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College preparatory curricula in nonpublic schools : a study and a model.

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COLLEGE PREPARATORY CURRICULA IN NONPUBLIC SCHOOLS:

A STUDY AND A MODEL

A Dissertation Presented

By

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College Preparatory Curricula in Nonpublic Schools:

A Study and A Model   (June 1974)

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The purpose of this study is to develop a college preparatory
curriculum model suitable for use in nonpublic secondary schools, and
structured around the personal, social and career concerns of college-
bound adolescents. The model was developed after surveying the history
of college preparatory curricula in the United States, studying the
development of middle-class college-bound adolescents, and reviewing
more than three hundred programs in nonpublic preparatory schools.
Five hundred questionnaires were sent to randomly selected nonpublic
schools; two hundred and fifty-six were returned. An additional fifty
nonpublic schools were visited by the investigator. The questionnaires
and visits focused on the curricula in the schools.

The survey of the history of college preparatory curricula
showed that learner-centered programs, specifically geared to the needs
and interests of the students, were largely successful in accomplishing
their goals, while discipline-centered programs were seemingly less
successful at achieving their goals, but more readily adopted by schools.

The study of the development of middle class college-bound
adolescents focused on six developmental tasks: (1) physical development,

(2) development of adult sexuality, (3) assuming adult roles, (4) decreasing emotional dependence on adults and the increasing role of the peer group, (5) developing formal reasoning and acquiring an ideology, and (6) developing a sense of identity.

A comparison of the developmental tasks of adolescents with the curricula of the nonpublic schools surveyed and visited indicated that although many excellent programs have been developed in these schools, the perspective is more discipline-centered than learner-centered. As both parents and students in nonpublic schools specify personal development as one of their main reasons for choosing non-public education, a learner-centered curriculum seems preferable.

The model presented is structured around the developmental tasks of adolescents. A rationale for program development is suggested, as are appropriate learning opportunities and structures. The model is intended to serve as a catalyst to stimulate evaluation and revision of programs in nonpublic preparatory schools. It draws from traditional programs, the programs of the schools participating in the study, and suggestions from educational specialists.

Further research is recommended as follows: (1) a more in-depth study of selected programs, (2) a study of the most favorable methods and conditions for introducing change in nonpublic schools, (3) the extension of this study to include public schools, and (4) an implementation and long range study of the effects of the model suggested.

T A B L E   O F   C O N T E N T S

C H A P T E R   I

INTRODUCTION

The last decade produced a plethora of criticism aimed at
educational institutions and practices. Unlike the criticisms of
the fifties which attacked the inability of our schools to produce
scientists and researchers capable of keeping the United States ahead
of the Soviet Union in the space race, the criticisms of the late
sixties and early seventies have focused on the irrelevance and seg-
mentation of curricula, and the structures and organizational patterns
of schools. Schools are accused of ignoring the needs and interests
of students, of training for passivity through teacher dominated class-
rooms, and for conformity by rewarding compliant behavior and by teach-
ing all students the same material in the same manner. It is claimed
that the hierarchical power structures in schools reinforce class con-
sciousness, that competition rather than cooperation is encouraged
through the use of grades and honor roles, and that an intellectual
elitism is spawned by an overemphasis of intellectual skills at the ex-
pense of social, manual and creative ones. A heightened awareness that
the medium of instruction gives as strong a message as the content of
the program has made educators and laymen aware that these problems
stem as much from the structures of the schools as they do from the
curriculum. In spite of this realization, however, little constructive
reform has occurred.

The Problem

Institutions are notably resistant to change, and schools are no exception.[1] The public school system is a cumbersome and complex organization: to large to permit timely adaptations, too susceptible to public and political pressures to encourage the experimentation necessary for constructive change, and too segmented in the division of power and authority to allow any educator or educational philosophy to determine its character. This results only too often in an overemphasis on the bureaucratic side of education and a program that consists of a smorgasbord of offerings with apparently little unity or purpose.

While the nonpublic schools in the United States do not have the same organizational structures as the public ones, they too show little propensity for change. Their organization could facilitate a quick response to student needs and educational findings. They are relatively small, accountable directly to the parents of their students, and to accrediting associations only in a general way. They concentrate the responsibility for shaping the programs and policies of the school in a single head and a small board of trustees. One might expect to find them highly individual and flexible, with well designed program specifically oriented to a particular group of students. In fact, this is not necessarily the case. Of the more than thirteen hundred college preparatory schools described in Porter Sargent's Handbook of Private Schools,[2] less

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[1] Cf. B. Brownson, "Alternative Schools and the Problem of Change: School is a School is a School is a School," in Contemporary Education, 44, April, 1973, pp. 298-303.

[2] Porter Sargent, ed., The Handbook of Private Schools: An Annual Descriptive Survey of Independent Education (53rd ed.; Boston, Mass.: By the Editor, 11 Beacon Street, 1972). This is the most comprehensive descriptive listening of nonpublic schools in the United States.

than one hundred stand out as having unique or noticeably different plans from the traditional college preparatory program.[3] The traditional program requires that approximately eighty per cent of a student's time be spent in the five major areas of academic study: English, social studies, mathematics, science and foreign language. Courses in the arts, work experience, political or social involvement and other learning opportunities are strictly limited, and sometimes considered to be frills, or "extra-curricular."

In the one hundred schools that had developed different programs, there was frequently an explicit educational philosophy that served as a guide for program development. The programs were multifaceted, and not limited to the five major disciplines. They often seemed specifically oriented to the needs of the students enrolled in the particular school. In one such school, the offerings were divided into three areas: the technical, the arts and theoretics.[4] Another school offered work experience, social action, creative arts and the academics.[5] Both schools required their students to select their program to include some offerings from each area. While much of the content of the traditional disciplines was offered in these schools, the curriculum was not limited to it.

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[3]Cf. Sargent, Handbook, The nature of the questionnaires sent to the schools, plus the extent of the editing of the schools' self-descriptions makes this book of limited reliability when comparing school programs. The descriptions, however, give an adequate overall impression of the schools.

[4]The Stockbridge School; Interlaken, Massachusetts as described in Sargent's Handbook, 148.

[5]The Urban School of San Francisco; San Francisco, California.

In spite of the abundant criticism of secondary school programs, then, very few schools have developed new curricula. Federal, state and private funds were poured into research and evaluation of programs, particularly during the fifties and sixties, but the schools, and most especially the college preparatory programs, remain surprisingly unchanged.

An Historical Perspective

History and politics seem to have conspired in the last century to prevent positive changes in the high schools. The basic structures of the college preparatory curriculum date from the late eighteen hundreds. In 1892 the Committee of Ten on Secondary School Studies set the stage for block scheduling, the establishment of the major areas of study, and the system of counting credits towards graduation.[6] A few years later, in 1899, the Committee on College Entrance Requirements recommended accelerated courses for gifted students which could lead to early graduation and early acceptance into college.[7] Most schools still rely on block scheduling; most still require that the bulk of courses be selected from the five major disciplines; and most specify a certain number of credits as the requirement

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[6]Lawrence Arthus Cremin, ed., Report of the Committee on Secondary Schools (New York: The Arno Press and The New York Times, 1969).

[7]National Education Association, Report of the Committee on College Entrance Requirements, 1899.

for graduation.[8] These structures originally grew out of the tenets of faculty psychology,[9] but the discovery in the early nineteen hundreds that the theory was erroneous has not resulted in new structures. Some schools, apparently unaware of the origins of their programs, describe their accelerated courses and possibilities for early graduation as innovations.

There have been several abortive attempts in this century to restructure high schools and the college preparatory curricula. The most ambitious was the Eight-Year Study sponsored by the Progressive Education Association, and evaluated by Ralph Winfred Tyler, then of the University of Chicago.[10] The experiment took place during the thirties, though the evaluation was not published until 1942. Thirty high schools, public and private, were asked to develop new programs that would prepare students for college as well as educate those who were not going on to college. So as not to prejudice their students' chances for college acceptance, the schools were assured by hundred of colleges and universities that the usual entrance requirements would be suspended, and the programs developed by the schools would be accepted as adequate preparation for college work. The results of the

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[8]Some schools have abandoned block scheduling for modular programs, but many find the modular even more restrictive. A few are experimenting with a unit plan that allows more flexibility that either. Most, however, still equate an academic credit with a time measure rather than with a measure of the achievement of a specific skill or body of knowledge.

[9]According to this doctrine, the aim of education was to "train" the mind. The mind was thought to consist of three separate sets of faculties: the will, the emotions, and the intellect. Schooling consisted in intensive drill, practice and memorization. Transfer was thought to be automatic.

[10]Wilford Merton Aiken, The Story of the Eight Year Study (New York: McGraw-Hill Company, Inc., 1942).

evaluation of this experiment show that when compared during their college years with a group of students from traditional programs, matched according to similarities in socioeconomic background, aptitude, age, race, sex, interests and other variables, the experimental group:

1. earned a slightly higher grade average;

2. earned higher grade average in all subject fields except foreign languages;

3. received slightly more academic honors each year;

4. were more often judged to possess a high degree of intellectual curiosity and drive;

5. were more often judged to precise, systematic, and objective in their thinking;

6. were more often judged to have developed clear or well-formulated ideas concerning the meaning of education;

7. had more often demonstrated a high degree of resourcefulness in meeting new situations;

8. had about the same problems of adjustment as the comparison group, but approached their solution with greater effectiveness;

9. participated somewhat more frequently in student groups;

10. earned a slightly better percentage of non-academic honors;

11. had a somewhat better orientation towards the choice of a vocation;

12. demonstrated a more active concern for what was going on in the world.[11]

It was also noted that the graduates of the more experimental schools attained strikingly higher levels of performance in the areas listed.

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[11]Ibid., 144.

In these schools, the curriculua were organized around the needs and interests of the students, and related to community problems. Traditional subject matter divisions were removed, and contemporary materials utilized. The schools were democratic rather than authoritarian in organization. Students, faculty and administration praticipated in the development and evaluations of the new programs.

The results of this study should have caused much comment among educators, parents and politicians and should have led to major revisions in high school curricula and structures. Unfortunately, the study was overshadowed by the crisis of World War II, and never received the attention it deserved. It did not, then, serve as a stimulus for large scale revisions in high schools.

The next major attempt to restructure high schools came with the "core curriculum" concept of the late forties and early fifties. The core is a problem or interest-centered curriculum, based on the personal and social concerns of youth. It is common to all pupils, whether college bound or not, and occupies at least a third of the student's time.[12] It involves considerable teacher-pupil planning, and ignores subject matter lines so as to present content and skills as they are needed. This type of program was showing real promise when Sputnik I started the educational activities of the fifties and sixties

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[12]Cf. Leonard H. Clark, Raymond L. Klein and John B. Burks, The American Secondary School Curriculum (2nd ed., New York: The Macmillan Company, 1972), 143 f.

that led to a retrenchment in curriculum development and a return to discipline-oriented programs.[13] A cry for "strong" studies, particularly in the sciences, mathematics and foreign languages, was raised by very prestigious voices, and quickly captured the support of the American public.[14] In this climate even the Educational Policies Commission of the National Education Association could not make its voice heard over the general clamor when it advocated pupil-centered education.[15] The stage was well set for the development of segmented programs in the various disciplines. The late fifties and sixties brought a proliferation of such programs to the high schools, each expensively packaged, and designed to upgrade education and produce the future leaders of the nation and the world. These programs have been largely unsuccessful in fulfilling their lofty aims. Some of the best known may be even less successful than the programs they replaced in motivating students and helping them to master the discipline. For example, studies comparing students in traditional physics courses with those in PSSC show no signivicant differences on College Board scores[16] or in college achievement.[17] Students in traditional courses scored

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[13]It is not an unusual phenomenon in American society to blame the schools for national cirses. "Soft" curriculum and child-centered education were the scapegoats when the U.S.S.R. surpassed the U.S.A. in space exploration. Many nationally prominent leaders, not necessarily educators, called for a return to the good old days of "no-nonsense" subjects.

[14]For example, Rear Admiral Rickover, James Bryant Conant and Jerome Seymour Brunner.

[15]National Education Association, Education for ALL American Youth--A Further Look (Washington, D.C., Educational Priorities Commission, 1944, revised 1952).

[16]J. Stanley Marshall, "Implementation of Curriculum Change in the Sciences" in New Curricula, 8, 130-131.

[17]Albert C. Braden, "Study of Success in College Physics" in Science Education, 51, 1967, 461-463.

better on the Cooperative Physics Test than those in PSSC,[18] and since

the advent of PSSC, a smaller percentage of students have elected to

continue the study of physics on the college level.[19] Similar studies

of BSSC, CBA, Chem Study, MLA and the new mathematics yield an equally

dismal picture. The only significant increase in pupil performance

seems to be in the area of mathematical terminology.[20] Whatever their

failures, however, they demonstrated an effective strategy for intro-

ducing educational changes. The strategy was comprehensive, including

provision for careful design of the innovation, development of local

awareness and local evaluation of the program, and a local trial before

final adoption.[21] Although this strategy could not assure the educa-

tional value of the reforms, it significantly aided their acceptance.

Thus, the programs developed in this way are still in use, though they

have failed to fulfill their stated objectives.

L. Craig Wilson calls the years between Sputnik I and this

decade the twenty-year by-pass.[22] He claims the by-pass was caused by

the convergence of five critical factors:

1. Absence of a critical mass of public unrest.

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[18]Warren L. Hissher, "Study of High School Physics Achievement"
in The Science Teacher, 28, Oct., 1961, 36-37.

[19]Susanne D. Ellis, "Enrollment Trends" in Physics Today, 20,
March, 1967, 77.

[20]Edward G. Begle and James W. Wilson, "Evaluation of Mathematics
Programs" in Mathematics Evaluation (69th Yearbook, National Society for
the Study of Mathematics, I), 402.

[21]Matthew Bailey Miles, Innovation in Education (New York:
Columbia University Press, 1964), Chapter I.

[22]L. Craig Wilson, The Open Access Curriculum (Boston, Mass.:
Allyn and Bacon, Inc., 1971), 2-13.

2. Absence of optimistic appraisals of human capacity.
3. Absence of critical definitions of the structures of
   the disciplines.
4. Unclear or erroneous contemporary definitions and inter-
   pretations of social and cultural needs.
5. Absence of theories of environmental change subject to
   administrative control and direction.[23]

This by-pass resulted in reducing high school curriculum devel-
opment to a process of substitution and accretion, of replacing old
courses with new packages, and adding new packages to existing offerings.
The end product was a fragmented discipline-oriented curriculum that
largely ignored the needs of students, and even alienated some from the
learning process. The repeated failures of this discipline-oriented
program development process underscored the need for a comprehensive
restructuring of secondary curriculum, and a return to the consideration
of the concerns and learning processes of the students.

Several educators, aware that the scattered attempts at curri-
culum reform were largely unsuccessful, attempted to organize the pro-
cess of curriculum development through the use of rationales. Early in
the fifties, Ralph Tyler published a book specifying the steps and pro-
cedures of rational curriculum development.[24] In brief, he said that
three major sources of information should be tapped: the learner,
society and subject matter specialists. The information gained from
these sources should then be screened by learning theories and philoso-
phies of education, and result in the selection of appropriate objectives.

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[23]Ibid., p. 5.

[24]Ralph Winfred Tyler, Basic Principles of Curriculum and In-
struction (Chicago: University of Chicago Press, 1950).

These objectives, stated in terms of changes to take place in the student, then lead to the development of learning experiences. The experiences must be effectively organized and provision made for periodic evaluations of the effectiveness of the learning experiences to produce the stated objectives.[25]

Tyler's suggestions sounded reasonable enough, but they did not answer the real questions that faced the curriculum developer. For example, the three sources of information (the learner, society and subject specialists) offer conflicting advice and insights. To highlight just a few examples: subject specialists in the social studies field have not been able to decide what should be taught to high school students, what the organizing elements of their specialty are, or what the goals of education in the social studies should be. A 1962 report of the National Council for Social Studies opens with the statement that the goal of education in the social sciences is to develop desirable sociocivic behavior.[26] Michael Scriven decries this position as "sociocivically repulsive"[27] and Gresham Sykes claims the social sciences should provide objective source material for the study of human behavior.[28] The curriculum developer is forced to choose among these and other conflicting opinions as he or she specifies the

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[25]Ibid., p. 3-43.

[26]National Council for the Social Studies, "The Role of Social Studies" in Social Education, 26, October, 1972, p. 315.

[27]Michael Scriven, "The Structure of the Social Sciences" in G. W. Ford and L. Pugno, eds., The Structure of Knowledge and the Curriculum (Chicago: Rand McNally, 1964), 97.

[28]Gresham M. Sykes, "Sociology" in The American Council of Learned Societies and the National Council for the Social Studies, (New York: Harcourt, Brace and Javanovich, 1962) 158-159. See also Donald W. Oliver and James P. Shaver, Teaching Public Issues in High School (Boston: Houghton-Mifflin, 1966) Preface.

goal of the social studies program. Similar conflicts arise among specialists in the sciences, languages, arts, physical education and English fields. These conflicts in themselves are sufficiently disheartening, but they are only the beginning of the problem.

There is very little agreement in society at large about the role of the high school. The demand that schools become social and economic equalizers in the United States has been called into question by the Coleman Report,[29] but this demand persists. Competing with this are demands that the schools be training grounds for good citizenship,[30] that they act as change agents,[31] that they help each child develop his own talents and interests,[32] that they keep "the kids" off the streets and out of the job market, and that they perform innumerable other services for society. The curriculum developer is thus confronted with a new cacophony of goals when he turns to society as a source of information for curriculum planning.

The recent focus on individual differences points up the difficulty involved in using the learner as a source for curriculum planning.[33] There will be almost as many goals as there are learners. Again the curriculum developer is left with a new set of unanswered questions.

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[29]James Samuel Coleman, et al., Equality of Education, United States Department of Health, Education and Welfare, 1966.

[30]Cf. James Bryant Coleman, "The Comprehensive High School" in Alvin C. Eurich, ed., High School 1980 (New York: Pitman Publishing Co., 1970), 68, and also Report of the Harvard Committee in General Education in a Free Society (Cambridge, Massachusetts: Harvard University Press, 1945), 4.

[31]Cf. Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies (2nd ed., New York: Harper and Row, 1968), 23.

[32]Report of the Harvard Committee, General Education, 4-5.

[33]Edward Chase Tolman, Behavior and Psychological Man, (Los Angeles, California: University of California Press, 1958), 144-178.

