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A STUDY OF SCHEDULING PRACTICES IN SMALL CLASS C NEBRASKA HIGH SCHOOLS, 1970-71

by 6221

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TABLE OF CONTENTS

LIST OF FIGURES

Section 1

INTRODUCTION

Establishing a daily schedule could well be classified as one of the major obstacles to the success of the modern secondary school principal.

In the last fifty years, many changes in secondary school scheduling in terms of blocks of time per day, per week, and per semester or year have been implemented. The relative values of each have been the subject of many articles and probably will be until some definitive research is conducted which will statistically show what designs of schedules, blocks of time, etc. will work for the various types and sizes of schools.

The basic purpose of this report was to make a cross-section study of basic designs and facets of daily schedules which were used in the smaller Class C High Schools in the State of Nebraska, for the school year 1970-71.

This survey shows the central tendencies of the facets of the schedules and relates many of these to the designs of the schedules.

It is hoped this report will be of value to the administrator responsible for making the daily schedule in the school of the size under study.

STATEMENT OF THE QUESTION

What are the significant differences in scheduling practices in small Class C Nebraska High Schools for the school year 1970-71?

STATEMENT OF OBJECTIVES

1. What are the differences in amount of time in a scheduled class period?
2. What are the differences in amount of time in scheduled activity periods per school week?
3. What are the differences in scheduled passing times between classes?
4. What are the differences in amount of time in scheduled lunch periods?
5. What are the differences in number of scheduled class periods per school day?
6. How do the credits given for a course relate to the number of minutes per year in class?
7. How do class minutes, minutes in activity periods, and minutes passing between classes relate to the design of the schedule?

JUSTIFICATION

This study was designed to aid administrators, including this writer, in schools of comparable size, in making a daily schedule.

It is hoped that some ideas interpreted from the data gathered will give some help to administrators of the small rural high school with schedule design and features of schedules.

DEFINITIONS OF TERMS

Small Class C - a school defined by the Nebraska School Activities Association, in October 1970, as a school with from 83 to 162 students.

Daily Schedule - a master plan of daily school activities including such things as: classes offered, teachers, time of classes, and time between classes.

Block of Time - a period of time in which an activity of a school takes place.

Traditional or Conventional Schedule - a design of daily schedule in which a class meets for one period every day of every week in a school semester or year, depending upon the course duration. Period length ranges from 42-58 minutes per day.

Flexible Schedule - a schedule design so classified for this report as a modular schedule.

Mods - periods of time (blocks of time) in the modular schedule program.

Carnegie Unit - a school credit unit based on class activity for every day of every week for a school semester or year. The length of period ranges from 42-58 minutes per day.

Semi-flexible Schedule - a schedule so defined for this report, as a step between the conventional schedule and the flexible schedule.

Enrichment Courses - classes which are over and above the normal class offerings of a school. These courses exist to supplement the education of youth.

Core Schedule - a system of combining classes which have a subject matter relationship for the purpose of having a more flexible schedule. Generally, the procedure is used to allow for team teaching.

Section 2

REVIEW OF THE LITERATURE

INTRODUCTION

Literature which has been written is very inconclusive as to the type of schedule which appears to be the best. It is almost impossible, at the present time, to find any evidence as to the type of schedule that is the best for the small school, because there has been little or no research done on the value of the conventional or traditional type schedule. Without such research, there is little foundation from which to build new directions.

The concern of this report was to establish trends in scheduling practices in the smaller Class C Nebraska High Schools. The literature was thus reviewed for the purpose of finding some ideas about what has been done throughout the United States relative to the scheduling practices.

The study will show some types of schedules which are most common and will show measures of dispersion and central tendency in regard to class minutes, lunch minutes, passing minutes, etc. This study also will establish trends in scheduling from the original conventional schedule as established by the North Central Association.

Periodical articles were used as a primary source to find scheduling techniques and to find advantages and disadvantages of these techniques.

Periodicals such as National Association Secondary School Principals Bulletin; Journal of Education Research; California Journal Secondary Education; and the Journal of Secondary Education were the sources used for review of literature. The bulk of the articles was written by persons directly involved with new scheduling techniques, thus revealing more direct reactions.

Although this report is concerned with trends, techniques, and factors influencing scheduling, it does not provide a solution to the major problem of which schedule type is best and why. A topic such as this is worth pursuing if criteria can be established to measure which technique is best and if some valid measure of comparison between the conventional and other type schedules can be made.

Development of Daily Schedule

The daily schedule is the general chart and master plan of action for all high school activities. No other phase of the duties of the principal and his administrative assistants is a greater challenge to their administrative ability than the making of a satisfactory daily schedule. The ideal daily schedule meets everyone's needs on an individual basis, but the optimum schedule is constructed for the greatest good to the greatest number.[1]

Success in constructing a good schedule is an indication to many teachers, pupils, and patrons that the new principal

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[1] R. E. Langfitt, The Daily Schedule and High School Organization (New York: MacMillan Co., 1938), p. 1.

"knows what he is about."[2] Construction of this satisfactory schedule leads to the prime question, "What type of schedule should be employed?" According to Douglass, the type of schedule to be employed depends upon these points:

1. The structure and plan of administration of various curricula: which subjects are constants and which are variables.
2. The probable number of enrollments in each subject.
3. The standard, minimum and maximum size of class sections in various subjects.
4. The number of class sections necessary.
5. The plan for formulation of class sections.
6. The number, types and seating capacities of rooms available.
7. The organization of the school day: the length and number of periods; the beginning and dismissal hours; and the length and hour of the lunch period or periods.
8. Special problems, for example: overlapping sessions made necessary by building construction; part time teachers, etc.
9. Data concerning teachers: preparation; experience; preferences for subject matter, etc.
10. The assignments involved in a standard teaching load.[3]

All of these factors, when taken into consideration, cause administrators to begin to consider how the schedule will be put together. Another factor which must be considered by the administrator is the prevailing practice of the school. Although administrators today must not allow themselves to become bound to

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[2]Harl Douglass, The Administration of the Secondary School (New York: Ginn and Co., 1964), p. 363.

[3]Ibid., pp. 363-364.

tradition they also must realize that a complete change cannot be made in one year.

Characteristics of the Traditional Schedule

A. W. Sturges, Assistant Professor of Education at Winona State College, Winona, Minnesota, in his 1962 study of types of schedules, opening and closing times, and other administrative data pertaining to scheduling, reported that 40 per cent of the 938 high school administrators reporting from Illinois, Iowa, Minnesota, Missouri, and Wisconsin, were on the six-period day. Those who reported showed that periods varied from 47 to 58 minutes daily.[4] The type of schedule which contains the above characteristics will be referred to here as the conventional or traditional type of schedule. Previous educational study had revealed that this type of system, where the classes meet daily for the same number of minutes each day, grew out of the Carnegie unit. (See Fig. 1 in Appendix, p. 48.)

