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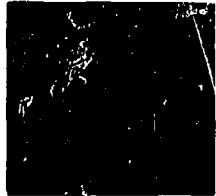
**ABSTRACT**

This seminar was a thinking, writing, idea-generating conference ("think-tank") aimed at producing ideas that would be helpful to principals presently implementing a flexible modular schedule and to those contemplating such scheduling for the near future. Participants agreed that flexible scheduling cannot be considered seriously except in combination with other closely related innovations as it is only one item within a cluster of interdependent, interrelated innovative practices. (Author/MLF)

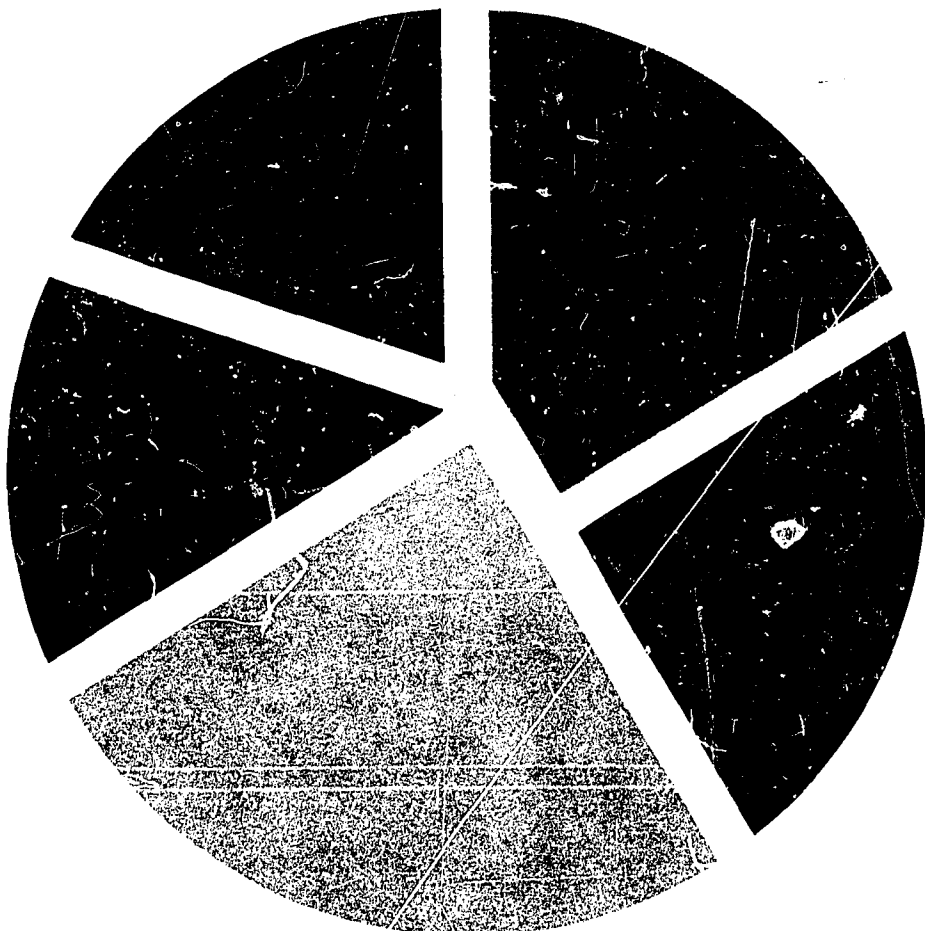
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# THE FLEXIBLY SCHEDULED SCHOOL<sup>OF</sup> 1980



A REPORT OF  
THE NATIONAL SEMINAR ON MODULAR FLEXIBLE SCHEDULING



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# A REPORT OF

# THE NATIONAL SEMINAR ON MODULAR FLEXIBLE SCHEDULING

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"The flexibly scheduled school is not an educational objective"

Scott Richardson

"We must learn to treat time in a school day as a resource . . . The master schedule must be controlled by teachers and students."

Gardner Swenson

"The flexibly-scheduled school of the 80's will have a differentiated staff and a well designed system of continuous in-service education for this staff. The principal will become more a facilitator in terms of administrative organization and communication and less an oracle of all wisdom."