To help sort out the information and choose appropriate goals, Tyler proposes a "screening" of the information. The screens to be used are educational philosophy and learning theories. Again the problem arises: which educational philosophy and which learning theories? There are precious few similarities in the essentialist position and the progressive one. Figure 1 summarizes the behaviorist,

	BEHAVIORIST (Skinner el al)	GESTALT (Wertheimer et al)	FIELD (Lewin et al)
LEARNING METHODS	Trial and error.	Active process of selecting and organizing - - discovery ot relationships	A social process: events are perceived and given meaning in relation to an individual's life - space - - new events restructure the life - space
MOTIVATION	External: rewards and punishments	Internal : man learns through his own responses	Intrinsic and central: curiosity and relevance are very important
INDIVIDUAL DIFFERENCES	Unimportant: secondary to the process of conditioning	Central	Essential to learning
TRANSFER OF LEARNING	Occurs only in similar situations	Occurs through recognition of general principles and relationships	General: learning determines the life - space of a person

Figure 1

Gestalt and field theories in the areas of learning methods, motivation, individual differences and transfer of learning. In even these important aspects, the learning theories hold different, and even contradictory, opinions.[34] Needless to say, the more aware a curriculum developer is of the differences in the learning theories, the more he needs·guidelines to be able to choose among them if they are to be used as screens. The recent humanistic approaches to education, with strong emphasis on the affective, make an understanding of psychology imperative. The curriculum developer who uses Tyler's rationale has more, not fewer, decisions to make than one who uses a less organized approach. While this is not bad in itself, Tyler seems to ignore the problem, and offers no method for coming to the decisions that must be made.

Tyler's rationale is not without merit. It raises excellent questions, and heightens awareness of the range of considerations that must go into good curriculum decisions. Several other educators have built upon his model, hoping to clarify it and make it more workable.

John I. Goodlad's rationale specifies a selection of basic values as the first step in curriculum development.[35] This would help sort out the information and opinions gained from the various sources but Goodlad does not, and cannot say how to arrive at appropriate values. Hilda Taba adds steps in her description of the process of rational curriculum development, but again does not handle the problem caused by conflicting inputs

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[34]For a more detailed comparison, see Thomas E. Clayton, Teaching and Learning: A Psychological Perspective (Englewood Cliffs, N.J.: Prentice-Hall, 1965), 46-77.

[35]John I. Goodlad, "The Development of a Conceptual System for Dealing with Problems of Curriculun and Instruction," a paper presented in 1966.

from the various sources.[36] The much lauded rationale used by Zacharias and his committee in the development of PSSC began with an examination of the organizing principles of the discipline, but no one was able to come up with a satisfactory statement of such organizing principles for physics, or for any of the other disciplines. Specifying a beginning point and outlining the steps and procedures for curriculum development are relatively simple tasks; actually designing the curriculum is far more complex.

Too strict an adherence to plans for rational curriculum development can lead to other problems. When curriculum development begins with a statement of objectives and goals, it becomes a pre-requisite that the teacher (curriculum expert, or text-book publisher) makes the decisions aobut what is to be taught and what should be learned. This leaves out input from those most affected by such decisions: the pupils. It even precludes taking the needs and backgrounds of the specific students enrolled in the program into account, as presumably the curriculum will be designed before school opens. Predetermined goals, especially those that are very specific and inclusive, make response to immediate needs and interests difficult. If such goals and objectives are further stated in behavioral terms as has been a frequent practice in the last twenty years, then there is an underlying assumption that the end of education is to produce behavioral changes. While this is true in the case of certain skills, it is open to question as an all encompassing goal. A more appropriate goal of education may be to equip persons with the information

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[36]Hilda Taba, Curriculum Development: Theory and Practice (New York: Harcourt, Brace and World, 1962).

and processes that will allow them to make their behavior conscious
and rational. This is not the same as eliciting a predetermined
behavior change from students.[37]

Curriculum rationales have made a valuable, if limited, con-
tribution to the field of education. They have demanded that edu-
cators ask important and sometimes overlooked questions: who should
determine the curriculum, who should it serve, do the structures and
content seem effective in the light of the expressed goals? Although
rationales cannot supply the answers to the questions, they can serve
as organizing structures to insure that the questions are considered
and that apt sources are consulted for help with decision making.
Beyond this, however, curriculum planning remains a fully human pro-
cess; it is in part rational, in part intuitive, and in part just
plain expedient.

Purpose of the Study

The purpose of this study is to develop a college preparatory
curriculum model. It is expressly designed to be useful to nonpublic
college preparatory schools in the examination and restructuring of
their programs. The model is based on the personal, social and career
concerns of college-bound adolescents, thus it is learner-centered
rather than discipline-centered.

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[37]See Ronald T. Hyman, "Means-Ends Reasoning and the Curriculum"
in Teachers College Record, 73, 3, February, 1972.

Procedures

The investigator surveyed recent findings in adolescent
psychology, and selected material most pertinent to educators dealing
with middle-class college-bound youth. Five hundred questionnaires
were sent to nonpublic secondary schools selected at random from those
listed in the 1972 edition of Sargent's Handbook.[38] Information was
sought about the schools' programs, requirements for graduation, and
offerings in the cognitive, affective and creative fields.[39] After
reading the descriptions of the schools' programs in the Handbook,
the investigator selected one hundred eight schools with particularly
interesting descriptions, and asked to visit the schools and interview
the persons responsible for program development. Fifty interviews
in all parts of the country were scheduled. The schools supplied
the investigator with school brochures and program outlines before the
interview. The interviews were informal in nature, but a predeter-
mined selection of topics are always included.[40] To insure some ob-
jectivity, a second investigator was present at all but one interview,[41]
and tapes were made of the conversations. Only the conclusions agreed
upon by both investigators were included in the study.

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[38]The schools were numbered consecutively as they appeared in
the book, and a random table was used to choose the five hundred.

[39]See Appendix A.

[40]See Appendix B.

[41]Ms. Marion Muriel Jones. Ms. Jones was completing the
requirements for an M.A. from Fairfield University, Fairfield, Connecticut.

Definitions

Nonpublic schools--a term which includes independent, denominational, parochial and diocesan schools. It is used interchangeably with the term "private schools."

Curriculum--the system of planned actions for instruction. In its widest sense, curriculum refers to the overall educational plan of the school. It can also refer to a specific part of the plan, such as the mathematics curriculum.[42]

Learner-centered curriculum--a plan for instruction that is based on the personal, social and career needs of the students in the school. Such needs may be directly expressed by the students, or gleaned from secondary sources such as psychology, sociology or requirements for college entrance.

Discipline-centered curriculum--a plan for instruction that is based on the nature, structure or content of the discipline to be studied. This is the approach that was advocated by Jerome Seymour[43] and is exemplified by MLA, PSSC, BSCS, CBA, Chem Study and the new mathematics.

College-bound students--those students who have the expressed goal of continuing their education at a two or four year college. It does not include students who are qualified for college, but uninterested in attending.

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[42]See James B. Macdonald, "Educational Models for Instruction" in Theories of Instruction, National Education Association, 1965. The definition for curriculum is taken from this article. Macdonald further defines instruction as the system for putting the plan into action.

[43]Jerome Seymour Brunner, Toward a Theory of Instruction (Cambridge, Massachusetts: The Harvard University Press, 1966).

Significance of the Study

This is one of the few large scale studies of college preparatory programs in nonpublic schools. Otto F. Kraushaar published a study of nonpublic schools in 1972, but his study did not focus of the programs in the schools.[44] This study is significant in that it evaluates some major existing programs and proposes a new model in the light of the developmental stages and tasks of adolescents. It suggests objectives and structures that can aid nonpublic schools to evaluate and revise their own programs, to review their hiring and training policies in the light of the tasks assigned to faculty and administrators, and to make maximum use of the facilities and opportunities available to them in their community. Because the study and model draw heavily from the experiences of people actually in the schools, at the same time they have a strong theoretical base in curriculum design and adolescent psychology, and therefore can help to bridge the gap between research and practice in the schools. The model is designed to encourage curriculum planning at schools, not to be adopted without change and expansion. It is, however, designed with the specific organizational structures of nonpublic schools in mind, and thus is most suitable as a guide for those schools.

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[44] Otto F. Kraushaar, American Nonpublic Schools: Patterns of Diversity (Baltimore, Md., The Johns Hopkins University Press, 1972).

C H A P T E R   I I

REVIEW OF SELECTED LITERATURE: THE ADOLESCENT

A major prerequisite for the development of curricula is an understanding of the students for whom it is designed. This chapter will present an overview of the chief insights into the development of adolescents, particularly those of special concern to educators. Each of the main ideas will then be discussed more fully, with specific reference to middle-class college-bound youth in the United States. As Otto Kraushaar notes, the overwhelming majority of students in the nonpublic schools come from the middle-class, in spite of efforts during the past decade to broaden the socio-economic bases of these schools.[1] The next chapter will describe programs and trends found in nonpublic secondary schools, so that a comparison of the developmental tasks of the adolescent and the learning opportunities offered by the schools can be made.

Introduction

Adolescence, as it is commonly understood in contemporary thought, is an American invention of the past century. Granville Stanley Hall, a pioneer in the study of adolescence, described it as a period of stormy physical and psychological development, crises of authority,

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[1]Kraushaar, Nonpublic Schools, pp. 94-101.

quick personality and role changes, and agonizing self doubt.[2] This
was thought to be the adolescent experience the world over until the
American anthropologist, Margaret Mead, discovered that while in all
cultures girls and boys experience the biological development that
takes them from childhood to adulthood, not all experience the social,
psychological or intellectual phenomena associated with adolescence in
the United States. Her book, Coming of Age in Samoa, caused a new
understanding of the relationship between specific cultures and human
development.[3]   The youth of this South Pacific Island culture enjoyed
a smooth transition from childhood to adulthood. Their adolescence
was a short one or two year experience, with little or no stress such
as that found in modern western societies. The realization that
adolescence is highly influenced by cultural conditions caused a search
for its cross-cultural aspects.

<div align="center">Universal Aspects of Adolescence</div>

Of all the changes of adolescence, biological development is
the most important of culture. The growth cycle appears to be universal,
with girls preceeding boys by about two years. The cycle consists of:

1. a brief slowdown of growth, followed by rapid growth for
about three years, then a marked decline until the closure of the

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[2]Granville Stanley Hall, Adolescence (2 vols., New York: Appleton
Press, 1916), Chapter 10, pp. 40-94, esp. 75.

[3]Margaret Mead, Coming of Age in Samoa: A Psychological Study
in Primitive Youth for Western Civilization (New York: W. Morrow and
Company, 1928).

epiphyses of the long bones, and the consequent halting of growth in height. In less developed societies, adolescence begins later than it does in more developed ones, probably due to nutritional factors. Even within a single culture there is wide variation in the age of beginning and ending this growth cycle. In America, the average girl reaches her adult height at about sixteen, and the average boy at about eighteen;

2. the development of primary and secondary sex characteristics. Pubic hair and hair in the armpits appear in both sexes; facial hair develops on boys. The body shape of both sexes changes; there is a widening of the shoulders in boys. The external genital organs reach full growth and development, and the internal genital organs and breasts mature in girls;

3. changes in the gonads, and the pituitary and adrenal glands causing physiological changes: menarche and the establishment of the menstral cycle in girls, and sexual maturation in boys.

The timing of these developments depends chiefly on genetic factors and diet. Both early and late maturation have marked effects on personality and intellectual development of youth,[4] and these will be discussed in more detail in a later section of this chapter.

Other aspects of adolescence, while still universal, are more culture-bound than is biological development. Robert L. Havighurst,

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[4]John Janeway Conger, Adolescence and Youth: Psychological Development in a Changing World (New York: Harper and Row Publishers, 1973), 114-118.

in a cross-cultural study of adolescence, lists six features that can be found in all societies, though the details vary widely in different settings: (1) sex role differentiation, (2) the assumption of adult roles under societal guidance, (3) the achievement of emotional independence from parents and other adults, (4) the acquiring of an ideology, (5) the development of identity, and (6) the formation of an adolescent peer culture.[5] Because these six aspects of adolescent development are shaped extensively by the cultural setting in which the girl or boy is growing up, they will be examined within the setting of middle-class American society rather than in their cross-cultural phenomena.

An additional development during adolescence is that of clear formal-operational reasoning. There are cultures in which this stage of reasoning is never reached, and even in America neither all adolescents nor all adults display a capacity for it. A study conducted by Kihn, Langer and Kohlberg shows that in a sample of 265 persons of different ages, living in California and chosen from lower-middle and upper-middle-class families, the following per cent gave evidence of formal-operational (or abstract, theoretical) reasoning in a specific assigned task:

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Age 10 to 15:     45%
Age 16 to 20:     43%
Age 21 to 30:     65%
Age 45 to 50:     57%.[6]
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[5]Robert L. Havighurst, "A Cross-cultural View of Adolescence" in James Frederick Adams, Understanding Adolescence: Current Developments in Adolescent Psychology (2nd. ed., Boston, Massachusetts: Allyn and Bacon, 1973), 48-54.

[6]Lawrence Kohlberg and Carol Gilligan, "The Adolescent as a Philosopher: The Discovery of the Self in a Postconventional World" in Jerome Kagan and Robert Coles, eds., Twelve to Sixteen: Early Adolescence (New York: W. W. Norton and Company, Inc., 1972), 158-159.

While this stage of intellectual development is not experienced by all adolescents either cross-culturally or in the United States, it is likely to be a part of the development of middle-class college bound youth. For this reason, it will be discussed further in another section of this chapter.

· With this brief overview of the general aspects of adolescence, we can now consider more specifically the development of the middle-class adolescents in the United States. Though the next section is specifically focused on the middle-class adolescent, some of the tasks and environmental factors would apply to adolescents of upper and lower classes as well. There inclusion in the section does not imply that they are exclusively applicable to the middle-class youth, but only that they must be considered when developing educational plans for these youth.

Adolescent Development in Middle-Class America

Physical Development

While the first two years of life contain the most striking and rapid events in physical growth, it is the years from twelve to sixteen that seem the most eventful to the subjects involved. The infant is unable to reflect on his growth and its consequences; the young adolescent is highly conscious of it. He is at times pleased, at others horrified. Sometimes the consequences of maturing delight him, sometimes they are frightening. Whatever the emotional response to his development, however, he is always aware of it and affected by it.

Studies by Secourd and Jourard relate self-esteem to the feelings a person has about his body.[7]   Studies of individual differences in physical growth indicate that the tempo of physical maturation is a significant factor in the formation of body-image, self-acceptance and self-rejection.[8]   When these findings are coupled with those linking self-esteem and achievement, it becomes obvious that educators must be aware of their students' concern maturation, and must be ready to help them understand and accept their own development.

Jones and Bayley studied a group of boys, some of whom were accelerated growers and some slow growers, between the ages of twelve and sixteen.[9] Many differences were found between the two groups. Adults rated the slower-growing boys as less masculine, less well groomed, less mature in heterosexual social relations, tense, more animated and more affected than the fast growing boys. They rated the groups as similar in popularity, leadership, prestige and social effect on their peers. When rated by their peers, the slower growing boys were judged more restless, bossy, talkative and attention-seeking, less popular, less likely to be leaders, and less confident than the other group. In general, fast growing boys were accepted and treated as more mature by both adults and peers. The investigators also found

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[7]P. F. Secourd and S. M. Jourard, "The Appraisal of Body-cathexis: Body-cathexis and the Self" in Journal of Consulting Psychology, 1953, 17, 343-347.

[8]M. C. Jones and N. Bayley, "Physical Maturing Among Boys as Related to Behavior" in Journal of Educational Psychology, 1950, 41, 129-148.

[9]Ibid.

them more likely to be secure and independent than their slower-
growing peers, who more frequently displayed childish, attention-getting
behavior. In a later study by Weatherly, college students who had been
slow growing were shown to be less likely to have resolved their
adolescent conflicts, less likely to seek positions of leadership,
and more likely to seek attention and affection from others. They
were also less likely to accept authority and more likely to be re-
bellious.[10]

It seems apparent then, that late physical maturation is gener-
ally a handicap to boys, effecting their emotional growth and their
self-esteem. Early physical maturation can be a mixed blessing; while
it seems to aid the development of a positive self-concept and to
offer definite competitive advantage, it may also require a boy to
meet adult and peer expectations that are based more on his size than
his emotional, social or intellectual maturation.

Studies of the effects of early and late maturation in girls
show that they are most frequently similar to those for boys, but to a
less pronounced degree.[11] This lessening of the effects may well be
caused by sexrole prescriptions in the American society as Hamacheck
suggests.[12]

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[10]D. Weatherly, "Self-perceived Rate of Physical Maturation
and Personality in Late Adolescence" in Child Development, 1964, 35,
1197-1210.

[11]Jones and Mussen, "Physical Maturing," p. 498.

[12]Don E. Hamacheck, Encounters With the Self (New York: Holt,
Rinehart and Winston, 1971).

In the early stages of adolescence, fast-growing girls may find their height and maturation a social disadvantage. Studies by Stolz and Jones indicate that such girls are generally less popular, less apt to be viewed as leaders, and less influential in junior high school than later developing girls.[13] The high school years seem to reverse this situation, however, and physical development becomes a decided advantage for girls as well as boys.

There is evidence that children who are physically advanced score slightly higher on most I.Q. measurements than do their same age peers who are less mature. While the difference is small, it remains consistent even into adulthood.[14] Clearly, differences in the tempo of human growth have implications for educational theory and practice. The middle-class college-bound student is usually educated in a competitive setting. He is constantly being measured against his peers by his teachers, his parents and himself. Frequently, he is isolated from younger and older students by age-grouped classes, which may highlight individual differences and contribute to a feeling of inferiority and of being different. As the studies of the effects of early and late physical maturation were conducted on subjects enrolled in schools and colleges, there is no way to determine if such institutional settings heighten either the adverse or the positive

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[13]Jones and Mussen, "Physical Maturing," p. 498. Herbert Rowell Stoltz and L. H. Meak, "Adolescent Problems Related to Somatic Variations" in Yearbook of the National Society for the Study of Education (1944, 43, Part I), 80-99.

[14]James M. Tanner, "Sequence, Tempo and Individual Variation in Growth and Development of Boys and Girls Aged Twelve to Sixteen" in Kagan, 12 to 16, 18-19.

effects; it would be logical to speculate that because of their age groupings and their competitive atmospheres, they do.

Development of Adult Sexuality

Even though the sex roles begin to be learned as early as infancy, and are part of the teaching of homes, schools and general society, sex role differentiation remains one of the major developmental tasks of adolescence. Specifically, adolescents must integrate an emerging adult sexuality with a developing sense of selfhood. This necessitates an understanding and acceptance of new sexual powers and drives, the development of a code of behavior towards same-sex and other-sex peers, and the acceptance or rejection of contemporary social standards and values with respect to sex.