The conventional schedule has been accepted to include the 42- to 58-minute class period every day of every week. Of late, it has been subjected to criticism.[5] Criticism centers around this statement: "the rigid, conventional schedule constitutes one of the most formidable impediments to progress for schools desiring to encourage independent learning." Such

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[4] A. W. Sturges, "Scheduling Practices in Midwestern Secondary Schools," National Association Secondary School Principals Bulletin, 46: 43-50, April, 1962.

[5] Douglass, p. 367.

schedules, designed primarily for administrative convenience, place severe limitations on decision-making by students and teachers. In fact, the conventional schedule, itself, takes from teachers and students some of the most important decisions which affect the learning situation.[6]

Douglass, in Modern Administration of Secondary Schools, pointed out these limitations:

1. The schedule does not permit the students to go on field trips or other educational excursions for sufficiently long periods of time without being absent from classes other than those with which the field trip or excursion are associated.

2. The conventional daily schedule does not permit adequate time for conferences and co-operative planning by instructors.

3. The conventional schedule does not provide adequate opportunity for students to have access to teachers for conferences.[7]

Many schools, which have conventional schedules, base their schedules on these false assumptions indicated by Mr. E. R. Howard, who is Superintendent-Principal of Ridgewood High School, Norridge-Harwood Heights, Illinois:

1. That all teachers are alike--thus we see that all classrooms and schedules are alike.

2. That pre-determined period length can serve many purposes, equally well.

3. That group size of 30 is equally appropriate for many kinds of instruction.

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[6] E. R. Howard, "Flexible Scheduling," North Central Association Quarterly, 40: 208, Fall, 1965.

[7] Douglass, pp. 369-370.

4. That the self contained classroom with one teacher present is equally appropriate for a wide variety of learning experiences.

5. That all learners should study the course content the same way and should learn at the same rate.

6. That all students should be scheduled for at least 200 minutes a week into all courses.

7. That students will not learn unless they are taught in the classrooms by teachers.[8]

Trends

Surveys indicate that 50- to 60-minute class periods tend to be predominant, at least in the Middle West and in schools of the North Central Association of Colleges and Secondary Schools.[9] The traditional schedule was designed for 40 minutes of teaching and 15 minutes of study, but this has never materialized.[10] The traditional schedule has come under fire for not giving enough study time.

Little was said about the advantages of the conventional schedule. Howard, in the process of criticism, pointed out that the only advantage to the conventional schedule was its administrative convenience.[11]

Much needs to be done in the field of evaluation of designs of schedules, especially in relation to conventional

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[8]Howard, p. 208.

[9]F. P. Abel and D. R. Gill, "What is the Most Effective Way of Organizing the Number and Length of Class Periods and Length of School Day," National Association Secondary School Principals Bulletin, 44: 9, April, 1960.

[10]Abel and Gill, p. 11.

[11]Howard, p. 208.

schedules as they will have to be the foundation from which progress is measured. Much was said about the disadvantages of the conventional schedule, but no concrete evidence could be found to support the concept. If such schedules do have merit, they should be statistically supported. Little has been done to show a definite connection between a particular schedule and increased flexibility. Schools which have traditional patterns of organization are still modifying master schedules. Most scheduling programs, presently used in secondary schools, cannot be adapted to the variable structure schedule.[12]

SEMI-FLEXIBLE SCHEDULES

Reasons for Development

Today, educators are in the midst of re-examining the entire school program to see if ways can be found to prepare students to the fullest extent of their capabilities--but as school planners we have been rather unwilling actually to begin from the ground up. Too often proposed instructional modifications meet the response "it won't fit into the schedule" and the issue dies there. Modifications are what are needed, not the "all or nothing" approach. Some of the justifications cited for modifications are: to meet current school plant limitations, to meet a desire to change period length, to enable students to take more courses, to better use faculty talents, to permit

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[12]R. H. Anderson, "Organizational Character of Education: Staff Utilization and Deployment," Review of Educational Research, 34: 463, October, 1964.

modifications for psychological reasons, and to create instructional improvement and new means of teaching.[13]

A study in 11 Indiana schools, by D. W. Beggs, used a rating scale technique to show strategy of implementing a flexible schedule. Beggs concluded from this rating, that opposition was apparent in faculties when the flexible program was first implemented, but it almost disappeared after three years' use of the new schedule. He also found that the main reason principals supported the flexible schedule was that both teachers and students performed better.[14]

Some reasons given by Lobb for change to flexibility and which lead to greater teacher specialization were:

1. Psychological-- that is, change for students is necessary, changes in patterns of human development are necessary and now we know more about the learning processes than ever before.

2. Instructional-- that is, many new methods have been tried and tested and elaborated on--values have been set out.

3. Supplemental bases-- that is, to say we must go beyond conventionalism with all the ideas of expanded study brought into the high school.[15]

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[13]D. W. Allen and R. B. Moore, "Nothing Ventured, Nothing Gained," California Journal Secondary Education, 35: 92+, February, 1960.

[14]D. W. Beggs III, "A Study of the Implementation Strategy Employed by Selected Schools Using a Flexible Class Schedule," Dissertation Abstracts, 26: 6541.

[15]D. M. Lobb, "A Basis for First Steps in Flexible Scheduling," Journal of Secondary Education, 36: 369-369, October, 1961.

Types of Schedule Modifications

Various modifications were discovered in the review of literature, and the main ideas will be elaborated in the following paragraphs.

The most common semi-flexible schedule found seemed to be the "floating period." The 70-minute period has been under trial in several schools recently.[16] Administrators of Indiana and Michigan schools reported many 70-minute floating period schedules.[17] The administrators of Cobra Consolidated High School, Bayard, New Mexico;[18] Griffith High School, Griffith, Indiana;[19] Carver High School, Stephens, Arkansas;[20] and St. Paul High School, St. Paul, Nebraska[21] were among those reporting the use of the "floating period." (See Fig. 2 in Appendix, p. 49.)

Figure 2 shows a typical class schedule with the "floating period," which was used in St. Paul, Nebraska. All the other

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[16] Abel and Gill, p. 10.

[17] P. S. Harper, D. Parnell, and E. E. Oliver, "The Daily Schedule--Shorter Period, Longer Period, Variable Periods, or What?", National Association Secondary School Principals Bulletin, 45: 17, April, 1961.

