Pattern Development, Sectional and Auxiliary
- +0815 Pictorial Drawing
- +0816 Machine Drawing
- +0817 Perspective Drawing
- +0818 Plastics I
- +0819 Plastics II
- +0820 Electricity
- 0830 Architectural Drawing
- 0831 Design
- 0832 Independent Study

General Elective Courses

- 0900 Public Health
- 0901 Practical Safety
- 0910 Library Assistant
- 0920 Learning Materials Assistant
- 0930 Classroom Assistant
- 0940 Office Assistant

---

+Courses also open to eighth grade students.

++Courses also open to seventh and eighth grade students.

## CHAPTER V

### ENROLLMENT AND SCHEDULING

#### Course Selection Procedure

On Monday, March 22, 1971 the Anna Besser Junior High Course Selection Guides<sup>1</sup> were distributed to sixth, seventh and eighth grade students by their homeroom teachers. On that same day seventh and eighth grade teachers were instructed to discuss and answer questions pertaining to courses offered in their respective departments. Seventh and eighth grade students were then given their respective Course Preference Survey<sup>2</sup> sheets. They were directed to take their Course Selection Guide and Course Preference Survey sheet home with them so they could discuss the various courses being offered with their parents.

Since sixth grade students were not housed in Besser Junior High School it was necessary for four Besser

---

<sup>1</sup>See Appendix B for Course Selection Guides.

<sup>2</sup>See Appendix C for Course Preference Survey Sheets.

Junior High staff members<sup>3</sup> to visit the elementary schools which send students to Besser Junior High. Essentially, they followed the same procedure with the sixth grade students as described for the seventh and eighth grade students.

On Wednesday, March 24, 1971 the 850 sixth, seventh, and eighth grade students were expected to have made their elections on their Course Preference Survey Sheets. On that day the first hour class was extended to provide teachers time to make a tally of student elections. This tally included the count, by first hour classes, of the number of students signed up for each course being offered. After the tally had been made by each individual first hour teacher, Joel Osborne and a few other anxious teachers began to make a total tally of all the first hour tally sheets.<sup>4</sup> This total tally was completed by the end of the school day Thursday, March 25, 1971.

Once the total tally had been completed, the results made known to teachers, and the under-enrolled courses eliminated<sup>5</sup>, several problems became evident. A

---

<sup>3</sup>Joel Osborne (administrative trainee and Math teacher) and Norm Frey made up one team, and Pat Chadwick (counselor) and Horace Webb (principal) made up the other team.

<sup>4</sup>See Appendix E for courses that had been eliminated as a result of the first total tally.

<sup>5</sup>Any course with an enrollment of fifteen or less was eliminated. The purpose of the course selection procedure was to determine which courses would be eliminated and which courses would be offered.

building meeting was set for Friday, March 26, 1971 in order to provide the staff an opportunity to air these problems:

1. There seemed to be a communications breakdown. Most teachers involved felt that things were moving too fast, that we were not being kept well-informed. The consensus of opinion was that we had better slow down and assess what we had done and what we were about to do.
2. The industrial arts teachers, after having examined the total tally, indicated that they had more students than they had anticipated sign up for shop classes and fewer than anticipated sign up for drafting classes. These teachers explained that unless the Alpena Public School system could provide another shop area facilities would not be available to accommodate all these students in the shop classes. They also felt that first hour teachers did not adequately understand what the various industrial arts courses involved and consequently misrepresented the industrial arts courses to students.
3. The language arts teachers felt that at least one of their courses had been misrepresented

(0217 Speed Reading).<sup>6</sup> According to them this course was intended for "slower" students to improve their reading skills but was being elected primarily by "better than average students."

As a result of the concerns expressed at this meeting, it was decided by the staff that the total tally sheet should be disregarded and that we should work through the course preference process again, after these concerns had been remedied. These problems were resolved at this lengthy meeting.

On Monday, March 29, 1971 corrections were read to the students. On the basis of this revised information students were then instructed to make any class changes they desired, tallys were again made by first hour teachers, these tallys were totaled, and courses with a total enrollment with fifteen or less were eliminated. The courses which were not eliminated, the preferred courses, would now be offered for students to elect.

#### Scheduling Procedure

On Wednesday, March 31, 1971 teachers returned to their first hour classes with a list of the preferred courses and a list of the courses that had been

---

<sup>6</sup>For course description see Appendix B.

eliminated.<sup>7</sup> Students still had their Besser Junior High Course Selection Guides<sup>8</sup> and their respective Course Preference Survey Sheet.<sup>9</sup>

Teachers then asked students to look through their Course Preference Survey sheets and cross out the courses that had been eliminated and would not be offered next year because of insufficient student interest. Students were then asked to examine their own Course Preference Survey sheet and to replace any course they had elected that had now been eliminated with another course of their choice. Students were also informed that if they were interested in changing any other electives that this was the time to do so.

Students were then asked to read the directions and fill out the necessary information on their enrollment sheets.<sup>10</sup> This was then to become their official enrollment form.

---

<sup>7</sup>See Appendix E for courses that had been eliminated as a result of the second total tally.

<sup>8</sup>See Appendix B for 7th, 8th, and 9th grade Course Selection Guides.

<sup>9</sup>See Appendix C for 7th, 8th, and 9th grade Course Preference Survey sheets.

<sup>10</sup>See Appendix D for 7th, 8th, and 9th grade enrollment sheets.

Enrollment sheets were collected by first hour teachers at the end of the time allotted and then sent to the principal's office. These enrollment sheets were then delivered to Alpena Community College in order to begin key punch preparation for the computer programming.

Once the cards had been key punched they were sent to the computer as input. The printouts from the computer were in turn sent back to Horace Webb, principal, who then took the tally sheet and the conflict matrix and proceeded to build a master schedule. The master schedule was then sent back to the computer for the purpose of key punching every teacher, every hour, every class. The master schedule cards and student elections cards were then run through the computer. A simulated run was then sent to Mr. Webb in order for him to resolve some of the conflicts. After necessary changes had been made he sent them back to the computer to check the schedules. If most of the conflicts were now correct, they were sent back to Mr. Webb for final approval. If, at this point, the schedules were not to the principal's satisfaction he could recycle them back to the computer for further reprocessing.<sup>11</sup> The final printout from the computer provided class lists and individual student schedules.

---

<sup>11</sup>For the complete flow chart see Appendix F.

Problems and Proposed Solutions in the  
Enrollment and Scheduling Procedures

1. The time element was the first problem that was identified by the Besser staff. When we decided to move toward implementation of this new program for the 1971-72 school year we realized that the small amount of time available to prepare would probably create more problems in the enrollment procedure than in any other aspect of the new program. As it turned out the problem was more severe than we had anticipated. As far as we can determine the problem was not with the enrollment procedure per se but with the feedback we received from the Oakland computer. At the time this thesis was prepared the source of the problem had not yet been identified.

Approximately 450 students at Besser Junior High received schedules for the first quarter that were accurate. It was necessary to make new schedules for the remaining 400 students at Besser Junior High. The two counselors, Patrick Chadwick and Norman Frey, were asked to put in many hours working late into the night to have schedules ready for the opening of school in September 1, 1971. Even with the additional hours the counselors put in, many of the schedules were not yet



ready for students when school doors opened. It was near the end of September before all the first quarter schedules were completed.

In the future we have avenues which we may pursue for more adequate enrollment procedures; to hand-schedule all students or to identify the cause of conflict with computer scheduling and correct this source of error. However, at the present time it has not yet been determined which course of action will be pursued for the 1972-73 school year. For the remainder of the 1971-72 school year Norman Frey, counselor, has been appointed as the person in charge of rectifying any schedule conflicts. Mr. Frey, with the assistance of a part-time secretary, Candy Voight, will hand-schedule all students who have conflicts in the last three quarters of the 1971-72 school year.

2. A majority of the courses being offered for the 1971-72 school year were entirely new to students and teachers alike, consequently they were unfamiliar with many of the courses being offered. One of the original reasons for the nine-week course structure was to make the school and its curriculum more responsive to the student, which in practice means elective courses which are offered are determined in large part by student

enrollment. Consequently, it is highly probable that each year some new, unfamiliar courses will be added. In this sense this will remain a problem which must be contended with at the beginning of each school year.

In the future, it is not expected that the problem of unfamiliarity with courses will be as difficult to overcome as it had been the first year of enrollment under the new program. Besser staff and students will have a full year to prepare for enrollment and furthermore there will not be as many new courses to investigate.

3. The fact that the enrollment procedure itself was a completely new and different procedure creates another problem of unfamiliarity. As students proceed through their junior high years this problem is expected to decrease in intensity. Only the incoming seventh graders will find the enrollment procedure new and different.
4. A problem which some staff members anticipate and which has been generally discussed deals with the intended level of difficulty of some elective courses. It is very possible that some students will unknowingly select courses that are too difficult and conversely there will be other courses

that will not challenge their ability. If this situation arises one solution would be to devise a system for indicating the general level of difficulty for each course.

Unfortunately, due to lack of time, in most cases the students that were hand-scheduled by counselors were not any better advised as to level of difficulty and interest areas than those students scheduled by the computer. Even though the counselors knew in which courses a student was likely to experience success they were not able to write new schedules or change schedules to accommodate students to level of difficulty. If the new program is to succeed, teachers must play a more active role in advising students with regard to course selection.

5. A problem which is indirectly a problem of enrollment is the amount of time the counselors, especially Norman Frey, were expected to sacrifice from what they considered their counseling duties. Both Norman Frey and Patrick Chadwick agree that their primary responsibility is to counsel students and to generally make themselves available to students who need to talk to someone. Both counselors feel that the number of students enrolled at Besser necessitates at least two full-time

counselors who are free of scheduling responsibilities except in an advisory capacity to students.

In the future, regardless of whether students are hand-scheduled or computer-scheduled, someone must assume the responsibility of scheduling students and two counselors must make themselves available to advise students who are experiencing personal problems and problems with their schooling.

6. In May of 1971 Horace Webb, principal, passed around a sheet asking teachers to indicate which courses they wanted to teach each shift. Many teachers who had four sections of a particular course, for example, signed up for all four sections in a single shift. This made scheduling more difficult.

In the future, the four sections will have to be offered in different shifts to allow more flexibility in scheduling.

7. The three-hour seventh grade language arts and social studies block makes it extremely difficult to schedule seventh graders in electives.

In the future it would be less difficult to schedule seventh graders if the three-hour block could be eliminated.

8. In the Anna Besser Junior High Course Selection Guide most course descriptions were written for teachers and parents.

In the future course descriptions should be written to communicate with the Besser Junior High students.

Generally, enrollment as expected has provided the greatest number of headaches in implementing the new program.

CHAPTER VI

THE FUTURE OF THE PROGRAM IN  
ALPENA PUBLIC SCHOOLS

What Must Happen for the Program  
to be Considered a Success?

The program, as described in Chapter IV, is still largely unproven. At the time this dissertation was written, the program had not been evaluated in operation. It will probably be at least two or three years before the program can be effectively evaluated. As far as the people involved in the development of this program are concerned, the program is expected to be a success.

Most people involved in the development of the program also realize that in order for the program to succeed, several things must happen:

1. Teachers involved in the development of new courses must do their homework throughout the developmental stages.
2. The Alpena Board of Education must be willing to provide the financial backing for any unforeseen initial costs that may arise as a result of this change in curriculum structure.

3. The teachers must be willing to teach some courses which may not have high personal priorities in order to eliminate scheduling difficulties and consequently make it possible for all courses elected by the students to be offered.
4. All people involved with the program must realize that the 1971-72 school year is the first year of the program and that it is experimental and many problems will have to be ironed out.

#### Unfinished Business

Several topics have been generally discussed by the staff and must be dealt with in the future:

1. Requirements for graduation must be determined.  
The staff must decide if there will be specific course requirements for graduation from one "grade level" to another. If it is decided that specific course requirements will be necessary for graduation the staff will find it necessary to determine which of the courses are to be required.
2. The staff must also determine whether or not course requirements and/or credit requirements will be necessary for students to graduate from the junior high level to the senior high level, the number of credits, and which courses will be required.

3. If the staff decides that there are to be course requirements for graduation from one grade level to another and it turns out that the number of required credits are less than the number of credits a student could take, it would require a study of the possibility of early and late graduation. Of course if such a study is implemented and the recommendation is made to allow early and/or late graduation this would have to be coordinated with the high school and approved in board policy. The high school would certainly have veto power over any such innovation. It is highly unlikely that the high school would approve any attempt to implement such a change.
4. Some departments in both "academic" and non-academic" areas have been discussing the feasibility of including the credit, non-credit system of evaluation.<sup>1</sup> Some departments are very much in favor of dropping the A, B, C, D, E system of grading and replacing that system with the credit, non-credit system of evaluation. This issue is a very live issue at the time this dissertation was prepared. Currently there are several suggestions

---

<sup>1</sup>Upon completion of a nine-week course student would either receive credit or they would not receive credit for a course. They would no longer be graded A, B, C, D or E.



being considered for including the credit, non-credit system of evaluation in the Besser program:

- a. Use the credit, non-credit system only in "non-academic" areas.
- b. Use the credit, non-credit system in both "academic" and "non-academic" areas.
- c. Use the credit, non-credit system in "non-academic" areas and allow students in "academic" courses to elect the system they prefer (A, B, C, D, E or credit, non-credit).
- d. Any department that requests to replace the A, B, C, D, E system with the credit, non-credit system may request to do so by going through their building principal.

#### The Affects of the New Program on Other Alpena Secondary Schools

If the new program at Besser Junior High is judged successful, the Thunder Bay Junior High staff will probably give serious consideration to implementing a similar structure.

Alpena High School will not be able to escape being affected by the nine-week course structure since they receive students who have been exposed to the Besser program. There is very little doubt in my mind that students going from Besser to Alpena High School will have a definite impact on future programs at Alpena High. The high

school may also be affected by early and/or late graduation policy, evaluation, and responsiveness of the institution to the individual.

The Affects of the Besser Program  
on the Administration

There is pressure being exerted by some administrators in the Alpena Public School system to keep both junior high schools operating under the same curriculum.<sup>2</sup> These people seem to feel that there is a specific bank of knowledge from which all junior high age students must make their knowledge withdrawals in order for the junior high schools to have fulfilled their purpose. My own involvement in this program was, in large part, to overcome this kind of thinking. My humble opinion is that there are so many important areas for concern that any arbitrary selection of subject topics by school monks is a gross injustice to the diversity of life and the uniqueness of the individual.

The Affects of the Besser Program  
on Curriculum Committees

A genuine concern on the part of curriculum committees is the implicit loss of control to various established curriculum committees over curriculum evaluation

---

<sup>2</sup>Neither Horace Webb (Besser Junior High Principal) nor Ron LaBarre (Thunder Bay Junior High Principal) support the notion that the two junior high schools must operate under the same curriculum. They have been instrumental in overcoming this notion.

and development. The English and science curriculum committees challenged the basic premises of the new Besser Junior High program that the "deadwood" be removed from curricula and that our new program remain experimental (continuous removal of "deadwood" and irrelevant material). It seemed that many people on the curriculum committees in the Alpena Public School system believe that the results of their particular curriculum studies should stand as marble monuments to venerate their efforts at least as long as marble is resistant to weathering.

I feel that some progress has been made with regard to modifying this kind of thinking. When the spokesmen of these committees challenged our position, we in turn challenged the results of the committees. We were more successful with the Science Curriculum Study Committee than with the English Curriculum Study Committee. The Science Curriculum Study Committee accepted our proposal for changing the Besser science curriculum. The most likely reason for their acceptance of our proposal, in my mind, was probably the fact that they had not yet moved beyond the philosophy, much to their credit, and developed the usual "guidelines." This is probably the same reason that we were not as successful with the English Curriculum Study Committee as they had set up their "guidelines" and were firmly convinced that they had "the answer" to teaching English to all junior high students. Interestingly

enough most opposition to our program was based on time spent in developing the English curriculum and not in the validity of their established curriculum.

## CHAPTER VII

### COMMENTS OF OTHERS INVOLVED

In order to obtain some measure of accuracy in this case history, I asked several of the people involved with different stages of the development of this program to read and criticize this case history.

The people I selected to comment on the case history were:

1. Paul Bray, English-social studies teacher, was asked to read chapters II and III because of his involvement in the initiation of this program.
2. Norm Frey, counselor and scheduler, was asked to read chapters IV, V and VI because of his involvement with the scheduling procedure and his change in role as a counselor.
3. Art Merritt, social studies teacher and typist, who typed my paper and was as familiar with its content as I was.
4. Joel Osborne, mathematics department chairman and administrative intern, was asked to read chapters II, III, IV and V because he was probably more directly involved in implementation of the program than anyone else in the school system. He was provided with one-half day release time to work specifically on implementation of the mini-course concept.

5. Jere Standen, English Department Chairman, was asked to read chapters II, III and IV because of his involvement in initiating the groundwork of the program.
6. Horace Webb, principal, was asked to read chapters III, IV, V and VI due to his involvement in every phase of the program except the initiation of the program.

Each person was given the following questionnaire on which to summarize their comments:

#### QUESTIONNAIRE

A case history of the development and implementation of the nine-week course concept at Besser Junior High School, Alpena, Michigan.

The purpose of this questionnaire is to determine a measure of validity of this case study. You were asked to read and make comments on this dissertation because I considered you an individual who played an integral part in the development of the nine-week course concept at Besser Junior High.

Your responses will be included in Chapter VIII of this case study exactly as you write them on this questionnaire.