Increased sexual drive is a universal physiological concomitant of adolescence, though its form and expression vary widely according to cultural and psychological factors. For the adolescent male, the drive is imperious and specifically sexual. It must be dealt with directly and consciously so that means of control and discharge are found that strengthen the ego and avoid excessive guilt and crippling inhibitions.[15] The sexual drive in the adolescent female is more diffuse and ambiguous. It is not only possible for her to deny its existence, but such denial may even be her most comfortable coping mechanism during the first years of adolescence.[16] Sexuality is not experienced as such; it is

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[15]Elizabeth Ann Malcolm Douvan and Joseph Adelson, The Adolescent Experience (New York: Wiley, 1966), 110-111.

[16]Ibid.

easily sublimated, romanticised or spiritualized. While the male sexual drive tends to be erotic and to demand erotic gratification, for the female it is secondary to the fulfillment of other needs such as self-esteem, intimacy, reassurance and love![17]

It is not surprising that virtually all available data indicate that adolescent boys experience greater sexual activity than do adolescent girls. These activities include not only premarital intercourse, but also petting, masturbation and homosexuality.[18] Even in the area of attitudes, boys show themselves far more liberal than girls.

Many adults feel there is a new sexual morality among contemporary adolescents. Today's youth are frequently credited with freedom from sexual inhibitions, full understanding of both the physical and psychological aspects of human sexuality, and often, a premature and dangerously indiscriminate promiscuity. Adolescents themselves, however, are clearly in disagreement with these appraisals. Recent surveys in Life and Seventeen show that more than eighty-five per cent of the young people surveyed felt a strong need for better sex education, particularly in the areas of social concerns (homosexuality, premarital sex, ethics, etc.) and psychological phenomena (sexual drives, female frigidity, male impotence, etc.).[19] The surveys further indicate that

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[17]Douvan, Adolescent Experience, 111.

[18]Conger, Adolescence and Youth, 265-270.

[19]M. Hunt, "Special Sex Education Survey," in Seventeen, July, 1970, pp. 94ff. L. Harris, "Change, yes--Upheaval, no" in Life, January 8, 1971, 70, 22-27 and "What People Think of Their High Schools" in Life, December 10, 1970, 66, 22-23.

the youth want the schools to offer sex education, and feel that a competent teacher is one of the most reliable sources for sex information.

While adults may feel that youth engage in more sexual activity than they did in the past, adolescents feel that they are not more active than their parents were at their age, but only more honest.[20] Recent surveys indicate that there is some truth in their position. Openness is not the only difference between the generations, however. More fundamental is the conviction of youth that sexual morality is a private rather than a public issue. For many young people today, especially middle-class youth, the acceptability of heterosexual behavior depends on the degree of closeness of the two individuals, not on any other factors.[21] A majority of adolescents surveyed in the study felt that intercourse was permissible for a couple who were tentatively engaged, but very few approved it for young people who were just good friends or casually attracted to each other.[22]

There are, of course, variations in adolescents' attitudes towards sexual behavior. In general, younger adolescents (twelve to sixteen) are more conservative than older adolescents and youth,[23] non-college youth are significantly more conservative than college

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[20]"The Open Generation," Look, 30, 1966, 36ff.

[21]I. L. Reiss, "The Scaling of Premarital Sexual Permissiveness" in Journal of Marriage and Family, 1964, 26, 188-199.

[22]E. Luckey and G. A. Nass, "A Comparison of Sexual Attitudes and Behaviors in an International Sample" in Journal of Marriage and Family, May, 1969, 364-379.

[23]Gallup Pole, in Denver Post, May 21, 1970.

youth,[24] and students from the midwest seem more conservative than their peers from the east and west coasts.[25] It has also been shown that actively religious adolescents are more conservative than their religious peers and that youths who are politically conservative are also conservative with regard to sexual behaviors and attitudes.[26] Females at every age are more conservative than males at the same age, though an apparent exception occurs among students in liberal, permissive schools. A career orientation is an additional factor that seems to make the attitudes of the female adolescent approach those of the male.[27]

In short, there does seem to be an emerging new sexual morality among youth, though there is much variation among the different segments of the youth population. The most marked change from conventional morality is the condoning of premarital intercourse for engaged couples. While the majority of the middle-class adult population does not condone such activity, however, a greater percentage admit to engaging in premarital intercourse than express agreement with it.[28] This finding lends some credence to the adolescent cry of hypocrisy when discussing conventional morality.

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[24]D. Yankelovich, Generations Apart, CBS News, New York, 1969.

[25]Vance Oadley Packard, The Sexual Wilderness: The Contemporary Upheavel in Male-Female Relationships (New York: Pocket Books, 1970).

[26]R. F. Peack and C. Gallini, "Intelligence, Ethnicity, and Social Roles in Adolescent Society," in Sociometry, 1962, 25, 64-72.

[27]Packard, Sexual Wilderness, 152-165.

[28]Alfred Charles Kinsey, Wardell B. Pomeroy, Clyde E. Martin and Paul H. Gebhard, Sexual Behavior in the Human Female (Philadelphia: Saunders Press, 1953) and Sexual Behavior in the Human Male (Saunders, 1948).

While there is clear evidence that middle-class youth have
developed new attitudes towards sex, the sexual behavior of this
group may be more like that of their parents at the same age than most
people realize. This is particularly true of boys, for the woman's
movement seems to have had a liberalizing effect on girls' behavior.
Current studies indicate that there is little or no increase in the
incidence of either male or female masturbation in the past few de-
cades.[29] Petting has increased in this century, but the most signifi-
cant changes came during the adolescence of today's parents rather than
with the present generation.[30] The greatest concern and discussion,
of course, centers on premarital intercourse. Again, the greatest
revolution did not come with contemporary adolescents, but with their
grandparents.[31] Some studies indicate that there is no significant
difference in actual behavior in recent decades.[32] However, the most
recent studies do show significant changes. In the 1972 nationwide
survey conducted by the President's Commission on Population Growth,
forty-six per cent of all unmarried women had engaged in intercourse
by the age of nineteen, while less than twenty per cent of their mothers
had by the same age. Sixty per cent of the youth reporting premarital
intercourse limited themself to one partner, and half intended to
marry that partner.[33]

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[29]Eleanor E. Maccoby, ed., The Development of Sex Differences,
(Stanford, California: The Stanford University Press, 1966).

[30]Kinsey, Sexual Behavior.

[31]Ibid.

[32]Packard, Sexual Wilderness, 161.

[33]M. Zelnik and J. E. Kanter, "Survey of Female Adolescent
Sexual Behavior" conducted for the Commission on Population, Washington,
D.C., 1972.

In summary, then, today's middle-class adolescents differ from their parents more in their attitudes towards sexual behavior than in their actual behavior, though praticularly for girls, there are also behavioral differences. Anxiety and guilt are significantly lower in the current generation.[34] Young people do not perceive themselves as irresponsible, but as motivated by personal value systems. They perceive a lack of consistency between the values and the behavior of the adult community, and strive to develop a personal morality which can be consonant with behavior.

Assuming Adult Roles

In all societies adolescence marks the time when youth takes on, or prepares to take on, the adult roles of husband or wife, worker and responsible member of the community. In primative societies this was a relatively easy task: marriage occurred soon after sexual maturation, vocational choices were limited and frequently determined by family status, and governance or responsibility for the community's affairs was generally assumed by elders and chiefs, giving youth an easy transition from childhood obedience to adult citizenship. The adult status was officially conferred on youth at a ceremony or rite of passage. This provided a visible sign of his new role, alerting the youth and the members of his community to the fact that he must now accept the responsibilities of adulthood and be treated accordingly.

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[34]While this is generally true, a new form of anxiety has appeared. Youth who do not want to engage in premarital sex may experience more anxiety than previously. They no longer can rely on an unchallenged conventional morality to support their position, and may feel they are strange for holding to it.

In complex industrial societies, such as is found in the United States, the assumption of adult roles and the recognition by others that one has assumed them are not easy to accomplish. Youth is faced with a confused and diversified society that bestows the signs of adulthood somewhat reluctantly and haphazardly. Thus the rights to vote and to drink alcohol are given at eighteen, the right to drive an automobile from fifteen to eighteen depending on local laws, and the right to own property as late as twenty-one. Rites of passage from childhood to adulthood are virtually non-existent. Until this century, Confirmation, Bar-Mitzvah and even the coming out parties of the socially elite had some meaning as puberty rites, but they are no longer significant as such. The youth today must struggle alone to achieve adult status. This struggle occurs on three major fronts: sexual, economic and political. As the development of adult sexuality has been discussed in the previous section of this chapter, this section will be confined to an examination of adolescence in relation to economic and political roles.

The length of psychological adolescence and the values cultivated during this stage depend to a considerable degree on the way in which the controlling adult society organizes its human resources for work. For the segment of the adolescent population that is the subject of this study, psychological adolescence extends from puberty to at least the end of undergraduate studies. A sizeable minority, those preparing for the professions, may experience several more years of education before they can become productive members of society. Unfortunately, the majority of middle-class youth will find their

opportunities for self-exploration and trial in the world of work severely restricted during these years, so much so that the ability of their preadult experience to prepare them to deal effectively with the realities of a complex and intricate occupational world is seriously questionned today.

Ginzberg has identified three major phases in the process of career choice: a fantasy period, a tentative period and a realistic period.[35] The fantasy period is usually a preadolescent experience. It involves picturing oneself in a variety of careers without consideration of practicalities such as ability, training, job opportunities or salary. The tentative period is usually experienced during the secondary school years. It is characaterized by a more comprehensive reflection on career choices. This involves assessing personal strength and desires, and coming to terms with the values assigned by society to different careers. The realistic period typically begins at about the age of seventeen, and marks the beginning of a direct resolution of the problem of vocation. It is the time of choosing a college and an area of specialization in studies. Economic and social demands assume increasing importance as the youth accommodates his personal desires and abilities to the conditions of the real world. Career choice is an important step in the process of maturation.

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[35]Eli Ginzberg, S. W. Ginzberg, S. Axelrod and J. L. Herman, Occupational Choice (Columbia University Press, 1951).

It is an implementation of a person's self-concept, and an attempt
to optimize his personal satisfactions in life.[36]

The tasks of career determination are particularly difficult
for today's middle-class youth. Not only are there a bewildering
array of careers to choose from (The Dictionary of Occupational Titles
defines and codes almost twenty-two thousand separate American occu-
pations),[37] but there is also a very small likelihood that the adoles-
cent will have the opportunity to observe adults pursuing the occupa-
tions he is considering. Unlike youth of earlier times who had oppor-
tunities for apprenticeships and direct observations, today's youth
have only a vague conception even of the work done by their own and
their friends' fathers and mothers. Any work experience they are
able to get will most likely be of a type and in fields far removed
from their aspirations. To add to this problem, middle-class youth
in nonpublic schools may receive even less career guidance than the
little offered to their peers in public schools. While college guid-
ance receives emphasis in these schools, vocational guidance fre-
quently is ignored.

In the absence of direct work experience and adequate career
guidance, the middle-class youth finds himself under the strong in-
fluence of his family in making career choices. This is particularly

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[36]Eli Ginzberg, "Toward a Theory of Occupational Choice: A
Restatement" in Vocational Guidance Quarterly, 1972, 20, 171.

[37]United States Department of Labor, 1965.

true of boys.[38] Due to societal changes in the family as an insti-
tution, new male-female role definitions and a heightened awareness
of self on the part of many women, signigicant changes are currently
occurring in the career orientation of girls, and it is difficult to
predict their effects. In spite of these current trends, however,
girls continue to lean towards service careers and to set their aspira-
tions lower than boys.[39] Martina Horner claims this is due in part
to a fear of success, a fear induced by the cultural assignment of
the traits of affiliation and nurturance to the female, and the
traits of aggression and competitiveness to the male.[40]

If the American society is reluctant to allow adolescents to
sample the adult work world, it is equally reluctant to allow him to
achieve adult political status. He has been allowed the vote at
eighteen, but has been effectively excluded from active participation
in the development of social and political agencies, even those with
which he is most concerned. Our nation has better educated and more
aware youth than any other, but that resource is largely ignored.
With the exception of the universities where youth have forced educa-
tional reform, the young have no voice in the development, governance
or values of their schools.

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[38]R. L. Simpson, "Parental Influence, Anticipatory Socializa-
tion, and Social Mobility" in American Sociological Review, 1962, 27,
521.

[39]Judith M. Bardwick, The Psychology of Women: A Study of
Bio-cultural Conflicts (New York: Harper and Row Publishers, 1971).

[40]Martina S. Horner, "Feminity and Successful Achievement: A
Basic Inconsistency" in Judith M. Bardwick, Elizabeth A. M. Douvan and
Martina S. Horner, Feminine Personality and Conflict (Belmont, Califor-
nia: Brooks/Cole, 1970).

The activist movements of the sixties, which involved many young persons, are dying out. This is in part due to the decreased involvement of the United States in Southeast Asia, but it is most certainly also due to the reluctance of this country to take its young people seriously. (Less than four per cent of Nixon's appointments have gone to persons under thirty.) Youth have been made cynical about their ability to effect change in America. Today's adolescents are less political than their counterparts of the sixties, though they are perhaps even better informed and more aware of critical issues.

Middle-class youth, not faced with the concerns of earning a living, can afford the luxury of political thought and activism. As they have fewer vested interests in the status-quo than their parents do, they may be able to evaluate new programs and approaches to societal problems more objectively. While middle-class adults are concerned with law and order, maintaining their privileged social and economic status and international politics, their adolescent sons and daughters focus on the four P's: peace, poverty (with emphasis on racial and educational implications), population and pollution.[41] They are concerned that America reprioritize its goals, for they are convinced that their own survival depends on this.

While adolescents are frequently idealists, their political stands cannot be dismissed as youthful altruism. Their altruism is a practical one which seeks to improve their lot. Their education has exposed them to the ideas of Toffler, Ardrey and Erlich, and they

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[41]James Frederick Adams, "Adolescents in an Age of Crisis" in Adams, ed., Understanding Adolescence, 15.

know their world is being wasted. They have witnessed political
corruption, seen examples of double standards in the application
of justice to rich and poor, black and white. The Kent state inci-
dent made them clearly conscious of society's unwillingness to
listen to them or to treat them with the respect accorded adults.
All this has combined to produce a sort of political apathy in
today's adolescents. Even their newly acquired right to vote has
not assured them that they have influence in American politics.

In summary, middle-class youth face a difficult task as they
begin to assume adult roles. They are effectively excluded from the
work market and the political scene. Few opportunities are provided
for them to practice behaviors suitable to either sphere, and society
seems to wish to postpone their entrance into these spheres, as much
as possible. As the assumption of adult roles is an important factor
in the growth of independence, this can only impede the maturing pro-
cess of our society's youth.

Decreasing Emotional Dependence on Adults and
the Increasing Role of the Peer Group

The major decisions in a child's life are made for him by his
parents. He is, in a very real way, an extension of his parents. He
shares their lives, accepts their goals and values, and looks to them
for support, guidance and reassurance. Adolescence marks the beginning
of a young person's existence apart from his parents. One of the major
tasks he faces is the shifting of his need for recognition, approval

and advice from parents and adults to the peer group. Failure to do this will result in a prolonged psychological adolescence that may even last a lifetime.

Popular conceptions of the influence of parents and peers during adolescence may exaggerate the role of the latter while ignoring the very strong role of the former. Even during early adolescence when peer influences are at their strongest, fundamental moral and social values, beliefs and codes of behavior are more influenced by parents than peers. The more superficial areas of taste in music, clothes and vocabularly reflect the peer influence. In late adolescence parents exert the strongest influence in educational and career choices as well as political and ideological stands.[42]

There is also considerable similarity between the values of parents and peers due to similarities in backgrounds. The idea of a sharp dichotomy between peer and parent attitudes seems much overplayed in the case of most adolescents.

David Paul Ausubel specifies seven basic functions that peer groups serve for the adolescent: (1) family replacement, (2) stabilizing influence, (3) self-esteem, (4) standards, (5) protection, (6) practice by doing, and (7) modeling.[43] The peer group is the practice

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[42]Adams, Understanding Adolescence, 291 and Douvan, Adolescent Experience, 87.

[43]David Paul Ausubel, Theory and Problems of Adolescent Development (New York: Grune and Stretton, 1954), 42.

ground for behaviors appropriate to the adult society, and offers a source of feedback which can be used to modify and refine the adolescent's sense of personal identity. For this reason acceptance by the peer group is of central importance to youth, for without peer group acceptance there can be no feedback and no stage to try out new behaviors. Peer group acceptance in early adolescence shows high correlation with educational and career success,[44] and it may even provide an important opportunity (perhaps the last chance) for repairing psychological damage incurred during childhood.[45] This does not deny that peer relationships during this vulnerable age when self identity is still fluid may also be harmful. Boys and girls who are mocked or avoided by their peers may develop defense mechanisms that inhibit interaction with others, and the pressures to be accepted by peers may become so great that a young person may engage in activities he later regrets.[46] Whatever its final effect, however, the peer group is an undeniable force in the life of an adolescent, and acceptance by it is rated high in importance by both the individual and his parents.

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[44]Norman Edward Gronlund and William S. Holmlund, "The Value of Elementary School Sociometric Status Scores For Predicting Pupils' Adjustment in High School" in Educational Administration and Supervision 1958, 44, 258.

[45]Peter Blos, On Adolescence: A Psychological Interpretation (New York: The Free Press, 1962), 10.

[46]N. Polansky, R. Lippit and F. Redl, "An Investigation of Behavioral Contagion in Groups" in Human Relations, 1950, 3, 319-348.

Both the structures and the functions of the peer group change with the development of the adolescent. Its influence is strongest during early adolescence, and becomes more diversified and weaker as the youth advances toward adulthood. It is also strongest where parental closeness is lacking, where parent values are inconsistent with behavior, and where the adolescent has a marked lack of self-confidence.[47] In "swinging" affluent suburban communities, the peer group influence may totally outweigh parental influence, particularly in the areas of drug usage, sexual activities and delinquent activities.[48]

Structural changes in the nature of middle-class peer groups are closely related to the changing socialization of the adolescent. In general, peer relations fall into three categories: the "crowd," the "clique," and individual friendships. The crowd is the largest group, and is formed because of mutual interests or activities. It is composed of members from two or three cliques. The clique consists of a maximum of eight or nine members, and involves more intimate relationships than the crowd. Clique activity centers on talking and occurs mostly during week days; crowd activity involves parties and heterosexual groups and occurs primarily on weekends. The most intimate

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[47]John Janeway Conger, "A World They Never Knew: The Family and Social Change" in Daedalus, Fall, 1971, 1105-1138, esp. 126-138.