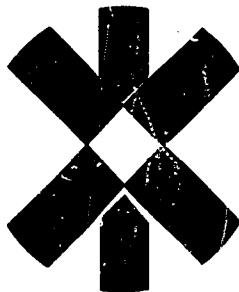
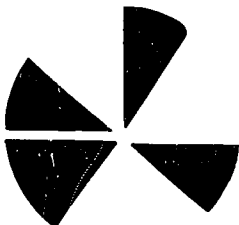
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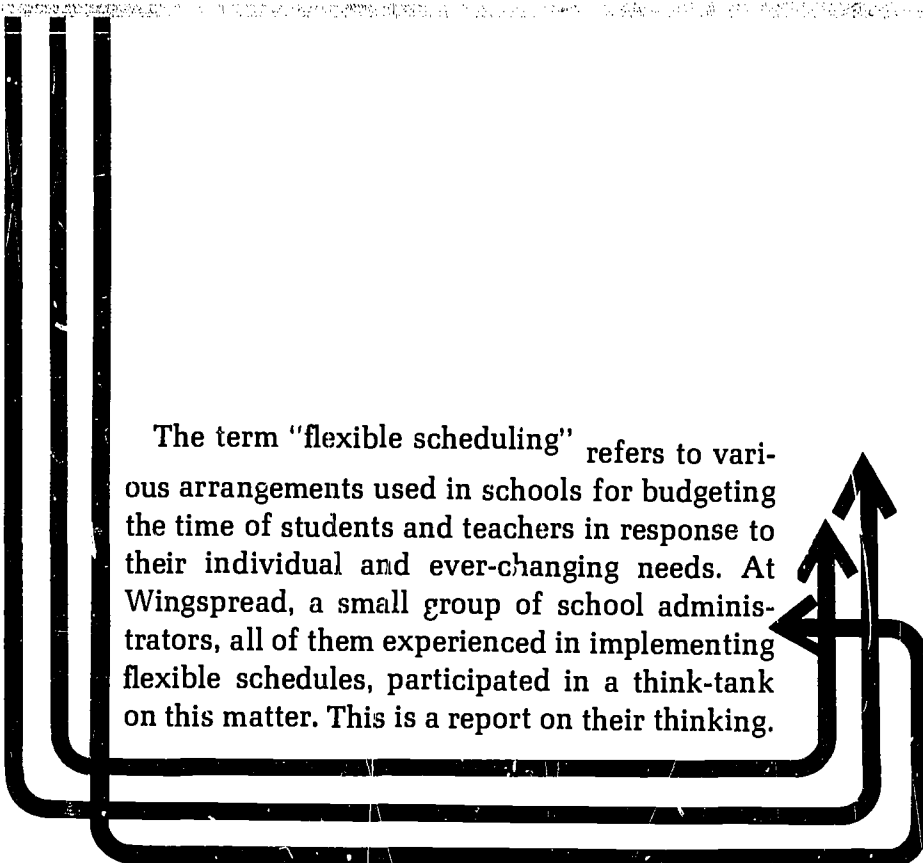
"A fixed flexible schedule is just as rigid and undesirable as the traditional schedule."

Spencer Wyatt

"In talking about change, five percent of the teachers I deal with don't want any. Ninety-five percent don't know how. The alarming thing is that the observable behavior of both groups is the same."

Joseph Bechard





The term "flexible scheduling" refers to various arrangements used in schools for budgeting the time of students and teachers in response to their individual and ever-changing needs. At Wingspread, a small group of school administrators, all of them experienced in implementing flexible schedules, participated in a think-tank on this matter. This is a report on their thinking.

**The seminar set two major objectives:**

- 1.** To cause some of the nation's most experienced secondary school principals to plan the desirable next steps to be taken in the young but rapidly developing flexible scheduling movement, and
- 2.** To stimulate innovative schools to launch pilot projects in flexible scheduling utilizing some of the new ideas to be generated at the seminar.

The seminar was a thinking, writing, idea generating conference, not a conference devoted to an exchange of experiences or an in-service education session for the participants. It was anticipated, however, that the report of the discussions would contain ideas which will be helpful to principals presently implementing a flexible modular schedule and to those contemplating such scheduling for the near future.

Seminar participants quickly agreed that flexible scheduling cannot be considered seriously except in combination with other closely related innovations. Flexible scheduling, it appears, is only one item within a cluster of interdependent, interrelated innovative practices.

# FLEXIBLE SCHEDULING AND OTHER INTERRELATED INNOVATIONS

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The Seminar concluded that **the success of any one practice in the cluster depends to a large extent on the success of all the others.**

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In schools which utilize the prominent "Stanford-type" computer-built modular schedule, for example, students typically find that 30% to 50% of their time is unscheduled. A conventionally designed school building cannot accommodate so many unscheduled students. If a school is to utilize such a flexible schedule, new facilities must be constructed or existing facilities modified. Otherwise, appropriate space cannot be made available for the independent, study-type activities which flexible scheduling makes possible. Even with appropriate facilities, however, such activities are not assured. They will not occur unless teachers are trained and expected to stimulate and guide students' independent study activities and until the curriculum provides for self-pacing, depth, and quest activities. It is simply not meaningful to consider the problems associated with unscheduled time for students without also considering facilities, teacher competencies, and curriculum.