Please respond as honestly as possible. If you consider this thesis inaccurate please indicate this in your responses.

NAME \_\_\_\_\_ POSITION \_\_\_\_\_

SCHOOL \_\_\_\_\_

SECTION(S) READ \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

\*\*\*\*\*

1. In your opinion is/are the section(s) you read accurate?

Yes \_\_\_\_\_ No \_\_\_\_\_  
COMMENTS:

2. In your opinion are there any significant areas or factors that should have been included that were not?

Yes \_\_\_\_\_ No \_\_\_\_\_  
COMMENTS:

3. In your opinion how should the mini-course concept be evaluated:

Yes \_\_\_\_\_ No \_\_\_\_\_  
COMMENTS:

Comments of Paul Bray

1. In your opinion is/are the section(s) you read accurate? ANSWER: yes--no comment
2. In your opinion are there any significant areas or factors that should have been included that were not? ANSWER: No--no comment
3. In your opinion how should the mini-course concept be evaluated? comments below

It would seem to me that there are three main ways in which the mini-course concept could best be evaluated.

These are as follows:

1. Student response. A survey taken in each class at the end of every nine weeks to ascertain students response to the mini-concepts in which they are involved. This would NOT serve to judge teaching popularity (this could be accomplished through a separate measure of evaluation) but rather the students feeling toward the mini-course as an on-going project designed to expose them to a broad spectrum, liberal education.

Full benefit would not be realized from this for probably two or three years. It would be interesting to view change in attitude, however (if any).

2. Parental response. Either through use of a questionnaire or, more preferably through teacher parent conferences, to ascertain how student feelings (opinions) toward school have altered since the inception of the mini-concept. This might prove extremely valuable in terms of determining TRUE student reaction to school. The "happiness" aspect of education could be well served through this method. (Cross section sampling of parents would probably be best.)
3. Individual teacher evaluation. Once-a-year written evaluation by every teacher of the courses he (she) has taught during the past year. This report could be combined with student evaluation forms previously unseen by the individual teacher. This might present a TRUE picture of the actual classroom situation.

These three procedures, combined with the inevitable administrative ventures into the classroom might be a step in evaluation of the mini-course concept. However, a more accurate method might be the objective counting of the number of smiles seen in Besser's halls during representative school days.

#### Comments of Norm Frey

1. In your opinion is/are the section(s) you read accurate? ANSWER: yes--no comment
2. In your opinion are there any significant areas or factors that should have been included that were not? ANSWER: yes--comments below

#### Page 73

Math under the new program differs in one respect. Under the old program students were placed by the math department into one of the three levels. Under the new program the student with academic guidance from the math teacher, makes the choice as to his level of placement.

#### Page 73

There is movement by math students between lab math and regular math classes. Also vice versa.



Page 83

It should be noted that a student may take as many physical science classes as his schedule will allow. In other words a student may, if he so desires, take as much or more physical science as he could under the old one year requirement.

Pages 99

To remedy the industrial arts problem students' third industrial arts elective had to be a drafting class.

Page 103

Of the four hundred schedules which had to be done over approximately three hundred schedules had to be done entirely. The other one hundred were schedules which either had missing classes or misplacement problems. For example a student was placed in Clothing III when she needed Clothing I.

By September 10, all students had schedules. The next two weeks were spent balancing classes, creating new sections to handle overcrowded classes and working with individual scheduling problems.

During the week of August 30, a total of approximately 212 hours were spent on schedules by the two counselors, the principal, and the secretarial help.

Page 104

I would add as an alternative having the master schedule set up by computer. At this point (December, 1972) this seems the most feasible alternative.

Page 106

As a counselor and as the primary person involved in scheduling at Besser Junior High, I feel the importance of academic counseling by the teachers cannot be stressed enough. With as many choices as our students have the counselor is incapacitated as far as pre scheduling counseling.

Pages 107

I again have to add that in order for success the teachers must assume a major responsibility in academic counseling.

3. In your opinion how should the mini-course concept be evaluated? comments below

I would first have to say that if evaluation is based solely on academic achievement the whole idea of a mini-course program is defeated. To appease the academic oriented public some types of achievement

evaluation must be included. I would suggest achievement tests composed by the various departments used in conjunction with national achievement tests.

Primarily I feel the evaluation of the mini-course program must include the evaluation of student interest, the evaluation of attitude towards school, and the evaluation of teacher interest. These three areas are, in my opinion, the justifiers of the program. I feel that students' interest in school is increased under a mini-course program and hand-in-hand with this a more positive attitude towards education will result. As for teacher interest, the mini-course program raises the teacher from the monotony of teaching the same classes all year, year after year. Also the teacher in facing a new group of students every nine weeks and he is more apt to be teaching courses in which he has a personal interest.

As to how such an evaluation could be constructed, I do not have the answer. Perhaps the three areas mentioned are too subjective to be accepted by traditional educators and the achievement oriented public. It is my hope that we finally recognize the importance that interest and attitudes play in the educational process.

#### Comments of Joel Osborne

1. In your opinion is/are the section(s) you read accurate? ANSWER: yes--comment below

Number of units required for graduation is the same, more are elective however. New teachers also involved in developing courses. Another major reason for fewer 7th grade electives was the need to use Central for a block junior high due to lack of funds to equip Central on a par with Besser and Thunder Bay.

Seventh grade accelerated math students were put in 8th grade classes to make scheduling more flexible, they were also given more choice on acceleration. Course 0308 was not open to ninth grade. Very few 9th graders are permitted in Lab B most are channeled into Math 9.

Item 8 should be, perhaps, better explained.

2. In your opinion are there any significant areas or factors that should have been included that were not? ANSWER: comment below

Chapter V

Part of the problem with scheduling, a significant part in my judgment, was due to the fact that the master schedule creation was a one man show-- a method should be devised to permit the entire staff to view the total year's master schedule and look for potential conflicts which one man cannot foresee.

3. In your opinion how should the mini-course concept be evaluated? ANSWER: no comment

Comments of Jere Standen

1. In your opinion is/are the section(s) you read accurate? ANSWER: yes--comments below

I feel that it should be mentioned that the mini-course concept was not new to me or to Besser Junior High.

Five years ago I taught in Milford at Muir Junior High where the social studies department had divided their curriculum into mini-courses, or many-courses for 7th and 8th grades. Classes could cross grade levels--they changed courses every six weeks.

In the area of English we had set up semester courses like creative writing, novel, short story, speech, drama, current affairs, etc.

I had taught under this system for a year before moving to Alpena. Being new I figured I had better cool it for a while before I tried to suggest anything new.

Towards the end of the year I talked with Mr. Webb, our principal, and suggested that we try and provide more options for our students. He seemed very receptive to the idea and suggested that I put something in writing, which I did, and he would present to the English Curriculum Committee, who were finishing up a 5 year study and just about ready to implement their curriculum.

When I presented it I felt like I was being hawked like "here we have spent five years working on a K-12 curriculum and haven't even implemented it and you try to change it." After a lot of talk back and forth they agreed to let me implement two courses: creative writing and basic communication as electives, but I found this to be fruitless because of scheduling. The kids didn't have any openings to elect anything.

Then the following year talk started again among more teachers and here again I was involved--but with a group effort not with an individual effort.

In conclusion I find out that if one wants change within a school system they have to be persistent, there has to be numbers, and there has to be endurance.

2. In your opinion are there any significant areas or factors that should have been included that were not? ANSWER: no--no comment
3. In your opinion how should the mini-courses concept be evaluated? ANSWER: no comment

Comments of Horace Webb

1. In your opinion is/are the section(s) you read accurate? ANSWER: yes--no comment
2. In your opinion are there any significant areas or factors that should have been included that were not? ANSWER: yes--comments below

The minimum amount of time for completing the computer runs was a detrimental factor in the 60% completion of student schedules. The master schedule for the new mini-course concept actually was a composite of four minor master schedules, one for each quarter. Due to lack of time all conflicts could not be resolved in the two computer runs with the result that 40% of the student schedules were either incomplete or had irresolvable conflicts.

3. In your opinion how should the mini-course concept be evaluated? ANSWER: comments below.

It will be virtually impossible to obtain an objective evaluation at the end of this current school year. It will, however, be possible to compare the results of last year's and this year's ninth grade Iowa tests, but caution should be exercised when attempting to draw any valid comparisons. Of real value will be the teacher oriented surveys of student interests in each of the mini-courses. Student and teacher evaluation will help determine deletions and/or additions to the catalog for the school year, 1972-73.

Comments of Arthur Merritt

1. In your opinion is/are the section(s) you read accurate? ANSWER: yes--no comment
2. In your opinion are there any significant areas or factors that should have been included that were not? ANSWER: yes--comments below

While I realize that it is early for this kind of thing, I believe that a chapter should have been written on student reaction to the mini-course. I think that you would have found out some very interesting things from the students. The entire contents of this paper, or I should say a large amount, deals with a great many unknowns about what effect it can have, or would have on the student in junior high school. Yet, nothing at all in the paper deals with the one thing, or article, that really should have something concrete to say about how really successful it has been so far, that of course, is the student.

3. In your opinion how should the mini-course concept be evaluated? ANSWER: comments below

I believe that at this stage of the mini-course concept the students have not really caught on to what it is all about; and what it really boils down to is a personality contest with little, if any, regard to what can I learn from this teacher, or this course. I feel that too many students picked courses because they sounded easy and not because they read the course description. Two years from now when this year's seventh grade is in the ninth grade--then I feel we will be able to make, with their help, some valued judgements.

## CHAPTER VIII

### FUTURE STUDIES

Any study resulting from the curriculum changes at Besser Junior High would probably focus on evaluation of some facet of the changes and possible effects of the change.

#### Who to Evaluate?

1. Ideally, schools exist for the sole benefit of young people (students). Consequently emphasis should be placed on what benefits young people are receiving from this curriculum change.
2. Teachers are an integral part of any school system, therefore, they should be evaluated with regard to the part they play in the learning process.
3. Since the administration is ultimately responsible for the success or failure of any program under their jurisdiction, their role in the development and successes and/or failure of the curriculum must be appraised.

What to Evaluate?

1. The effectiveness of various courses in meeting student needs.
2. Course requirements must be continuously re-evaluated.
3. The effectiveness of departments in meeting student needs.
4. Attitudes of students, teachers, and parents, in my opinion, ranks second to nothing in order of educational importance.
5. If school systems ever focus on one aspect of human growth and development it, it would be an achievement. Fear not, this aspect will be studied and tested to death in the Alpena Public School system. Hopefully someday, someone will study the achievement of student's goals and not just the system goals.
6. Even though creativity is extremely difficult to measure this aspect should certainly be considered.
7. The availability of audio-visual aids under the new structure.

8. The amount of money spent on the development of new programs by the Alpena Public School Board.
9. Has the new program encouraged students to explore new and perhaps difficult areas?

#### When to Evaluate?

Evaluation should be continuous but before the success or failure of persons, or specific curriculum changed programs, are evaluated they should be provided adequate time to develop. Evaluation of growth and development of people should be continuous. Evaluation of the program and/or modifications would require years of observance before valid conclusions could be formulated. I would suggest a minimum of two or three years of observance and study.

#### Other Areas of Concern

There are other areas of concern for the Alpena Public School system with regard to evaluation:

1. How are the various aspects of a new and different program evaluated?
2. Who should evaluate these various phases of the New Program?
3. Why evaluate?



## BIBLIOGRAPHY

## BIBLIOGRAPHY

- Benedict, Ruth. Patterns of Culture. New York: Houghton Mifflin Company, 1934.
- Culkin, Re. John M. Summerhill: For and Against. Edited by Harold H. Hart. New York: Hart Publishing Company, Inc., 1970.
- Farber, Jerry. The Student as Nigger. North Hollywood, Calif.: Contact Books, 1969.
- Friedenberg, Edgar Z. The Vanishing Adolescent. New York: Dell Publishing Company, Inc., 1959.
- \_\_\_\_\_. Coming of Age in America. New York: Vintage Books, 1967.
- Frymier, Jack. Educating for Tomorrow. Edited by Walter N. Tifton. New York: John Wiley and Sons, Inc., 1970.
- Ginott, Hiam. Between Parent and Child. New York: The MacMillan Company, 1965.
- Goodman, Paul. Compulsory Miseducation and the Community of Scholars. New York: Vintage Books, 1962.
- Holt, John. How Children Learn. New York: Pitman Publishing Corporation, 1967.
- Keats, John. The Sheepskin Psychosis. New York: Dell Publishing Co., Inc., 1963.
- Neill, A. S. Summerhill: A Radical Approach to Child Rearing, 1960.
- Peddiwell, J. Abner. The Saber-Tooth Curriculum. New York: McGraw-Hill Book Company, Inc., 1939.

Renfield, Richard. If Teachers Were Free. Washington, D.C.: Acropolis Books, 1969.

Skinner, Burrhus Fredric. Walden Two.

Skolnick, Jerome H. The Politics of Protest. New York: Simon and Shuster, 1969.

Szent-Gyorgyi, A. Teaching and the Expanding Knowledge. Science, Vol. 146. American Association for Advancement of Science, December 4, 1964.

Wheelis, Allen. The Quest for Identity. New York: W. W. Norton and Company, Inc., 1958.

## APPENDICES

APPENDIX A

TEACHER AND STUDENT SUGGESTIONS FOR COURSES

## APPENDIX A

### TEACHER AND STUDENT SUGGESTIONS FOR COURSES

First Aid  
Aircraft  
Photography  
Typing  
Sex Education  
Enging Making  
Math (fractions, addition, etc.)  
Driver Education  
Wood Shop  
Metal Shop  
Drafting  
Chemistry  
German  
Careers  
Gym  
Civics  
Science  
Biology  
Free Hour  
Drugs and Alcohol  
Witchcraft  
Shorthand  
Office Work  
Wrestling  
Other Languages  
Creative Writing  
Sociology  
Current Events  
Health and Safety  
Band  
Fly Tying  
Taxidermy  
Wildlife  
Skeet Shooting  
Rifle Stock Construction  
Conservation  
Working with Retarded Children

Riflery  
Canoeing  
Resource People  
Nature  
Auto Mechanics  
Small Engine Repair  
Physical Education  
Music  
Ceramics  
Bowling  
Swimming  
Rock Music--kids form own instrument and vocal groups  
Current Events Seminar  
Recreation  
Building Homes  
Art  
Roller Skating  
Archery  
Future Farmers of America  
Population Problems  
Social Work  
Social Dancing  
Seminars  
Boy-Girl Relations  
Pollution  
Cosmetics  
Skiing  
Sewing  
Girls Football  
Cooking  
Ice Skating  
Girls Basketball  
Math Choice  
Welding  
Debate  
Business  
Law  
Hunting  
Hobbies  
Sports  
Boating  
Tracking Animals  
Veterinary (heal animals)  
Hockey  
Volleyball  
Literature without English  
Electricity  
Drama  
English  
Golf  
Gymnastics  
Baseball  
Track

Tennis  
Badminton  
Making Movies  
Cooking  
Guidance Class--discuss your problems  
Horseback Riding  
Income Tax  
Tumbling  
Psychology  
Radiation  
Solar Power  
Ecology  
Sound  
Light  
Universe  
Agriculture  
The Human Body  
Reading  
Bookkeeping  
Geography  
The World Economy  
Economics  
Archaeology  
Interior and Exterior Decorating  
Mythology  
Jewelry  
Drug  
Making and Illustrating Books  
Music Composition  
Accounting  
Religions  
Sociology  
Anthropology  
Yoga  
Reading and Talking about Novels, Magazines, etc.  
Books  
Office Work  
Teacher's Aid  
Dissecting  
Human Behavior  
Student-Teacher Discussions  
Social Problems  
Parent-Child Relationships  
Grooming  
Gourmet Cooking  
Michigan History  
Spelling  
Letter Writing  
Math Refresher Course  
Poetry



APPENDIX B

COURSE SELECTION GUIDE

## APPENDIX B

### COURSE SELECTION GUIDE

#### PRE-REGISTRATION

Dear Parents and Students:

This catalog contains the pre-registration information you and your son/daughter need to help select next year's classes. Please confer with your son/daughter about this material. Your help in his/her selections will be of great assistance.

Please be sure to take time to consider each selection and alternates carefully and to record them accurately on the enclosed course preference survey sheet. It is difficult to make changes once the final schedules have been sent to the computer.

The purpose of the Unit Step Program is to help students broaden their educational experiences in junior high in order that they may choose more wisely their plans and programs in high school.

Why will we have nine-week courses?

1. Many students are weak in certain areas. Nine week courses give students a chance to catch up or brush up.
2. Students pass or fail in nine weeks, not a semester or year. Each nine weeks students can set new goals with new courses to stimulate them.
3. Special new courses can be taught at levels designed to meet student needs. The chance of the student's completing the course successfully is much greater.

4. Teachers can specialize more in the particular interests and major areas, thus giving the student a more informed presentation.
5. Students who fail in a nine week course have two options:
  - a. Repeat the course, if required, the same year or following year, or
  - b. Select an equivalent course, but at a lower level of difficulty.

#### COURSE REQUIREMENTS BY GRADE

The following are conditions for elections and are also printed on each of the preliminary election forms. Be sure you understand how your elections must be made. There are significant differences in elections from grade to grade.

#### ELECTIONS FOR SEVENTH GRADE:

If you are to be a seventh grader, you will be required to take 12 units of the Language Arts-Social Studies Block (this will also include your Physical Education class); four units of Math; and two units of Earth Science. On your preliminary survey sheet you will be expected to:

- a. Indicate which Math track you wish to take (Your teacher can help you with this.)
- b. Elect two Science courses from those listed on your election sheet.
- c. Choose ANY remaining eight units of the electives in part two that you want to take and which you qualify for.