[18] N. L. Haggerson and H. B. Smith, "The 70 Minute Period Schedule Contributes to More Effective Staff Utilization," National Association Secondary School Principals Bulletin, 46: 51, April, 1962.

[19] E. W. Bridges, "We Did Away With Study Halls," Nations Schools, 66: 67, September, 1960.

[20] E. B. Robinson, "A New Look at Scheduling In the Small School," National Association Secondary School Principals Bulletin, 44: 50+, March, 1960.

[21] Statement Summation by John Ringlein, telephone interview, April, 1970.

"floating period" schedules showed similar organization with modifications. For instance, Carver High School did not plan physical education into the regular rotating schedule, but students could arrange to get their physical education requirement by going one time per week during study time provided in the 70-minute class. Carver High School also deviated by having two 45-minute class periods in the regular day, one immediately after lunch and one the last period of the school day. These periods provided opportunities for students to take classes they otherwise could not take. These classes were referred to by Carver High School as enrichment classes.[22] The "floating period" moved in different directions in different schools. Griffith High School placed the first floating period at the bottom of the schedule and moved it diagonally upward. This meant the floating period was first on the last period on Mondays and moved one period back each day until it reached the first period on Thursdays.[23] St. Paul High School[24] and Cobra High School[25] each began their week with the floating period and moved one period out each day until the last period of the floating class met on Thursday.

The common occurrence in these two types of schedules was to have an activity period in the last period of the last day of the week. (See Fig. 2 in Appendix, p. 49)

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[22]Robinson, pp. 50-51.

[23]Bridges, pp. 67-68.

[24]Ringlein, interview.

[25]Haggerson, p. 51.

Some of the advantages cited for this type of schedule were:

1. It increased course offerings and made allowance for the offering of such courses as journalism, introductory speech, developmental reading, photography, community problems, advanced biology, science for the gifted and practical business courses. All of this was possible without an increase in the number of teachers.
2. Fewer discipline problems and interruptions were shown.
3. More effective and efficient use of the library was shown.
4. There was more efficient use of study time.[26]
5. More home study and greater student academic involvement were apparent.[27]
6. Better staff utilization was indicated.
7. Students gained more from their educational experience.[28]

All these advantages were based on the report of observation by the principal. No specific measures of any of these advantages were cited. If a controlled situation could be developed, or if an adequate measure could be made of the conventional system, it would be extremely interesting to see if these advantages could be shown to have statistical support.

Disadvantages cited were:

1. Students got too many credits for graduation, too soon.
2. Slow students became even more frustrated than they were under normal routine.
3. Scheduling was harder to do because of compactness created by the addition of the courses.

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[26]Bridges, pp. 67-68. [27]Ibid.

[28]Haggerson, p. 57.

4. Teacher preparation time is reduced when all teachers are put to maximum use.[29]

Some of the other types of semi-flexible schedules identified were: a rotating schedule used at Jay High School, Jay, Maine, where the classes were numbered and rotated on a sequential basis through all the periods of the school day.[30] (See Fig. 3 in Appendix, p. 50) This schedule would classify under the psychological reasons for changing schedules as cited before in this report. With the schedule providing for the same classes to meet different periods throughout the week, Lobb's criteria for change would be met.[31]

A two-period high school day was used by Edwin O. Smith High School, which was located on the University of Connecticut campus. In this 7-12 structure, a five-period, 60-minute period day was abandoned to go to what was referred to as a long increment plan in which classes met for 160 minutes once every three days, alternating to fall on Monday morning, Thursday afternoon, and Tuesday morning. Some classes would be scheduled this way, others for 80-minute blocks, and some all day, especially in the humanities subjects' area. Other classes would meet 220 minutes, particularly the sciences. Breaks in class periods were left to the discretion of the teacher. Alexander J. Plant, school Principal, stated that no data were available from the study of

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[29]Bridges, p. 110.

[30]D. B. Austin, W. French, and J. D. Hull, American High School Administration Policy and Practice (New York: Holt, Rinehart and Winston, 1962), p. 317.

[31]Lobb, p. 368.

the traditional schedule to use as criteria for comparison with this new system. Therefore, nothing existed with which this schedule could be compared.

The study conducted through Edwin O. Smith High School, showed that the schedule was not advantageous to students in gaining understanding of a subject; in amount of work covered; in efficiency of student study time; nor in discipline or grades reported for the students. The only advantage cited was that teachers' time was used more valuably, and in some subjects students made gains in insight - History and Home Economics in particular.[32] The measuring instruments used in the foregoing study were self-made appraisal tests classified as attitude tests, the validity and reliability of which were not established.

Wade N. Patterson, a research assistant in Educational Administration, Eugene, Oregon, cited a type of schedule which supposedly ranks between the conventional and the completely flexible or the modular plan. Patterson pointed out that this schedule may not be typical and that it deviates from the Carnegie unit approach. The schedule has a 50-minute class period base with classes meeting in Monday, Wednesday, and Friday blocks and Tuesday and Thursday blocks. Required classes met four times a week and double periods were allowed for laboratory classes other than science. Science classes met for five periods a week with all elective classes meeting three periods

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[32] W. Roby and M. Hayden, "An Experience with a Two-Period High School Day," Journal of Educational Research, 59: 217-218, January, 1966.

a week. This schedule allowed opportunity for team teaching as well.[33] (See Fig. 4 in Appendix, p. 51) The diagram of this schedule shows only that schedule for one particular grade level.

Harper, Parnell, and Oliver showed four other variations from the conventional schedule which could be classified as semi-flexible in nature. One of these was the lengthening of the school day and was developed in Sarasota County, Florida. The extra time in the school day was used to teach enrichment courses to supplement the learning of the students. Another idea expressed by these same authors was to block classes of a related nature together so teachers could plan their own flexibility. This type was developed in Dade County, Florida.

According to Harper et al., Beaverton, Oregon, High School began school for freshmen and sophomores one-half hour earlier and offered its required courses during the early period. School for the upper classmen started later in the school day. At the end of the day the schedule allowed for an extra period so that another enrichment class might be offered for the upper classmen. The under classmen were dismissed earlier which allowed the teaching staff to do more specialization for enrichment classes for the upper classmen. Golden High School, Jefferson County, Colorado, was reported by Harper et al., as having a schedule which included double periods every day, with different

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[33] W. N. Patterson, "Variable Period Scheduling - Another Curriculum Scheduling Alternative," National Association Secondary Principals Bulletin, 49: 68, October, 1965.

subjects being offered on alternating days.[34]

The American School Board Journal carried an article which stated that Beeville, Texas High School had an eight-period day with students required to take five subjects daily. This arrangement allowed the students to choose what they wanted to do in off-class time.[35]

D. L. Stillman reported San Marcos High School, Santa Barbara, California, as having a double-period schedule of 40-minute units of time. The school day consisted of seven academic periods plus a 40-minute guidance period. The guidance period also served as an activity and assembly period. The schedule defined some classes to meet for single periods all week, some three times per week on double periods, and others two times per week on double periods. The schedule was said to be observably better in the fields of science, industrial arts, home economics, and art, with more valid success in English and social studies. Success in classrooms was said to relate to the ability of the students.[36] Measuring instruments were not cited, but indications show improvement was strictly observable.