The seminar participants approached their planning and idea-generating responsibilities by considering three major questions. These questions; which occupied most of the thinking, writing, and discussing time of the group; were designed to lead group members to make carefully considered suggestions for new pilot projects, a major objective of the seminar. **The three questions were:**

**1.**

What is the present status of the flexible scheduling movement?

- A. What has been accomplished during its first ten years?
- B. What major problems delay the next steps forward?

**2.**

What should be the characteristics of the flexibly-scheduled school of 1980? i.e., towards what kind of "model" should the flexible-scheduling movement be moving, and

**3.**

What specific pilot projects will move us to where we would like to be?

This report summarizes the Seminar's answers to these three questions.

<sup>1</sup>As used in this paper the term "depth" refers to teacher-proposed but student-accepted activities which lead a student to a more complete understanding of the topic or concept under study. "Quest" refers to similar activity which is student-initiated and student-planned.

"What could be more motivating to the learner than to know that he has the power to change his environment, to free his curiosity, to plunge down new roads of exploration, and to discover unforgettable experiences . . ."

The Ferris Story<sup>1</sup>

## WHERE WE ARE

### THE PRESENT STATUS OF THE FLEXIBLE-SCHEDULING MOVEMENT

The first major set of questions posed by the seminar was:

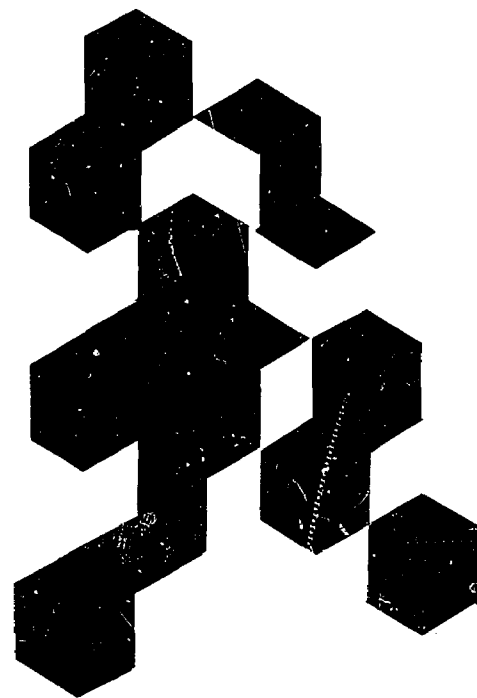
"What is the present status of the flexible scheduling movement?"

— "What are some accomplishments?"

— "What are some major problems?"

Flexible scheduling has come a long way since its humble beginnings in the National Association of Secondary School Principals' famous Staff Utilization Studies<sup>2</sup> some ten years ago. The concept of the teacher-initiated daily demand flexible schedule<sup>3</sup> has been invented, developed, and successfully implemented at the Brigham Young University Laboratory School at Anaheim, California, and elsewhere. Drs. Robert Bush and Dwight Allen, through a well-known project supported by the Fund for the Advancement of Education<sup>4</sup> have succeeded in defining the dimensions of a new, flexible secondary school and have developed the technology necessary to schedule such a program. A parallel project, involving Dr. Robert Holz at Massachusetts Institute of Technology and several cooperating high schools<sup>5</sup>, on an experimental basis, put two computer-built modular schedules into operation in the fall of 1962.

Most of the participants of the National Seminar on Modular Flexible Scheduling had participated directly in these and related projects. In this sense, insofar as the flexible scheduling movement is concerned, they are among the nation's pioneers.



<sup>1</sup>The Ferris Story, published by the Joel E. Ferris High School's "Project 81 Center," Dr. Harry O. Finnegan, Project Director. Single complimentary copies are available from the Project 81 Center, East 3020 37th Avenue, Spokane, Washington 99203.

<sup>2</sup>See Trump, J. Lloyd and Baynham, Dorsey, *Focus on Change . . .*, paperback, Rand McNally Co., Chicago, 1961.

<sup>3</sup>Note: Such schedules are generated daily by the school staff in accordance with the instructional needs of students. For example, a teaching team may choose to "call" a large group together consisting of all eleven and twelve-year-old students for small discussion groups of twelve students each. A new schedule is developed daily to accommodate a wide variety of requests such as these. See Swenson, Gardner and Keys, Donald, "Providing for Flexibility in Scheduling and Instruction," pamphlet, 65 pp., Successful School Management Series, Prentice-Hall, Englewood Cliffs, New Jersey, 1966.

<sup>4</sup>See Bush, Robert N. and Allen, Dwight W., *New Design for Secondary Education*, McGraw Hill, New York, 1964. 196 pp.

<sup>5</sup>See Educational Facilities Laboratories, *School Scheduling by Computer — The Story of GASP*, New York, 1964.



# ACCOMPLISHMENTS

The seminar participants largely agree that the serious technical problems, which have plagued the movement from the beginning, have now, for the most part, been solved. A system is now available — well-developed and ready for expanded use — which will enable the highly-committed, highly motivated principal to build a flexible schedule with a computer.