\* Please NOTE that Foreign Language, Band, Orchestra and Chorus must be elected as four unit blocks. You might wish to consider that Foreign Language may only be begun at the 7th, 9th or 10th grade level, depending on whether you will want 3, 4, 5, or 6 years.

#### ELECTIONS FOR EIGHTH GRADE

If you are to be an eighth grader, you will be required to take two Life Science units, four Math units, four History units, three English units and two Physical Education units. On your preliminary survey sheet you will be expected to:

- a. Indicate your Mathematic course preference. (You should consult with your parents and your Math teacher before making this indication.)
  - b. Elect one of two English courses which are required on an either/or basis.
  - c. Make three units selections from the Language Arts electives in Part II of the survey sheet.
  - d. Make two unit selections from the Science offerings in Part II of the survey sheet.
  - e. Elect ANY eight of the remaining Elective Units from Part II of the survey sheet.
- \* Please NOTE that Foreign Language, Band, Orchestra, Mixed Chorus, and Choir, must be elected as four unit blocks, except for Introduction to French and Introduction to Spanish.

#### ELECTIONS FOR NINTH GRADE

If you are to be a ninth grader, you will be required to take two units of English, two units of Civics, four units of Math, two units of Science and one unit of Health Education. On your preliminary survey sheet you will be expected to:

- a. Indicate your Math preference. (You should carefully discuss this with your parents, your Math teacher and your counselor.)
- b. Elect one of three Language Arts units which are required on an either/or basis.
- c. IF YOU SELECTED MATH-9, elect two units from the Math section in Part II of the Preliminary Survey Sheet.
- d. Elect two of the courses from the Language Arts section of Part II of the preliminary survey sheet.
- e. Elect two units from the Social Studies section of the preliminary survey sheet.
- f. Elect two units from the Physical Science area of the Science section of Part II of the survey sheet (these will be indicated by a + in front of the course number.)

g. Elect ANY 11 of the remaining ELECTIVE units in Part II of the survey sheet.

\* Please NOTE that Foreign Language or Music courses marked with a (\*) must be elected as four unit blocks.

LANGUAGE ARTS DEPARTMENTCOURSE OFFERINGS

- 0100 SEVENTH GRADE BLOCK Full year  
0101 A study of the history and geography of Europe,  
0102 the Soviet Union, the Middle East and Africa  
0103 emphasizing practice in the communications  
skills of reading, writing, speaking and listen-  
ing.  
Prerequisite No.: None  
Type of Course: Required
- 0104 READING IMPROVEMENT 9 weeks  
Review of basic reading skills, phonics, word  
attack skills, vocabulary and comprehension.  
Prerequisite No.: Teacher Recommendation  
Type of Course: Elective
- 0106 READING FOR FUN 9 weeks  
Encourage wide, independent reading with  
emphasis on comprehension and interpretation.  
Prerequisite No.: None  
Type of Course: Elective
- 0107 VOCABULARY - BASIC 9 weeks  
To develop a knowledge of basic words, their  
meanings, synonyms, antonyms and homonyms.  
Prerequisite No.: None  
Type of Course: Elective
- 0108 VOCABULARY - ENRICHMENT 9 weeks  
To learn more about words already known and to  
learn new and unfamiliar words, their meanings  
and uses.  
Prerequisite No.: None  
Type of Course: Elective
- 0109 REPORTING - ORAL AND WRITTEN 9 weeks  
Emphasis on research--how to use reading skills  
in finding information, following directions,  
etc. Also how and where to find information.  
Prerequisite No.: None  
Type of Course: Elective

- 0110 BASIC COMMUNICATION I 9 weeks  
To develop ability of students to communicate clearly to their peer group, their teachers and other people both above and below their age level, by developing self-confidence in their communication skills and effectiveness and heightening their awareness of the world and people around them. Criterion for admission: has demonstrated difficulty in past English courses, or recommendation of eighth grade Language Arts teachers.  
Prerequisite No.: None  
Type of Course: Elective
- 0111 COMPOSITION 9 weeks  
Students will learn to develop and write compositions of explanation, description, evaluation, persuasion, interpretation, narration, and comparison. Vocabulary study will be included as well as the study of important grammatical errors. Students will learn to evaluate compositions of other members of the class.  
Prerequisite No.: None  
Type of Course: Elective
- 0112 NOVEL 9 weeks  
This course will involve an introductory study of the novel, type, (genre) characterization, plot and sub-plot, as well as various methods of creating each. Novels to be read include: The Light In the Forest, Richter; Captains Courageous, Kipling; Pebble in the Sky, Asimov.  
Prerequisite No.: None  
Type of Course: Required
- 0113 SHORT STORY 9 weeks  
Designed to expose the students to different short stories emphasizing methods of characterization, dialogue, flash-back, foreshadowing, imagery, inference, irony, plot, point of view, etc.  
Prerequisite No.: None  
Type of Course: Required

- 0115 PLEASURE READING 9 weeks  
Designed to allow the student to read in class that which interests him. A wide range of literature will be encouraged and offered. Library materials will be used. Students will be expected to keep a file on their readings. Weekly evaluations will be made by the teacher. Encouraged will be: weekly evaluations written emphasizing writing skills and compositions of thoughts and ideas and general skills on the following: short stories, magazines, newspapers, journals, novels, poems and non-fiction books.  
Prerequisite No.: None  
Type of Course: Elective
- 0116 PRACTICAL ENGLISH 9 weeks  
This course will stress the correct everyday usage of our language in written and oral uses. Included will be such topics as letter writing, check writing, manners and introductions, spelling and the newspaper.  
Prerequisite No.: None  
Type of Course: Elective
- 0117 MASS MEDIA 9 weeks  
Designed to encourage the student to explore media to acquaint him with the different communications in our society. Classroom discussion will follow up and encourage interest; also movies, TV, advertisements, etc. will be used.  
Prerequisite No.: None  
Type of Course: Elective
- 0118 POETRY 9 weeks  
An introduction to many kinds of poetry, from old ballads to present haiku. "Voices" and present textbooks will be used.  
Prerequisite No.: None  
Type of Course: Elective
- 0119 LESSON ATTACK SKILLS 9 weeks  
To develop the student's comprehension and retention of ideas--how to find and organize main ideas with practice in outlining.  
Prerequisite No.: None  
Type of Course: Elective



- 0120 SCIENCE FICTION 9 weeks  
Will stress the relationship between Science and Literature and will introduce the concept that what is fiction today may be fact tomorrow and that what is current fact may be the fiction of the future. Students will be able to take the course for credit in either Science or English. Readings will be offered from a wide selection of authors and essayists.  
Prerequisite No.: None  
Type of Course: Elective
- 0121 RESEARCH WRITING 9 weeks  
Designed to teach the student procedures to research and research writing. One research paper will be required utilizing techniques. Investigation of library and other sources of information, bibliography, card file, outlining and note-taking will be taught.  
Prerequisite No.: None  
Type of Course: Elective
- 0122 SPEECH I 9 weeks  
This course makes the student aware of the importance of good speech, diction, pronunciation. Outlining of speeches and notecard use will be taught. Short poems and readings will be used first to improve diction and pronunciation. Criticism of other speeches will be encouraged.  
Prerequisite No.: None  
Type of Course: Elective
- 0123 SPEECH II 9 weeks  
This course would involve speeches suited for public speaking. The student would learn how to address a fairly large audience in the gym using a platform, lecturn and mike.  
Prerequisite No.: Speech I  
Type of Course: Elective
- 0124 DRAMA I 9 weeks  
Introduction to Drama through short plays and try out readings. Emphasis will be on a one-act play involving all the class in the parts.  
Prerequisite No.: None  
Type of Course: Elective

- |      |  |
|------|--|
| 0125 | <p><b>DRAMA II</b> 9 weeks</p> <p>This course involves students interested in longer plays and writing their own plays. The last few weeks would be devoted to one play to be put on in an assembly for eighth and ninth graders. Use of props will be emphasized.</p> <p>Prerequisite No.: Drama I</p> <p>Type of Course: Elective</p>  |
| 0127 | <p><b>SPEED READING</b> 9 weeks</p> <p>Instructions on scanning, skimming, use of key words, use of bold face and italicized headings. Practice in using these skills in content areas.</p> <p>Prerequisite No.: None</p> <p>Type of Course: Elective</p>  |
| 0128 | <p><b>MYTHOLOGY</b> 9 weeks</p> <p>This course will introduce the student to the classical myths of Greece, Rome, and the Scandinavian countries. The major objective will be to enable the student to recognize allusion to these myths in their future reading of English literature. Will also include a brief study of classical heritage (art, music, sculpture).</p> <p>Prerequisite No.: None</p> <p>Type of Course: Elective</p>                 |
| 0129 | <p><b>JOURNALISM I</b> 9 weeks</p> <p>This introductory course is designed for students interested in journalism and newswriting. Students will become familiar with the various parts of the daily newspaper and some of the trade "jargon," note differences between writing "straight" news feature stories, editorials, columns, sports stories, etc.</p> <p>Prerequisite No.: Recommendation by English teacher</p> <p>Type of Course: Elective</p> |
| 0130 | <p><b>BASIC COMMUNICATION II</b> 9 weeks</p> <p>Designed to teach the student basic skills in writing. Emphasis will be placed on sentence writing and proper grammar usage.</p> <p>Prerequisite No.: None</p> <p>Type of Course: Required</p>   |

- 0131 COMPOSITION 9 weeks  
 It is the intent of this course to work specifically on student writing. The course will be designed to review sentence structure and paragraphing. In addition, the students will be dealing with expository writing, analogy, comparison, narrative exposition. The writing and reading of poetry will also fit into this course in an introductory fashion.  
 Prerequisite No.: None  
 Type of Course: Required
- 0132 CREATIVE WRITING 9 weeks  
 Creative Writing is a mode of composition in which the student, aided by his imagination, shapes the raw material of his own thoughts, feelings and experiences into some literary form. By doing so, he externalizes these thoughts, feelings and experiences and is able to interpret and evaluate them against the background of his environment.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0133 SHORT STORY II 9 weeks  
 In this course the students will be reading a number of short stories both fiction and non-fiction. They will become aware of terms such as irony, crises, climax, plot patterns and different styles of writing. Keeping a journal, writing a short story and taking essay tests will be implemented into the course.  
 Prerequisite No.: None  
 Type of Course: Required
- 0134 NOVEL 9 weeks  
 Study of all aspects of the novel. Emphasis on developing a sensitivity with the characters. Writing skills also will play an important role.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0135 JOURNALISM II Full year  
 0136 The writing, editing and printing of the school  
 0137 newspaper. At least 2 editions of the Bulldog  
 0138 will be required from this class every marking period.  
 Prerequisite No.: Journalism I  
 Type of Course: Elective

SOCIAL STUDIES DEPARTMENTCOURSE OFFERINGS

- 0201 GEOGRAPHY OF LATIN AMERICA 9 weeks  
The interdependence of U.S. and Latin America and a study of the similarities and differences in the heritage of our country and the Latin-American countries. Similarities and differences in geography, history, and ways of living between U.S. and Latin America.  
Prerequisite No.: None  
Type of Course: Elective
- 0202 OCEANIA 9 weeks  
This course includes the island groups of the Pacific. Stressing physical features, products, culture and people.  
Prerequisite No.: None  
Type of Course: Elective
- 0203 GEOGRAPHY OF NORTH AMERICA 9 weeks  
A second look at N. America paralleling and supplementing the eighth grade American History course.  
Prerequisite No.: None  
Type of Course: Elective
- 0204 WORLD RELIGIONS 9 weeks  
The students in this course will learn to explore man's religions: Buddhism, Judaism, Christianity, Hinduism and Islam. This course will enable the student to discover similarities and differences and to work with tolerance of others.  
Prerequisite No.: None  
Type of Course: Elective
- 0205 WORLD RESOURCES, INDUSTRY AND AGRICULTURE 9 weeks  
Students would study renewable and expendable resources along with locations of them. The effect on economy, touching lightly ecology and problems. Agricultural and industrial studies would include reason for location of each, problems, and results.  
Prerequisite No.: None  
Type of Course: Elective

- 0206    MAPS, GRAPHS, TABLES & CHARTS    9 weeks  
A study of the tools of geography stressing ability to read, understand and use maps, graphs, tables and charts with practice in making maps, charts and graphs and listing statistics in tables.  
Prerequisite No.: None  
Type of Course: Elective
- 0207    INDEPENDENT STUDY    9 weeks  
A study of any social studies area of the student's interest. Student works with the teacher as an introduction to the course and then the student completes a suitable project. Designed for students of higher ability at all grade levels.  
Prerequisite No.: None  
Type of Course: Elective
- 0210    DISCOVERY, GROWTH & INDEPENDENCE    9 weeks  
Events leading to the discovery of America. The Spanish and French efforts to explore America. The landing of the Pilgrims, the growth of the 13 colonies, the French and Indian War, colonial discontent, revolution and independence.  
Prerequisite No.: None  
Type of Course: Required
- 0211    GROWTH OF AMERICA, 1783-1840    9 weeks  
The course will discuss: the Articles of Confederation, The Constitution, the Louisiana Purchase, the War of 1812, Westward expansion to the Mississippi, the Monroe Doctrine and Jackson's Era.  
Prerequisite No.: None  
Type of Course: Required
- 0212    WESTWARD MOVEMENT THRU THE CIVIL WAR    9 weeks  
This course will discuss: the westward growth beyond the Mississippi, the War with Mexico, life in the northern states, life in the southern states, the prelude to the Civil War and the Civil War.  
Prerequisite No.: None  
Type of Course: Required

- 0213 CITIZENSHIP RESPONSIBILITIES 9 weeks  
 Social Security, Voting requirements, you and the law, police-youth relations and the social services. Becoming a better citizen and basic sociology.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0214 STATE AND LOCAL HISTORY 9 weeks  
 History of the State of Michigan with special emphasis on the growth of local culture and history.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0215 PERSONAL ECONOMICS 9 weeks  
 Occupations, vocations, managing your personal income, accepting credit responsibility and income tax--State and Federal.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0216 HISTORY OF AMERICAN MINORITY GROUPS 9 weeks  
 Particular emphasis on the Negro, Indian and Spanish-American contributions to American culture. This course will also discuss the social problems and personalities of both past and present.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0217 CONTEMPORARY ISSUES 9 weeks  
 Based upon Newsweek magazine, which will be used in class; the V.E.C. filmstrip series from the Alpena News. Other newspapers and news programs will also supplement.  
 Prerequisite No.: None  
 Type of Course: Elective
- 1230 STATE AND LOCAL GOVERNMENT OF MICHIGAN 9 weeks  
 State constitution, the structure and function of the Executive, Legislative and Judicial branches of the state government. The functions of the cities, counties, townships and school boards of Michigan.  
 Prerequisite No.: None  
 Type of Course: Required

- 0231 NATIONAL GOVERNMENT AND THE CONSTITUTION 9 weeks  
 The structure and function of the Legislature,  
 Executive and Judicial branch of the government.  
 This course will also cover the federal system,  
 the Bill of Rights and the other amendments.  
 Prerequisite No.: None  
 Type of Course: Required
- 0232 COMPARATIVE GOVERNMENT 9 weeks  
 Communism vs. Capitalism: the ideology of the  
 U.S. and Western Europe as compared to the  
 Communist block countries  
 Prerequisite No.: National Government & the  
 Constitution  
 Type of Course: Elective
- 0233 YOU AND THE LAW (CIVIL LIBERTIES) 9 weeks  
 Civil Rights, case histories, the Bill of  
 Rights, and the study of minority groups. There  
 will be a use of community resources.  
 Prerequisite No.: None  
 Type of Course: Elective

MATHEMATICS DEPARTMENTCOURSE OFFERINGS

- 0300 MATH 7 - COURSE I-IV Full year  
 0301 Numeration Systems and Whole Numbers, Intro-  
 0302 duction to Geometry, Fractions and Decimals,  
 0303 and Ratio, Proportion and Percent.  
 Prerequisite No.: None  
 Type of Course: Required
- 0304 LAB MATH A, I-IV Full year  
 0305 This course offers the student the opportunity  
 0306 to improve basic arithmetic skills. Included  
 0307 is a review of whole numbers, addition and  
 subtraction of fractions and basic decimal  
 operations. Also included is a variety of  
 interesting mathematic units including map  
 study and mathematical recreation of various  
 kinds. Laboratory setting. Individual help.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0308 LOGIC & INQUIRY 9 weeks  
 A study of various types of problem solving  
 through logical systematic methods. Assists  
 students in increasing ability in solving  
 mathematical, scientific and everyday problems.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0310 MATH 8 - COURSE I-IV Full year  
 0311 Includes: review of whole numbers including  
 0312 decimal systems, fractions, reciprocals,  
 0313 computing negative rational numbers, geometry,  
 ratio, proportion and percent.  
 Prerequisite No.: None  
 Type of Course: Required
- 0314 LAB MATH B, I-IV Full year  
 0315 This course is a continuation of Lab Math A. It  
 0316 offers a short review of A concepts, then expands.  
 0317 Introductions will be offered in factoring,  
 rational numbers and practical geometry concepts.  
 Prerequisite No.: None  
 Type of Course: Elective