M. F. Noall reported Salt Lake City, Utah Schools as employing three types of schedules. Roosevelt High School used a class schedule with double periods one day, followed by single

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[34]Harper, Parnell, and Oliver, pp. 13-16.

[35]"A Successful 8 Period High School Day," The American School Board Journal, 150: 78-79, April, 1965.

[36]D. L. Stillman, "Experimentation With a Double Period Schedule at San Marcos High School," California Journal Secondary Education, 35: 108-110, February, 1960.

periods the next two days and a one-half time period on the last day of the week. Walquist Junior High School had a core schedule approach and Hurricane High School was reported as scheduling split classes back-to-back along with a class related to it so teachers could arrange their own flexibility.[37] Two related classes which might be offered in this arrangement were English and history.

Cordry indicated that Fremont Union High School, Sunnyvale, California, had a class schedule based on double periods for one class on Mondays and Wednesdays and another class of double periods on Tuesdays and Thursdays. Both sessions met in regular schedules on Fridays.[38]

A similar double-period schedule was used at Haddam High School, Haddam, Kansas, Unified School District 221. This schedule operated with double periods for every class with two classes meeting in the morning sessions and an activity-music period and one other class in the afternoon session. This allowed students to complete a course in one semester and take six subjects per school year.[39]

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[37]M. F. Noall, "The Need for and Effects of Schedule Modifications in Walquist, Roosevelt, and Hurricane High Schools," California Journal Secondary Education, 35: 108-110, February, 1960.

[38]V. Cordry, "A More Flexible Schedule at Fremont," California Journal Secondary Education, 35: 115-116, February, 1960.

[39]Observation of system, directed by Superintendent Ed H. Stehno, U.S.D. #221, Mahaska, Kansas, September, 1967 to May, 1968.

Tidrick and Wright wrote that John Marshall High School, Rochester, Minnesota, created flexibility by offering courses before the regular school day and by grouping classes of a like nature (example: history and English) and used team teaching.[40]

In summary, the semi-flexible schedule varied greatly in form. In choosing one form for a particular school, careful analysis of the one under consideration would have to be made considering the organization of the school to which the schedule is to be applied.

Advocates of Flexible Scheduling

The move to the semi-flexible schedule has been made for a number of reasons. One which influences many modern educational administrative plans was cited by L. W. Kindred, professor of Educational Administration, Temple University, when he said: "research findings and personal experience have convinced many secondary school principals that study halls should be sharply reduced or eliminated all together."[41]

A strong advocate of flexibility is J. Lloyd Trump. Some of the above-listed schedule types are mentioned briefly in his writings.[42] Another advocate of flexibility is Dr. James B.

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[40]K. A. Tidrick and R. F. Wright, "What are Some Imaginative Approaches to Good Scheduling Practices for School and Student?", National Association Secondary School Principals Bulletin, 44: 47, April, 1960.

[41]L. W. Kindred and C. C. Stanard, "How Have Schools Met the Problem of Eliminating Study Halls?", National Association Secondary School Principals Bulletin, 44: 190, April, 1960.

[42]J. L. Trump, "Flexible Class Schedules," California Journal Secondary Education, 35: 95, February, 1960.

Conant, who pointed out reasons for flexibility in his book The American High School Today. Conant reasoned that if high schools do not have some form of flexibility, the academically talented student can not elect the wide academic program recommended and at the same time elect to take music, art, and the practical courses.[43]

THE COMPLETELY FLEXIBLE SCHEDULE

Modular Development

The last design of a schedule which will be covered in the review is called the modular schedule. A great deal has been written in recent years on this relatively new innovation. This type of schedule is what this report will call complete flexibility. The possibility of developing a flexible high school schedule to serve educational needs of pupils has become a reality with the advent of electronic data-processing procedures and high-speed computers.[44] According to Bush and Allen, the foundation of the modular-type schedule was developed under Professor Robert V. Oakford of Stanford University.[45]

In order to get an understanding of the modular schedule, definition must be made of the types of instruction used under

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[43] J. B. Conant, American High School Today (New York: McGraw-Hill Co., 1959), p. 65.

[44] R. N. Bush and D. W. Allen, A New Design for High School Education: Assuming a Flexible Schedule (New York: McGraw-Hill Co., 1964), p. 5.

[45] Ibid., p. 5.

this schedule. Bush and Allen defined these well.

> Independent and individual study are those forms of instruction in which the student engages in activities independent of other students and in large part independent of immediate teacher direction. This study may take place in a library, resource center or laboratory. Small group instruction is the small class type situation in which direct 'face to face' group interaction occurs. The small group exists for discussion of ideas created by the large group. It creates close, teacher-pupil relationship and its informality brings out the ideas of the student, and in the process causes the student to think. Large group instruction is the design which involves large numbers of students and places primary emphasis on presenting materials to great numbers with a minimum of interaction. Laboratory instruction is what the name implies; a physical facility situation where the necessary tools exist for the student to work independently or in small groups, at applying ideas created from large group instruction.[46]

Moving Toward Flexibility in Scheduling

The comprehensive high school of America appears to be the answer for combining students who are college bound with those who are vocationally bound and setting schedule objectives to meet their needs.[47] Experimentation with television, tape recorders, teaching machines, and with other results of modern technology is opening new vistas for enhancing learning. While each of these avenues appears to be promising, they can not be fitted into the school of today unless a change is made.[48]

The Carnegie unit and state regulations built around it have caused a lockstep approach to development in the educational process. If we are to make sense in scheduling, these points must be considered:

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[46] Ibid., pp. 35-37.

[47] Ibid., pp. 347-348.

[48] Ibid., p. 348.