In the past ten years, educational innovators have accomplished the following:

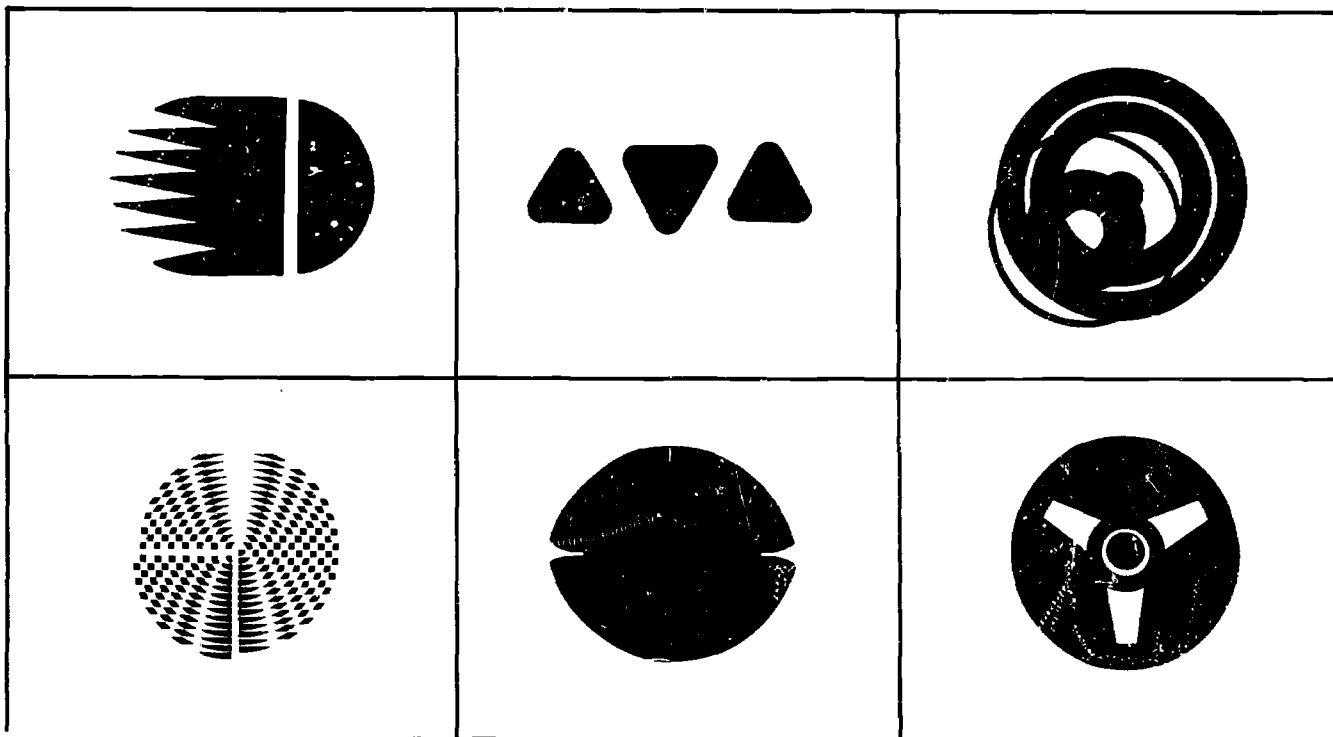
- Solved the technical problems which previously had limited the benefits of computer-built flexible scheduling to a few experimental projects.
- Solved the technical problems inherent in the daily demand schedule — at the junior high level.
- Developed and implemented school-wide reorganization plans designed to shorten communication lines and to make more efficient use of complementary teacher talents.
- Developed and implemented the concepts of team teaching, large and small group instruction, independent study, and continuous progress.
- Further refined the nongradedness concept and implemented it at the secondary school level.

- Developed and, on a limited scale, implemented a plan for organizing self-instructional, multi-media units of instruction appropriate for individualized learning.<sup>1</sup>
- Experimented with computer-assisted instruction, which shows great promise of facilitating individualized diagnosis and prescription.
- Invented and developed the concept of the differentiated staff which shows promise of increasing staff motivation for improved performance and which contributes to overall staff efficiency.
- Learned how to build new buildings and to modify old ones so that facilities are appropriate for flexible programs.
- Stimulated, on the part of the educational and lay communities, an awareness of the critical need for reorganization of our schools.

Much has been achieved. In a recent national survey of innovative practices<sup>2</sup>, 14.8 percent of 7,368 high schools responding reported the use of flexible scheduling. While this figure is no doubt high as a general measure of nationwide use, flexible scheduling clearly is gaining acceptance in our nation's schools.

<sup>1</sup>See Kapfer, Philip, "An Instructional Management Strategy for Individualized Learning," *Phi Delta Kappan*, January, 1968.