- 0318 BUSINESS MATH 9 weeks  
Practical value and business use of Mathematics. Basics for buying and selling as well as receipts, inventories and ledgers are included. Insurance, stocks, calculators, check writing and checkbook balancing will be included.  
Prerequisite No.: Math II  
Type of Course: Elective
- 0319 GRAPHING 9 weeks  
An introduction of descriptive statistics and the process of organizing data and some probability; providing experience in constructing, reading and interpreting bar graphs, circle graphs, picture graphs, and line segment graphs; and the use of measures of central tendency-range, median, mode, and mean.  
Prerequisite No.: None  
Type of Course: Elective
- 0320 MEASUREMENT 9 weeks  
The study of the use of measurement. The study of linear, weight, liquid and time measurement through the use of maps, time and liquid experiments. Conversion methods for measurements.  
Prerequisite No.: None  
Type of Course: Elective
- 0321 FUNDAMENTAL SET THEORY 9 weeks  
An introduction to set theory with applications, Venn diagrams are used to describe union, intersection, and compliments of sets. Elementary proofs are discovered.  
Prerequisite No.: Math II  
Type of Course: Elective
- 0322 NUMBER SENTENCES & FORMULAS 9 weeks  
The study of number sentences and how to solve them. The solving of formulas concerned with perimeter, area, volume, distance, fahrenheit, electricity, and others.  
Prerequisite No.: None  
Type of Course: Elective

- 0323 PLANE GEOMETRY 9 weeks  
A study of basic geometric ideas with main emphasis on metric geometry and its application to physical objects; a development of the concepts of perimeter and area of simply polygons; the use of the compass and protractor in comparing and measuring angles; experiences in work with ruler-compass constructions; study of congruence for segments, angles and triangles.  
Prerequisite No.: None  
Type of Course: Elective
- 0324 HISTORY OF MATH 9 weeks  
A brief history of the important men of mathematics will be the main theme of the course. Some basic theories and ideas of mathematics will unfold as the course progresses. Students may select a particular branch of mathematics such as Algebra, Geometry, etc. and study parts of its development.  
Prerequisite No.: None  
Type of Course: Elective
- 0325 FRACTIONS 9 weeks  
A review of addition, subtraction, multiplication, and division of fractions. The application of fractions in everyday living will be emphasized.  
Prerequisite No.: None  
Type of Course: Elective
- 0326 INTEGERS AND THE COORDINATE PLANE 9 weeks  
Using integers to describe physical situations; the basic principles for operating with integers; simple equation solving; graphing ordered pairs of integers on the coordinate plane; graphing simple solution sets.  
Prerequisite No.: None  
Type of Course: Elective
- 0327 METRICS AND SCIENTIFIC NOTATION 9 weeks  
Studies the origin, development, computation, etc. of the metric system of measurement. Studies the use of scientific (exponential) notation in computing with very large numbers.  
Prerequisite No.: None  
Type of Course: Elective

- 0330 RATIONAL NUMBERS 9 weeks  
 This course will be a general review of rational numbers. The fundamental operations involving the use of fractions will be stressed. Decimals will be an important segment.  
 Prerequisite No.: None  
 Type of Course: Required
- 0331 RATIO PROPORTION PERCENT 9 weeks  
 A continuation of rational numbers will lead to percent and ratio concepts.  
 Prerequisite No.: Fractions (0325)  
 Type of Course: Required
- 0332 IRRATIONAL NUMBERS AND TRIGONOMETRY 9 weeks  
 This course will introduce properties of right triangles and to properties of triangles in general.  
 Prerequisite No.: Integers (0326)  
 Type of Course: Elective
- 0333 BASIC ARITHMETIC OPERATIONS 9 weeks  
 A review of the basic arithmetic operations, including shortcuts, estimation techniques and different methods of performing the basic operations.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0334 INDEPENDENT STUDY - TEACHER AIDE 9 weeks  
 Gives the student the opportunity to assist other students in the following math courses: Rational Numbers, Ratio Proportion and Percent, Measurement, Fractions, Basic Arithmetic Operations, Number Sentences and Formulas, Business Math. Student will work with teacher explaining methods to individual students.  
 Prerequisite No.: Teacher Approval  
 Type of Course: Elective
- 0335 ALGEBRA 9 I-IV Full year  
 0336 General Algebra course including fundamentals of  
 0337 Algebra through problem solving. If time per-  
 0338 mitting, in IV, students will look at proofs, numerical trig., ratio and proportion.  
 Prerequisite No.: Approval of Math Dept.  
 Type of Course: Elective

- 0340 GEOMETRY I-IV Full year  
0341 Starts with a small review of Algebra, then into  
0342 general principles of geometry on through Plane  
0343 Coordinate Geometry, circles and spheres, polygons, etc. Time permitting IV will cover solids and their volumes.  
Prerequisite No.: Satisfactory completion of Algebra IV  
Type of Course: Elective
- 0345 PROBABILITY AND STATISTICS 9 weeks  
This course will cover some general theories of probability. The development of skills will be accomplished through the elements of chance. The relationship of probability to games of chance will be discussed. As the course progresses, statistics will be used to determine probabilities and students will conduct experiments in chance.  
Prerequisite No.: None (8-9)  
Type of Course: Elective

SCIENCE DEPARTMENTCOURSE OFFERINGS

- 0400 ENVIRONMENTAL LABORATORY 9 weeks  
This course is to provide techniques for checking levels of water pollution, air pollution and noise pollution. Simple experiments will be performed in and outside of the lab. Individual projects will be emphasized.  
Prerequisite No.: None  
Type of Course: Required
- 0401 WEATHER 9 weeks  
Deals with the atmosphere and its phenomena. Weather forecasting and reading weather maps will also be included. There will be several laboratory sessions.  
Prerequisite No.: None  
Type of Course: Required
- 0402 SCIENCE: A WAY OF KNOWING 9 weeks  
This course explains what science is. Questions to be raised: What is science? How can one use science? How are measurements used in science?  
Prerequisite No.: None  
Type of Course: Elective
- 0403 ALPENA FOSSILS 9 weeks  
In this class students will study about the fossils in the Alpena area, about the era in which they lived, and why they lived there. Identification of fossils will also be emphasized. Field trips to collect fossils and making a fossil collection will be included in this course.  
Prerequisite No.: None  
Type of Course: Elective
- 0404 INSECTS 9 weeks  
This course includes collecting, identifying and mounting of insects.  
Prerequisite No.: None  
Type of Course: Elective

- |      |  |         |
|------|--|---------|
| 0405 | AIRCRAFT   | 9 weeks |
|      | This course makes available information concerning the history and development of aircraft, the different kinds of aircraft, the principles of flight and the future of aircraft. Tentative field trip to the air-base and resource people involved with aircraft will play an important part.           |         |
|      | Prerequisite No.: None   |         |
|      | Type of Course: Elective   |         |
| 0406 | OCEANOGRAPHY & LIMNOLOGY   | 9 weeks |
|      | Students will be exposed to the physical, chemical, meteorological and biological conditions in fresh and salt water. Tentative field trips to study wave action and longshore currents, laboratory experiments, etc. will play an important part.   |         |
|      | Prerequisite No.: None   |         |
|      | Type of Course: Elective   |         |
| 0407 | ASTRONOMY  | 9 weeks |
|      | This class will deal with: the foibles of the astronomer, a study of celestial bodies, their magnitudes, motions, and their development; laboratory experiments and trips to the planetarium.  |         |
|      | Prerequisite No.: None   |         |
|      | Type of Course: Elective   |         |
| 0408 | AMPHIBIANS & REPTILES  | 9 weeks |
|      | Deals with amphibians & reptiles of the world with emphasis on those native to Michigan. Identification, predator-prey relationships, regeneration, collecting and preserving specimens, anatomy through dissection, diet, preparing a terrarium, economic values and classification will be emphasized. |         |
|      | Prerequisite No.: None   |         |
|      | Type of Course: Elective   |         |
| 0409 | CONSERVATION SEMINAR   | 9 weeks |
|      | The purpose: explore the conservation practices being employed by conservation-minded organizations with emphasis on practices, activities and special projects.   |         |
|      | Prerequisite No.: None   |         |
|      | Type of Course: Elective   |         |

- 0410 POLLUTION SEMINAR 9 weeks  
Purposes: examine the causes of pollution; discuss possible remedies, discuss state, local, and national problems and legislation concerning each. Student projects will be encouraged.  
Prerequisite No.: None  
Type of Course: Elective
- 0411 ROCKS, MINERALS AND GEM POLISHING 9 weeks  
This course entails knowledge of rock and mineral characteristics of precious and semi-precious gems and polishing of same. Requirements will be a rock or gem for polishing.  
Prerequisite No.: None  
Type of Course: Elective
- 0412 WILDLIFE SEMINAR 9 weeks  
Introduces students to wildlife native to the Alpena area. Time will be devoted to: understanding needs of wildlife, how man has affected wildlife, programs and groups directed at preserving wildlife, etc. If time permits, students will be exposed to wildlife of North America and rest of the world. Emphasis will be on student research and discussion.  
Prerequisite No.: None  
Type of Course: Elective
- 0413 ORNITHOLOGY (BIRD STUDY) 9 weeks  
This course will study native birds of the area. Students will learn about habitats, anatomy, theories of migration, ecological problems, songs and common birds of the area. Projects will be encouraged. Class will carry on projects at the sanctuary and work with the Audubon Society.  
Prerequisite No.: None  
Type of Course: Elective
- 0414 INDEPENDENT STUDY 9 weeks  
Students who have identified a specific area of interest and wish to study more in this area may sign up for this course. Student must select a teacher in science dept. who will supervise.  
Prerequisite No.: None  
Type of Course: Elective
- 0415 CELLS, TISSUES & TOOLS OF BIOLOGY 9 weeks  
Students will learn about the tools used in biology, basic concepts of cell structure in both plants and animals and how these cells are organized to form tissues and organs.  
Prerequisite No.: None  
Type of Course: Required

- 0416 HUMAN BODY 9 weeks  
Students will study how the human body works, how organs arranged together develop systems, how systems make the body work as a single unit, circulation, digestion, respiration, reproduction, etc.  
Prerequisite No.: None  
Type of Course: Required
- 0417 SCIENCE LABORATORY AIDE 9 weeks  
The student is responsible for finding a teacher in the science department who is willing to accept a laboratory aide.  
Prerequisite No.: None  
Type of Course: Elective
- 0418 GENETICS 9 weeks  
Investigation of basic principles of heredity. Will include the study of the basic unit of inheritance, the gene, chromosomes and DNA. The lab work will include fruit fly and corn genetics.  
Prerequisite No.: None  
Type of Course: Elective
- 0419 CAREERS IN SCIENCE SEMINAR 9 weeks  
This is an open-ended course designed to provide an opportunity for students to examine the various careers available for science-oriented people. The information for this course will come from films, cassette tape interviews, magazines and resource people arranged for by the students and teacher in each class.  
Prerequisite No.: None  
Type of Course: Elective
- 0420 FIRST AID 9 weeks  
Students will study basic first aid: bleeding, artificial respiration, shock, broken bones, burns and techniques of treating these injuries. Demonstrations by students, movies, research people and first aid resources in the community will be high lights of the course.  
Prerequisite No.: None  
Type of Course: Elective



- 0421    ANIMAL TRAINING                      9 weeks  
The purpose of this course is to teach students the theory of animal training. Methods and techniques for training should apply to almost any animal. It is helpful, but not necessary, if students own some kind of animal they wish to train.  
Prerequisite No.: None  
Type of Course:     Elective
- 0422    ANIMAL BEHAVIOR                      9 weeks  
Introduces students to the behavior of different kinds of animals. For students who like animals and want to find out more about them, this is a good beginning. Methods for training animals will also be discussed.  
Prerequisite No.: None  
Type of Course:     Elective
- 0423    THE HISTORY OF LIFE                      9 weeks  
Students learn about Charles Darwin's theories of evolution. Also, the class will study the theory on how life developed through adjustments in their environment.  
Prerequisite No.: None  
Type of Course:     Elective
- 0424    ANCIENT PEOPLES OF NORTH AMERICA    9 weeks  
Provides an opportunity for the student to study findings of archaeologists concerning the life and culture of ancient peoples of the N. American continent. The course is directed to American Indians but other ancient cultures will be studied and contrasted to the American Indians.  
Prerequisite NO.: None  
Type of Course:     Elective
- 0425    ECOLOGY                                      9 weeks  
The study of plants and animals and how they relate to their environment, certain plants and animals reasons for living where they do, the climax of forest and animal migration.  
Prerequisite No.: None  
Type of Course:     Elective

- 0426 MAMMOLOGY 9 weeks  
Students exposed to general knowledge of mammals of the world with emphasis on mammals of Michigan. Students will dissect several mammals and investigate: relationship between their structure and function, habitats, diet, gestation periods, territorial rites, methods of communication, true hibernators, general behavior and the economic value of some mammals. Field work will be included in observing and trapping and lab work in preparing and stuffing specimens will be expected.  
Prerequisite No.: None  
Type of Course: Elective
- 0427 PARASITOLOGY 9 weeks  
Places emphasis on finding parasites in lower and higher forms of animals. Students will then learn to stain and mount these parasites on slides. The life cycle of these parasites and how they relate to man in his local area will also be covered.  
Prerequisite No.: None  
Type of Course: Elective
- 0428 ENTOMOLOGY 9 weeks  
Deals with collecting, mounting and classifying insects and spiders (both aquatic and terrestrial). Specific topics to be covered are diet, eggs, metamorphosis, movement, mating and reproduction, color and luminescence, defense and offense, senses, instinct, insect societies, migration, hibernation, pollination, evolutionary aspects.  
Prerequisite No.: None  
Type of Course: Elective
- 0429 ROCKS AND MINERALS 9 weeks  
In this class, students will study how minerals and rocks are formed, where they form, to identify many common rocks and minerals by chemical tests, touch and sight, and how to make a rock collection from rocks in the local area.  
Prerequisite No.: None  
Type of Course: Elective

- 0430    SPACE TRAVEL                      9 weeks  
 Space travel will be looked at from a historical viewpoint. Students will then study present-day space travel, what is in store for future space exploration and Newton's laws of motion. Students will spend time at the planetarium studying the above areas. They will also learn to make and fly model rockets, to estimate the heights of these rockets and study G-forces produced by the models.  
 Prerequisite No.: None  
 Type of Course:        Elective
- 0432    DISEASES                              9 weeks  
 Deals with human diseases. Specific topics to be covered are vitamin deficiency diseases, pathogenic diseases, childhood diseases, epidemic diseases, organic diseases, history of diseases, vectors, immunity, antiseptics, poisonous plants, cancer and viruses. Students will be able to do their own research in an area of interest.  
 Prerequisite No.: None  
 Type of Course:        Elective
- 0433    VASCULAR PLANTS                      9 weeks  
 This class will deal with plants in the Alpena area that have true roots, stems and leaves. Students will learn: to identify local vascular plants on field trips, to press and make a plant collection, to dissect certain parts of these plants, and to show a structural and functional relationship between these vascular plants. This course will include poisonous plants and plants used in medicine and manufacturing.  
 Prerequisite No.: None  
 Type of Course:        Elective
- 0434    NON-VASCULAR PLANTS                  9 weeks  
 Includes the lower forms of plant life in the Alpena area without true roots, stems and leaves. Emphasis will be placed on plants native to Michigan. To be included in this study: the relationship between their structure and function, their reproductive cycles, poisonous varieties, plants used in medicine and those of economic value. Specimens will be collected, identified, mounted and dissected and then classified as: primitive or advanced.  
 Prerequisite No.: None  
 Type of Course:        Elective

- 0435 HUMAN BEHAVIOR SEMINAR 9 weeks  
Discussions will be held on: mental health, personality development, effects of culture(s) on behavior, individual problems, deviant behavior, mental illness and research and new developments in psychology. Additional sources of information for this course will be resource people, field trips, and the various news media. A good deal of time will be spent discussing individual, real or fictitious, situations posed to the class by individual students.  
Prerequisite No.: None  
Type of Course: Elective
- 0436 CAREERS IN FOOD PRODUCTION & NATURAL RESOURCES 9 weeks  
The purposes of this course are: to provide information and correct misinformation about agriculture, and related fields; to equip the student with knowledge of the needs of modern agriculture and the course offerings provided in Senior High; to provide a knowledge of the activities and requirements involved in Vocational Agriculture with respect to classroom, field trips, F.F.A. activities, and individual student projects.  
Prerequisite No.: None  
Type of Course: Elective
- 0437 GEOLOGIC MEASUREMENT & MAPS 9 weeks  
This course will deal with earth measurements including: measuring the earth's surface, changes in gravitational pull, temperature underground and the earth's crust, etc. Another part of the course will deal with making contour and geologic maps and skills needed to interpret topographic, geologic and aerial photos.  
Prerequisite No.: None  
Type of Course: Elective
- 0438 SLIDE RULE 9 weeks  
The slide rule is a tool that helps to quickly carry out certain operations dealing with very large and very small numbers such as: multiplication, division, squaring, taking square roots, cubing, taking cube roots and many other related functions. This course teaches a skill that is very helpful for anyone interested in careers requiring any of these operations.  
Prerequisite No.: None  
Type of Course: Elective

## 0439 ICHTHYOLOGY 9 weeks

In this class the student will learn about the fish of the Great Lakes region. The environment of many fish will be studied, what they feed on, how they reproduce, their enemies, and what part of the food chain they're in. Students will study: how to age fish, how to estimate fish populations, commercial and sport fishing aspects and how to dissect fish to study their anatomy.

Prerequisite No.: None

Type of Course: Elective

0440 THE MIND 9 weeks

This course includes investigations in mental telepathy, clairvoyance, ESP, hypnotism, illusions and mental illusions. Paperback books will be used in place of a text.