1. Curriculum schedules should be designed in a sensitive, objective way to meet a prescribed individual need.

2. Requirements should be flexible enough to be adjusted to by each student.

3. Some subjects are better taught in longer time periods, others in shorter periods.[49]

When discussing the use of flexible scheduling with teachers, these points are important:

1. If you could have all the pupils continuously throughout high school in your subject, how would you arrange it?

2. What would your aims be?

3. What different groups would you provide for?

4. Would you use the same pace for all or adjust aims to levels and interests of pupils?

5. What size classes would be most desirable?

6. What content would be most useful?

7. How would you evaluate the results?[50]

The Flexible Schedule

The modular schedule is constructed around pockets of time, ranging from 15 minutes as suggested by Bush and Allen, in A New Design for High School Education, to 30 minutes as practiced by Sebewaing High School, Sebewaing, Michigan.[51] Mods may meet for only one mod of short duration. Ridgewood High School, Norridge-Harwood Heights, Illinois, meets 20-minute mods with

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[49] Ibid., p. 349.

[50] Ibid., pp. 349-350.

[51] W. D. Dodge, "You Might Be Class C But You Can Be Flexible; We Are!", Michigan Education Journal, 44: 21-22, January, 1967.

large groups meeting one to two mods and small groups meeting one to four mods, depending on course outline and projects established at the outset of the course.[52] Henrico County High School, Henrico, Virginia, meets 16-minute mods with sessions running one to four mods and differing daily.[53] Sebewaing, Michigan operated on a 30-minute mod with classes meeting one to four mods, depending on the nature of the class.[54] E. J. Anderson reported that Wayland High School operates an instructional program of one large group, two medium group, and one small group sessions weekly.[55] Bush and Allen reported that their suggested mods are 15 minutes and run from that time to three hours, depending on the nature of the class.[56] Newton, Massachusetts High School used 30-minute mods and ran up to four mods daily.[57] The plans vary, but common to number of mods per day is that of San Angelo, Texas High School, with 13 mods daily.[58]

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[52]J. E. Smith, "Flexible Scheduling at Ridgewood High School," Journal of Secondary Education, 36: 366, October, 1961.

[53]N. G. Tubbs, "No Bells Ring, Henrico County High School, Henrico, Virginia," Virginia Education Journal, 61: 21, February, 1968.

[54]Dodge, p. 21.

[55]E. J. Anderson, "Wayland High School Flexible Scheduling," Journal Secondary Education, 36: 354, October, 1961.

[56]Bush and Allen, p. 185.

[57]H. Howe II, "Experimentation at Newton," California Journal Secondary Education, 35: 117, February, 1960.

[58]D. Sands, "Secondary School Schedule A Break With Pattern," California Journal Secondary Education, 35: 131, February, 1960.

J. Lloyd Trump suggested that 18 hours be spent weekly in large groups, six hours in small groups, and 12 hours in individualized study.[59] The trend showed mods to average 30 minutes.[60] Williamsville Central High School, Williamsville, New York, used the 30-minute mod with classes meeting in two mods on Mondays, two on Wednesdays, and one each on the remaining days.[61] In the Flossmoor Public Schools, Flossmoor, Illinois, daily schedules are changed each month by the students. The content of the schedule remains the same, but the periods are changed to various time slots in the day.[62] For those desiring a slow change to the modular schedule, ideas on a year-by-year transition were cited by J. D. Laurtis, Principal of Cubberly Senior High School, Palo Alto, California.[63] The major work on the flexible schedule appeared to be the work of Robert N. Bush and Dwight W. Allen, professor and assistant professor of educational administration, respectively, at Stanford University.

Values Through Flexible Scheduling

Educational values to be achieved through flexible scheduling are:

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[59] J. L. Trump, Images of the Future (Chicago: Rand McNally Co., 1961), pp. 23-27.

[60] S. L. Besvinick, "Scheduling Problems: How Many? How Long?", Clearing House, 39: 425, March, 1965.

[61] D. Cramer et al., "Five Flexible Schedules That Work," Nations Schools, 82: 28-29, August, 1968.

[62] Ibid., p. 31.

[63] J. D. Laurits, "Those First Steps," California Journal Secondary Education, 35: 111-113, February, 1960.

1. All students should have continuous, rigorous study in breadth and depth in all basic subject matter fields throughout the six secondary grades.

2. In each subject area, several groups of students can be identified and can be given a discrete program of studies.

3. Each subject properly taught will include four basic types of instruction so mentioned at the outset.

4. Adequate instruction in each subject matter field required senior teachers who are assisted by less highly trained members of the instructional and supporting staff.

5. Class size, length of class meeting, number and spacing of classes should vary with types of classes and levels of ability and interest of the pupils.

6. Data processing equipment will almost have to be used in making the flexible schedule.[64] (Figure 5 in Appendix, p. 52 shows a daily student schedule and from this, one can readily see the complexity and therefore, the near impossibility of hand developing the modular-type schedule.)

Advantages of the modular system cited include:

1. Better teacher preparation for each class.

2. Students use resources better.

3. Cooperation of students was better.

4. Better instructional methods prevailed.

5. More enrichment opportunities existed for students.

6. Easier for first year teacher orientation.

7. Ill teachers were not missed as badly.[65]

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[64] R. N. Bush and D. W. Allen, "Flexible Scheduling for What?", Journal of Secondary Education, 36: 350-353, October, 1961.

[65] R. Johnson and D. M. Lobb, "The Transformation of the Sacred Secondary School Schedule," California Journal Secondary Education, 35: 104, February, 1960.

Self-made reaction tests were used in the Jefferson County, Colorado High School to measure some of these factors, the validity of which was not stated.

Other advantages cited were:

1. Pupils had more time to learn.
2. More students did exploratory learning.
3. Students made greater use of the library.
4. Discipline problems were reduced.
5. Overall book circulation was up.[66]
6. Laboratory classes had more time for proper use.
7. Students had to develop more individual responsibility for success.
8. Each day was different.[67]

This new design has been proposed to meet the central educational challenges of these times which are the insurance of essential education for all young citizens and the creation of the opportunity for each student to develop his unique talents at a maximum. These requirements mean an accomplishment of higher purpose than has ever been required in the past.[68]

It appears that even though the modular schedule has been used for some time, little research has been done to prove its merits.

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[66]Bush and Allen, A New Design for High School Education, p. 186.

[67]Dodge, p. 22.

[68]Bush and Allen, p. 186.

Summary

Various innovations in schedule types were found in analyzing the literature on the topic. Scheduling undoubtedly is in a state of change.

As far as specific research is concerned as to the degree of flexibility of a certain type of schedule and the merits of each to the student, little was found.

Trends in techniques of scheduling showed a definite swing toward flexibility but in most cases the process was slow. The move to increase flexibility has been led by Stanford University and its School of Education and more specifically Dwight Allen, Robert Bush, and Robert V. Oakford.