<sup>2</sup>For a report on this survey, see "Special Study: How High Schools Innovate," *The Nations Schools*, April, 1967. This study was sponsored by I|D|E|A| Inc.

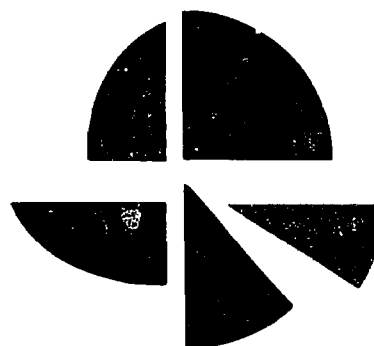
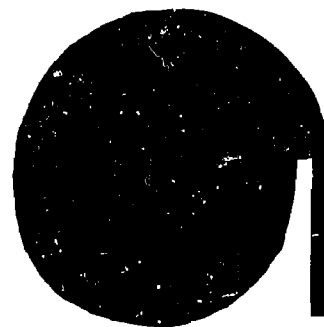




# PROBLEMS

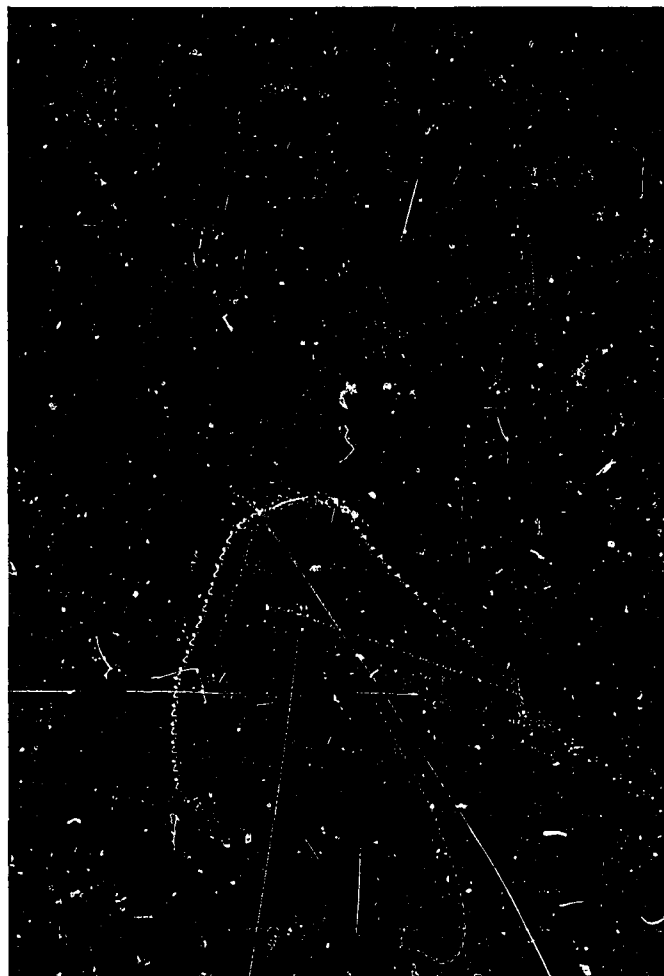
Much needs to be done before the flexible schedule — and the kind of educational program it is designed to accommodate — can be adopted generally throughout the country. Participants in the seminar identified several problems which are impeding progress. Among them:

- Competent consultant services and appropriate computer facilities are not generally available. In some cases, schools have been promised services which were not forthcoming, and "boom and bust" resulted. No program is available, at present, which will work on a small computer.
- There is an unfortunate tendency among school administrators to regard flexible scheduling as an end in itself rather than as a tool. Too often such schedules have not reflected the needs of a well-planned educational program.
- Even though technical problems have been solved in the nation's pilot programs and in most experienced schools, such problems continue to plague schools moving into their first year of flexible scheduling.
- Computer-built flexible schedules are more expensive to build than are conventional period schedules. Furthermore, they are difficult to build and, once built, are difficult to manage.
- Computer-built, flexible schedules, once completed, are difficult to change. Flexibility is, for the most part, limited to that part of the day which is unscheduled for students and teachers.
- School principals receive inadequate training in performing those administrative functions required in a flexibly-scheduled school. Likewise, as yet, teacher training institutions have not recognized the need to develop programs for preparing teachers for their changing roles in flexibility.
- A few promising in-service education programs have been demonstrated. Typically, however, such programs are under-planned and under-financed.
- Present methods for involving the staff in educational change are too often ineffective. New ways must be found to build self-renewal into the decision-making process at the teaching team level.