[48]Ibid., 1130-1131.

relationship, of course, is the personal friendship, which may occur either within or apart from a clique.[49]

In late childhood and early adolescence, cliques and crowds consist of same-sex members. As the youth progresses towards middle adolescence (fourteen or fifteen years old), unisexual cliques begin to relate to cliques of the opposite sex, and introduce the first steps leading to heterosexuality. Interaction between the sexes at this age is superficially antagonistic. Next some cliques become heterosexual as upper status members of each unisexual clique begin to interact on a one-to-one basis. These upper status members retain membership in two cliques: the original unisexual one and a newly formed heterosexual one. Finally, there is a reorganization of the unisexual cliques into small heterosexual groups, and with late adolescence comes a lessening of the need for the large group or crowd, and a growth in the formation of friendship cliques consisting of couples who are engaged or going steady.[50]

Among girls cliques rarely cross soicoeconomic lines. There is a bit more democracy and flexibility among boys, as athletic ability and general sociability exert some leveling force.[51] Ethnic background, hobbies, proximity of residence and the degree of maturity are also factors in the formation of cliques and crowds.

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[49]D. C. Dunphy, "The Social Structure of Urban Adolescent Peer Groups" in Sociometry, 1963, 26, 231.

[50]Ibid., 230-246.

[51]James Samuel Coleman, The Adolescent Society (New York: The Free Press, 1961).

Some adolescents, either by their own choice or because of peer rejection, are isolates--belonging neither to cliques nor to crowds. For them adolescence can be a lonely and difficult time, and leave them with problems of low self-esteem and inappropriate behavior patterns.[52]

Today's adolescents put strong emphasis on the need for true friendship in a world they see as impersonal, competitive and threatening.[53] In this they are not unlike their parents, who also stress the need for intimate and lasting relationships. While boys tend to emphasize mutual interests as the basis for friendships, girls reveal greater nuturance needs.[54] Both develop an increasing emotional investment in friendships as they move through adolescence. They become more sophisticated in their understanding of it, tolerate more individual differences in their friends, and develop a more disinterested appreciation of them.[55]

The adolescent is affected by his parents' attitudes and behavior even in his interaction with the peer group. When the peer group assumes unusual dominance in an adolescent's life, it is generally more due to neglect at home than to the attractiveness of the group.[56]

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[52]Paul Henry Mussen, John Janeway Conger and Jerome Kagan, Child Development and Personality (New York: Harper and Row, Publishers, 1969), 3rd. ed., 664-665.

[53]L. Harris, "The Teenagers" in Newsweek, March 21, 1966, 57-72.

[54]Douvan, Adolescent Experience, 111.

[55]Ibid., 185.

[56]Urie Bronfenbrenner, Two Worlds of Childhood: U.S. and U.S.S.R. (New York: Russel Sage Foundation, 1970), 96.

Parental influence is strongest where there is strong "parental-adoles-
cent affect."[57] It is also strongest at the sixth grade level, then
drops sharply as the adolescent period begins. It regains strength at
the end of adolescence only if there is a warm and open relationship
between parent and child. Thus, while parental influence in late child-
hood is not specifically dependent on the quality of the parent-child
relationship, influence after adolescence is.[58] The ease with which
the adolescent achieves a sense of his own identity depends on many
factors, perhaps the most critical of these being the kind of relation-
ships he has had and continues to have with his parents.

Developing Formal Reasoning
and Acquiring an Ideology

To understand an adolescent's thinking it is necessary to
understand the developmental stages of thought and moral judgment. The
concept of developmental stages implies a necessary sequence, or stepwise
progression. Education and experience can affect the tempo of the
progression from one stage to another and can cause it to stop before
it has reached completion, but they cannot change the order of the pro-
gression. Cross-cultural studies indicate the universality of these stages
in both cognitive and moral development.[59]

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[57]L. E. Larson, "The Relative Influence of Parent-Adolescent Affect
in Predicting the Saliency Hierarchy Among Youth" (Paper presented at the
annual meeting of the National Council on Family Relations, Chicago, October,
1970).

[58]Ibid.

[59]Lawrence Kohlberg, "Moral Education in the School" in School
Review, 74, 1966, 1-30.

Jean Piaget, in his work on cognitive development, has identified three main stages: (1) symbolic thought, (2) concrete operations and (3) formal operations. For the middle-class American, symbolic or intuitive thought is characteristic of children from eighteen months to seven years of age, concrete operational thought is characteristic from seven to twelve years of age, and formal operational thought from about twelve through adulthood. The formal operational stage, which most concerns adolescent psychologists, involves three substages:

substage 1: relations involving the inverse of the reciprocal;

substage 2: capacity to order triads of propositions or relations;

substage 3: true formal thought--construction of all possible combinations of relations, systematic isolation of variables, and deductive hypothesis-testing.[60]

Substage 1 is typically reached between the ages of ten and thirteen by middle-class Americans, while the consideration of all possibilities is reached at the age of fifteen or sixteen. "The Watchmaker Test" administered Morf to a group of children from seven to fifteen years of age offers a good illustration of the transition to formal operations.[61]

The children were told a story: a technician visited a watch factory and discovered that all the watches manufactured in there in September were defective and did not keep time. He then examined four

[60]Jean Piaget, "Intellectual Evolution From Adolescence to Adulthood" in Human Development, 1972, 15, 1-12.

[61]A. Morf, "Les Relations entre la Logique et la Langue lors du Passage du Raisonnement Concret au Raisonnement Formel" in Leo Apostel, et al., eds., Etudes d'epistemologie genetique, in Logique, Langage et Theories de l'Information (Vol. 3, Paris: Universitaires de France, 1957).

watches and made the following statements: (a) this one was made in September. Therefore, it is defective. (b) this one was made in July. Therefore, it cannot be defective. (c) I know this one is defective. Therefore, it was made in September. (d) I know this one is not defective. Therefore, it could not have been made in September. The children were then asked if the technician could make those four statements.

Morf discovered that before the age of twelve, so little understanding of implication was present that even after an explanation of the correct and incorrect statements, the children said that statements (b) and (c) were correct. After the age of thirteen, over one-half, and after fifteen, three-quarters of the subjects realized that they were not. The problem involved substage 1 reasoning (the formation of a non-September, possibly not defective category).

The development of formal operations is dependent on a number of factors. Lovell has related it to the concept of mentage age,[62] Elkind has found that facility in dealing with symbols is necessary for its use,[63] and Newman has found that it is related to reading ability.[64] Kohlberg found that the stages of moral development are dependent on, but not a necessary consequence of, cognitive development.[65]

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[62]K. Lovell, "Some Problems Associated with Formal Thought and Its Assessment" in Donald Ross Green, et al., eds., Measurement and Piaget (New York: McGraw-Hill, 1971).

[63]D. Elkind, R. Barocas and B. Rosenthal, "Combinational Thinking in Adolescents from Graded and Nongraded Classrooms" in Perceptual and Motor Skills, 1968, 27, 1015-1018.

[64]L. Newman, Temple University pilot study cited in Adams, Understanding Adolescence, 176.

[65]Lawrence Kohlberg and Carol Gilligan, "The Adolescent as a Philosopher" in Kagan, 12 to 16, 159-161.

Kohlberg identifies three levels of moral development: (1) pre-conventional, (2) conventional and (3) postconventional. The preconventional level corresponds approximately to Piaget's stage of symbolic, intuitive thought. Behavior is governed by whatever is desired at the moment. That is, "the good" is defined as "what I want." With the beginning of concrete operational thought, the child enters the first two of three stages of conventional morality. The child responds to conventional or cultural labels of "good" and "bad." At stage one his behavior is motivated by a desire for reward and a fear of punishment. At stage two he is concerned with human reactions and reciprocity. His justice ia an eye-for-an-eye affair. As the child reaches early adolescence and the first stages of formal operational thought, his motivation for conforming to conventional standards becomes the desire to please others (stage 3) and an orientation towards law and order (stage 4). The highest level of moral development, the post conventional, is achieved only by adolescents and adults who are capable of full formal operational thought. It involves a movement towards autonomous moral principles apart from societal identification. Stage 5 morality involves motivation in terms of general rights and standards; it is a movement toward increasing inner-directedness, but is not yet based on clear rational principles. Stage 6 morality involves an orientation towards abstract, universal ethical principles.[66]

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[66]Kohlberg is currently discussing a level 7 morality which is related to religious thought. Unpublished paper, 1973.

It is important to understand that while formal operational thought is necessary for principled morality, it is not sufficient. Kuhn, Langer and Kohlberg found that according to their measures, sixty per cent of a sample group of persons over sixteen years of age had achieved formal operational thought, but only ten per cent had achieved postconventional morality. All of the ten per cent were capable of formal reasoning.[67] The relationship between Piaget's logical stages and Kohlberg's moral stages is summarized in Figure 2.[68]

LOGICAL STAGE	MORAL STAGE
SYMBOLIC Intuitive thought	STAGE 0 The good is what I want and like
CONCRETE OPERATIONS Substage 1: Categorical classification	STAGE 1 Punishment, obedience orientation
Substage 2: Reversible concrete thought	STAGE 2 Instrumental hedonism and concrete reciprocity.
FORMAL OPERATIONS Substage 1: Relations involving the inverse of the reciprocal	STAGE 3 Orientation to interpersonal relations of mutuality
Substage 2	STAGE 4 Maintenance of social order, fixed rules, and authority
Substage 3	STAGE 5A Social contract, utilitarian law-making perspective STAGE 5B Higher law and conscience orientation STAGE 6 Universal ethical principle orientation

Figure 2

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[67]D. Kuhn, J. Langer and L. Kohnberg, "The Development of Formal Operational Thought: It's Relation to Moral Judgment" Unpublished paper, 1971.

[68]Kohlberg, "Adolescent as Philosopher," 165. All relations are that the attainment of the logical stage is necessary but not sufficient for attainment of the moral stage.

Logical stages and moral levels describe the structure, not the content of thought. They are concerned with _how_ the adolescent thinks about good, truth, love and evil; they do not what what he thinks about them. Dramatic as these qualitative changes are, the changes in the content of thought as a child moves through adolescence are even more dramatic. It would be difficult to overstate their combined importance in the maturation of an adolescent.

The adolescent's increased awareness of the difference between the actual and the possible, his fascination with his new found ability to theoreticize and hypothesize, his new and often painful self-consciousness, and his relentless questioning of values, social and political systems, and authority figures make him at times wearing and mercilessly critical, though never dull. His pitifully limited access to the adult world which is often the target of his complaint makes him unaware of the difficulty of implementing even the best of schemes, and intolerant of the hesitation of adults to give such schemes a try. In fact, he is frequently so involved with thinking and creating abstract solutions to problems that he fails to implement the very causes he espouses. His concerns for the effects of pollution contrasted with his lack of concern for cleanliness and order at home, school or in public places is a case in point. These tendencies towards criticism are most characteristic of the brightest youth,[69] which gives lie to the popular accusation that criticalness and untempered idealism are merely the results of a permissive, affluent society.

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[69]Conger, _Adolescence and Youth_, 162.

One of the persistent questions in the study of adolescent cognitive development centers on the relationship between intelligence and creativity. For college bound youth, and in general all persons who have an I.Q. score above 110, intelligence seems to be a negligible factor in creativity.[70] Creativity is generally related to divergent thinking, while intelligence relates to convergent thinking. Education, for the most part, stresses convergent thinking, though creative courses are becoming more common. Creativity can be stimulated by training, but like intelligence it is to some degree an innate quality. This has implications for scholarship committees and talent search groups, who generally employ intelligence measures when evaluating their candidates. They may well be overlooking the very gifts they wish to foster.

Developing a Sense of Identity

The establishment of identity has been singled out by Erik Erikson as the central task of adolescence.[71] It is not difficult to see that all the adolescent tasks described thus far can be subsumed under this heading. Coming to terms with one's new physical size and appearance, adjusting to adult sexuality, relating in a relatively inde-pendent manner with adults and peers, assuming adult responsibilities in work and society, and understanding the world in a new way all contribute

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[70]Frank X. Barron, Creative Persons and Creative Press (New York: Holt, Rinehart and Winston, 1969).

[71]Erik Homburger Erikson, Childhood and Society (New York: W. W. Norton and Company, 1963) and Identity: Youth and Crisis (Norton, 1968), esp. 261-262.

to a recognition of the self as unique, though related to others and to the external world. Most central to the development of strong ego-identity is the achievement of a personal ideology, with fidelity to it.[72]

To achieve a strong sense of ego, the adolescent must achieve a workable integration of his needs, motives and responses. He must see himself a wholeness, or self-consistency. He also needs to recognize a correspondence between his self-perceptions and his perception of the expectations and image other persons have of him. Factors such as education, experience, home, friends and childhood development have strong influence on the adolescent's success or lack of success in achieving this sense of identity.

One important element in the development of ego-identity is the successive identifications of childhood. Identification with parents, an admired teacher, athletes or movie stars, folk heroes and friends give a child the opportunity to see himself in a role, and to experience his comfort or discomfort within that role. Identifications are also formed towards groups: social classes, ethnic groups, churches and generations. While identity formation is not just a summing up of these many identifications, it is impossible to achieve without them.[73]

A final aspect of the formation of identity is the utilization of coping mechanisms. Coping mechanisms are mechanisms of defense that

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[72]Richard Isadore Evans, Dialogue with Erik Erikson (New York: Harper and Row, 1967), 30.

[73]Erikson, Identity, 158.

reduce anxiety, and work to the benefit of the individual. They include such devices as repression, denial, projection, rationalization, withdrawal, regression, intellectualization and sublimation. Most of these devices are also used by children, but rationalization, intellectualization and sublimation require the more advanced stages of cognitive development achieved in adolescence. Any coping mechanism used to excess or used exclusively can be damaging. A flexibility and variety in their use when responding to the changing demands and concerns of adolescence is a sign of healthy progress.[74] Because adolescence brings such a large number of changes, it is a time when anxiety is often experienced. Thus coping mechanisms are necessary for the peace and maturation of the individual, particularly in this stage of development.

Conclusion

Schools are not the only influences in the lives of adolescents, and they cannot be expected to assume responsibility for their development on all fronts. Nevertheless, they do play a central role in their lives. Nonpublic schools frequently schedule activities from early morning to as late as five in the evening. Boarding schools provide a total environment for youth for eight months out of the year. At the very least they should be expected to provide an atmosphere that does not hinder or prevent the maturation process. It is imperative that they consider the opportunities they provide for peer interaction, heterosexual

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[74]Anna Freud, "Adolescence," in Alvin E. Winder and David L. Angus, eds., Adolescence, Contemporary Studies (New York: American Book, 1968), 22-23.

groupings, work opportunities, political involvement and the development of independence and responsibility. In addition to this, they must be expected to positively foster the cognitive development of the students, and to give opportunities for a consideration of the moral implications of personal, interpersonal, social and political behavior. This will only be possible if the faculty, administration and parents are aware of the processes of adolescent development, and evaluate the structures and programs of their schools in their light. Equally important, they must be aware of individual differences in the students and respond to them whenever possible. Parents are an invaluable source of the information and feedback needed for this critical response to the individual student, and it is incumbent upon both the school and the parents to see that the necessary communications channels are opened.

CHAPTER III

COLLECTION OF DESCRIPTIVE DATA:
ASSESSMENT OF SELECTED PROGRAMS IN NONPUBLIC SCHOOLS

Chapter II described the development of the middle-class college-bound adolescent in the United States; Chapter III will describe some current porgrams and issues in nonpublic college preparatory schools. To facilitate a comparison of the developmental tasks of the adolescent with the learning opportunities offered by the schools, the categories used in Chapter II will be repeated in Chapter III. The first section of the chapter will describe the data collection; the second will discuss selected programs as they are related to adolescent development; the third will highlight the issues that seemed of most concern to the schools visited; and the final section will present some observations about the common characteristics found in schools categorized by the investigator as "most successful."

Data Collection

Five hundred college preparatory schools were randomly selected from the 1972 edition of Porter Sargent's Handbook of Private Schools and sent a questionnaire about their programs.[1] Part I of the questionnaire asked for a summary of each school's graduation requirements. Part II asked for a summary of additional courses and learning opportunities offered by the schools. These latter were divided into three categories:

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[1]Appendix A.

learning opportunities aimed primarily at intellectual growth, those
aimed primarily to promote affective growth, and those focusing on social
concerns. Figure 3 summarizes the number and per cent of returns by
geographical area. The geographical divisions were as follows:

New England--Maine, New Hampshire, Vermont, Massachusetts,
Connecticut and Rhode Island.

Middle Atlantic States--New York, New Jersey, Pennsylvania,
Delaware, Maryland, and Washington, D.C.

South Atlantic States--Virginia, West Virginia, North Carolina,
South Carolina, Georgia and Florida.

South Central States--Kentucky, Tennessee, Alabama, Mississippi,
Louisiana, and Texas.

East North Central States--Michigan, Ohio, Indiana, Illinois,
Wisconsin.

West North Central States--Minnesota, Iowa, Missouri, Arkansas,
North Dakota, South Dakota, Nebraska, Kansas, and
Oklahoma.

Mountain and Southwest States--Montana, Wyoming, Colorado, New
Mexico, Idaho, Utah, and Arizona.

Pacific States--Washington, Oregon, California, Hawaii, Nevada,
and Alaska.

AREA	Number Sent	Number Returned	Per cent Returned
New England States	113	42	37
Middle Atlantic States	140	66	39
South Atlantic States	52	37	71
South Central States	47	25	53
East North Central States	45	26	58
West North Central States	27	16	59
Mountain and Southwest States	16	11	69
Pacific States	60	33	55
TOTAL	500	256	51

Figure 3

In addition to the five hundred schools selected at random
to receive the questionnaire, one hundred and eight were chosen to be
visited by the investigator. (Nineteen had also been selected in the
random sample.) The choice was made after a preliminary study of the
schools as described in Sargent's Handbook of Private Schools. These
schools also completed the questionnaire. In addition, they supplied
the investigator with brochures and program descriptions. The investi-
gator then visited the schools and interviewed personnel about the
schools' programs, governance and policies.[2] A second investigator
participated in the interviews to assure a degree of objectivity.[3]
Figure 4 summarizes the number of schools selected and actually visited
in each geographical area.

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[2]See Appendix B for a fuller list of topics covered in the
interviews, and Appendix C for a list of schools visited and persons
interviewed.

[3]Marion Muriel Jones.