The conventional schedule is still used in most schools but the trend is to loosen it somewhat and move to a semi-flexible schedule. The semi-flexible schedule, as classified by this writer, seemed to be characterized by a "floating period." This schedule is operated to keep classes from meeting the same period each day and also to provide the opportunity for each student to enroll in an extra class.

The modular schedule has been described in the Bush and Allen book: A New Design for High School Education and in J. L. Trump's book: Images of the Future. Even though the modular schedule is only a decade or so old, many schools were found to be using modifications of it and to recognize its advantages.

Although the writer holds the opinion that the rural or semi-rural school in which the following study will take place

will have little modular scheduling, the overall aim is to find what is being done and apply it to the rural high school.

Section 3

METHODS AND MATERIALS

Description of Population

The population of this study was the small Class "C" High Schools in the State of Nebraska for 1970-71. The number of students in schools surveyed, ranged from 83 to 162. This enrollment size was established by the Nebraska School Activities Association, 216 North 11th St., Lincoln, Nebraska, 68508. This number and size of such schools fluctuate each year as a result of school reorganization and as a result of the need for the Association to keep the schools balanced geographically.

Sample Selection

The sample of this population was chosen by assigning each school in the small Class "C" category a number and using the Table of Random Numbers to select one-half of the total number of schools. There were 64 schools in the category and 32 were sampled.

Design and Procedure

A descriptive questionnaire requesting a copy of the current daily schedule, the previous daily schedule, the credits given for graduation, and the length of time the schedule had been employed was sent to the administrator responsible for the daily schedule in the schools studied. After the sample was chosen, the names of the administrators to whom the request for

information was sent were obtained from the Nebraska State School Directory. This publication is available each year, around November 1, from the Nebraska State Department of Education, State Capitol, Lincoln, Nebraska. Each administrator was asked to refer the request to the person responsible for scheduling in his school.

Description of Measures and Analysis Procedures

The questionnaire and request for information are shown in the Appendix, pages 54 and 55. The questionnaire was tested for reliability and validity at the first meeting of the Southern Frontier Conference. This meeting had in attendance, superintendents and principals from schools equivalent to those sampled.

The data were analyzed as follows:

1. The mean, median, and mode of number of minutes in class periods were established.
2. The mean, median, and mode of number of minutes in activity periods per school week were established.
3. The mean, median, and mode of minutes involved in passing time between each class were established.
4. The mean, median, and mode of minutes in lunch periods per school day were established.
5. The mean, median, and mode of number of class periods per school day were established.
6. A relationship was established between minutes spent in class per school year or semester and credits given.
7. A relationship between type of schedule, as defined by the writer, and the number of minutes in class periods, number of activity minutes, and the number of minutes between classes were made. A bivariate frequency table was established and the Chi-Square Test of Independence applied to determine whether there was any relationship between the dependent variable schedule design and the independent variables: class minutes, activity minutes, and minutes in passing.

8. Trends in scheduling were derived, using the results of the foregoing information and through a comparison of previous schedule design and current schedule design.

9. A comparison was made of the schedule designs found and those identified in the literature.

Section 4

FINDINGS OF THE STUDY

Thirty-two samples were obtained from the original 32 requests made. Twenty-eight responses were received on first request, two more on the second letter, and the last two on more than two letters.

Class Minutes

Responses to the number of minutes in class periods derived from schedules received revealed that one-half of the schools had 40- to 55-minute class periods. Four schools, or one-eighth of the sample, had floating period schedules, the latter being defined by this writer as semi-flexible schedules. One-fifth of the samples had combination time lengths of 40- and 50-minute periods. The mean number of minutes in class periods was 54.6. The median and mode number of minutes was 55.0.

Activity Minutes

The results obtained from the schedules in regard to the question of minutes in activity periods produced minimal results. Eighteen schools were indicated to set aside no particular time for activity periods. The majority of the school schedules indicated that these meetings were taken from regular class time when they were needed. One school was indicated to set aside one hour per week for an activity session. Of those schedules showing activity periods, the mean number of minutes was 39.8, the median

was 42.0 minutes, and the mode was 40.0 minutes. The most common situation as to time for activity periods was reported to be at the day's end or in the early afternoon, although one school administrator indicated that the school's day started with a short activity period.

Passing Minutes

The amount of time spent in passing time between classes was the most concrete material derived from schedules made available as a result of the questionnaire. Three school schedules indicated that five minutes were provided for passing time, eight indicated three minutes' passing time, 18 indicated two minutes, and two indicated two and one-half minutes for passing time. All of this material was taken randomly without consideration of campus set-up, building construction, etc. The mean amount of time spent in passing between classes was 2.5 minutes. The median and mode were 2.0 minutes.

Lunch Periods

The responses to the question of lunch periods which came from the analysis of schedules showed only one school to have an open noon hour; the remaining 31 had closed campuses. The school with the open campus allowed 59 minutes for its noon-hour program while the minutes for the lunch period in the closed campus schools ranged from 15 to 44. The mean number of minutes in the lunch period was 31.7; the median was 30.0 minutes and the mode also was 30.0 minutes.

Class Periods Per Day

Twenty school schedules showed seven class periods per day; three showed nine period days; seven scheduled eight period days; and two showed six periods per day. Again, this information was collected without any information as to building type, where the school was located, etc. The mean number of periods was found to be 7.4 while the median and mode were 7.0 periods per day.

Relationship of Credits Given to Time Spent

Only eighteen school administrators responded with complete information as to credits given for courses shown on the daily schedule. The information which was received indicated a positive relationship. This relationship would mean that all schools, which reported, gave ten credits towards graduation for each class or activity which met daily or equivalent to daily for a class period of 40 to 80 minutes.

Chi-Square Test of Class Minutes and Schedule Types

BIVARIATE TABLE OF CLASS MINUTES

	Minutes			
	40-45	50-55	60-82	
Conventional	5 /4.2	22 /19.4	0 /3.4	27
Semi-Flexible	0 /0.8	1 /3.6	4 /0.7	5
	5	23	4	32

A bivariate table was made of the number of minutes in class periods and the two types of schedules, as defined by the writer. The Chi-Square Test of Independence was applied to the 2X3 table and tested at the 0.10 level. The results showed the calculated statistic as 22.042 and the tabled value at df = 2 at 4.605. The tabled value being smaller, indicated there was a relationship between schedule type and minutes in class periods.