- No workable method of systematically evaluating the results of the cluster of innovative practices associated with flexible scheduling has yet been demonstrated. The critical public, and some critics within the profession, ask unanswerable questions regarding the outcomes of such innovative programs. Funds to pay for the evaluations desired are, typically, not available.
- Methods of obtaining community support for change are too often inadequate. Some effective programs are discontinued by communities which are inadequately or erroneously informed about the practices.
- Pupils and teachers find it difficult to utilize their unscheduled time as profitably as is usually desired. The success of the schedule depends, to a large extent, on the assumption by all concerned of a high degree of responsibility for their own actions.
- Flexible-education programs have as yet not been adopted in inner city schools. We know how to build good schools, but we have built them primarily in our small towns, suburbs, and middle-class sections of our cities.
- State departments of education are typically not adequately staffed to provide leadership and support to schools desiring to become more flexible.
- In our flexibly-scheduled schools, students frequently do not understand the objectives of the program or the potential of the innovative practices. Too often students are reluctant to accept responsibility for their own learning because they have previously been conditioned to assume a conforming role in school.
- Appropriate learning materials designed for student use during unscheduled time are as yet generally not available.
- The high school curriculum tends to be fragmented and content-centered rather than unified, process-centered, and concept-centered. New ways must be found to make the curriculum relevant to uncommitted learners.
- We need to learn how to build into our schools a mentally-healthy, psychological atmosphere. School personnel must become less institutional and more human in their relationships with learners. Education has not yet been meaningfully personalized for many learners.

These and related problems deter progress in the flexible-scheduling movement.



## WHERE WE SHOULD BE GOING

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### THE CHARACTERISTICS OF THE FLEXIBLY-SCHEDULED SCHOOL OF 1980

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The second major question posed for the seminar was:

“What should be the characteristics of the flexibly-scheduled school of 1980?”

Suggestions for the model grew naturally from the group's analysis of the present situation (question one). It was assumed that the successful school of the 1980's would reflect

- 1) the best of current practice, as refined, and
- 2) successful solutions to the problems identified as present impediments.

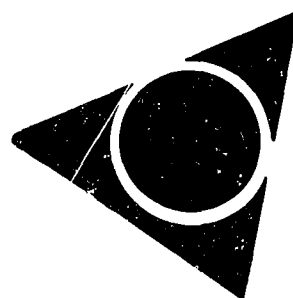
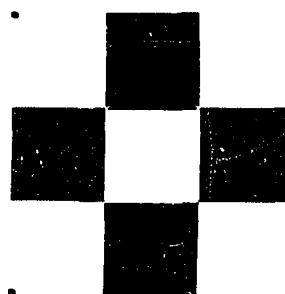
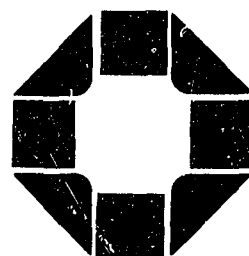
# INPUTS FOR SUCCESS IN FLEXIBLE SCHEDULING

More specifically, it was assumed that by the 1980's, substantial progress will be made in: 1) teaching self-directiveness to the students and to the staff, 2) developing flexible, multi-media, self-instructional curricula, 3) making the curriculum relevant to learners, 4) involving learners, staff, and community in the change process, 5) clarifying objectives, nationally and locally, 6) developing functional pre-service and in-service education programs which help the staff link learning theory to practice, and 7) linking decision-making regarding change to an information base.

Assuming reasonable progress in these seven major problem areas, the school of the 1980's might be characterized as follows:

1. Pre-service and in-service education programs will rely heavily on developing self-evaluative skills. Such techniques as micro-teaching and sensitivity training will be widely used to equip the staff to make more valid decisions about the kind of teaching role they will assume under varying circumstances.
2. The instructional staff of the school will be "differentiated." Compensation and job descriptions will be related to the degree and kind of responsibility assumed by each professional employee. It will no longer be necessary for a person to leave teaching for administration in order to be "promoted."
3. Administrator roles will be similarly differentiated.
4. Decision-making regarding instruction will be decentralized, to a large extent, to the teaching-learning team level. The basic organizational unit of the school will not be the class. Rather, it will be the teaching-learning team with from three to twelve members. Community consultants as well as teachers will be members of these teams.
5. The teaching-learning teams will use the community as a learning laboratory. Businesses, industries, and governmental agencies will appoint "education officers" to work with the teaching-learning teams. In some cases they will set aside space for learning and, with professional help, will develop specific units of instruction. Any one student will belong to several such teams. He may, for example, belong to a learning team of three students studying, with the help of a businessman, the problem of growing government restrictions on

<sup>1</sup>See Rand, M. John and English, Fenwick, "Towards a Differentiated Teaching Staff," *Phi Delta Kappan*, January, 1968, pp. 264-268.



small business. He may also belong to a science-math team working in a local industrial plant on practical applications of principles studied in the school laboratory.