Prerequisite No.: None

Type of Course: Elective

## 0441 DRUGS, NARCOTICS AND COMMUNICABLE DISEASES 9 weeks

This course will include the study of Drugs, Alcohol and Tobacco. Students will study history, types, common names, effects and cures of these drugs. Areas involved would include study of Heroin, Marijuana, Halucinogens, Sedatives, Amphetamines, medicines, alcohol and tobacco. Emphasis will be placed on student involvement in research, interviews and discussions. Research people and movies will be brought into the classroom to help answer student questions. Communicable diseases will also be offered. This would include study of venereal disease, its cause, social problems, symptoms, cure, and psychological problems.

Prerequisite No.: None

Type of Course: Required

## 0442 MECHANICS 9 weeks

This course will cover force and work, mechanical advantage in simple and complex machines, levers, pulleys, inclined plane, wheel and axle, wedge, screw, belt and pulley, gears and the bicycle. Most of this course will consist of laboratory experiments.

**Prerequisite No.:** None

Type of Course: Elective

- 0443 MEASURING INSTRUMENTS OF PHYSICAL SCIENCE 9 weeks  
 This course is designed for people who intend to be science majors in high school. The purpose is to introduce students to instruments used in the field of science. Some of the instruments to be studied are: meterstick, triple beam balance, spring scale, pipette, graduated cylinder, vernier caliper, micrometer caliper, liquid thermometer, ammeter, voltmeter, galvanometer, barometer, and compass. The theory behind measuring instruments will be emphasized.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0444 FORCE & MOTION 9 weeks  
 Helpful for students who would like to study Physics in high school. The course is intended to expose students to the following topics: force, velocity, acceleration, Newton's Laws of Motion, momentum, natural forces, Bernoulli's Effect, flight of airplanes and rockets, and weightlessness. Approximately 1/3 of the time will be devoted to experiments.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0445 ATOMIC STRUCTURE & THE PERIODIC TABLE 9 weeks  
 This course is designed for students who are preparing for Chemistry on the high school level. The course includes a historical approach to how the scientists' ideas of the atom have changed as they gained more knowledge. It includes a study of chemical bonds and ends with a study of the periodic table.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0446 WAVES AND THEIR EFFECTS 9 weeks  
 Designed for students who are interested in preparing for high school Physics and for students who are interested in understanding wave motion. Areas to be studied will include: the laser, wave properties, the electromagnetic spectrum, various kinds of rays (x-ray), sound waves, wave frequency, resonance, the Doppler effect, musical sounds, musical instruments, the human voice. The course is not as difficult as some of the terminology might suggest. Considerable time will be devoted to experiments.  
 Prerequisite No.: None  
 Type of Course: Elective

- 0447 MICHIGAN GEOLOGY 9 weeks  
This course includes description and identification of geologic features in Michigan and a look at the forces which have shaped these features (wind, water, earthquakes, volcanoes, folding, etc.). The focus of this course will be on the local area and what significance past history has on its development.  
Prerequisite No.: None  
Type of Course: Elective
- 0448 LIGHT 9 weeks  
This course is designed to expose students to the theories behind the behavior of light. It deals with reflection and refraction, lenses, optical instruments, the eye, eye defects, and color. Approximately 1/2 the time will be spent with experimentation.  
Prerequisite No.: None  
Type of Course: Elective
- 0449 ELECTRICITY AND MAGNETISM 9 weeks  
The purpose of this course is to acquaint the student with some of the basic theory in electricity and magnetism. The following areas will be covered: magnets, fields, the earth as a magnet, static electricity, current electricity, circuits, electrical measurements, sources of electricity, electric motors, electric generators, heat from electricity, electrical appliances, power from electricity, electromagnets, and transformers. Approximately 1/3 of the time will be devoted to experiments.  
Prerequisite No.: None  
Type of Course: Elective
- 0450 ATOMIC ENERGY 9 weeks  
This course is designed to meet the needs of people who are interested in atomic energy and for those who are preparing for high school Physics or Chemistry. The material covered would include: radiation, disintegration, isotopes, nuclear forces, nuclear energy, chain reactions, fusion, fission, nuclear reactors, power from atomic energy, peaceful and wartime use of atomic energy.  
Prerequisite No.: None  
Type of Course: Elective

- 0451 SOLIDS, LIQUIDS, GASES AND HEAT 9 weeks  
This course includes investigations in density, buoyancy, temperature, units of heat, heat of fusion, heat of vaporization, pressure, conduction, convection, expansion, surface tension, adhesion, cohesion and hydraulics. About 1/2 of the course will consist of lab work.  
Prerequisite No.: None  
Type of Course: Elective



FOREIGN LANGUAGE DEPARTMENTCOURSE OFFERINGS

- 0500 FRENCH I, SECTIONS I-IV Full year  
 0501 In the first 9 weeks the student will be intro-  
 0502 duced to the first four lessons of Je Parle  
 0503 Francais. The work in this course will be almost  
completely oral with a little reading in the  
 fourth lessons. This is to enable the student to  
 speak the language correctly before seeing the  
 written word so that he will not pronounce the  
 silent letters. There will also be some intro-  
 duction to the culture of France, its geography  
 and people, through maps, filmstrips, games and  
 songs. In the other three 9-week periods, the  
 student will continue lessons 5-14 and learn to  
 speak, read and write French with emphasis upon  
 speaking.  
 Prerequisite No.: C average or above  
 Type of Course: Elective
- 0504 SPANISH I, SECTIONS I-IV Full year  
 0505 The first step in a possible three year junior  
 0506 high Spanish course. The student will study the  
 0507 filmed program "La Familia Fernandez." Emphasis  
 is on spoken Spanish with some reading, writing,  
 songs and games included. Basic grammar and  
 Spanish culture will be taught as needed. This  
 Spanish course will study the first 13 lessons  
 in the filmed program.  
 Prerequisite No.: C average or above  
 Type of Course: Elective
- 0508 INTRODUCTION TO FRENCH 9 weeks  
 This is an introductory course to French. Several  
 films will be shown, the dialogues learned and  
 some reading and writing of French to give stu-  
 dents an idea of what the language is about.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0509 INTRODUCTION TO SPANISH 9 weeks  
 A 9 week exploratory course to sample the Spanish  
 language and learn about the culture of Spanish-  
 speaking people. Students will study some lessons  
 of the regular program "La Familia Fernandez" and  
 learn greetings, numbers and other vocabulary as  
 time and ability permit. Some Spanish songs and  
 games will be included.  
 Prerequisite No.: None  
 Type of Course: Elective

- 0510 FRENCH II, SECTIONS I-IV Full year  
 0511 Emphasis will be on learning to speak the French  
 0512 language. Reading and writing French will be  
 0513 included with each lesson. Cultural studies will  
 be added. Plays, games and songs will be used  
 frequently.  
 Prerequisite No.: French I, Sections I-IV  
 Type of Course: Elective
- 0514 SPANISH II, SECTIONS I-IV Full year  
 0515 A review of work covered in Spanish I and a  
 0516 continuation of the lessons of "La Familia  
 0517 Fernandez." Emphasis is still on spoken Spanish  
 with reading, writing, songs, skits and games  
 included. Grammar study will include a study of  
 regular verbs in the present, past and future  
 tenses.  
 Prerequisite No.: Spanish I, Sections I-IV  
 Type of Course: Elective
- 0530 FRENCH III, SECTIONS I-IV Full year  
 0531 A continuation of study in the French language  
 0532 with emphasis on speaking French fluently as well  
 0533 as writing and reading. More advanced lessons  
 including writing stories, poems and plays in  
 French will be emphasized.  
 Prerequisite No.: French II, Sections I-IV  
 Type of Course: Elective
- 0534 SPANISH III, SECTIONS I-IV Full year  
 0535 A review of Spanish studied in Spanish I & II  
 0536 and a continuation of the lessons of "La Familia  
 0537 Fernandez." Emphasis is on spoken Spanish with  
 reading, writing, songs, dramas and games in-  
 cluded.  
 Prerequisite No.: Spanish II, Sections I-IV  
 Type of Course: Elective
- 0538 FRENCH I, SECTIONS I-IV Full year  
 0539 An introduction to the French language for the  
 0540 student who will continue at the high school  
 0541 level. Je Parle Francais will be used as the  
 program. It will follow the pattern for 0500-3  
 at an advanced level, and will cover lessons 1-28  
 for the year.  
 Prerequisite No.: C average or above  
 Type of Course: Elective

- 0542 SPANISH I, SECTIONS I-IV Full year  
0543 An introduction to the Spanish language for  
0544 the student who will continue at the high school  
0545 level. The student will study the filmed program  
"La Familia Fernandez." Emphasis is on spoken  
Spanish (oral communication) with some reading,  
writing, songs and games included. Basic grammar  
(including present tense verbs and adjective  
agreement) will be taught. Approximately 18 les-  
sons will be studied in this first year.  
Prerequisite No.: C average or above  
Type of Course: Elective
- 0546 LATIN I, SECTIONS I-IV Full year  
0547 An introduction to the grammatical structure of  
0548 Latin and cultural relevance of the Roman Empire.  
0549 Study of grammar and vocabulary is stressed to  
help enable the student to successfully learn to  
translate between Latin and English.  
Prerequisite No.: C average or above  
Type of Course: Elective

MUSIC DEPARTMENTCOURSE OFFERINGS

- 0550 BEGINNING BAND I-IV Full year  
0551 Exploration of abilities in learning to play  
0552 a band instrument. Some instruments are loaned  
0553 by school, others are rented from music store.  
Course leads to possible promotion to Inter-  
mediate and Advanced Bands.  
Prerequisite No.: None  
Type of Course: Elective
- 0554 INTERMEDIATE BAND I-IV Full year  
0555 A training band to add to experience gained in  
0556 previous band classes such as elementary school  
0557 5th & 6th grade or Beginning band in junior high.  
Course leads to promotion to Advanced Band.  
Prerequisite No.: 5th or 6th grade band or  
Beginning  
Type of Course: Elective
- 0558 ADVANCED BAND I-IV Full year  
0559 Performing group--at least 2 concerts per year  
0560 plus assembly programs, etc. Will be given  
0561 training in playing and marching in preparation  
for High School Band.  
Prerequisite No.: By audition only  
Type of Course: Elective
- 0562 ORCHESTRA I-IV Full year  
0563 Training in playing together as a string group  
0564 consisting of violins, cellos and bass. Variety  
0565 in types of music. Training for advancement to  
high school orchestra.  
Prerequisite No.: 1 or 2 years Elementary String  
Class  
Type of Course: Elective
- 0570 MIXED CHORUS I-IV (7) Full year  
0571 A variety of music will be sung. Part singing  
0572 emphasized.  
0573 Prerequisite No.: None  
Type of Course: Elective
- 0574 VOCAL MUSIC 9 weeks  
Open to any student interested in singing. A  
variety of music will be sung.  
Prerequisite No.: None  
Type of Course: Elective

- 0576 MIXED CHORUS I-IV (8-9) Full year  
0577 Select singing group. Opportunity to perform in  
0578 assemblies and concerts.  
0579 Prerequisite No.: Audition in Spring  
Type of Course: Elective
- 0580 CHOIR I-IV Full year  
0581 Select singing group. Opportunity to perform in  
0582 assemblies and concerts.  
0583 Prerequisite No.: Auditions in Spring  
Type of Course: Elective
- 0584 MUSIC APPRECIATION 9 weeks  
A study of various periods and styles of music,  
including jazz, Broadway musicals, major choral  
and instrumental works.  
Prerequisite No.: None  
Type of Course: Elective
- 0585 MUSIC THEORY 9 weeks  
Basic fundamentals; a study of scales, intervals,  
chords and simple compositions.  
Prerequisite No.: One music course or private  
lessons  
Type of Course: Elective
- 0586 SMALL ENSEMBLE 9 weeks  
For students interested in solo or ensemble  
(small groups) singing.  
Prerequisite No.: Audition  
Type of Course: Elective

FINE ARTS DEPARTMENTCOURSE OFFERINGS

- 0600 BASIC ART SKILLS 9 weeks  
A basic art course for all students entering art for the first time on the junior high level. The course will stress observation of one's environment while exploring many medias, techniques and acquiring the skills needed to pursue art on the junior high level.  
Prerequisite No.: None  
Type of Course: Elective
- 0601 DRAWING & PAINTING I 9 weeks  
Basic course in the art of observation. Figure, landscape, still life and other subject matter will be studied using a variety of two dimensional medias. Mood, personal reactions and feelings will be stressed as a source of creativity. Many modern approaches will be used in this course.  
Prerequisite No.: Basic Art Skills (0600)  
Type of Course: Elective
- 0602 DRAWING & PAINTING II 9 weeks  
An advanced course in the skills of drawing and painting and interpretation of one's environment. Drawing will be studied in a more abstract manner and painting will stress mixed media and other environmental medias.  
Prerequisite No.: 0601  
Type of Course: Elective
- 0603 DESIGN I 9 weeks  
Basic course in the design and function of everyday items. A course in working with common materials to make functional items for daily use and appreciation. Weaving, jewelry, carving and construction of many materials will be the basis of this course.  
Prerequisite No.: 0600  
Type of Course: Elective
- 0604 DESIGN II 9 weeks  
An advanced course in the design and function of those things we use daily in our dress, own environment and things to decorate with. One will be exposed to many advanced techniques in carrying out a design.  
Prerequisite No.: 0603  
Type of Course: Elective

- 0605 PRINTING I 9 weeks  
A basic course in making prints by the relief method. Structure and design of the print will be stressed. Techniques will include vegetable, monolith, cardboard, inner tube and linoleum printing.  
Prerequisite No.: 0600  
Type of Course: Elective
- 0606 PRINTING II 9 weeks  
An advanced course in printmaking skills and techniques. New means of printing and techniques will be exploration studies made by the student. Medias and techniques will include linoleum, etching, woodcut and other self-discovered techniques.  
Prerequisite No.: 0605  
Type of Course: Elective
- 0607 SCULPTURE I 9 weeks  
A beginning class in three dimensional stressing the principles of sculpture. Craftsmanship and technique will be studied as the tools for fine sculpture. Materials for sculpture will include cardboard, papermache's, toothpicks, and other environmental objects.  
Prerequisite No.: 0600  
Type of Course: Elective
- 0608 SCULPTURE II 9 weeks  
An advanced course in the study of sculpture. One or two larger sculptures in a media chosen by the student will be required. Some medias might include clay, metal, plaster of paris and other materials found by the student.  
Prerequisite No.: 0607  
Type of Course: Elective
- 0609 CERAMICS I (POTTERY) 9 weeks  
A basic course in the technique and manipulation of clay to form permanent pieces of pottery, sculpture, etc. Function and form of the ceramic pieces will be its main objective. Various hand built methods will be used in making the pottery.  
Prerequisite No.: 0600  
Type of Course: Elective

- 0610 CERAMICS II (POTTERY) 9 weeks  
An advanced course in the manipulation of clay and glazes. Techniques used in Ceramics I will be used as well as pottery on the ceramics wheel. Composition of glazes will be studied as well as making glazes. Function and glazing techniques will be studied further.  
Prerequisite No.: 0609  
Type of Course: Elective
- 0611 DARKROOM TECHNIQUES 9 weeks  
The total darkroom process will be studied in depth from developing negatives (film) to printing the negatives. Basic enlarging techniques will be studied.  
Prerequisite No.: None. Approval of instructor  
Type of Course: Elective
- 0612 MOVIE PRODUCTION 9 weeks  
In conjunction with the English Dept. a 20-minute film will be produced by the students involved. Creativity, originality and emotional aspects of film making will be stressed.  
Prerequisite No.: Approval of Art & English instructors involved  
Type of Course: Elective
- 0613 MICRO AND MACRO PHOTOGRAPHY 9 weeks  
The student will be photographing the small or micro world around him. Photos will be taken through microscopes, stereoscopes and with close-up lenses of various specimens.  
Prerequisite No.: 0611  
Type of Course: Elective
- 0614 PHOTOGRAPHY ART 9 weeks  
Photography as a creative experience in the observation and interpretation of one's environment. All the developing techniques and enlarging techniques will be carried on by the student. Quality will be stressed.  
Prerequisite No.: 0611  
Type of Course: Elective



- 0615 PHOTO-JOURNALISM 9 weeks  
A class in recording school related activities through photography. This class will be in conjunction with the production of the school paper and other publications.  
Prerequisite No.: 0611 & approval of Art & Journalism instructors  
Type of Course: Elective
- 0616 INDEPENDENT STUDY 9 weeks  
After a ninth grader has completed two or both levels within one area he can do independent work in that area. Originality and creativity will be stressed.  
Prerequisite No.: Approval of the instructor and completion of 2 consecutive art courses.  
Type of Course: Elective