Chi-Square Test of Passing Minutes and Schedule Types

BIVARIATE TABLE OF CLASS PASSING MINUTES

	Minutes			
	1-2½	3	5	
Conventional	17 / 18	7 / 7	3 / 2	27
Semi-Flexible	4 / 3.3	1 / 1.3	0 / 0.5	5
	21	8	3	32

A bivariate table was made of minutes allowed in passing time and schedule types as defined by this writer. The Chi-Square Test of Independence was applied to the 2X3 table and tested at the 0.10 level. The results showed the calculated statistic as 1.273 and the tabled value at df = 2 at 4.605. The tabled value being larger, indicated there was no significant relationship between schedule type and minutes used in passing to classes.

Chi-Square Test of Activity Minutes and Schedule Types

BIVARIATE TABLE OF ACTIVITY MINUTES

	Minutes			
	None	30 & under	Over 30	
Conventional	15 /15.2	2 /2.5	10 /9.3	27
Semi-Flexible	3 /2.8	1 /0.5	1 /1.7	6
	18	3	11	32

A bivariate table of minutes in activity periods and schedule types, as defined by this writer, was made. The Chi-Square Test of Independence was applied to the 2X3 table and tested at the 0.10 level. The results showed the calculated statistic as 0.958 and the tabled value at df = 2 at 4.605. The tabled value being larger indicates there was no significant relationship between schedule type and minutes in activity periods.

Trends in Scheduling

Administrators of 18 of the 32 sampled schools indicated that their school had been on a conventional schedule the previous school year and planned to stay on the same schedule next year. Schedule designers of five schools indicated their schools had been on a conventional schedule previously and had only either added or subtracted a number of class periods this year. The majority of the schools indicated a reduction in number of class periods. The school which was indicated to have added class periods also indicated that the period length was decreased to

40 minutes. It was also indicated this had been done to meet increasing needs of growing numbers of students. Administrators of three schools indicated their schools had previously used a conventional schedule, but had moved to a semi-flexible schedule type this year. One school administrator indicated his school was on a semi-flexible schedule last year and used the same this year and planned to do the same next year. Administrators of five schools indicated their schools were on a conventional schedule now, but were planning forms of semi-flexible schedules for next year. The schedule plans ranged from floating period to independent study and exploratory programs. One administrator indicated his school had gone to a floating period, semi-flexible schedule at the semester and liked it even though the school was going through the transition stage with all its problems.

All schools which reported on the item relating to credit gave ten credits towards graduation for a course which met daily or equivalent to daily for one school year, for minutes ranging from 40 to 80.

Eleven school administrators provided the number of hours required for graduation. Four of the reports indicated their school required from 160 to 165 units; two required 170 units; three required 180 to 190 units; and two required 200 units.

None of the schools responded with modular schedules in the sampled small Class C Nebraska Schools, but a few responses mentioned the idea had been considered but that facilities and staffs were not adaptable to such a schedule.

One superintendent indicated that even though his school was relatively small, computerized scheduling was coming, and hand scheduling soon would be impossible. The most common type of schedule found in small Class "C" Nebraska High Schools, was the conventional schedule, as described rather frequently in the literature. The data gathered indicated that new ideas were slow to be accepted in this type school. The most common type of semi-flexible schedule used was the same as that identified in the literature, this being the "floating period" schedule. The most common type schedule being used was one that included the 70- to 80-minute period meeting four times weekly. This type was basically similar to that used by St. Paul, Nebraska, and discussed in the literature. Other ideas found to be in use were schedules which recognized independent and exploratory study. Independent study was discussed in the literature under modular scheduling.

Section 5

SUMMARY AND CONCLUSIONS

Conservative attitudes, limited facilities, lack of finances and staff were reasons indicated, in unsolicited responses, for there not being more flexibility in small Class C Nebraska High Schools.

The schedules provided showed more flexibility than this writer anticipated. The greatest amount of flexibility was shown in schools nearer metropolitan areas and also in those schools so far remote that it was necessary to be innovative to meet the growing needs of the children in the district.

The number of minutes in class periods averaged 54.6. This figure was basically what the writer assumed, taking into consideration the foregoing information. Very little deviation was found from the 42- to 50-minute period discussed as the conventional schedule design in the literature.

The number of minutes in activity periods per week was found to vary greatly. Eighteen of the 32 sampled schools set aside no particular time for activities, but rather took the time when needed from the regular class schedule. Those administrators whose schedules reported an activity period as such, indicated an average time of 39.8 minutes per week.

The minutes spent in passing to and from classes averaged 2.5. The greatest amount of time given was five minutes as compared to the shortest of two minutes.

Lunch periods basically were found to be in closed campuses with the average number of minutes being 31.7.

The number of class periods per day ranged from nine to six, with the mean figure being 7.4.

This study revealed that a relationship existed between schedule type and minutes in class periods, but no relationship existed between passing and activity minutes and schedule type.

This information was determined by establishing a bivariate table of each and applying the Chi-Square Test of Independence.

The study showed that very little change is being made from the conventional schedule in the small Class C Nebraska High School. Where change is taking place, it seems to be semi-flexibility. The most common modification is the "floating period" schedule similar to that used by St. Paul, Nebraska, and discussed in the review of the literature.

Administrators who reported on credits given for graduation showed that ten credits were given for graduation for all those courses meeting daily for one school year for 40 to 80 minutes.

Administrators of 11 schools indicated the school's hour requirement for graduation. The range was from 160 to 200 hours, with indications that this figure was being increased.

Modular scheduling did not exist in the small Class C Nebraska High Schools sampled, but some administrators indicated the concept had been considered.

Semi-flexible schedules seemed to be the only deviation from the conventional schedule.

A follow-up to show the degree of change in schedule design of these same 32 schools should be undertaken within the next five years.

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APPENDIX

Instructor	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8
	8:30-9:25	9:28-10:23	10:26-11:21	11:24-12:19	12:19-12:45	12:48-1:43	1:46-2:41	2:44-3:39
I	Subject A	Subject B	Subject C	Study Hall	L	Preparation	Subject F	Study Hall
II	Study Hall	Subject D	Subject E	Preparation	U	Subject G	Subject H	
III	Preparation	Study Hall	Subject M	Subject N	N	Subject O	Subject P	
IV	Subject I	Preparation	Study Hall	Subject J	C	Subject K	Subject L	
V	Subject Q	Subject R	Subject S	Subject T	H	Study Hall	Preparation	
VI	Subject U	Subject V	Preparation	Subject W		Subject X	Study Hall	

ACTIVITY PERIOD

FIGURE 1

Conventional Schedule

Period length varies from forty-two (42) minutes to fifty-eight (58) minutes, depending on state requirements.

Example shows a fifty-five (55) minute period. Each student must take a class or study hall each period of each day.