6. Educational professionals will help the student to synthesize his field experiences with conventional knowledge.
7. Daily demand scheduling will enable teaching-learning teams to form, within the school, instructional groups when such groups are appropriate. Students will be scheduled by the school for much less time than in today's flexibly-scheduled schools. Most of the student's time will be scheduled by the student himself and by his teaching-learning team.
8. The daily schedule will not be built with a computer. Some data processing equipment may, however, be needed for the purpose of centrally coordinating the activities of the teaching-learning teams.
9. Learning laboratories and resource centers will be open year-round for from 12 to 14 hours a day. They will contain learning materials organized by the professional staff, but they will be managed by para-professionals. Professionals will be available to learners on an "education by appointment" basis. Students, when appropriate, will be given the opportunity to build their own curriculum.
10. Question-asking, on the part of staff and students, will be encouraged. A major objective of the school will be to teach inquiry. The same rational problem-solving methods which the staff encourages the student to use in his work will also be used by the staff in making professional decisions.
11. Policy-making will be more highly decentralized in the 1980's than it is now. Over-all district policies, as approved by school boards, will be designed to encourage, rather than discourage, professional decision-making at the individual school level and at the teaching-learning team level. Community members will be involved in policy-making activities at all levels — district, individual school, and teaching-learning team.
12. Interdisciplinary teaching-learning teams will be flexible in membership.
13. Some specific practices which may prove successful and thus may become common practice by 1980 are:
  - Courses of study of short duration (sometimes called "mini-courses"), initiated by students, teachers, or community consultants.
  - "Rolling seminars" — i.e., unscheduled, continuous discussion groups in which students and staff explore problems of the school together. Participants may join the group when they are unscheduled elsewhere and may remain for as long or as short a time as desired.
  - "Hyde Park" areas within the school where student speakers can speak to others regarding important issues.
  - Optional-attendance large groups and optional-attendance seminars.
  - Conventional large-group instruction (used to present subject matter) replaced by videotaped or filmed presentations. Video tapes and films will be available, through a check-out system, in learning laboratories and resource centers.

## SUGGESTED NEXT STEPS

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### PROJECTS SUGGESTED BY THE SEMINAR WHICH WILL CONTRIBUTE TO THE PROGRESS OF THE FLEXIBLE-SCHEDULING MOVEMENT

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The main objective of the National Seminar was to stimulate, within innovative schools everywhere, pilot projects which will contribute to the advancement of the flexible-scheduling movement.

Once some of the problems and successes of flexible scheduling were defined and some of the characteristics of the school of the 80's were forecast, suggestions for specific projects came quickly.

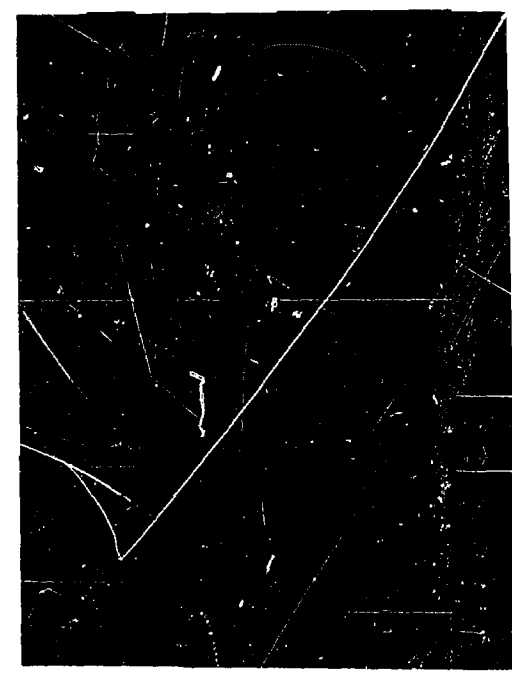
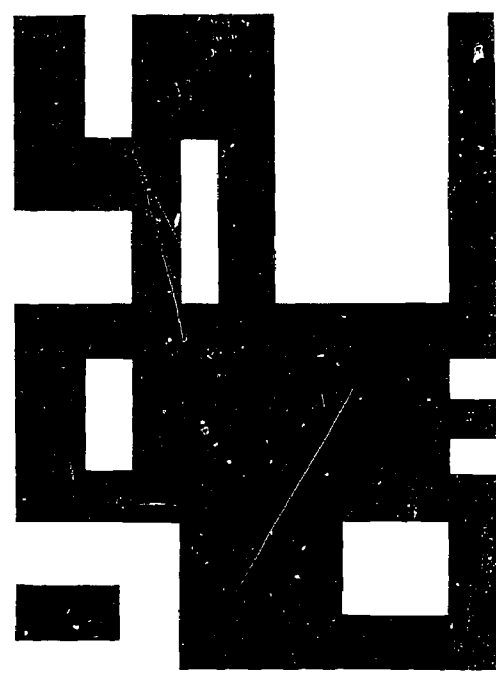
Participants were asked the following question:

"Now that we have defined where we are and where we want to go, what are some possible next steps that will move our flexibly-scheduled schools in the desired direction?"