PHYSICAL EDUCATION DEPARTMENTCOURSE OFFERINGS

- 0650 PHYSICAL FITNESS, POWDER PUFF FOOTBALL, 9 weeks  
VOLLEYBALL  
The American Association for Health, Physical Education and Recreation Physical Fitness test will be given. The test consists of the 50-yard dash, 600 yard run-walk, softball throw (overhand) for distance, standing long jump, sit-ups, shuttle run, and flexed arm hang. A.A.H.P.E.R. Physical Fitness Awards will be given to those who meet the requirements.  
Powder Puff football--if weather permits; the class will provide each girl with a greater understanding of football. This is not tackle football, but is known as flag football.  
Volleyball-- the Women's Volleyball Rules will be used and studied. Team plays and personal improvement in the skills of volleyball will be developed. A tourney will be held within the class and the class winners will play off.  
Prerequisite No.: None  
Type of Course: Elective
- 0651 STUNTS TUMBLING, AND APPARATUS 9 weeks  
Tumbling, mini-tramp, ropes, trampoline, dual stunts, vaulting, self-testing and free exercise. A greater knowledge in gymnastic skill should be accomplished by each girl. Routines and stunts on the various pieces of equipment will be taught.  
Prerequisite No.: None  
Type of Course: Elective
- 0652 BASKETBALL - INDOOR FIELD HOCKEY - BADMINTON 9 weeks  
Basketball--the class will develop around basic teamwork and build upon the basic skills which have previously been learned, such as the different types of passes and when they should be used. The Rules of Women's Basketball will be studied and applied in greater detail. Each girl will be working on personal self-improvement, as well as team improvement in the skills of basketball. A basketball tourney will also be held.  
Hockey--(Indoor Field Hockey) played inside with plastic hockey sticks. A class tourney will be held.  
Badminton--the class will use the official badminton rules. Badminton skills will be taught in greater detail, such as the different types of shots, and when to use them. A singles and doubles tourney will be held.  
Prerequisite No.: None  
Type of Course: Elective

- 0653    SOFTBALL-PHYSICAL FITNESS    9 weeks    (GIRLS)  
       The American Assn. for Health, Recreation, Physical Education, and Recreation Physical Fitness Test will be given. The test consists of the 50 yard dash, 600 yard run-walk, softball throw (overhand) for distance, standing long jump, sit-ups, shuttle-run and flexed arm hang. A.A.H.P.E.R. Physical Fitness awards will be given to those who meet the requirements. Softball--the class will work on individual softball skills, such as fielding, battling and throwing. Women's softball rules will be used. Class softball tourney will be held.  
       Prerequisite No.: None  
       Type of Course:    Elective
- 0660    SOCCER AND CROSS COUNTRY (BOYS)    9 weeks  
       Basic skills through participation in Soccer and Cross Country will be taught. Rules and terminology will be stressed and put into use in games action and tournaments. Both sports will be covered at the same time.  
       Prerequisite No.: None  
       Type of Course:    Elective
- 0661    VOLLEYBALL-BASKETBALL (BOYS)    9 weeks  
       Basic skills in volleyball and basketball will be covered separately. Rules, terminology and safety aspects will be stressed and put into use in tournament situations. Basic offensive and defensive set-ups will be covered. This course is not open to members of interscholastic basketball team.  
       Prerequisite No.: None  
       Type of Course:    Elective
- 0662    GYMNASTICS II (BOYS)    9 weeks  
       Intermediate and advanced skills in single and dual tumbling stunts, trampoline, mini-tramp and apparatus will be covered. Safety will be stressed.  
       Prerequisite No.: Successful completion of similar unit  
       Type of Course:    Elective
- 0663    TRACK-FIELD AND SOFTBALL (BOYS)    9 weeks  
       Skills through participation in track-field and softball will be taught. Student will be able to specialize in track and field after initial introduction. Some softball will be co-educational.  
       Prerequisite No.: None  
       Type of Course:    Elective

- 0664 INDIVIDUAL FITNESS II (BOYS) 9 weeks  
Physical Fitness Testing, indoor and outdoor obstacle course, self-testing activities, mass games, relays and combatives. Emphasis on fitness through low organized games will be the basis for this class. Basic knowledge of health problems associated with physical fitness and gymnasium participation will be covered.  
Prerequisite No.: None  
Type of Course: Elective
- 0665 WRESTLING - WEIGHT TRAINING 9 weeks  
Basic skills in wrestling and weight training will be taught. Emphasis in wrestling will be on complex moves and sustained effort. Weight training emphasis will be decided by the student himself. It may be possible later in the unit to spend a major portion of one's time in one area. Safety aspects, rules and terminology will be stressed.  
Prerequisite No.: None  
Type of Course: Elective
- 0666 BADMINTON AND WEIGHT-TRAINING 9 weeks  
Basic skills in badminton and weight training will be covered in this course. Student will decide emphasis for himself in weight training. Most badminton play will be in doubles. An opportunity for co-educational badminton is possible. Rules and safety aspects will be stressed.  
Prerequisite No.: None  
Type of Course: Elective
- 0667 AIKIDO (A SELF DEFENSE ART) (BOYS) 9 weeks  
This course will improve one's coordination and reflexes; falls and basic techniques of self defense will be taught. A brief history of aikido with its development as a martial art will also be included.  
Prerequisite No.: Good physical condition  
Type of Course: Elective
- 0670 PHYSICAL EDUCATION - Girls (8) 18 weeks  
0671 Basketball and indoor field hockey  
Badminton, softball, physical fitness.  
Prerequisite No.: None  
Type of Course: Required

0680 PHYSICAL EDUCATION - BOYS (8) 18 weeks  
0681 This P.E. course will offer a variety of team  
activities, but not to the exclusion of  
individual activities. Some areas that will  
be covered are indoor hockey, volleyball,  
wrestling, cross country, softball, and  
individual testing.  
Prerequisite No.: None  
Type of Course: Required

HOME ECONOMICS DEPARTMENTCOURSE OFFERINGS

- 0700 WHO AM I? 9 weeks  
General introduction to homemaking. Study of how emotionally, socially and spiritually. Getting along in school and with family and friends. What it takes to be well groomed. Girls only.  
Prerequisite No.: None  
Type of Course: Elective
- 0701 BEGINNING SEWING I 9 weeks  
Developing skill in use of sewing machine and also hand sewing. Non-pattern projects using machine and hand sewing. Introduction to differences in fabrics and fibers. Girls only.  
Prerequisite No.: None  
Type of Course: Elective
- 0702 BEGINNING SEWING II 9 weeks  
Additional practice in use of sewing machine for those students who need or want to develop more skill in use of sewing machine. Non-pattern or simple pattern projects of students choice. Girls only.  
Prerequisite No.: Beginning Sewing 0701  
Type of Course: Elective
- 0703 CHILD CARE 9 weeks  
The study of children especially from the viewpoint of a babysitter or an older brother or sister. Safety in the care of children, differing needs of children as they grow, the value of play and tender loving care. Young children may be invited to a party the last week of class. (Co-Ed)  
Prerequisite No.: None  
Type of Course: Elective
- 0704 BASIC FOODS 9 weeks  
Fun in the kitchen while learning basic nutritional needs. Emphasis on choosing and cooking breakfasts and nutritional snacks. (Co-Ed)  
Prerequisite No.: None  
Type of Course: Elective

- 0705 SPECIAL FOODS 9 weeks  
 Cooking with an eye on the waistline. Many beginning cooks are trying to control their weight. This class will try to help them do this while learning basic food preparations and nutrition. (Co-Ed)  
 Prerequisite No.: None  
 Type of Course: Elective
- 0706 CLOTHING CONSTRUCTION I 9 weeks  
 Involves the first use of commercial patterns. Students will learn to select both suitable fabrics and patterns for their needs. Emphasis will be on the student learning to follow pattern instructions, making a good hem, applying a waistband on fitted facing, and an acceptable zipper application. Garments usually made are a simple skirt, jumper, pantskirt, or slacks. (Girls)  
 Prerequisite No.: 0701 or 0702 or comparable 4H Girls Club or Community School Program  
 Type of Course: Elective
- 0707 HOME ECONOMICS SURVEY (BOYS) 9 weeks  
 This is an introductory course to acquaint boys with two various areas of home economics and to make them aware of the job opportunities for men in these areas. The areas to be introduced will be cooking, laundry, pressing, mending, clothes selection and buying, manners and behavior, babysitting and family responsibilities. There will be laboratory experiences in the appropriate areas--foods, laundry, mending, etc.  
 Prerequisite No.: None  
 Type of Course: Elective
- 0708 INTERIOR DECORATING & HOME FURNISHING 9 weeks  
 Room arrangement of furnishings, principles of design, color schemes and how to do own decorating work will be covered. Flower arranging and use of plants in the home will also be studied. A home accessory project (pillows, bulletin board, wall hanging, picture framing or furniture refinishing) will be done by each student.  
 Prerequisite No.: None  
 Type of Course: Elective

- 0709 CREATIVE CRAFTS IN HOME ECONOMICS 9 weeks  
The students will choose at least three areas from the following list for their emphasis in this course. Areas of choice: beginning knitting, beginning crocheting, needlepoint, hairpin lace, smocking, huck weaving, creative stitchery (embroidery of all types) and sewing of accessories. Construction of a project in each chosen area to learn the basic skills involved will be emphasized.  
Prerequisite No.: None  
Type of Course: Elective
- 0710 CREATIVE COOKING 9 weeks  
This course will be a preparation of single dishes per laboratory period to further food preparation skills and knowledge. It will also emphasize the cost, nutrition and knowledge of use of food from the basic four food groups. Special emphasis will be upon the creative use of both convenience foods and common everyday foods.  
Prerequisite No.: None  
Type of Course: Elective
- 0711 CLOTHING SELECTION & CARE 9 weeks  
This course will cover laundry, stain removal, ironing, pressing, and mending of clothes. The choice of clothing suited to the individual--size, figure, resources, color, etc.--will be emphasized; some study will be made of textile fibers. Buymanship of clothing to get the most satisfaction for the money spent will be stressed. A thorough study of the information found on labels and hang tags of clothing and fabrics will be made.  
Prerequisite No.: None  
Type of Course: Elective
- 0712 SPECIALTY COOKING 9 weeks  
This course will cover the following categories of food preparation: international foods, grill and campfire cooking, special baking projects (bread, pies, etc.), foods from field, stream and forest.  
Prerequisite No.: None  
Type of Course: Elective



- 0713 HOME ENTERTAINMENT & HOSPITALITY 9 weeks  
This course will give students practice in acting as host, hostess or guest in various social situations--manners and responsibilities will be stressed. Planning and carrying out the plans for various types of parties, party food service, family occasion parties and party entertainment will be studied and practiced.  
Prerequisite No.: None  
Type of Course: Elective
- 0714 HOME NURSING & HOME CARE & SAFETY 9 weeks  
This course will stress the prevention of illness and how to care for the sick in the home. Home safety features and practices will be stressed. Students will learn about the care of the home and surroundings in relation to accident prevention and sanitation practices to prevent illness.  
Prerequisite No.: None  
Type of Course: Elective
- 0715 CLOTHING CONSTRUCTION II 9 weeks  
Advanced principles of fabric and pattern selection. More independent use of pattern instructions will be stressed, as well as improvement in basic skills of garment construction. New zipper applications, set-in sleeves and collars will be emphasized. (Girls)  
Prerequisite No.: 0706  
Type of Course: Elective
- 0716 HUMAN RELATIONS 9 weeks  
Getting along with people, personality analysis, character analysis, self-improvement, dating, and harmony and understanding between family members, will be emphasized.  
Prerequisite No.: None  
Type of Course: Elective
- 0717 PERSONAL IMPROVEMENT 9 weeks  
This course is designed to help the individual see himself as he is now. A self analysis and evaluation will be made. The student will make a plan for improvement of those areas he most wishes to change. Particular points of emphasis will be grooming, personality, manners behavior, diet, exercise, posture, and figure.  
Prerequisite No.: None  
Type of Course: Elective

- 0718    MAKING TIME & MONEY COUNT      9 weeks  
      Ways to use time and money to obtain the greatest satisfaction will be covered in the course. Each student will make an evaluation of present use and a plan for future improved use of resources of time and money.  
      Prerequisite No.: None  
      Type of Course:      Elective
- 0719    FAMILY MEALS                      9 weeks  
      In this course the student will plan and prepare meals that would be suitable for their family. Particular emphasis will be upon quality, quantity and cost of foods used as related to the student's resources. Also involved will be meal service and manners applicable to everyday family situations. Main dish preparations will stress meat extender dishes, meat substitute dishes, and some economy meat dishes. Some food buymanship will be covered.  
      Prerequisite No.: None  
      Type of Course:      Elective
- 0730    SUMMER JOB TRAINING      9 weeks  
      The purpose of this course is to help girls be more employable for part time summer jobs. The course content will cover the personal qualities for getting and holding a job and the development of skills needed for jobs such as all day child care and meal preparation, mother's housekeeping aide, cottage and motel cleaning and waitress and kitchen work. (Girls)  
      Prerequisite No.: None  
      Type of Course:      Elective
- 0731    CLOTHING CONSTRUCTION III      9 weeks  
      Advanced sewing skills with independent research and construction projects (choice of garment pattern & fabric). (Girls)  
      Prerequisite No.: 0715  
      Type of Course:      Elective

INDUSTRIAL ARTS DEPARTMENTCOURSE OFFERINGS

- 0800 SKETCHING 9 weeks  
Freehand sketching is a process of producing a drawing without the aid of instruments. Sketching is the most widely used form of drawing. A sketch shows what an object looks like, its size, and how it is to be made. The methods, techniques and importance of accurate sketching will be stressed.  
Prerequisite No.: None  
Type of Course: Elective
- 0801 BASIC WOODWORKING 9 weeks  
An introductory course in woodworking, using hand-tools and some basic machines in the construction of projects. The projects are designed to give the student experiences with processes and materials of industry. Leisure time activities are stressed. Area covered will include conservation, planning a project, safety, tool identification and project construction.  
Prerequisite No.: None  
Type of Course: Elective
- 0802 LAMINATING 9 weeks  
This course is designed to acquaint the student with the lamination of wood and other materials. Most laminating will be done with wood veneer. Related information pertaining to types of veneer, how veneer is cut and types of adhesives will be discussed and experimented with in class.  
Prerequisite No.: None  
Type of Course: Elective
- 0803 BENCH & WROUGHT METAL 9 weeks  
Bench metals is a basic course of metal working. Learn the use of hand tools and safety in their use. This area of metal work covers tools for cutting, shaping, drilling and countersinking, threading and fabricating. The metal will be in the form of rods, squares and flat stock.  
Prerequisite No.: None  
Type of Course: Elective

- 0804    FOUNDRY                      9 weeks  
 The hot metals area of foundry can offer a fascinating experience for students. Metals are heated to their melting points, poured into sand molds--designed sometimes by the student, and finished with abrasive materials. This offers students an insight into industry's method of producing many of the everyday products.  
 Prerequisite No.: None  
 Type of Course:        Elective
- 0805    HOME MECHANICS                9 weeks  
 A course designed to enhance the student's "know-how" when confronting repairs around the home. Will emphasize repairs that can be made with hand tools and simple power tools. (This course will include special mathematic computations necessary in making household repair.) Could be some repetition for boys who have taken previous Industrial Arts Courses. (Co-Ed)  
 Prerequisite No.: None  
 Type of Course:        Elective
- 0806    INDUSTRIAL GRAPHICS          9 weeks  
 A basic course in Graphic Arts dealing with silk screen, linoleum block, dry point etching, hand composition, and book binding. This course is designed to deal with the methodology of the graphic arts processes and not so much with the artistic values.  
 Prerequisite No.: None  
 Type of Course:        Elective
- 0807    WOOD REFINISHING & ANTIQUING   9 weeks  
 This course is designed to enlighten the student as to the many different ways wood and small pieces of furniture can be finished or refinished. Some repair of wood furniture will be done if it is necessary. Antiquing of small projects or furniture will be offered to those who show interest in this area.  
 Prerequisite No.: None  
 Type of Course:        Elective
- 0808    INTRODUCTORY DRAWING          9 weeks  
 Emphasis upon the foundations of orthographic representation, lettering, use of instruments, dimensioning, and working drawings are discussed in this unit.  
 Prerequisite No.: None  
 Type of Course:        Elective

- 0810    MACHINE WOODWORKING            9 weeks  
This is an advanced course in woodworking that is being offered to acquaint the student with processes and procedures in woodworking using machines and handtools. Machines covered will include: circular saw, lathe, drill press, jointer, band saw, sander, jigsaw and router.  
Prerequisite No.: 0801  
Type of Course:     Elective
- 0811    ORTHOGRAPHIC DRAWING & DIMENSIONS   9 weeks  
This course is a continuation of Introductory Drawing. It gives the student an opportunity to develop his ability of perception of objects in the orthographic views.  
Prerequisite No.: 0809  
Type of Course:     Elective
- 0812    POWER MECHANICS                9 weeks  
This course is designed to give a basic understanding of gasoline engines and the principles on which they operate. Students will learn how to repair from a minor tune-up to a complete overhaul. This will also include limited work on snowmobile engines.  
Prerequisite No.: None  
Type of Course:     Elective
- 0813    MINI-BIKE REPAIR                9 weeks  
Learn how to do all necessary repair work yourself on bike and engine; make all adjustments and repairs; preventative maintenance and safety. Laws pertaining to mini-bikes in Michigan.  
Prerequisite No.: 0812  
Type of Course:     Elective
- 0814    PATTERN DEVELOPMENT, SECTIONAL & AUXILIARY   9 weeks  
This course is designed for the interested student in mechanical drawing, sheet metal work, or the more advanced areas of mechanical drawing. The student will draw and construct his own models.  
Prerequisite No.: 0811  
Type of Course:     Elective