AREA	Number Selected	Number Visited	Percent Visited
New England States	21	9	43
Middle Attantic States	31	14	45
South Attantic States	13	4	31
South Central States	11	8	73
East North Central States	10	3	30
West North Central States	5	2	40
Mountain and Southwest States	6	4	67
Pacific States	11	6	55
TOTAL	108	50	46

Figure 4

Figures 5 and 6 give a breakdown of the schools surveyed
and the schools visited by type and size. Note that those visited
are not representative of the schools in the random selection. Each
was chosen because of a particular program or organizational structure,
not because they provided a typical selection of nonpublic schools.

The questionnaires and interviews yielded information far in
excess of that needed for this study, and much has had to be omitted.
In visiting the schools, the most interesting and telling information
occasionally came in the form of anecdotal accounts of persons or events.
These gave a very special flavor to the schools, and probably told more
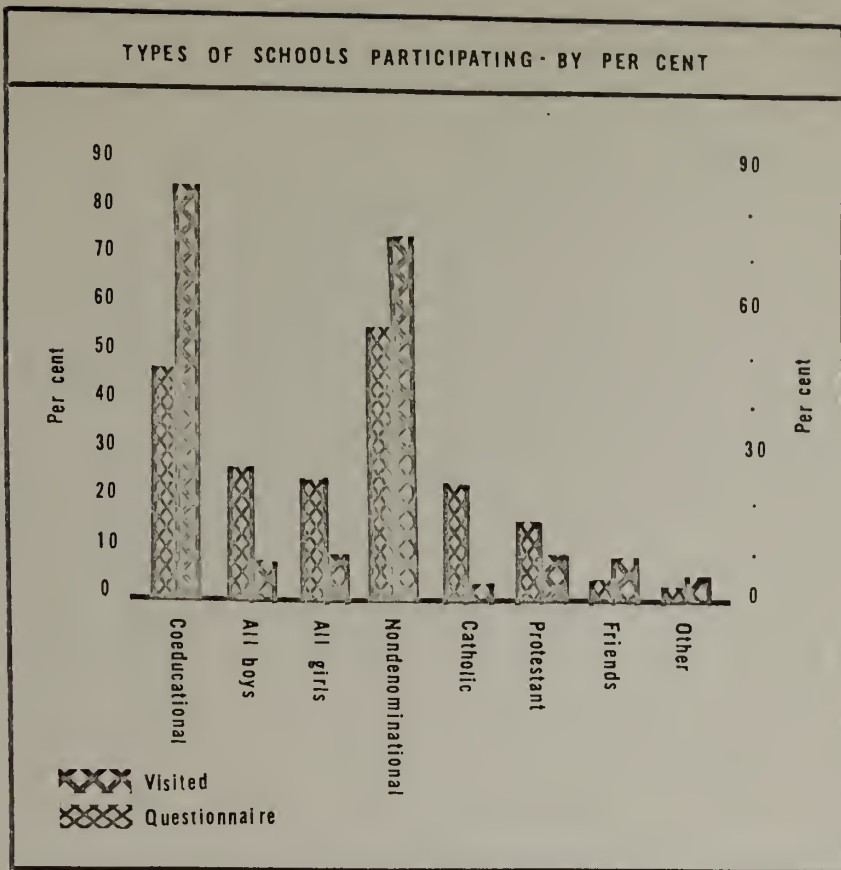
Figure 5
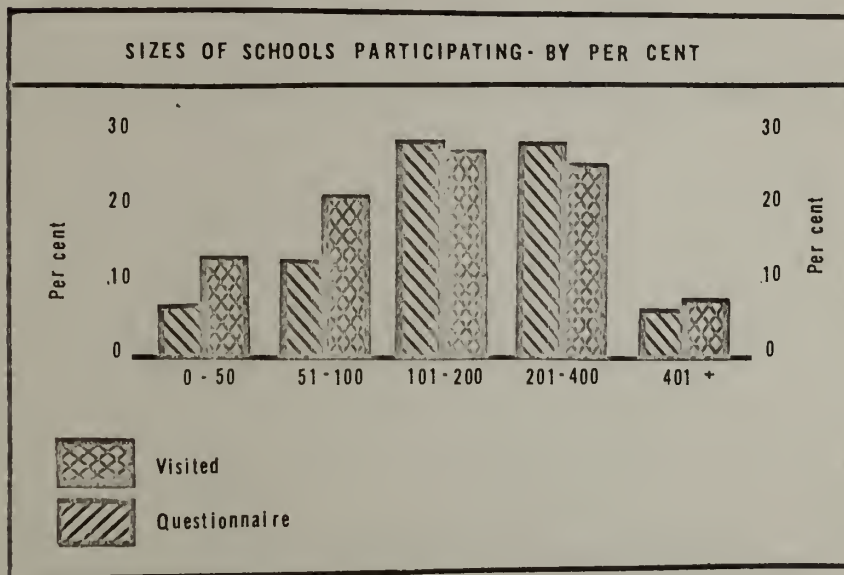
Figure 6

about them than any description of programs or structures ever could.
Unfortunately, they do not translate well into writing, and thus most have
not been included in this chapter. Instead, the findings which seem most
salient and most in line with the purposes of this study have been re-
ported. Even these are only representative samples from a much larger
set of findings. It would be beyond the scope of this work to try and
summarize all the programs and schools surveyed and visited.

Selected Learning Opportunities and Programs Related
to the Developmental Tasks of Adolescents

Physical Education

Physical education has been given considerable attention in
secondary schools for many years, and is required by most states. In
recent years there has been an increasing emphasis on programs that pro-
mote physical fitness, introduce students to lifetime sports and recrea-
tion, or increase self-awareness and self-confidence through the develop-
ment of physical skills. The programs are no longer limited to competitive
sports. This trend was apparent in all parts of the country, but was best
typified in the schools in the west. Colorado Rocky Mountain School, for
example, requires all students to praticipate in a "wilderness session"--
a two week program of conditioning, survival training, map reading,
climbing and wilderness travel. Their location, adjacent to the Williams
and Saguache Mountains, is ideal for these activities. The students
evaluate their experience some months after it is completed, and while a
few hope never to see a mountain again, almost all feel that it is an

invaluable experience filled with real, unavoidable problems, and leads to an understanding of interdependence, responsibility, cooperation and trust.[4]

The Selwyn School in Denton, Texas sets aside two afternoons a week to foster "interest and accomplishment in those sorts of activities which will be a source of pleasure and recreation throughout life - not merely those which are played mostly in high school and college."[5] Golf, tennis, sailing, riding, bicycling and construction work are the activities stressed. (Each year students undertake a major construction project on the campus.) In addition to these activities, survival programs are offered, and almost every weekend there is some sort of outdoor expedition. Team sports are also offered, but are not emphasized.

Midland School in Los Olivos, California stresses work, outdoor skills and competitive sports in their physical education program. A small residential boys' school in a fairly remote part of California, the school is deliberately rustic, and the boys do much of the work required to keep it running. This gives them experience in coping with people and real life situations, and helps them build self-conficence and realistic self-evaluations.

Without denying the value of team sports, the emphasis on lifetime activities, survival programs and outdoor activities adds a new dimension

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[4]The Colorado Rocky Mountain School descriptive brochure, p. 12.

[5]The Selwyn School descriptive brochure.

to physical education. Students and faculty can participate together
in these activities, often on equal footing. Cooperation as well as
competition can be emphasized, and girls and boys who do not excel in
speed, strength or aggressiveness can experience success and pleasure in
physical endeavors. A growing number of schools in all parts of the
country are broadening their programs to include these activities.

Sex Education

Very few of the schools surveyed described their sex education
program. It seems that sex education is most frequently included in
health, biology or psychology courses. In some religious schools it is
also presented in religion, ethics and marriage courses. While there is
no reason to deprecate these approaches, there is some danger that sex
education is fragmented and incomplete unless planned as a whole. The
physical, psychological, social and ethical aspects of sex are of central
importance to adolescents, and schools that do not offer them an oppor-
tunity to study and discuss them are doing them a disservice.

Students in the seventh and eighth grades need to understand the
physical and emotional changes that they are experiencing. Most schools
include the study of human sexuality, with emphasis on the development of
the sex organs, in a general science or biology course. Even at this
level, however, issues involving the psychological and emotional aspects of
sexuality need to be explained and discussed. These are the years when
early or late maturation is most apparent, and causes most concern, when
cliques begin to become heterosexual, and when the adolescent's self-image
is most fluid and vulnerable. Undoubtedly a sensitive teacher can deal

with these factors in a biology or health course, but no one teacher can assure a continuity and completeness without comprehensive program planning.

During the high school years, sex education is continued in what seems to be a haphazard and undirected fashion. Psychology courses, ethics and morals courses, biology and health classes all deal with varying aspects of human sexuality, but few students take all the courses, and few have a chance to consider sexuality in all its significant aspects.

Newton Country Day School in Newton Massachusetts[6] developed a sex education program for students from grade seven to twelve that proved well suited to the students' needs, and very much appreciated by them. At the seventh and ninth grade levels, an explanation of the male and female reproduction systems, with discussions of adult emotionality were given. Parents were involved in the planning and development of the program, and reviewed films, texts and course outlines. They offered suggestions and evaluations of the program. The students were broken into small groups of eight to ten to facilitate discussions and questions. Classes met in an informal atmosphere, and care was taken to schedule sufficient time to allow for unhurried and complete discussions. Several sessions were scheduled over a period of ten weeks, and options existed to have more when they seemed warranted.

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[6]Newton Country Day was not included in the study conducted during 1972-1973, but the author was familiar with their curriculum from 1970-1972. The program described was developed then. Since that time, the couple chiefly responsible for it have left the school.

In the tenth and eleventh grades, trimester elective courses were offered. These dealt with social and ethical considerations. All students took at least two of these, but most elected to take more. In the senior year, a course dealing with areas such as homosexuality, abortion, contraceptives, marriage, childbirth and parenthood was given to all students. Again the class was divided into small groups, and met informally for as long and as often as the students wanted. The sessions were conducted by a married couple who lived on campus. One was a nurse and the other a teacher. The students were overwhelmingly positive in their evaluations of the program, and many of the seniors described it as one of the best and most helpful experiences of their school years.

Sex education needs to be planned as much as does any other program. While it is probable that most of the school surveyed do offer some sex education, the fact that they did not mention it when describing their programs is an indication that more specific and comprehensive program development may be needed in this important area.

Assuming Adult Roles.

Less than one-half of the schools surveyed had developed programs to help adolescents get a taste of the adult worlds of work, politics and social service. Of the 256 schools responding to the questionnaire, fifty-eight had work or self-help programs in their schools. In some a major part of the responsibility for maintenance, cooking, and occasionally even construction was assumed by the students. Fifty-six schools had

programs which included work in social or political organizations. Only
thirteen had both. Senior projects, periods of two weeks or longer
that were devoted to self-planned learning opportunities outside the
school, were scheduled by forty-five schools. These projects fre-
quently consisted of apprenticeships in a field under consideration for
a career, though creative and academic projects were allowed by many of
the schools. Only seventeen offered similar opportunities to under-
classmen. Eight schools had an apprenticeship program in cooperation
with local professionals, businessmen and public servants. All of these
programs give students an opportunity to experience the rewards and
demands of various adult occupations, and to assess themselves in a work
situation. Figure 7 summarizes the frequency of these learning oppor-
tunities among the schools surveyed and among those visited.
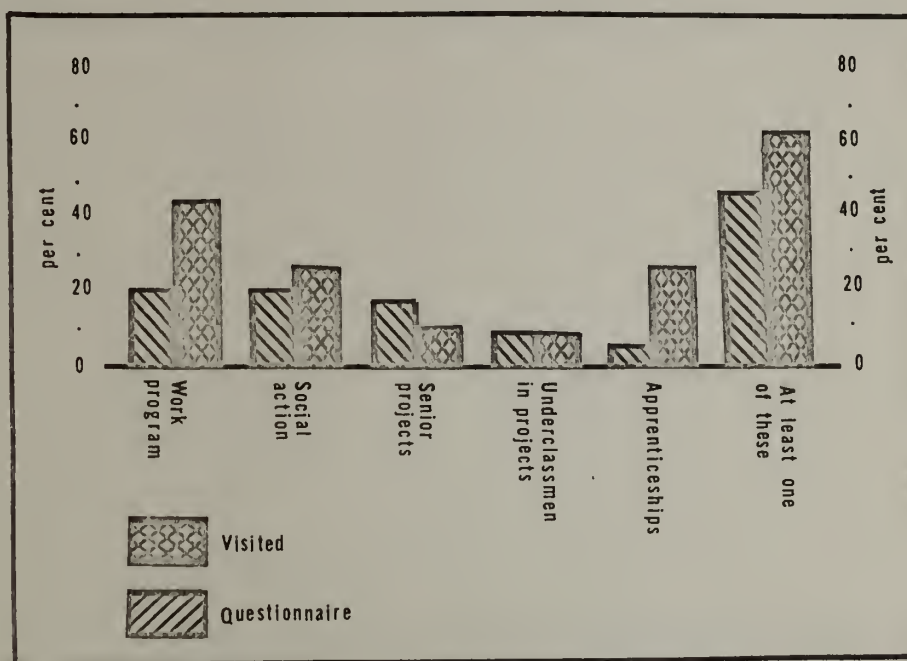
Figure 7

Though the majority of schools surveyed did not mention any program or opportunity sponsored by the school for their students to become familiar with adult professions and careers, those that did described a wide variety of programs. A few of the most outstanding will be mentioned.

The Urban School of San Francisco is an independent four year co-educational day school. It is a school that is deliberately informal, yet challenging. The school belongs to the students in some very real ways, and they assume more responsibility for its finances, programs and atmosphere than is usually the case. Students are voting members of the Board of Trustees, serve on the admissions committee with a voice equal to that of the faculty, evaluate the teachers and assist in the hiring process, and are responsible with the faculty for program development. The schedule has been arranged to allow sufficient time for these activities. The students take their responsibilities seriously, and the Urban School has a program (and a record of college acceptances) that would make any school proud. They have managed to create a true learning community, with strong personal bonds between students and faculty. The atmosphere is friendly and informal, but serious work, study and responsibility have not been sacrificed.

A very different type of introduction into the adult world is offered at Wilmington Friends School in Wilmington, Delaware. As part of a ninth grade course in comparative economic systems, businessmen from the community come several evenings to explain the workings of free enterprise in American industry. These men and women translate the abstractions of academic learning into the nitty gritty everyday problems and

and successes of business, and discuss the pros and cons of the American system with the students. The school makes it possible for students to work in the community during senior projects, and also through apprenticeship programs. Some of the high school students help in the elementary school, and a course in elementary education is offered to give them the background necessary to do a reputable and responsible job.

The Athenian School in Danville, California has an urban center in San Francisco to provide a way of "learning about the processes, institutions, opportunities and problems of modern urban America."[7] Students and staff live, study and work together in a victorian house in San Francisco. This program, also open to college students, offers experience-based learning. It includes a program of seminars, readings, personal counselling and actual internships. The internships, full-time and unpaid, are in media, business, social or community action, politics, education, culture or medicine. Each intern chooses one, or preferably two, assignments. At the end of the semester each student receives a written assessment of his progress during the term.

The Prairie School in Racine, Wisconsin has an "Input Program," which is a two week experience, scheduled just before spring vacation to allow more time for those who wish. The Input Program is a work/learning experience that is supported by people in the community. While some students spend it at sites far removed from Racine, most take advantage of the opportunities provided there. The students react very positively to the program, and the faculty and administration find it of real value in promoting their development of self-confidence and responsibility.

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[7]The Athenian Urban Center descriptive brochure, April, 1972.

Villa Maria High School, a Catholic girls' school in Villa Maria, Pennsylvania has developed a "Life Program" which will be described in more detail in the section concerned with moral development and identity formation. One aspect of the program, however, is an internship in community services, and an afternoon a week for one semester each year is set apart for this purpose.

These programs which help students assume adult roles and develop a sense of responsibility fall into three major categories: (1) work programs at school, involving construction, maintenance, governance or program development, (2) participation in social services and community works, and (3) apprenticeships in actual work situations. Each offers the student a chance to make significant decisions and to assess himself in a work role, interacting with others (and particularly with adults) in new ways. While some schools offered a variety of such opportunities, a surprisingly large majority ignored this side of adolescent development and education, or felt it should be handled outside of the school situation.

Emotional Independence From Parents

Schools, by their very existence, offer opportunities for adolescents to grow in independence from the family. For many students, a favored teacher becomes a counselor, friend and guide when he no longer wants to rely on his parents to fulfill these functions. Some of the structures and practices in schools reinforce his dependence on his parents, however, and prolong it unnecessarily. The almost universal

practices of calling parents into conference, frequently without the
student being present, to discuss the student's personal or academic
difficulties, of sending reports to the parents rather than giving them
to the students, and of allowing parents more voice than the students
when setting policies of dress codes, school regulations and program
changes are examples of structures which force a dependence on parents
and thus retard the student's development as an independent person.

A very different appraoch is taken at the Robert Louis Stevenson
School in New York City. The school was established to promote the
realization of the full potential of gifted underachievers. One of
the essential elements in the program involves a transfer of dependency
from the parents to the school. For this reason, the school does not
report progress or grades to the parents, but rather deals directly
with the student. According to the director, Mrs. Lucille Rhodes, this
is notification to the student that he is responsible for his own actions
and their results. The school's descriptive brochure explains their
philosophy very well.

> Adolescence is the time of growing independence,
> but the child cannot grow up in all areas at the
> same time. While the student's home is inevitably
> identified with his parents, in school it is possi-
> ble to focus on his needs and aspirations as an
> individual and as a member of the group that is
> his own.
> For this reason the relationship between the
> home and the school is kept at a minimum, and there
> is no parent-teacher association. Parents visit
> the school only when classes are not in session. . .
> The environment the student finds at the
> Robert Louis Stevenson School mitigates the
> resentment and rebelliousness that has been

inhibiting his educational progress. In
this way his energies are freed for learn-
ing and growth, first academically and
socially and, subsequently, in his home and
all other fields of endeavor.[8]

Collins Brook School, a small free school in Freeport, Maine,
also is concerned that the structures of the school promote growth in
independence and self-awareness. They originally sent comments home
to parents at the end of each term, but have decided these prolong
parental dependency, and plan to eliminate them. Students at this
school are responsible to plan their use of time, and their educational
programs. Thus far they have shown little academic interest, though
many are quite gifted, and have concentrated on interpersonal relations
and the creative arts. This is not surprising, as free schools are
most attractive to students who wish to get away from the structures
of conventional schools, and "get their heads together." Some of the
students interviewed indicated a growing concern with the quality of
their education, and were considering seriously the possibility of
doing more academic work. They also felt that the "younger" students
should be forced to study and learn, a comment which, in context,
sounded as much like a cry for external structures in their own lives
as it did for structure in the lives of younger students. When questioned
about this, however, they said it was necessary and good for them to be
free to make their own decisions, and to become independent. They felt
they were better equipped for life, and more able to grow and learn than
they would have been had they been exposed to a more traditional education.