Instructor	Period 1	Period 2	Period 3	Period 4	Period 5
	8:30-9:40	9:45-10:55	11:00-12:00	12:45-1:55	2:00-3:10
I	B	C	C	C	C
II	D	B	D	D	D
III	E	E	B	E	E
IV	F	F	F	B	F
V	G	G	G	G	Activity Period

FIGURE 2

"Floating Period Schedule"

No study halls are used--study time occurs in seventy (70) minute blocks. Example shows a schedule with only five (5) features but can be adjusted to faculty number and subject offering requirement number.

Lunch break can be adjusted to preference. Example shows a 12:10-12:40 block.

Instructor	Monday	Tuesday	Wednesday	Thursday	Friday
B	Activity Period	6	5	3	2
C	1	7	6	4	3
D	2	1	7	5	5
E	3	2	1	6	5
F	4	3	2	7	6
G	5	4	Activity Period	1	7

FIGURE 3

Jay, Maine, High School Schedule

Each class meets four (4) times per week with the school operating on a six (6) period day.

:	Monday	:	Tuesday	:	Wednesday	:	Thursday	:	Friday
8:00- 8:50	A		Library		A		Health		A
8:55- 9:45	B		B		B		Journalism		B
9:50-10:40	C		C		C		C		C
10:45-11:35	D		D		D		C		D
11:40-12:30	X		X		X		X		X
12:35- 1:25	E		Library		E		E		E
1:30- 2:20	F		Music		F		Music		F
2:25- 3:15	G		Guidance		G		Lecture Presentations		G

FIGURE 4

Patterson Schedule

A--F--G are elective classes (Physical Education--Economics--Foreign Language)
B--D--E are required courses (English--Mathematics--History)
C-- is a science laboratory class
X-- is lunch

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	IS, T, or A	IS, T, or A	IS, T, or A	IS, T, or A	IS, T, or A
2	G (LG)	G (IS)	G (LG)	G (IS)	G (LG)
3	FL Lab. 4	IS	FL Lab. 4	PE (LG) 4	FL Lab. 4
4	FL (SG) 2	IS	SS (LG) 4	IS	SS (LG) 4
5	Sci. (LG) 3	Sci. (Lab) 3	Sci. (LG) 3	Sci. (SG) 3	Sci. (SG) 3
6	PE (Lab) 4	Sci. (Lab) 3	PE (LG) 4	Sci. (SG) 3	PE (Lab) 4
7	PE (Lab) 4	PE (LG) 4	PE (LG) 4	PE (SG) 4	PE (Lab) 4
8	IS	IS	IS	IS	IS
9	L	U	N	C	H
10	Math (LG) 1	Math (Lab) 1	Math (LG) 1	Math (Lab) 1	Math (LG) 1
11	Engl. (Lab) 3	FL (Lab) 4	Engl. (SG) 3	FL (Lab) 4	FL (SG) 4
12	Engl. (Lab) 3	Engl. (LG) 3	IS	Engl. (Lab) 3	FL (SG) 4
13	Arts (LG) 3	SS (SG) 4	SS (Lab) 4	Engl. (Lab) 3	IS
14	Arts (LG) 3	SS (SG) 4	SS (Lab) 4	SS (SG) 4	Arts (LG) 3
15	Arts (LG) 3	SS (SG) 4	SS (Lab) 4	SS (SG) 4	Arts (LG) 3
16	SS (SG) 4	IS	SS (Lab) 4	SS (SG) 4	Arts (LG) 3

FIGURE 5

FIGURE 5 (cont.)

Individual Student Modular Schedule
for 10th Grade Student

T = Transportation

A = Activities

IS = Individual Study

G = Glass, required

FL = Foreign Language

PE = Physical Education

SS = Social Studies

Sci. = Science

Engl. = English

QUESTIONNAIRE

School Name _____

Administrator _____

Title _____

Please include a copy of your present daily schedule.

Please indicate on this schedule the credits you give towards graduation.

When was this basic design adopted?

____ a. the first year of operation

____ b. one year ago

____ c. two or three years ago

____ d. four to six years ago

____ e. seven to ten years ago

____ f. more than ten years ago

Would you please send, if possible, a copy of your previous schedule? If this is not available, would you please briefly describe what was used? A xerox or photocopy of any type would be satisfactory.

LETTER OF TRANSMITTAL

901 East B
McCook, Nebr. 69001
November 25, 1970

Superintendent of Schools

Nebraska

Dear Supt.

I am a student in graduate study at Kansas State University, Manhattan, Kansas, and Secondary Principal of Republican Valley Schools, Indianola, Nebraska.

In order to complete the studies for an advanced degree I must complete a report which will be a study of scheduling practices in small Class C schools in the State of Nebraska.

Would you please direct this letter to the administrator in your school in charge of scheduling?

I would greatly appreciate a response in the enclosed self-addressed envelope.

Thank you very much.

Educationally yours,

Larry M. Lindquist

Enc.

A STUDY OF SCHEDULING PRACTICES IN SMALL CLASS C NEBRASKA HIGH SCHOOLS, 1970-71

by

LARRY M. LINDQUIST

B. S., Kansas State University, 1965

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1971

The purpose of this survey was to find information in regard to schedule designs and features of daily schedules employed in the small Class C Nebraska High Schools for the school year 1970-71.

Questionnaires requesting a copy of the current daily schedule, the previous daily schedule, the credits given for graduation, and the length of time the schedule had been employed were sent to the administrator responsible for the daily schedule in 32 of the 64 schools which made up the population of the small Class C Nebraska High Schools.

The number of minutes in a class period, in an activity period, in lunch periods, and in passing to and from classes was recorded from each of the schedules provided. The mean number of minutes in a class period was found to be 54.6. The mean number of minutes in an activity period was found to be 39.8 and the mean minutes in passing to and from classes was 2.5. The mean lunch period was found to be 31.7 minutes and closed.

Trends in scheduling, in the size school under study in this report, were made by comparing the current design with the previous design as indicated by the reporting administrators. Schedule design was established by this writer as conventional, semi-flexible, or modular. The trend established showed that the majority of schools operated with the conventional schedule. Indications of change were toward a semi-flexible schedule which was referred to throughout the paper as a "floating period" schedule.

No relationship was found to exist between the factors of minutes in activity periods and minutes in passing time between classes and schedule design, but some relationship existed between minutes in class periods and schedule design.

All respondents did not contribute information to the item on credits given a course for graduation, but those who did contribute this information reported that 10 credits were given for each course which met daily for minutes ranging from 40 to 80.

Graduation unit requirements ranged from 160 to 200, with an indication that this figure would increase.

A follow-up of this survey of the same schools should be made at a later date to see if additional changes had taken place.