- 0815 PICTORIAL DRAWING 9 weeks  
Method of showing an object as it would appear to the eye. Pictorials are used on drawings to help workers understand and visualize what the drawings mean. This is an interesting area in which students, who think of themselves as poor artists, find that it is quite simple to create accurate pictorial drawings.  
Prerequisite No.: 0811  
Type of Course: Elective
- 0816 MACHINE DRAWING 9 weeks  
Machine drawing is a course that involves the student with welding symbols and advanced assembly and detailed drawings of machine parts. It also involves threads and fasteners along with the design of gears and cams. A good introductory course for the student who plans to take advanced courses at the high school.  
Prerequisite No.: 0811  
Type of Course: Elective
- 0817 PERSPECTIVE DRAWING 9 weeks  
Perspective drawing is based on the fact that all lines which extend from the observer to converge or come together at some distant point. This also incorporates technical sketching.  
Prerequisite No.: 0811  
Type of Course: Elective
- 0818 PLASTICS I 9 weeks  
The student has an opportunity to work with acrylic plastics. The student will have access to machines and designing a project limited by his own ability. There will be a thorough discussion of thermo-plastics and thermosetting plastics.  
Prerequisite No.: None  
Type of Course: Elective
- 0819 PLASTICS II 9 weeks  
This course is a continuation of Plastics I with a more advanced involvement with the plastics processes of casting, vacuum forming, plastisol, crystals and styrofoams.  
Prerequisite No.: 0818  
Type of Course: Elective

- 0820    ELECTRICITY                      9 weeks  
      Explain theory of electricity; series and parallel circuits; lights and bells used in different circuits to demonstrate the theory; show difference between direct current and alternating current and their effects; how resistance affects the flow.  
      Prerequisite No.: None  
      Type of Course:     Elective
- 0830    ARCHITECTURAL DRAWINGS    9 weeks  
      This is an introduction into the world of architecture designed for the student who wants to know more about designing buildings. He is given an opportunity to design, the floor plan, elevations and details for simple buildings. Information concerning location of site, building location, building codes, etc. will be discussed.  
      Prerequisite No.: 0817  
      Type of Course:     Elective
- 0831    DESIGN                              9 weeks  
      Techniques and fundamentals peculiar to product drawing, design, material, and functions or mass produced products.  
      Prerequisite No.: 0811  
      Type of Course:     Elective
- 0832    INDEPENDENT STUDY IN INDUSTRIAL ARTS    9 weeks  
      This course is designed for those students who show a particular interest in one phase of industrial arts. The instructor will act as an advisor and resource person. Student will be able to make use of the Industrial Arts Labs, Library and other teachers. A certain amount of technical writing may be expected of the student.  
      Prerequisite No.: Instructor's Approval  
      Type of Course:     Elective

GENERAL ELECTIVECOURSE OFFERINGS

- 0900 PUBLIC HEALTH 9 weeks  
This course deals with the different public health organizations. Students will study local, county, state and federal health departments. Areas to be covered: health records, laboratories and their responsibility, quackery, radiation (civil defense) and you and your doctor. Students will also review careers that deal directly with health.  
Prerequisite No.: None  
Type of Course: Elective
- 0901 PRACTICAL SAFETY 9 weeks  
This course will deal with types of safety. Students will be involved in the areas of snowmobiling, boating, gun and driving safety. Course will include laws, equipment and common practices. Resource people will be brought into classroom for reference to the above areas. Tentatively, students will become certified in boating safety.  
Prerequisite No.: None  
Type of Course: Elective
- 0910 LIBRARY-STUDENT ASSISTANT 9 weeks  
Students are expected to learn the basic operations of the library and are responsible to the school librarian. Duties are assigned as needed.  
Prerequisite No.: None  
Type of Course: Elective
- 0920 LEARNING MATERIALS CENTER-STUDENT ASSISTANT 9 weeks  
Students assist the director of the learning materials center in the maintenance and repair of audio-visual equipment and films. Students also learn to operate the equipment.  
Prerequisite No.: Recommendation by Counselor  
Type of Course: Elective
- 0930 CLASSROOM - STUDENT ASSISTANT 9 weeks  
Students help the classroom teachers as lab assistants, clerical helpers, physical education assistants, or as helpers in the maintenance of classroom equipment.  
Prerequisite No.: Recommendation by Teacher  
Type of Course: Elective



## 0940 OFFICE - STUDENT CLERK 9 weeks

Course gives students insight in the basics of office work. Students are introduced to the types of office machines and their uses, receptionist responsibilities, compiling of alphabetical lists, filing of all sorts, fulfilling errands assigned, and are given freedom in many cases to use their judgment in situations and instructions.

Prerequisite No.: Recommendation by Counselor

Type of Course: Elective

APPENDIX C

COURSE PREFERENCE SURVEY

## APPENDIX C

### SEVENTH GRADE COURSE PREFERENCE SURVEY

You will be required to take 12 units of Language Arts-Social Studies Block & Physical Education; four units of Math; and two units of Science. The following are the elections you may make:

I. SPECIAL ELECTIONS - READ EXPLANATION, THEN SELECT

- ( ) 0300 Math - 7
- ( ) 0304 Lab Math 7 Indicate Expected Placement
- ( ) 0310 Math - 8 (Acc. Track)

II. ELECTIVES - Select 10 of the following courses. At least two of these must be from the Science offerings.

\*Courses must be elected as four-unit blocks.

#### LANGUAGE ARTS

- ( ) 0104 Reading Improvement
- ( ) 0106 Reading For Fun
- ( ) 0107 Vocabulary - Basic
- ( ) 0108 Vocabulary - Enrichment
- ( ) 0109 Reporting - Oral & Written

#### SOCIAL STUDIES

- ( ) 0201 Geography of Latin America
- ( ) 0202 Oceania
- ( ) 0203 Geography of North America
- ( ) 0204 World Religions
- ( ) 0205 World Resources, Industry & Ag.
- ( ) 0206 Maps, Graphs, Tables & Charts
- ( ) 0207 Independent Study

#### MATHEMATICS

- ( ) 0305 Logic and Inquiry

## SCIENCE

- ( ) 0402 Science - A Way of Knowing
- ( ) 0403 Alpena Fossils
- ( ) 0404 Insects
- ( ) 0405 Aircraft
- ( ) 0406 Oceanography & Limnology
- ( ) 0407 Astronomy
- ( ) 0408 Amphibians & Reptiles
- ( ) 0409 Conservation Seminar
- ( ) 0410 Pollution Seminar
- ( ) 0411 Rocks, Minerals, Gem Polishing
- ( ) 0412 Wildlife Seminar
- ( ) 0413 Ornithology
- ( ) 0414 Independent Study
- ( ) 0421 Animal Training

## FOREIGN LANGUAGE

- ( ) 0500 French I \*
- ( ) 0501 French II \*
- ( ) 0502 French III \*
- ( ) 0503 French IV \*
- ( ) 0504 Spanish I \*
- ( ) 0505 Spanish II \*
- ( ) 0506 Spanish III \*
- ( ) 0507 Spanish IV \*

## MUSIC

- ( ) 0550 Beginning Band I \*
- ( ) 0551 Beginning Band II \*
- ( ) 0552 Beginning Band III \*
- ( ) 0553 Beginning Band IV \*
- ( ) 0554 Intermediate Band I \*
- ( ) 0555 Intermediate Band II \*
- ( ) 0556 Intermediate Band III \*
- ( ) 0557 Intermediate Band IV \*
- ( ) 0562 Orchestra I \*
- ( ) 0563 Orchestra II \*
- ( ) 0564 Orchestra III \*
- ( ) 0565 Orchestra IV \*
- ( ) 0570 Mixed Chorus I \*
- ( ) 0571 Mixed Chorus II \*
- ( ) 0572 Mixed Chorus III \*
- ( ) 0573 Mixed Chorus IV \*
- ( ) 0574 Vocal Music \*

## FINE ARTS

- ( ) 0600 Basic Art Skills
- ( ) 0601 Drawing and Painting I
- ( ) 0602 Drawing and Painting II
- ( ) 0603 Design I
- ( ) 0604 Design II
- ( ) 0605 Printing I
- ( ) 0606 Printing II
- ( ) 0607 Sculpture I
- ( ) 0608 Sculpture II
- ( ) 0609 Ceramics I
- ( ) 0610 Ceramics II
- ( ) 0611 Darkroom Techniques
- ( ) 0615 Photo-Journalism

## HOME ECONOMICS

- ( ) 0700 Who Am I
- ( ) 0701 Beginning Sewing I
- ( ) 0702 Beginning Sewing II
- ( ) 0703 Child Care
- ( ) 0704 Basic Foods
- ( ) 0705 Special Foods
- ( ) 0706 Clothing Construction I
- ( ) 0707 Home Economics Survey (Boys)
- ( ) 0708 Interior Decorating & Home Furnishing
- ( ) 0709 Creative Crafts in Home Ec.

## INDUSTRIAL ARTS

- ( ) 0800 Sketching
- ( ) 0801 Basic Woodworking
- ( ) 0802 Laminating
- ( ) 0803 Bench and Wrought Metal
- ( ) 0804 Foundry
- ( ) 0805 Home Mechanics
- ( ) 0806 Industrial Graphics

EIGHTH GRADE COURSE PREFERENCE SURVEY

You are required to take two Science units, four Math units, three History units, three English units and two Physical Education units. The following are the electives you may make:

## I. SPECIAL ELECTIONS - READ EXPLANATION, THEN SELECT

- ( ) 0304 Lab Math - A
- ( ) 0310 Math - 8 MATH
- ( ) 0314 Lab Math - 8 Indicate expected placement
- ( ) 0315 Algebra
- ( ) 0110 Basic ENGLISH  
Communication Select one - if both  
selected, subtrace one
- ( ) 0111 Composition class from the 14 elec-  
tives below.

II. ELECTIVES - Select 14 of the following unit courses. Of these 14, three must be from the Language Arts offerings and two must be from the Science offerings. One must be History. \*Courses must be elected as four unit blocks.

Choose any 14 from the following (less any extra choices from Part I, above.):

## LANGUAGE ARTS (3 or more)

- ( ) 0107 Vocabulary Basic
- ( ) 0108 Vocabulary Enrichment
- ( ) 0109 Reporting - Oral & Written
- ( ) 0115 Pleasure Reading
- ( ) 0116 Practical English
- ( ) 0117 Mass Media
- ( ) 0118 Poetry
- ( ) 0119 Lesson Attack Skills
- ( ) 0120 Science Fiction
- ( ) 0121 Research Writing
- ( ) 0122 Speech I
- ( ) 0123 Speech II
- ( ) 0124 Drama I
- ( ) 0125 Drama II
- ( ) 0127 Speed Reading
- ( ) 0128 Mythology
- ( ) 0129 Journalism I

## SOCIAL STUDIES

- ( ) 0201 Geography of Latin America
- ( ) 0202 Oceania
- ( ) 0203 Geography of North America
- ( ) 0204 World Religions
- ( ) 0205 World Resources, Industry & Agriculture
- ( ) 0206 Maps, Graphs, Tables & Charts
- ( ) 0207 Independent Study
- ( ) 0213 Citizenship Responsibilities
- ( ) 0214 State & Local History
- ( ) 0215 Personal Economics
- ( ) 0216 History of American Minority Groups
- ( ) 0217 Contemporary Issues

## MATHEMATICS

- ( ) 0308 Logic & Inquiry
- ( ) 0325 Fractions
- ( ) 0326 Integers & Coordinate Planes
- ( ) 0327 Metrics & Scientific Notation
- ( ) 0318 Business Math
- ( ) 0319 Graphing
- ( ) 0320 Measurement
- ( ) 0321 Fundamental Set Theory
- ( ) 0322 Number Sentences & Formulas
- ( ) 0323 Plane Geometry
- ( ) 0324 History of Mathematics

## SCIENCE (2 or more)

- ( ) 0403 Alpena Fossils
- ( ) 0404 Insects
- ( ) 0405 Aircraft
- ( ) 0409 Conservation Seminar
- ( ) 0410 Pollution Seminar
- ( ) 0411 Rocks, Minerals & Gem Polishing
- ( ) 0412 Wildlife Seminar
- ( ) 0418 Genetics
- ( ) 0419 Careers in Science Seminar
- ( ) 0420 First Aid
- ( ) 0421 Animal Training
- ( ) 0422 Animal Behavior
- ( ) 0423 History of Life
- ( ) 0424 Ancient Peoples of North America
- ( ) 0406 Oceanography & Limnology
- ( ) 0407 Astronomy
- ( ) 0408 Amphibians & Reptiles
- ( ) 0413 Ornithology
- ( ) 0414 Independent Study
- ( ) 0425 Ecology
- ( ) 0426 Mammalogy

## SCIENCE (cont'd)

- ( ) 0427 Parasitology
- ( ) 0428 Entomology
- ( ) 0429 Rocks & Minerals
- ( ) 0430 Space Travel
- ( ) 0432 Diseases
- ( ) 0433 Vascular Plants
- ( ) 0434 Non-Vascular Plants
- ( ) 0435 Human Behavior Seminar
- ( ) 0436 Careers in Food Production & Natural Resources
- ( ) 0437 Geologic Measurement & Maps
- ( ) 0438 Slide Rule
- ( ) 0439 Ichthology
- ( ) 0440 The Mind

## FOREIGN LANGUAGE

- ( ) 0508 Introduction to French
- ( ) 0509 Introduction to Spanish
- ( ) 0510 French II Section I \*
- ( ) 0511 French II Section II \*
- ( ) 0512 French II Section III \*
- ( ) 0513 French II Section IV \*
- ( ) 0514 Spanish II Section I \*
- ( ) 0515 Spanish II Section II \*
- ( ) 0516 Spanish II Section III \*
- ( ) 0517 Spanish II Section IV \*

## MUSIC

- ( ) 0550 Beginning Band I \*
- ( ) 0551 Beginning Band II \*
- ( ) 0552 Beginning Band III \*
- ( ) 0553 Beginning Band IV \*
- ( ) 0554 Intermediate Band I \*
- ( ) 0555 Intermediate Band II \*
- ( ) 0556 Intermediate Band III \*
- ( ) 0557 Intermediate Band IV \*
- ( ) 0558 Advanced Band I \*
- ( ) 0559 Advanced Band II \*
- ( ) 0560 Advanced Band III \*
- ( ) 0561 Advanced Band IV \*
- ( ) 0562 Orchestra I \*
- ( ) 0563 Orchestra II \*
- ( ) 0564 Orchestra III \*
- ( ) 0565 Orchestra IV \*
- ( ) 0574 Vocal Music
- ( ) 0576 Mixed Chorus I \*
- ( ) 0577 Mixed Chorus II \*
- ( ) 0578 Mixed Chorus III \*
- ( ) 0579 Mixed Chorus IV \*



## MUSIC (Cont'd)

- ( ) 0580 Choir I \*
- ( ) 0581 Choir II \*
- ( ) 0582 Choir III \*
- ( ) 0583 Choir IV \*
- ( ) 0584 Music Appreciation
- ( ) 0585 Music Theory
- ( ) 0586 Small Ensemble

## FINE ARTS

- ( ) 0600 Basic Art Skills
- ( ) 0601 Drawing & Painting I
- ( ) 0602 Drawing & Painting II
- ( ) 0603 Design I
- ( ) 0604 Design II
- ( ) 0605 Printing I
- ( ) 0606 Printing II
- ( ) 0607 Sculpture I
- ( ) 0608 Sculpture II
- ( ) 0609 Ceramics I
- ( ) 0610 Ceramics II
- ( ) 0611 Darkroom Techniques
- ( ) 0612 Movie Production
- ( ) 0613 Micro & Macro Photography
- ( ) 0614 Photography Art
- ( ) 0615 Photo Journalism

## HOME ECONOMICS

- ( ) 0706 Clothing Construction I
- ( ) 0707 Home Economics Survey (Boys)
- ( ) 0708 Interior Decorating & Home Furnishing
- ( ) 0709 Creative Crafts in Home Economics
- ( ) 0710 Creative Cooking
- ( ) 0711 Clothing Selection & Care
- ( ) 0712 Specialty Cooking
- ( ) 0713 Home Entertainment & Hospitality
- ( ) 0714 Home Nursing & Child Care
- ( ) 0715 Clothing Construction II
- ( ) 0716 Human Relations
- ( ) 0717 Personal Improvement
- ( ) 0718 Making Time & Money Count
- ( ) 0719 Family Meals

## INDUSTRIAL ARTS

- ( ) 0800 Sketching
- ( ) 0801 Basic Woodworking
- ( ) 0802 Laminating
- ( ) 0803 Bench & Wrought Metal
- ( ) 0804 Foundry
- ( ) 0805 Home Mechanics
- ( ) 0806 Industrial Graphics
- ( ) 0807 Wood Refinishing & Antiquing
- ( ) 0808 Sheet Metal
- ( ) 0809 Intro. Drawing
- ( ) 0810 Machine Woodworking
- ( ) 0811 Orthographic Drawing & Dimensions
- ( ) 0812 Power Mechanics
- ( ) 0813 Mini Bike Repair
- ( ) 0814 Pattern Development Sectional & Auxiliary
- ( ) 0815 Pictorial Drawing
- ( ) 0816 Machine Drawing
- ( ) 0817 Perspective Drawing
- ( ) 0818 Plastics I
- ( ) 0819 Plastics II
- ( ) 0820 Electricity

### NINTH GRADE COURSE PREFERENCE SURVEY

You are required to take two units of English, two units of Civics, four units of Math, two units of Science and one unit of Health Education. The following are the elections you may make:

#### I. SPECIAL ELECTIONS

- |  |  |
|--|--|
| <p>Language Arts</p> <p>( ) 0130 Basic Communication II</p> <p>( ) 0131 Composition</p> <p>( ) 0132 Creative Writing</p> | <p>You must elect at least one from this group. If more than one is elected, subtract this number of elective units from those permitted in Part II.</p> |
|--|--|

- |   |   |
|---|---|
| <p>Mathematics</p> <p>( ) 0314 Lab Math B</p> <p>* ( ) 0330 Math - 9</p> <p>( ) 0335 Algebra</p> <p>( ) 0340 Geometry</p> | <p>Select one of these Math tracks. *If you elect Math-9, you must also elect two additional Math units from Section II in addition to the 17 electives you may make from any of these areas.</p> |
|---|---|

- II. ELECTIVES - Elect 17 of the following courses. Of these 17, two must be from the Language Arts Section, two must be from the Social Studies Section, and two must be from the + Science courses. If you have elected Math-9, you must elect two additional units from the Math Section, your total will be 19 instead of 17. \*Courses must be elected in 4 unit blocks.