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[8]Robert Louis Stevenson School Bulletin, "A New Frontier of
Education."

The Baldwin School of New York City also gives progress reports to the students rather than to their parents. The reports are detailed, and are accompanied by a conference with the student, his advisor and all his teachers. To allow sufficient time for these conferences, a week is set aside during which the students pursue independent study projects, and come to school only for the conference with their teachers.

Concern with the adolescent's development of independence from his parents was most apparent in the northeast, and particularly in the Bos-Wash megalopolis. It is perhaps a function of the complexity of urban living in this area, and the somewhat weakened family structures. In smaller urban areas, and more markedly in rural areas, there seemed less awareness and less need to help the students achieve emotional independence from their parents.

Peer Groups

The formation of peer groups and their influence on individual students are, from the student point of view, what school is all about. As a teacher in a western school remarked, the curriculum is the smoke screen that educators and parents erect to hide what is really going on in school: the kids are discovering themselves, others, and particularly, the opposite sex! His comment held as much truth as it did wit. All schools are aware of the importance of peer groups, and of their very strong influence, but relatively few seem able to tap this resource and capitalize on it.

At the Westtown School in Westtown, Pennsylvania the first week of school is used to develop a sense of community. No classes are held,

as faculty and students join together in physical work and recreation. This gives new students a chance to make friends and become acquainted with the school before they are expected to perform in the classroom or on the athletic field. It also sets a tone of cooperation and friendliness for the school year. Westtown has a rather different solution to the problem of sex discrimination in school elections and programs. The girls and boys each elect a head, and the two who are elected served jointly. The system seems to work well there, and assures that the girls as well as the boys have an opportunity to learn leadership skills and practice responsibility. The system also seems well suited to the natural development of high school peer groups, which as described in Chapter II, are at a transition stage between unisexual and heterosexual groupings. It will be interesting to see if the women's movement makes enough impact that this sort of precaution will become unnecessary.

The Indian Springs School in Helena, Alabama also makes deliberate use of peer groups in their educational program. Indian Springs stood out among the schools visited in the South Atlantic States because of its limited number of regulations and restrictions, and its strong emphasis on trust and student responsibility. Like Westtown, they stress the community aspect of the school. All rules, regulations and aspects of daily living are discussed at Town Meetings, where students and faculty have equal voice.

> . . .We encourage students to learn about themselves
> as well as about their classroom subjects, and we
> try to provide boys with the freedom to learn to
> make decisions responsibly.

> We have few rules, because we respect each
> boy's capacity to make responsible decisions.
> Teachers and students know each other well,
> and work together toward the common goal of
> helping boys grow into men.
>   Community life at Indian Springs is a con-
> tinuing exercise in the operation of a demo-
> cratic community; Students (sic) learn to be
> good citizens through personal experience and
> involvement.[9]

Very few schools made use of peer groups for disciplinary or regulatory purposes. At most of the schools visited, the students had made it clear that they did not want to sit in judgment on their peers, and felt this was the responsibility of the adults. This was probably partly due to the fact that some things the adults thought to be punishable misdemeanors (drug use, class cutting, etc.) are not thought wrong, or are considered personal and not public matters, by the students. There were a few exceptions to this trend: Westtown's student government performed judiciary duties, as did the students of the Sunset Hill School in Kansas City, Missouri. In the latter case, students were chosen by lot to serve on the disciplinary committee when the need arose.

The schools that made best use of peer groups tried to avoid a sharp distinction between student groups and faculty groups. This was done through the use of community, rather than student, governments, of social or athletic outings that could be enjoyed by all, and work pro- jects in which students and faculty participated together. This seemed to enhance the positive effects of the peer groups, and lessen the

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[9]Indian Springs School pamphlet, 1973.

chances of exclusion, cruelty or destructive activities. As most
adolescents enjoy being with adults when they are accepted on an
equal basis and not treated as inferior to them, there was no resis-
tence to these activities. They also seemed to increase school
spirit and lessen resistence to academic endeavors.

Cognitive Development

There was no lack of emphasis on cognitive development in
either the schools visited or those surveyed. Virtually every school
described well developed cognitive programs, and only five said that
it was not their primary focus. In many of the schools visited, common
problems and concerns with this part of the program were discussed: a
lack of unity in the program, overdepartmentalization, fragmentation of
learning, overly abstract approaches, lack of relevancy and schedule
restrictions. These issues will be discussed in the next section of
this chapter. This section will be limited to a description of selected
programs that were judged exciting and successful by the schools using
them.

The subject areas of mathematics and science are particularly
well suited to fostering formal operational thought. Mathematics demands
an ability to reason abstractly, stresses logic, ordering, the construc-
tion of all possible combinations and relations, and the systematic
isolation of variables. Science uses these same thought processes, and
allows many opportunities for inductive hypothesis building and deductive
hypothesis testing. The adolescent mind is just beginning to use these

processes, and to become adept at them. Unfortunately, many of the
packaged text book approaches to mathematics and science presume these
abilities rather than focusing on their development. It was not sur-
prising, then, to find that while many schools used BSCS, PSSC, CBS
and "new mathematics" texts and programs, most adapted them quite
freely to the needs of their students.

The Gill/St. Bernard's School Bernardsville, New Jersey
revised their curriculum extensively because they had opted for a new
type of schedule. The math-science department adopted an individual-
ized, interdisciplinary inquiry approach, and their statement of phil-
osophy clearly indicates a focus on the <u>development</u> of rational pro-
cesses.

> The Math-Science Department recognizes that
> the rational powers of the human mind play an
> expanding role in modern life; that these powers
> are basic to individual dignity, human progress
> and national survival; and that to help every
> individual to develop these powers is a profound
> objective, the importance of which increases with
> the passing of time.
> . . . .
> The development of the rational powers,
> therefore, when integrated with the emotion,
> beauty and wonder of science and mathematics,
> will lead to the development of an individual
> within the framework of current thinking in
> adolescent psychology.[10]

Many of the courses offered combine areas that traditionally
would be taught in separate courses: IPS and Algebra I; ESCP and
Algebra I; Chemistry and Algebra II--Trigonometry; Project Physics and
Algebra II--Trigonometry; Advanced Physics and Calculus. Others, such

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The Gill/St. Bernard, Mathematics-Science brochure, 1973.

as geometry, have the traditional name, but involve much more appli-
cation of geometry to the everyday world than do most geometry courses.
"Mathematics--A Human Endeavor" is a three-week experiment oriented
elective that "surveys many rather complex mathematical ideas presenting
them in a manner which allows students to discover what mathematics is
really like.[11] The Gill uses a total immersion scheduling plan that
allows students to pursue one subject at a time for a number of weeks.
The schedule encourages students to become more involved with the area
being studied, and gives ample lengths of time for discussions and
experiments. In mathematics and science, extended periods of time
encourage an approach that stresses application. While skill building
and vocabularly are also taught, they cannot be the focus of the courses,
as they demand too intense concentration to be extended over long
periods of time.

In the humanities field, many schools are interested in inter-
disciplinary problem-centered approaches that encourage students to
relate the knowledge and skills gained in a variety of fields, and to
deal with complex and relevant problems. The problems of interdisciplin-
ary approaches will be dealt with later, but some interesting programs
will be described in this section.

Westledge School in West Simsbury, Connecticut, is a day school
for students in grades seven to twelve. A new school, Westledge is
trying to provide a viable alternative to the traditional preparatory
school. To this end, it is multi-racial, has terminal as well as college-
bound students, a large financial aid program, and is very concerned with

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[11]Ibid.

current social problems. This orientation is reflected in its pro-

gram of studies. The course descriptions of two of the offerings

in the humanities department illustrate an interdisciplinary approach,

a combination of abstract and experience-based learning, and an effort

to help students gain sufficient knowledge and skills to solve real

problems.

> Role and Strategy of Citizen Action:. . .This
> course is a joint effort between Connecticut Cit-
> izens Action Group and Westledge. Its purpose
> is to acquaint students with the various forms of
> citizen action beyond the voting booth. Students
> will participate in both academic study and
> community experience. . . .Specific class tasks
> will be to (1) draft and lobby for a piece of
> legislature in the Connecticut General Assembly,
> (2) monitor laws passed in earlier legislatures,
> (3) learn techniques of using public media to
> inform citizens, (4) create a citizen complaint
> center.

> American Experience: A study of basic ideas
> concerning American life styles. Specifically,
> race as a deterministic idea, education as a
> "stepping stone" and the role of politics and
> policy makers.[12]

One of the most heartening findings of this study was the in-

creased respect and emphasis given to creativity, especially in the

Fine Arts and English fields. Of the 256 schools participating in the

survey, 192 offered a varied creative program. Forty-one of the 50

schools visited had creative arts programs. Many schools required their

students to take at least one full year course in a creative area.

The Waldorf school plan of studies has long integrated creative

studies into its program. One of the most striking things about the

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[12]Westledge, Course Selection Packet--Spring Term, 1973, pp. 11-12.

Rudolf Steiner School in New York City was the quality and abundance
of student art displayed throughout the building. A sense of the
beautiful could be felt everywhere in the school, an indication that
their philosophy is being operationalized.

> The arts are an integral part of the
> general curriculum and play their vital
> role in the all-round development of each
> child. The aim is not to train special
> skills, but to lead children into the ex-
> perience of color, form, movement, speech
> and tone in such a way that their capacities
> for life are awakened. . . .The high school
> art program offers training and experience
> in black and white drawing, modeling, wood-
> carving and painting. The crafts program
> for the older children includes woodwork,
> general crafts, and bookbinding. Exper-
> ience has shown how important and beneficial
> these subjects are in the over-all develop-
> ment of each boy and girl, especially in the
> adolescent years.[13]

Curriculum development in the cognitive and creative areas was a
major concern in virtually every school visited. None was satisfied
with the prepackaged courses offered by the commercial publishing
houses, and most found that too little help was given in this area by
the National Association of Independent Schools or by their local edu-
cational agencies. One exception was noted; the Independent Schools
Association of the Southwest was praised frequently for its contribu-
tions to the schools. Most schools expect their faculty to develop the
curriculum, but are aware that they do not have sufficient time or
resources to do the job correctly. To further complicate the process

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[13]Rudolf Steiner School brochure, 1973, p.7.

of curriculum design, many schools are ambivalent about the purpose, focus and thrust of their programs. The majority of schools visited had some very exciting and valuable programs within the curriculum, but very few had an overall purpose that gave unity and direction to the total curriculum.

Moral Development and Identity Formation

While most nonpublic schools highlight moral development and identity formation in their statements of purpose, very few have developed specific programs or courses to accomplish this aim. Less than twenty per cent of the schools responding to the questionnaire listed course offerings in the areas of value clarification, interpersonal relations or ethics. Many schools that offered psychology, philosophy, religion or ethics courses listed them under courses primarily concerned with cognitive growth, rather than affective or a combination of both.

Of the fifty schools visited, thirty-seven had at least one learning opportunity intended to promote the clarification or development of personal values and identity, but less than ten per cent had worked out a program appropriate to different age groups and concerned with the personal, interpersonal, social and political aspects of value formation.

One of the most complete programs was created at Villa Maria High School. The "Life" program, mentioned briefly previously, is required of all students, and uses discussions, experience-based learning

and formal teaching to accomplish its aims. It leads each student to understand herself better through a brief introduction to psychology, an examination of various value systems, and an experience with social and community service. The plans for the first two years of the program have been published,[14] and the second two years are still in the writing and testing stages.

Phillips Academy in Andover, Massachusetts offered eighteen courses in religion which "attempt to develop and combine a capacity for critical analysis and a sensitive appreciation of religious beliefs and values"[15] and a Human Relations Seminar to explore the dynamics of interpersonal and group relations. In the interview, Mr. Simeon Hyde indicated that special emphasis would be given to the planning of a program geared to the needs and abilities of high school students in the area of moral development during the 1973-1974 school year.

Some courses and learning opportunities are particularly well suited to the development of a sense of identity. Drama is one of these, and many schools have developed strong drama programs which interested a large percentage of their students. Schools that offered philosophy and psychology courses found students used them to examine their own behavior and values, and to come to a better understanding of themselves. Frequently schools used mini-courses or "non-academic" times to offer short exercises in value clarification. At most of the

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[14]Search for Values (Pflaum/Standard, 1972).

[15]Phillips Academy, "Course of Study," 1973-1974, p. 43.

schools visited, however, there was much interest in developing a better program in these areas, but a sense of frustration due to the lack of available materials and to an uncertainty about the goals and processes of such programs.

Summary

These descriptions give only a brief overview of some current programs that deal specifically with the developmental tasks of adolescents. Many other excellent programs were found in the schools visited and surveyed, but it would be an impossible task to describe them all. The overall impression given by the schools, however, was that cognitive development was the main focus of high school education, and was often emphasized at the expense of overall personal development. In general, the programs seemed more attuned to the demands of colleges and dictates of tradition than to the needs of adolescents. While the schools cannot be expected to assume total responsibility for the development of the students, they can probably be expected to do more than is currently the norm.

Concerns Most Frequently Expressed
During the Interviews

Certain issues and concerns were expressed again and again by administrators and faculty in the fifty schools visited. Five of these will be discussed in this section: (1) the development of a spirit of community within the school, (2) freedom and responsibility vs. discipline and authority, (3) discipline-centered vs. interdisciplinary

approaches to curriuclum design, (4) rigor and depth vs. enrichment and breadth in college preparatory programs, and (5) the pros and cons of different types of schedules. These topics were chosen because they were most frequently brought up during the interviews, and because they are critical factors in the educational plan and overall atmosphere of a school.

Developing Community Spirit

The development of a real spirit of community within the school was considered of primary importance by almost all boarding schools, and by many of the day schools as well. Involved in this spirit are a mutual concern among students and faculty, acceptance of personal responsibility for the well-being of the school community, recognition of oneself as important to the school, and a certain pride and pleasure at being a member of the school community. American society can be impersonal and dehumanizing, qualities which easily lead to apathy and inhibit full maturation. Many of the schools visited were concerned to provide an antedote to this by creating a warm, human atmosphere within the school which whould foster the development of the full potentials of their students. To this end, there was concern that the communications between adults and adolescents be open and honest, that peer groups exert beneficial influences on individuals, that each student be appreciated for his own worth, and that the school experience enhance the students' self-esteem.

In very small schools, a feeling of community seemed much easier to establish than in larger ones. Students and faculty all knew each other, and each individual made a visible impact on the group. Small schools needed fewer regulations than larger ones, had less red tape, and thus seemed more human and informal. It was also possible for them to respond easily to unforseen needs and events, to change the schedule, cancel classes for a school meeting, or plan outings and get-togethers for the entire community. While not all the small schools visited took advantage of their size in these ways, most did, and benefited from it.

Size seemed to be the prime factor in the development of community. Very few schools with an enrollment over two hundred reported that they were satisfied with the feeling of community in their school. The few large schools that had managed to create community in spite of their size were located in remote areas, where there were no cities to provide entertainment or escape, and where the faculty and students resided on campus, and really needed each other for companionship and the fulfilling of basic needs (maintenance, cooking, etc.).

Many large schools are attempting to promote the growth of community by the use of a cluster system. The cluster is a smaller group within the school which decides many of its own regulations, may share an advisor, and live and have meals together, relatively independent of the whole. While many schools felt that the cluster system helped to build community, none found it completely satisfactory. Large organizations are somewhat impersonal by their very nature. It is difficult

for one person to influence them or feel significant within them.
Schools with more than two hundred students found themselves having to
make continuous efforts to remain personal. Well developed advisory
systems, informal gatherings of faculty and students, scheduled outings
and cluster systems were the methods most frequently used. Schools
with large dormitories had a particularly difficult time developing
a warmth and freindliness about the school.

Freedom and Responsibility vs. Discipline and Authority

Probably there was no issue more controversial than that of
freedom and discipline in the schools. The schools visited ranged
from free schools to the most traditional, from informal and lenient
to formal and strict. A few administrators felt sure they had achieved
the proper balance in their schools, but the majority did not, and were
continually weighing the pros and cons of other approaches.

There is no easy answer to the dilemma, but certain telling
facts emerged from visiting schools across the country. The first was
that students can be happy and productive in strict, regulated schools
and in open, free schools, as long as the school is consistent in its
expectations. Schools which promote freedom and openness in the curri-
culum, encourage critical thinking and independence, and offer wide
choices in the program cannot expect their students to react positively
to restrictions on dress, authoritative administrative structures or
adult controlled disciplinary committees. Likewise, schools with set

programs find their students uneasy with demands that they assume
responsibility for governance and discipline when they are allowed
no responsibility for determining their own programs. Schools which
expect their students to be responsible and mature and which structure
the program, regulation and administration of the school accordingly
seem to find that the students meet their expectations. Administrators
who feel students need clearly defined limits and regulations find they
can structure the school so that students work happily within these
limits. The fact that schools report their students are happy in
both systems does not lessen the responsibility to choose wisely be-
tween them. There can be little doubt that schools which give their
students opportunities to act responsibly and make significant deci-
sions are promoting their maturation. Those that give them no practice
in these areas may be unnecessarily prolonging their dependence, and
thereby retarding their maturation.

Schools which allow students to make many of their own decisions
occasionally accept mediocre work and behavior from them. In several
interviews, this was attributed to the fact that it seemed more diffi-
cult to evaluate the work of students objectively when informality and
closeness between faculty and students characterized the atmosphere of
the school. Many administrators interviewed said the solution to this
problem was to hire mature faculty who were sincerely interested in
their field and in education. They named immaturity, shown by a re-
luctance to criticize and a desire to be popular with the students at
the expense of good teaching, as the cause for a lack of excellence.

Discipline-Centered vs. Interdisciplinary

Approaches to Curriculum Design

Most of the schools visited structured the curriculum along disciplinary lines. There was widespread interest in developing inter-disciplinary humanities courses, combining the skills and content usually found in English, social studies, psychology, philosophy and the fine arts. Integrated science courses incorporating material from all branches, integrated mathematics courses, and science-mathematics combinations were frequently discussed. Several reasons were given for the lack of progress with these courses: insufficient materials, inability of the faculty to plan and teach interdisciplinary courses, schedule restrictions and a fear that interdisciplinary courses would lack the rigor and depth possible in disciplinary approaches.