Following is a sampling of some of the ideas for projects which were suggested:

- Develop a method which works for building a flexible schedule by hand for a large (1500-2000 student) high school.
- Build a flexible schedule for a high school which successfully combines the most desirable features of the modular schedule, daily demand schedule, and block of time.
- Experiment with mini-courses, rolling seminars, student forums, optional-attendance large and small groups, and video taping of large-group instruction.
- Design a new mobile classroom (perhaps a modified micro-bus) which teaching-learning teams can use anywhere in the community.
- Expand the currently popular open laboratory concept into the evening hours and into the summer months. Replace scheduled groups in open laboratories with learning teams which schedule themselves into laboratories.
- Launch projects to provide information regarding the cost of specific innovative practices.
- Develop guidelines which could be used by architects in allocating space in new buildings.

- Experiment with the teaching-learning team concept.
- Develop within the school a talent pool of student educators.
- Initiate a cluster of projects designed to promote better human relations in the school. Badly needed are new techniques for helping students improve their self-concepts, understanding of others, and understanding of how groups function.
- In conjunction with a teacher-training institution, design a continuous pre-service, internship, in-service program for teacher self improvement and appraisal. Such techniques as micro-teaching, external consultant observation, and sensitivity training might be utilized.
- Initiate projects to develop instructional units and techniques to improve the students' ability to become progressively more self directive (a) as expected in instructional time periods and (b) as expected in continuous progress programs.
- Implement a differentiated school staff through the identification and placement of administrative, instructional, and special tasks into categories related to expertise and salary scales.
- Develop projects to design performance curricula and performance criteria.
- Develop a workable substitute for letter grades as a method of evaluating pupil performance.
- Develop criteria other than time-in-class which would be acceptable to state departments and accrediting associations as a basis for awarding course credits.
- Identify and classify a statewide or regional corps of resource consultants to: (a) assist schools in developing instructional programs that will utilize the opportunities provided by variable schedules and (b) help schools translate educational programs into computer input.
- Develop within a school or a district a plan for decentralizing decision-making to the teacher-pupil interaction level. Such a plan appears to be needed especially by the nation's urban schools.
- Develop a model of appropriate teacher roles which will help teachers become effective diagnosticians and prescribers.
- Develop a framework of evaluation procedures that will produce data relevant to imposed external criteria and data relevant to the declared intent of the program. Explore the use of school-initiated evaluative criteria as one method of linking evalua-





tion to a school's unique objectives.

- Devise new plans for closer working liaisons among local districts, colleges and universities, and state departments of public instruction — both on teacher preparation and program development projects.

These and several other "next steps" were suggested by seminar participants. The expectation is that these will spark similar ideas which may serve as bases for pilot projects in innovative schools.

The flexible scheduling movement in the United States today has arrived at a plateau. The technical problems, by and large have been solved, but enormous problems remain. Currently, widespread adoption of flexible scheduling is being impeded by

- 1) a lack of capable consultant help to secondary schools,
- 2) limited accessibility of computers to many schools,
- 3) the expense involved in implementing such a schedule,
- 4) a lack of trained administrative leaders, the prevalence of rigid, obsolete physical plants, and
- 5) widespread reluctance on the part of professional educators, community leaders,
- 6) and boards of education to adopt a comparatively new practice which affects an entire school program.

While the abandonment rate, as shown by the I|D|E|A-sponsored national survey, is quite low<sup>1</sup>, there have been, in various parts of the country, some spectacular failures. These failures typically have been the predictable result

of such factors as inadequate planning, lack of involvement of staff, students, and community in the planning, failure to link the schedule to instructional needs, and inadequate consultant and technical assistance.

Still, the adoption of modular flexible schedules in the nation's high schools has grown steadily for the past ten years, and, presumably, will continue to grow.

Much needs to be done to build into schools the kinds of flexible programs which such schedules are designed to accommodate. All too often, an observer can walk through a flexibly-scheduled school and see rigid, conventional teaching going on in the new physical and organizational setting.

Too often teacher roles and learner roles remain unchanged even though organizational changes have been extensive.

The seminar participants identified the in-service education of staff as flexible scheduling's most pressing problem. It was recognized repeatedly by individuals in the group that a flexible schedule is only one of many organizational innovations which make meaningful innovation in a school possible. In and of itself, it does not change what teachers do when they teach or what students do when they learn. When not accompanied by a continuous and comprehensive plan for staff and program improvement, a flexible schedule results in no more than a rearrangement of mediocrity.

It is hoped that this report will stimulate innovative activity which will result in improved educational programs in our flexibly-scheduled schools. The school schedule, after all, can never be any better than the program it accommodates.

<sup>1</sup>op cit Nations Schools, p. 72.

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