#### LANGUAGE ARTS (2 or more)

- ( ) 0107 Vocabulary - Basic
- ( ) 0108 Vocabulary - Enrichment
- ( ) 0109 Reporting - Oral & Written
- ( ) 0115 Pleasure Reading
- ( ) 0116 Practical English
- ( ) 0117 Mass Media
- ( ) 0118 Poetry
- ( ) 0119 Lesson Attack Skills
- ( ) 0120 Science Fiction
- ( ) 0121 Research Writing
- ( ) 0122 Speech I
- ( ) 0123 Speech II
- ( ) 0124 Drama I
- ( ) 0125 Drama II
- ( ) 0127 Speed Reading
- ( ) 0128 Mythology

## LANGUAGE ARTS (Cont'd)

- ( ) 0129 Journalism I
- ( ) 0134 Novel
- ( ) 0135 Journalism II Section I \*
- ( ) 0136 Journalism II Section II \*
- ( ) 0137 Journalism II Section III \*
- ( ) 0138 Journalism II Section IV \*

## SOCIAL STUDIES (2 or more)

- ( ) 0201 Geography of Latin America
- ( ) 0202 Oceania
- ( ) 0203 Geography of North America
- ( ) 0204 World Religions
- ( ) 0205 World Resources, Industry & Ag.
- ( ) 0206 Maps, Graphs, Tables & Charts
- ( ) 0207 Independent Study
- ( ) 0213 Citizenship Responsibilities
- ( ) 0214 State and Local History
- ( ) 0215 Personal Economics
- ( ) 0216 History of American Minority Groups
- ( ) 0217 Contemporary Issues
- ( ) 0232 Comparative Governments
- ( ) 0233 You and the Law (Civil Liberties)

## MATHEMATICS (Math-9 students must select 2)

- ( ) 0325 Fractions
- ( ) 0326 Integers & Coordinate Planes
- ( ) 0327 Metrics & Scientific Notation
- ( ) 0318 Business Math
- ( ) 0319 Graphing
- ( ) 0320 Measurement
- ( ) 0321 Fundamental Set Theory
- ( ) 0322 Number Sentences & Formulas
- ( ) 0323 Plane Geometry
- ( ) 0324 History of Mathematics
- ( ) 0332 Irrational Numbers & Trig.
- ( ) 0333 Basic Arithmetic Operations
- ( ) 0334 Independent Study

## SCIENCE (must select 2 of the + courses)

- ( ) 0409 Conservation Seminar
- ( ) 0410 Pollution Seminar
- ( ) 0411 Rocks, Minerals & Gem Polishing
- ( ) 0412 Wildlife Seminar
- ( ) 0413 Ornithology
- ( ) 0414 Independent Study
- ( ) 0418 Genetics

## SCIENCE (Cont'd)

- ( ) 0419 Careers in Science Meminar
- ( ) 0420 First Aid
- ( ) 0421 Animal Training
- ( ) 0422 Animal Behavior
- ( ) 0423 History of Life
- ( ) 0424 Ancient Peoples of North America
- ( ) 0425 Ecology
- ( ) 0426 Mammalogy
- ( ) 0427 Parasitology
- ( ) 0428 Entomology
- ( ) 0429 Rocks & Minerals
- ( ) 0430 Space Travel
- ( ) 0432 Diseases
- ( ) 0433 Vascular Plants
- ( ) 0434 Non-vascular Plants
- ( ) 0435 Human Behavior Seminar
- ( ) 0436 Careers in Food Production & Natural Resources
- ( ) 0437 Geologic Measurement & Maps
- ( ) 0438 Slide Rule
- ( ) 0439 Ichthology
- ( ) 0440 The Mind
- + ( ) 0442 Mechanics
- + ( ) 0443 Measuring Instruments of Physics
- + ( ) 0444 Force and Motion
- + ( ) 0445 Atomic Structure & the Periodic Table
- + ( ) 0446 Waves and Their Effects
- ( ) 0447 Michigan Geology
- + ( ) 0448 Light
- + ( ) 0449 Electricity & Magnetism
- + ( ) 0450 Atomic Energy
- + ( ) 0451 Solids, Liquids, Gases and Heat

## FOREIGN LANGUAGE

- ( ) 0508 Introduction to French
- ( ) 0509 Introduction to Spanish
- ( ) 0530 French III Section I \*
- ( ) 0531 French III Section II \*
- ( ) 0532 French III Section III \*
- ( ) 0533 French III Section IV \*
- ( ) 0534 Spanish III Section I \*
- ( ) 0535 Spanish III Section II \*
- ( ) 0536 Spanish III Section III \*
- ( ) 0537 Spanish III Section IV \*
- ( ) 0538 French I Section I \*
- ( ) 0539 French I Section II \*
- ( ) 0540 French I Section III \*
- ( ) 0541 French I Section IV \*

## FOREIGN LANGUAGE (Cont'd)

( )	0542	Spanish I Section I	*
( )	0543	Spanish I Section II	*
( )	0544	Spanish I Section III	*
( )	0545	Spanish I Section IV	*
( )	0546	Latin I Section I	*
( )	0547	Latin I Section II	*
( )	0548	Latin I Section III	*
( )	0549	Latin I Section IV	*

## MUSIC

( )	0554	Intermediate Band I	*
( )	0555	Intermediate Band II	*
( )	0556	Intermediate Band III	*
( )	0557	Intermediate Band IV	*
( )	0558	Advanced Band I	*
( )	0559	Advanced Band II	*
( )	0560	Advanced Band III	*
( )	0561	Advanced Band IV	*
( )	0562	Orchestra I	*
( )	0563	Orchestra II	*
( )	0564	Orchestra III	*
( )	0565	Orchestra IV	*
( )	0574	Vocal Music	
( )	0576	Mixed Chorus I	*
( )	0577	Mixed Chorus II	*
( )	0578	Mixed Chorus III	*
( )	0579	Mixed Chorus IV	*
( )	0580	Choir I	*
( )	0581	Choir II	*
( )	0582	Choir III	*
( )	0583	Choir IV	*
( )	0584	Music Appreciation	
( )	0585	Music Theory	
( )	0586	Small Ensemble	

## FINE ARTS

( )	0600	Basic Art Skills	
( )	0601	Drawing & Painting I	
( )	0602	Drawing & Painting II	
( )	0603	Design I	
( )	0604	Design II	
( )	0605	Printing I	
( )	0606	Printing II	
( )	0607	Sculpture I	
( )	0608	Sculpture II	
( )	0609	Ceramics I	
( )	0610	Ceramics II	

## FINE ARTS (Cont'd)

- ( ) 0611 Darkroom Technique
- ( ) 0612 Movie Production
- ( ) 0613 Micro and Macro Photography
- ( ) 0614 Photography Art
- ( ) 0615 Photo Journalism
- ( ) 0616 Independent Study

## PHYSICAL EDUCATION

- ( ) 0650 Physical Education Girls I
- ( ) 0651 Physical Education Girls II
- ( ) 0652 Physical Education Girls III
- ( ) 0653 Physical Education Girls IV
- ( ) 0661 Physical Education Boys I
- ( ) 0662 Physical Education Boys II
- ( ) 0663 Physical Education Boys III
- ( ) 0664 Physical Education Boys IV
- ( ) 0660 Boy's Individual Fitness
- ( ) 0665 Wrestling-Weight Training
- ( ) 0666 Badminton-Weight Training
- ( ) 0667 Aikido

## HOME ECONOMICS

- ( ) 0706 Clothing Construction I
- ( ) 0707 Home Economics Survey (Boys)
- ( ) 0708 Interior Decorating & Home Furnishing
- ( ) 0709 Creative Crafts in Home Economics
- ( ) 0712 Specialty Cooking
- ( ) 0713 Home Entertainment & Hospitality
- ( ) 0714 Home Nursing & Child Care
- ( ) 0715 Clothing Construction II
- ( ) 0716 Human Relations
- ( ) 0717 Personal Improvement
- ( ) 0718 Making Time & Money Count
- ( ) 0719 Family Meals
- ( ) 0730 Summer Job Training
- ( ) 0731 Clothing Construction III

## INDUSTRIAL ARTS

- ( ) 0800 Sketching
- ( ) 0801 Basic Woodworking
- ( ) 0802 Laminating
- ( ) 0806 Industrial Graphics
- ( ) 0807 Wood Re-finishing & Antiquing
- ( ) 0808 Sheet Metal
- ( ) 0809 Introduction to Drawing
- ( ) 0810 Machine Woodworking
- ( ) 0811 Orthographic Drawing & Dimensions
- ( ) 0812 Power Mechanics

## INDUSTRIAL ARTS (Cont'd)

- ( ) 0813 Mini Bike Repair
- ( ) 0814 Pattern Development, Sectional & Auxiliary
- ( ) 0815 Pictorial Drawing
- ( ) 0816 Machine Drawing
- ( ) 0817 Perspective Drawing
- ( ) 0818 Plastics I
- ( ) 0819 Plastics II
- ( ) 0820 Electricity
- ( ) 0830 Architectural Drawing
- ( ) 0831 Design
- ( ) 0832 Independent Study

## GENERAL ELECTIVE COURSES

- ( ) 0900 Public Health
- ( ) 0901 Practical Safety
- ( ) 0910 Library Assistant
- ( ) 0920 Learning Materials Assistant
- ( ) 0930 Classroom Assistant
- ( ) 0940 Office Assistant



APPENDIX D

ENROLLMENT SHEETS

ANNA BESSER JUNIOR HIGH  
SEVENTH GRADE ENROLLMENT

Date \_\_\_\_\_  
 Name \_\_\_\_\_  
     (Last)      (First)      (Middle Initial)  
 Sex \_\_\_\_\_ Date of Birth \_\_\_\_\_  
     (M or F)      (Month) (Day) (Year)  
 Address \_\_\_\_\_  
     (Street or Rte. No) (Street/Rd) (Twp.)  
 Parent or Guardian \_\_\_\_\_  
     (With whom you live) (Last) (First)  
 Home Phone \_\_\_\_\_ Emergency Phone \_\_\_\_\_  
 School Last Attended \_\_\_\_\_  
     (School Name) (Address)

Directions

1. Print all information neatly.
2. Print the course number in the spaces under each title or under the word, "ELECTIVE."
3. Be sure each space has a number. Do not write in the titles of courses.
4. Do not select a course more than once as an elective.
5. For alternate courses, write in the numbers according to first choice, second choice, etc.

COURSE SELECTIONS			ALTERNATE COURSES	
BLOCK I 0100	BLOCK II 0101	BLOCK III 0102	BLOCK IV 0103	Do not use
BLOCK I 0100	BLOCK II 0101	BLOCK III 00102	BLOCK IV 0103	Do not use
BLOCK I 0100	BLOCK II 0101	BLOCK III 0102	BLOCK IV 0103	Do not use
MATH	MATH	MATH	MATH	Do not use
SCIENCE 0400	SCIENCE 0401	SCIENCE ELECTIVE	SCIENCE ELECTIVE	
ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE	
ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE	

ANNA BESSER JUNIOR HIGH

EIGHTH GRADE ENROLLMENT

Date \_\_\_\_\_

Name \_\_\_\_\_  
           (Last)           (First)           (Middle Initial)

Sex \_\_\_\_\_ Date of Birth \_\_\_\_\_  
      (M or F)                   (Month) (Day) (Year)

Address \_\_\_\_\_  
           (Street or Rte. No) (Street/Rd) (Twp.)

Parent or Guardian \_\_\_\_\_  
      (With whom you live) (Last)           (First)

Home Phone \_\_\_\_\_ Emergency Phone \_\_\_\_\_

School Last Attended \_\_\_\_\_  
                                   (School Name) (Address)

Directions

1. Print all information neatly.
2. Print the course number in the spaces under each title or under the word, "ELECTIVE."
3. Be sure each space has a number. Do not write in the titles of courses.
4. Do not select a course more than once as an elective.
5. For alternate courses, write in the numbers according to first choice, second choice, etc.

COURSE SELECTIONS			ALTERNATE COURSES	
ENGLISH	ENGLISH	ENGLISH	ENGLISH ELECTIVE	
ENGLISH ELECTIVE	ENGLISH ELECTIVE	PHYSICAL EDUCATION	PHYSICAL EDUCATION	
U.S. HISTORY 0210	U.S. HISTORY 0211	U.S. HISTORY 0212	U.S. HISTORY ELEC- TIVE	
MATH	MATH	MATH	MATH	Do not use
SCIENCE 0415	SCIENCE 0416	SCIENCE ELECTIVE	SCIENCE ELECTIVE	
ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE	
ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE	

ANNA BESSER JUNIOR HIGH

NINTH GRADE ENROLLMENT

Date \_\_\_\_\_

Name \_\_\_\_\_  
           (Last)           (First)       (Middle Initial)

Sex \_\_\_\_\_ Date of Birth \_\_\_\_\_  
      (M or F)                   (Month) (Day) (Year)

Address \_\_\_\_\_  
           (Street or Rte. No.) (Street/Rd) (Twp.)

Parent or Guardian \_\_\_\_\_  
   (With whom you live) (Last)       (First)

Home Phone \_\_\_\_\_ Emergency Phone \_\_\_\_\_

School Last Attended \_\_\_\_\_  
                                   (School Name) (Address)

Directions

1. Print all information neatly.
2. Print the course number in the spaces under each title or under the word, "ELECTIVE."
3. Be sure each space has a number. Do not write in the titles of courses.
4. Do not select a course more than once as an elective.
5. For alternate courses, write in the numbers according to first choice, second choice, etc.

COURSE SELECTIONS			ALTERNATE COURSES	
ENGLISH (PART I)	ENGLISH 0133	ENGLISH ELECTIVE	ENGLISH ELECTIVE	
CIVICS 0230	CIVICS 0231	SOCIAL STUDIES ELECTIVE	SOCIAL STUDIES ELECTIVE	
MATH	MATH	MATH	MATH	
PHYSICAL SCIENCE ELECTIVE	PHYSICAL SCIENCE ELECTIVE	ELECTIVE	ELECTIVE	
DRUGS & NARCOTICS 0441	ELECTIVE	ELECTIVE	ELECTIVE	
ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE	
ELECTIVE	ELECTIVE	ELECTIVE	ELECTIVE	

APPENDIX E

COURSES THAT WERE ELIMINATED AS A RESULT  
OF THE SECOND TOTAL TALLY

## APPENDIX E

### COURSES THAT WERE ELIMINATED AS A RESULT OF THE SECOND TOTAL TALLY

0123 Speech II  
0201 Geography of Latin America  
0232 Comparative Government  
0308 Logic and Inquiry  
0321 Fundamental Set Theory  
0322 Number Sentences and Formulas  
0326 Integers and the Coordinate Plane  
0327 Metrics and Scientific Notation  
0332 Irrational Numbers and Trigonometry  
0334 Independent Study-Teacher Aide  
0345 Probability and Statistics  
0402 Science: A Way of Knowing  
0414 Independent Study  
0417 Science Laboratory Aide  
0419 Careers in Science Seminar  
0423 The History of Life  
0424 Ancient Peoples of North America  
0425 Ecology  
0426 Mammalogy  
0428 Entomology  
0429 Rocks and Minerals  
0433 Vascular Plants  
0434 Non-vascular Plants  
0436 Careers in Food Production and Natural Resources  
0437 Geologic Measurement and Maps  
0443 Measuring Instruments of Physical Science  
0445 Atomic Structure and the Periodic Table  
0447 Michigan Geology  
0500 French I Section I  
0501 French I Section II  
0502 French I Section III  
0503 French I Section IV  
0508 Introduction to French  
0530 French III Section I  
0531 French III Section II  
0532 French III Section III  
0533 French III Section IV

0571	Mixed Chorus (7)	Section I
0572	Mixed Chorus (7)	Section II
0573	Mixed Chorus (7)	Section III
0574	Mixed Chorus (7)	Section IV
0576	Mixed Chorus (8-9)	Section I
0577	Mixed Chorus (8-9)	Section II
0578	Mixed Chorus (8-9)	Section III
0579	Mixed Chorus (8-9)	Section IV
0584	Music Appreciation	
0585	Music Theory	
0602	Drawing and Painting II	
0604	Design II	
0606	Printing II	
0608	Sculpture II	
0613	Micro and Macro Photography	
0615	Photo-Journalism	
0616	Independent Study	
0650	Physical Fitness, Powderpuff Football, Volleyball	
0663	Track-Field and Softball (Boys)	
0711	Clothing Selection and Care	
0714	Home Nursing & Home Care & Home Safety	
0814	Pattern Development, Sectional and Auxiliary	
0815	Pictorial Drawing	
0816	Machine Drawing	
0817	Perspective Drawing	
0830	Architectural Drawing	
0831	Design	
0832	Independent Study in Industrial Arts	

APPENDIX F

ENROLLMENT AND SCHEDULING FLOW CHART



APPENDIX F  
ENROLLMENT AND SCHEDULING FLOW CHART