In virtually every school visited which had interdisciplinary offerings, the courses and materials had been developed by the faculty. Colorado Rocky Mountain School described a sophomore course which inte-grated English, history and science by using the theme of evolution. The Gill/St. Bernard's developed mathematics-science courses. The "Life" program at Villa Maria, and a senior "Concepts" course at Swain Country Day School, Allentown, Pennsylvania combine academic and experience-based learning. Verde Valley School in Sedona, Arizona is working towards a totally integrated curriculum, though the mathematics and science faculty have not yet been able to develop the course to include the content and skills from their disciplines. The Urban School of San Francisco has used an interdisciplinary approach to problem-centered

courses, and the Indian Springs School in Alabama has a well developed "Basic Studies" course that centers on English and history, but draws from all the humanities. Presently it is chronologically organized, but the faculty is attempting to make it philosophically based instead. The Sunset Hill School in Kansas City, Missouri has coordinated the science courses and also their humanities offerings. These schools were able to develop their programs either because one faculty member had sufficient knowledge and skills in several disciplines and could direct the program planning, or because several faculty members shared educational goals and worked particularly well together. No school found it could develop an interdisciplinary program and then train any faculty members to teach it. The need for teachers who work well together, or for a particularly gifted one with a command of several disciplines could be somewhat alleviated if there were more materials available. When faculty must decide on the content and structures of the course, find the materials, devise new teaching methods and learn to plan and schedule as a team, smooth interpersonal relations become an undisputed necessity. Hopefully, if some of these activities could be assumed by curriculum designers and educational publishers, teachers with different styles, approaches and goals could work together and provide valuable enrichment to the courses.

Schedule restrictions are very real barriers to interdisciplinary courses, as these frequently require combinations of long and short meeting times, as well as possibilities for small and large group instruction. Methods of overcoming this problem will be discussed in the next section of this chapter.

The concern that interdisciplinary courses lack the depth and rigor of disciplinary ones is not totally without foundation. Interdisciplinary courses usually stress relationships between trends, events, processes or elements. Disciplinary approaches concentrate on the trends, events, processes or elements themselves, and hope the students will draw the various courses together on their own. There is merit in both approaches, and the goals of a particular program can indicate with approach, or combination of approaches best suits them. There are certain basic skills, however, which are necessary to both approaches and more often neglected by interdisciplinary than disciplinary ones. Among these are the computational skills of mathematics, observation and inductive skills necessary for the sciences, reading, writing and speaking skills in language. Many schools are beginning to develop basic courses which concentrate on the acquisition of basic skills. The courses are required of all students unless they can demonstrate proficiency in the specified area, and they are prerequisures to elective and problem-centered courses. The Tatnall School in Wilmington, Delaware has such a program for the English skills, as does Phillips Academy in Andover, Massachusetts. Several secondary schools offer arithmetic skill classes at the seventh and eighth grade levels for students who need more instruction and drill in computation. The schools with these programs are pleased with them, and find they leave them free to develop a breadth of offerings while still assuring that the basics are well learned.

Rigor and Depth vs. Enrichment and Breadth
in College Preparatory Programs

The fear of a loss of rigor and excellence was not limited to
those schools considering interdisciplinary programs. As college
preparatory schools increase their offerings in the fine arts, work
experience and value formation, the recognize that their students have
less time to devote to the five traditional disciplines. Inevitably
there is some loss in the quality of their work in these fields. While
few schools advocate a return to a narrower program, they face the
problem of balancing enrichment and excellence. Enrichment is itself
a form of excellence, and as colleges do away with survey courses and
freshman requirements, high schools realize they may offer the last
chance to their students to receive a broad education. Thus they are
developing electives, some single-termed, problem-centered courses and
interdisciplinary programs, and encouraging their students to take as
broad a program as possible.

The schedule

No single material factor effects the programs and goals of a
school more fully than does the schedule. Schedules facilitate or hinder
every plan in the school: styles of classroom instruction, use of
community resources, team teaching, sharing of materials, development of
interdisciplinary courses, and flexibility for students and faculty.

Most of the schools visited used a form of block scheduling,
modified for their own purposes. Most courses met daily for forty to
fifty minutes. Sciences and art courses were scheduled into two "blocks."

Teachers occasionally "swapped" class times, or gave up a period, to allow the possibility of field trips. While some schools managed a schedule that allowed departments at least one joint planning period a week, most could not, and the faculty met at lunch, after school, or in a haphazard chance fashion.

The problems of this type of schedule are well known: it allows essentially the same amount of time for each course, regardless of its needs. To accommodate slow, average and fast learners, courses are watered down or enriched. Time is fixed, thus the only variable is content. Field trips must be held to a minimum lest too much class time be lost. The use of long films, games or role playing techniques, and in-depth discussions is limited by the shortness of the standard period. Some schools overcame this to some extent by scheduling certain afternoons to be used for field trips, work experiences and community involvement. Though this offered a partial solution, all activities had to vie for the same time slot.

Some few schools had attempted a modular schedule to give additional flexibility to their programs. The problem with such schedules, particularly in schools of one to three hundred students, was that once the schedule was set, it was almost impossible to make any changes in it. It became even more inflexible than the block schedule. To add to that disadvantage, it also wasted much student and faculty time. They frequently were scheduled for "one module" free periods during the day. These could be as short as twelve minutes, and rarely longer than twenty. That was too little time to study, correct papers or have a conference.

Five of the schools visited had developed forms of unit, or immersion schedules. The Gill/St. Bernard's used a schedule that allowed students to study one subject at a time for three, six or nine weeks, depending on the course. Their purpose for introducing this new schedule were (1) to provide more flexibility within courses for individual students, (2) to take fuller advantage of the offerings of the community, and (3) to make better use of the financial and personnel resources of the school. After using the new schedule for a year, they employed consultants to evaluate the school. The evaluation showed that no noticeable losses had occurred during the year, and that there was much more flexibility in teaching styles and content, in individual students' courses, and in the use of traditional and non-traditional materials.[16] The new scheme had also made it possible for community persons to teach in areas such as ceramics, oil painting, auto mechanics and stock market finances. These people were able to come for three weeks when they could never have scheduled an hour a day for a term.

The schedule also caused curriculum revision. The mathematics-science courses were described earlier. Language programs developed so that students had not only classroom instruction, but also the opportunity to spend three weeks in a country where the language was spoken. This resulted in an increase in fluency, oral comprehension and cultural

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[16]The Gill Plan: An Evaluation 1971-1972, evaluation prepared by David Locascio.

appreciation.[17] In all courses, films, museums, theaters, community resources and field trips could be incorporated with greater ease and at the time most beneficial for the course.

The Urban School of San Francisco developed a modified form of the immersion schedule. Each student's day was divided into two parts, allowing for the study of two subjects each term. The year was divided into twelve six-week terms, and students were urged to spend at least one in independent study, preferably off campus. A preliminary evaluation of the plan indicated a felt loss of community, which led to the development of times when the whole school could be free together. The ten periods each week were divided so that each course was alloted four, and the remaining two were used for school outings, interviewing new students, developing and evaluating corriculum, planning future functions and other tasks that were assumed by faculty and students.

The Tatnall School in Wilmington, Delaware developed the most flexible system. They divided the year into terms or "novas" of twenty-two teaching days each. During any single nova, a student could elect to take one total immersion course, or two major and one or two minor ones. The minor courses, such as band and chorus, were scheduled in forty minute afternoon periods. The morning was scheduled to accommodate long (two hour) and shorter (one hour, forty minutes) classes. The varying lengths of time allowed for different course needs, and also made possible a response to individual differences in students' rates of learning. Thus students who needed most time and most faculty assistance

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[17]Ibid.

in a particular course could take it for two novas in classes of an hour and forty minutes. Those who needed least help and time could schedule it for one nova of the same length. Others could spend two hours a day for one nova on the course. This allowed students to learn the material at their own pace, and made the padding and watering down of courses unnecessary. It also made it unnecessary to "track" students or put them in slow sections when they needed more time only in one area. The evaluations of this program are positive. The radical changes in the schedule necessitated radical program revision, and faculty and students are enthusiastic about the results.

While all the schools which used a form of immersion schedule were strongly positive about it for financial, academic and motivational reasons, schools which had not tried it were quite skeptical about its value. Some even insisted it could never work. Administrators admit that it complicates the administration of the school, particularly the record keeping. It also necessitates personal academic guidance for each student. These disadvantages seemed outweighed by the obvious enthusiasm of faculty and students, the increase in creativity and program development, and the financial benefits.

Common Factors Observed in the Most
Successful Schools Visited

Some of the schools visited had characteristics which led the researchers to classify them as particularly successful. This does not refer to their success in fulfilling a preconceived idea of what schools

should be doing or what values they should transmit, but to their success in fulfilling their own goals and meeting the needs and expectations of their constituencies. The following guidelines were used to identify successful schools:

1. the stated opinion of the head of the school (or person being interviewed, if the head was unavailable) that the school was moving towards its specified goals as a satisfactory pace,

2. active program development shown by recent evaluations and improvements of existing programs, or new programs in planing or existence,

3. a relatively low turnover of faculty and staff (less than 20%),

4. enrollment trends that indicated the school was experiencing no greater underenrollment or drop in applications than that experienced by private schools in the surrounding geographical area,

5. support of significant groups within the community: parents, alumni, and (for church affiliated schools) church. To minimize personal biases and misinterpretations of the interviews, a tape was made of each interview, and the author checked her findings with those of the second researcher who was present at all but one of the school visits. Only when both persons had come to the same judgments and conclusions was the material accepted for this evaluation.

The factors agreed upon by both researchers as common to the
most successful schools visited were:

1. active leadership in the person of the headmaster or head-
    mistress,

2. clearly stated values that were reflected in the programs,
    structures and regulations of the school, combined with
    clearly stated academic goals that served as impetus and
    guidelines for program development. Consistency between
    the two, as described on pages 84 and 85 was necessary,

3. careful planning of new programs and changes,

4. a policy of refusing to enroll students who did not want
    to attend the school.

Leadership

Probably no factor was more difficult to analyze than the leader-
ship exerted by the headmaster or headmistress. Faculty and students
alike credited the head with causing the successes of the school, though
they were apt to name many causes when discussing weaknesses. In his
study of nonpublic schools, Otto Kraushaar remarks that "the success or
failure of private schools depends to a large extent upon the quality of
the school head's leadership."[18] While no one style of leadership, either
democratic or authoritarian, stood out as clearly more effective than
any other, certain personal qualities seemed common to the most success-
ful school heads: all were enthusiastic, highly personable educators,

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[18]Kraushaar, Nonpublic Schools, 173.

with a quasi-philosophical perspective on the programs, problems and strengths of their schools. Though almost all complained of too little time to keep up with trends in education, and too little time to read, they showed a very good knowledge of educational ideas and trends, balanced by a realistic evaluation of their students and community they were serving. Kraushaar offers a sympathetic and accurate description of the demands put on the head of a nonpublic school.

> . . .he must be a competent administrator who
> can evoke cooperation from people who often have
> little taste for it, and prefer 'to think other-
> wise'; he should have a good head for budget-
> making and running a business enterprise; he
> should be himself a competent teacher and judge
> of teaching capacities in others; he should know
> how to interpret the school to the community
> and win for it moral and financial support;
> and above all else he should combine in his
> person the philosopher of education who can
> think penetratingly about ends, and a man of
> action who can translate a vision of what should
> be into the means for its fulfillment.[19]

This combination of a sage and salesman is rare, and few persons could excel in both. However, the ability to get along well with others and to bring forth their best efforts seemed a definite necessity for success in this job. In almost every school visited, the faculty provided real leadership in curriculum development within their department and in their own courses, but major revisions in goals, structures, schedules or departments came most frequently from the head.

Values and goals

While it was not surprising to find that the most successful schools indicated specific human values and specific academic goals

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[19]Ibid., 182.

which they wished to promote, it was surprising to find many schools
with no overall aims, or with glaring inconsistencies in their expressed
values and goals. The schools which reported the most unrest among
faculty and students, the most apathy, and the most serious drug and
alcohol problems most frequently had vague goals, vague disciplinary
policies, and had not taken a position with regard to the values they
wanted to be characteristic of their schools. While there were real
differences in the philosophies of the successful schools, each had a
clear position. In this case, the choice of specific values seemed
less significant than the fact that a choice was made.

Schools with clear academic goals but unclear ones in the sphere
of human values frequently found themselves caught up in faculty-
student-administration disagreements, and a mushrooming array of in-
dividual discipline problems with no guidelines for solving them.
Schools with a clear sense of the values they stood for, but unclear
academic goals often created fragmented programs, and overlooked skills
and experiences that should be included in a college preparatory pro-
gram. Only when both the academic goals and the values of the school
were clear (though not necessarily static) did the schools seem able to
develop cohesive programs and create satisfactory learning environments.

Planning

The importance of thorough planning for changes and program
development cannot be overstated. In several schools new programs
failed not because they were badly suited to the school or lacking in
merit, but because insufficient time and thought had been spent in

planning and explaining the program. The most successful planning methods described by the schools included careful examination of the proposed change and its predictable effects on the school community, the seeking of opinions from parents, students, faculty and outsiders during the planning stage, disclosure of the proposed change, the reasons for it and expected outcomes (short and long term), and an explanation of the timing and methods for its evaluation. This type of planning schedule allows many problems to be spotted and corrected before the change is actually adopted, encourages the support of the many people consulted for planning, and lessens resistence due to ignorance or misunderstandings. Schools which used this format were careful to promulgate the evaluations of the program after they had been conducted. Though this process takes time, it seems more pro- ductive and perhaps occasionally even less time consuming, than calming the storm of resistance caused by changes that are introduced before they are adequately examined, developed and explained.

The Students

At almost every school visited, it was stressed that students who do not want to attend a school and are forced to by their parents, usually do not achieve well, and frequently cause problems and unrest in the school. While not understating the problem of enrollment, many adminis- trators and found from experience that it was far better to be under- enrolled for several years than to accept students who would make the atmosphere of the school unpleasant, and create problems that could take

years to correct. Most schools felt that they could easily absorb a few students whose academic talents fell short of the norm for the school, and could help these students, but none felt it advisable to accept students who were being forced to apply by their parents. This was expressed most strongly in boarding schools, but was mentioned by day schools too.

Conclusion

There were many excellent schools and programs not mentioned in this chapter that contributed to the investigator's understanding and appreciation of the education offered by nonpublic schools. Their omission is not an indication of their lack of merit, but merely the result of the limitations of time and space. Each of the fifty schools visited and the two-hundred fifty-six responding to the questionnaire added something to the study, and the model developed in Chapter IV has been enriched by their contributions.

C H A P T E R   I V

A MODEL COLLEGE PREPARATORY PROGRAM FOR NONPUBLIC SCHOOLS

It is evident from the preceding chapter that while many ex-
cellent programs have been developed in nonpublic preparatory schools,
the concerns mentioned by the administrators and the structures of the
schedules and the curriculua indicate more of a disciplinary perspective
than a learner-centered one. While the model proposed in this chapter
has drawn heavily from the major disciplines and presents a strong
academic program, it is organized around the concerns, needs and
development of the students. That is, the study of the developmental
tasks of middle-class American adolescents provided the structures for
the curriculum, while the information supplied by the schools visited
and surveyed, as well as that described in books and articles dealing
with secondary curriculum provided the programs judged suitable to the
goals of the curriculum.

The chapter will be divided into four sections. The first pre-
sents a rationale specifying the steps and procedures of curriculum
planning in a nonpublic school. In Chapter I it was pointed out that
rationales are of limited assistance in curriculum development. They
specify a process of information gathering the decision making, but
they cannot supply answers to the important questions: what aims and
values should be promoted by the school, what are the real needs of the

students, what programs meet these needs best. They provide an orderly
and relatively complete process for curriculum planning, however,
and thus have a place in the presentation of a model. The proposed
rationale is eclectic, drawing heavily from the works of Tyler,
Goodlad, Taba, Schwab and Tanner.[1] In deference to readability, the
similarities are not highlighted by individual footnotes. The rationale
is suggested for use in nonpublic rather than public schools. The
differences in the assignment of responsibility and authority in these
two educational systems make it necessary to use different approaches
in each.

The second section of this chapter will present some general in-
formation concerning the needs and desires of nonpublic school students
and their parents. If this model were being developed for a particular
school rather than as a sample learner-centered curriculum, information
about the specific students and parents to be served by that school
would be used rather than that presented here.

The third section is a model secondary curriculum for students
from eleven to eighteen years of age. The model does not provide the
specifies of day to day instruction, but rather deals with overall goals
and programs. Development of a curriculum at the more specific levels
is rightly the task of the faculty and students.

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[1]Tyler, _Basic Principles_, John I. Goodlad, _The Changing School
Curriculum_ (New York: Georgian Press, 1966); Taba, _Curriculum Develop-
ment_; Joseph Schwab, "The Practical: A Language of Curriculum and
Instruction" in National Education Association, _Schools for the 70's--
And Beyond_ (1970); and Tanner, _Secondary Curriculum_.

The final section of Chapter IV proposes some major structures and policies for a college preparatory school with a learner-centered program. These would have to be adapted to fit the needs of any specific school, thus the focus of the section is on the principles behind the decisions to be made, and the considerations to be taken into account.

A Rationale for Curriculum Planning
in Nonpublic Secondary Schools

Step 1: Gathering Information

Curriculum planning is not conducted in a void, nor does the curriculum expert have the option of starting from scratch. There already exists a commonly accepted high school program for college-bound students, though it is adapted in a variety of ways. College Board Examinations include certain skills and content, and as these examinations are the passkeys to college entrance, schools must provide the training and learning opportunities necessary for students to master the necessary skills and material. In addition to this, any existing school has an operating curriculum with proven strengths and weaknesses, and any new school has the given elements of pupil, parent, teacher, director and board expectations. The existing curriculum and the expectations of the school community are sources of information for curriculum development. Still other sources are: the needs and desires of the school community, psychology, pedagogy and experience. When designing the curriculum, each of these sources must be tapped for its input.

Step 2: Choosing the School's Philosophy

Or Purpose

The second step in curriculum design, specifying the school's philosophy, is a very important one, for it will shape the major policy decisions, influence hiring policies, determine the character of the curriculum and even effect the admissions policy. The persons most directly responsible for setting the school philosophy and policies are the members of the Board of Trustees and the Headmaster or Headmistress. The Headmaster has two roles in these decisions: he is the representative to the Board of the students, faculty and parents and an educator in his own right.

Before setting the philosophy and policies of the school, the Board and Headmaster need the information provided by the sources listed in Step 1 (the learners, society, the existing curriculum, the school community, psychology, pedagogy and experience). Frequently Boards are asked to make decisions without being given sufficient information, and then the decisions are criticized as inadequate or misinformed. In most schools, the Board is comprised of persons from a variety of careers, and not necessarily associated with the field of education. Thus it falls to the Headmaster and members of the Board familiar with education and adolescent psychology to provide all the members with as complete an understanding as possible of the issues involved.

The Headmaster and Board of Trustees have personal value systems, either implicit or explicit. As these value systems are necessarily

operative in decision-making, they provide the filter (or screen) which works to select among competing goals and information. The more explicit and clearly expressed are these values, the more they can act as a filter, and thus simplify the task of setting policies and goals. This process of selecting among competing philosophies in no way assures an "objectively" correct choice, but it assures a clear and relatively consistent one. In a field as human and subjective as education, there can be no objective best. Differences in personal values and wishes should lead to real differences in educational plans and policies. This can be one of the greatest contributions of nonpublic schools to education. It provides real alternatives in education, and allows for a study of the outcomes of programs with widely different goals and processes. Such alternatives are necessary to the development of education, and need to exist in a country which claims to promote the individual and value differences as enriching rather than fear them as threatening.

If the school's philosophy and goals are to be internally consistent, it is necessary that the trustees and Headmaster have compatible value systems. If another administrator or curriculum director is responsible for the program, he or she too must understand, and preferably share these values. Incompatible value systems could easily lead to the establishment of widely divergent goals in the program, and nullify the hoped for results.

Steps 3, 4, and 5: Specifying, Disseminating

and Evaluating Objectives and Programs

While these three steps involve different activities, they are
so necessarily intermeshed in program planning that they will be dealt
with together. Programs should be designed, explained and evaluated
even before they are adopted for use. In this way, many mistakes and
oversights can be avoided. Planning and evaluation also go on during
the program and at its conclusion.

When the general policies and the philosophy of a school have
been decided, they become guidelines for further curriculum planning.
Responsibility for this further planning rests with the Headmaster in
almost all nonpublic schools, though he is free to delegate as much of
the actual decision making as he sees fit. It seems best to leave
the decisions to those who are closest to the sources of information
and most directly affected by them, while providing whatever support
and help seems beneficial.[2] Thus decisions concerning the structures
and activities within a given program are best made by the faculty
and students involved; those concerning the overall structures and
curriculum by faculty, administration, pupils and parents; those con-
cerning the reporting of progress by students, parents and faculty;
those concerning readiness for college by students, parents, administra-
tion and college admissions officials. The role of the Headmaster in

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[2]For a discussion of this type of management in a business
setting, see Warren G. Bennis, Organizational Development, Its Nature,
Origins and Prospects (Reading, Massachusetts: Addison-Wesley Pub-
blishing Co., 1969).

most of these decisions is that of a facilitator and coordinator, with the additional task of keeping the school's explicit philosophy as an active guideline for decision-making at all levels, and of promoting the harmonious interaction of the various elements in the school.

While decentralized decision-making in schools seems complicated and somewhat disorganized, it is no more unwieldy than the comples centralized schemes operating in most schools today, and it offers many advantages. The students and faculty take more responsibility for the school, and their talents are more fully tapped in the service of the school. Parents are better informed and thus more able to contribute positively to the school's development. The almost impossible demand placed on many heads of schools, that they hire faculty, choose programs, texts and materials, set budgets, and be aware of the needs and activities of all the faculty and students is replaced by the more manageable task of facilitating a multi-leveled decision-making process.

Educational objectives and programs may be stated in behavioral terms, and this is often the best expression of many of the objectives in the sciences, mathematics and physical education. They can also be stated as activities, program goals, or even general directions in which to move. These latter seem more appropriate to the creative fields such as the arts, humanities and behavioral sciences. As these fields can- not be specified quantitatively, and cannot be evaluated by behavioral changes, there is no advantage to restricting their plans to behavioral objectives. It is also unnecessary and unwise to determine all of the objectives and activities of a program before it begins. This would

constrain its natural development, and lessen or eliminate inputs from the teachers and pupils involved.

An important element in curriculum design, and one that is often overlooked, is the place of dissemination of information about the goals and programs of the school. This task is best accomplished by those who have a complete picture of the school, namely its administrators, with active input and help from the students and faculty. If a school wants parental participation in the development and evaluation of the school, dissemination of information is essential. It not only opens additional sources of opinion and information, but also prevents unnecessary opposition to well-designed and needed changes in the school. Generally, parental opposition to change is in inverse proportion to the accuracy and timeliness of information about the proposed innovations. Such information should include the reasons for the proposed change, explanations of the new programs or structures, a description of the expected short and long-term outcomes, and a plan for evaluating the effectiveness of the changes. It is wise to ask for reactions to the program before it is too late to modify it, for in this way some of the inevitable "kinks" of a new program may be ironed out even before it goes into effect.

Evaluation plays a central and critical role in curriculum development. It is an on-going process, engaged in continually by all members of the school community, and can be formal or informal. If it is not conducted properly it can become frustrating, meaningless and even

detrimental to progress. One very common pitfall is the attempt to evaluate every structure, program and activity in the light of the overall philosophy of the school. Such evaluations easily deteriorate into long and involved philosophical discussions. This saps the energy of the persons involved, and seldom leads to action. Generally, the overall goals of the school and its programs should be evaluated in the light of the school philosophy. This is best done at the conclusion of a school year, or when designing a new program. The structures, objectives and components of a program should be evaluated in the light of the overall goals of that program. The specific activities and learning opportunities should be evaluated in the light of the structures and objectives of the program. This simplifies the process of evaluation, and allows energy to be put into action rather than dissipated in endless talk. The school's philosophy should be reviewed periodically by the Board of Trustees and the Headmaster. This must be done when selecting a new Headmaster, or when there are indications that a change in direction is needed. Such indications might be a decreasing or increasing enrollment, dissatisfaction on the part of many students, teachers or parents, financial considerations or new advances in psychology or education that suggest new directions for the school. Day-to-day activities, structures and problems are the stuff of continuous evaluation and relatively frequent change.

This rationale is summarized in Figure 8, which indicates the steps in the process of curriculum design. Figure 9 is a clarification of the evaluation process.

DEVELOPING CURRICULA

TRUSTEES & HEADMASTER ⟶ PHILOSOPHY

SOURCES

Existing
Curricula

Pedagogy

Adolescent
Psychology

Learners

Experience

Society

PROGRAM DEVELOPMENT

goals

objectives
& programs

structures

evaluations

learning
opportunities

dissemination

EVALUATING CURRICULA

School
philosophy

Sources of
information

goals

structures

objectives
& programs

learning opportunities

Nonpublic School Students and

Their Parents

The first step in curriculum design, as indicated in the pre-
ceding rationale, is the gathering of information. Chapters one
through three presented some of the most salient findings from adoles-
cent psychology, pedagogy and the existing curriculum. This section
of Chapter IV will present information from two additional sources for
curriculum planning: the students and their parents.

Information about the needs and interests of the students should
be obtained from the students themselves. This is done in an on-going
fashion by the faculty throughout the year. It can also be done system-
atically at various times during the year, and should be a normal part
of the admissions interview. As this is not possible in the develop-
ment of this model, the information supplied to Otto Kraushaar in his
study of nonpublic schools will be used.[3] His survey indicated differ-
ences among students who were attending different types of nonpublic
schools, and among students from different parts of the country. The
information given by students in nondenominational schools in the
northeast has been selected for this study.[4]

When students were asked to check the two goals they most de-
sired and the two they least desired from a prepared list, the ability

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[3]Kraushaar, American Nonpublic Schools, Part II.

[4]Surveys stress the opinion of the majority. The needs of the
minority must also be considered when developing a curriculum. Needless
to add, the results shown do not reflect any one school, but are a
composite of the many schools contributing to the study.

to think clearly and independently was the most desired, and develop-
ing the skills necessary to earn a living and compete the least de-
sired. Figure 10 shows the results of the survey.

This survey does not tell the whole story, however, for when
these goals are compared with the students' expressed life goals,
there seems to be little correlation. This may indicate either that
the author specified goals that were not highest in the students'
priorities, or that the students feel the schools have little to offer
them in terms of "real life." If this latter is the case, a rede-
fining of the purposes and expectations of the schools seems indicated.
Figure 11 summarizes the students' life goals.

A third area where student feedback is necessary and helpful
is that of grievances with the school. Figure 12 is a summary of the
grievances most often heard, and those believed justified.

To summarize some of the most significant input from the stu-
dents: there is a strong desire to learn to think clearly and inde-
pendently, to become an interesting individual, and to be knowledge-
able. An emphasis on individual and personal growth is apparent in
these goals, as well as in the students' choice of the life goals to
have a happy personal life and develop one's personal abilities and
interests. The grievance lists points to a strong desire for inde-
pendence and a need for the power necessary to shape their own lives
at school. These findings correspond well with the developmental tasks
of adolescents described in Chapter II.

GOALS MOST DESIRED (In per cent)[5]
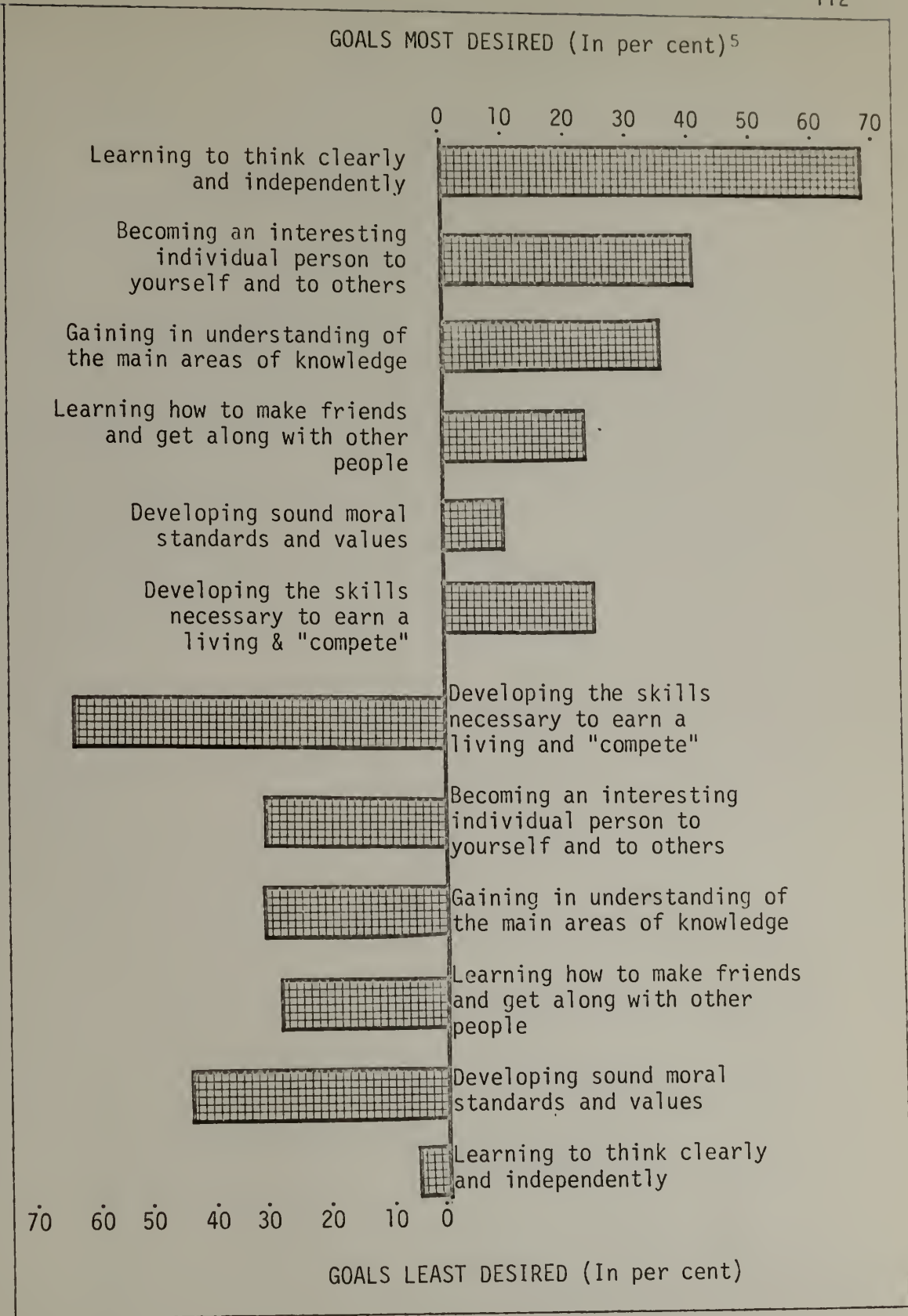
Figure 10

[5]Kraushaar, American Nonpublic Schools, 124.
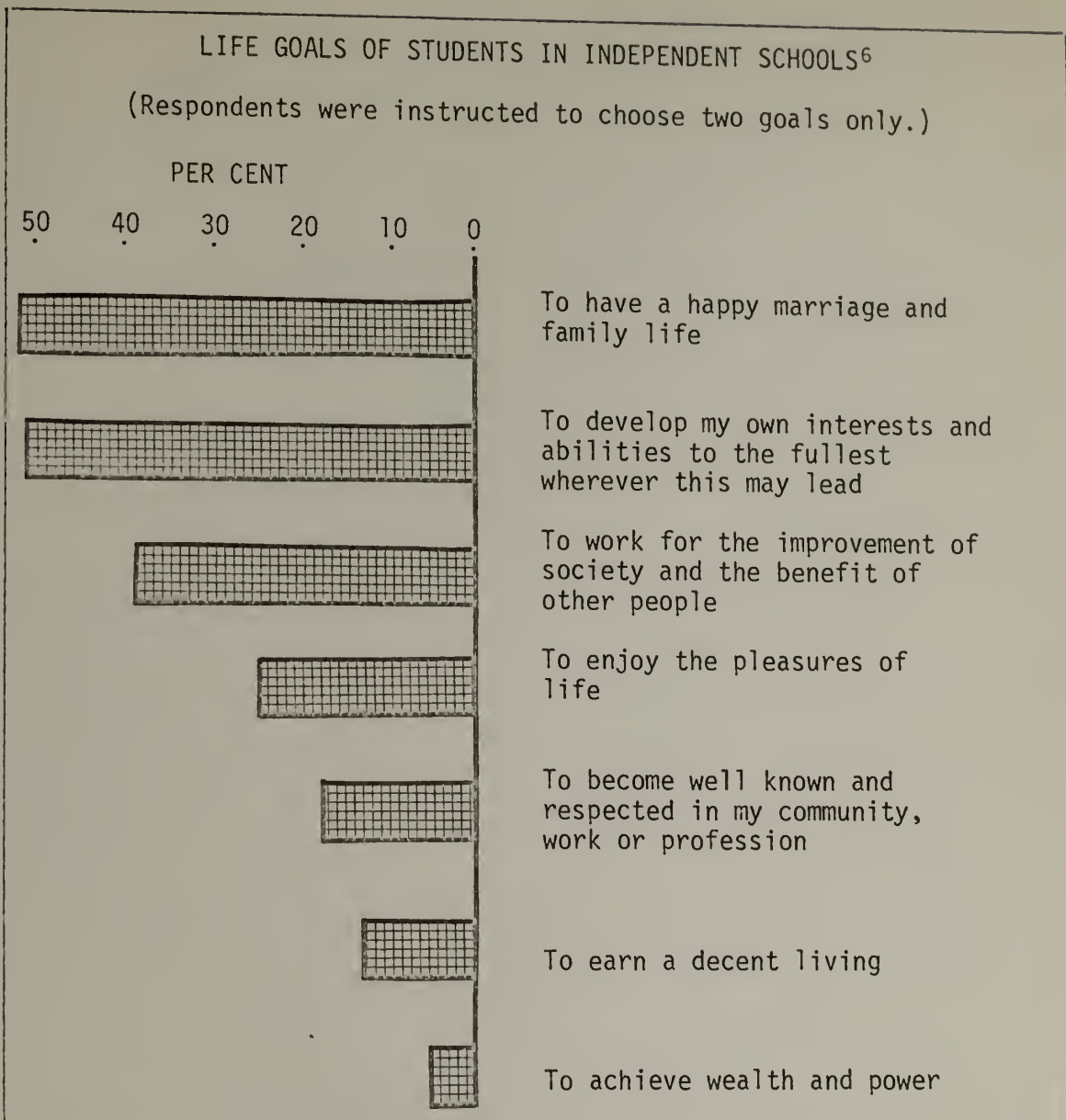
Figure 11

[6]Kraushaar, American Nonpublic Schools, 128.

GRIEVANCES[7]

Heard   Believed justified

PER CENT

60 50 40 30 20 10 0

Lack of student voice in
shaping school rules

Overly strict regulation of
dress, hair, etc.

Too much pressure for
grades

Poor faculty/student
communication

School life too scheduled
and regemented

Boredom

Lack of relevance of
education

Compulsory attendance at
religious services

Unfair grading practices

Too much emphasis on
getting into college

Compulsory athletics

Being bullied or harassed
by other students

Figure 12

[7]Ibid., 134.

The parents of the students in nonpublic schools take on a considerable financial burden to exercise their option of determining what kind of education their children will be given. Their desires are part of the information necessary for curriculum planning.

The majority of parents send their children to a nonpublic school because they feel they will receive better preparation for college, be given more individual attention, and have a better atmosphere in which to develop moral character than they would in public schools. Almost two-thirds of the parents surveyed for the Kraushaar study wanted their children to develop a personal value system, rather than be molded into a traditional cultural or religious pattern. They were uncertain as to whether the schools should concentrate on providing a solid training in the traditional disciplines or should instead deal with problems of immediate concern to the students. Almost all the parents replying to the questionnaire wanted their children to receive the education necessary to allow them to attend the college of their choice. Frequently, concern for college admission outweighed all other considerations. Figure 13 summarizes the reasons parents choose nonpublic school for their children.

Both parent and student desires indicate that nonpublic schools must present strong college preparatory programs combined with a humanistic approach that fosters the development of personal values and talents. If the schools focus on either of these aspects of their program to the detriment of the other, there will be student and parent dissatisfaction. To achieve a balance between rigorous academic studies

WHY PARENTS CHOOSE NONPUBLIC SECONDARY SCHOOLS[8]

(Reasons endorsed as important or very important
by at least 25 per cent of the parents)

Better training in diligence,
study habits

Stricter discipline

Values, attitudes or custom
closer to those at home

Better teachers

Smaller classes

Greater likelihood of admission
to college of choice

Atmosphere free from problems
of drugs, delinquency, turmoil

More academically challenging
curriculum

80 70 60 50 40 30 20

PER CENT

Figure 13

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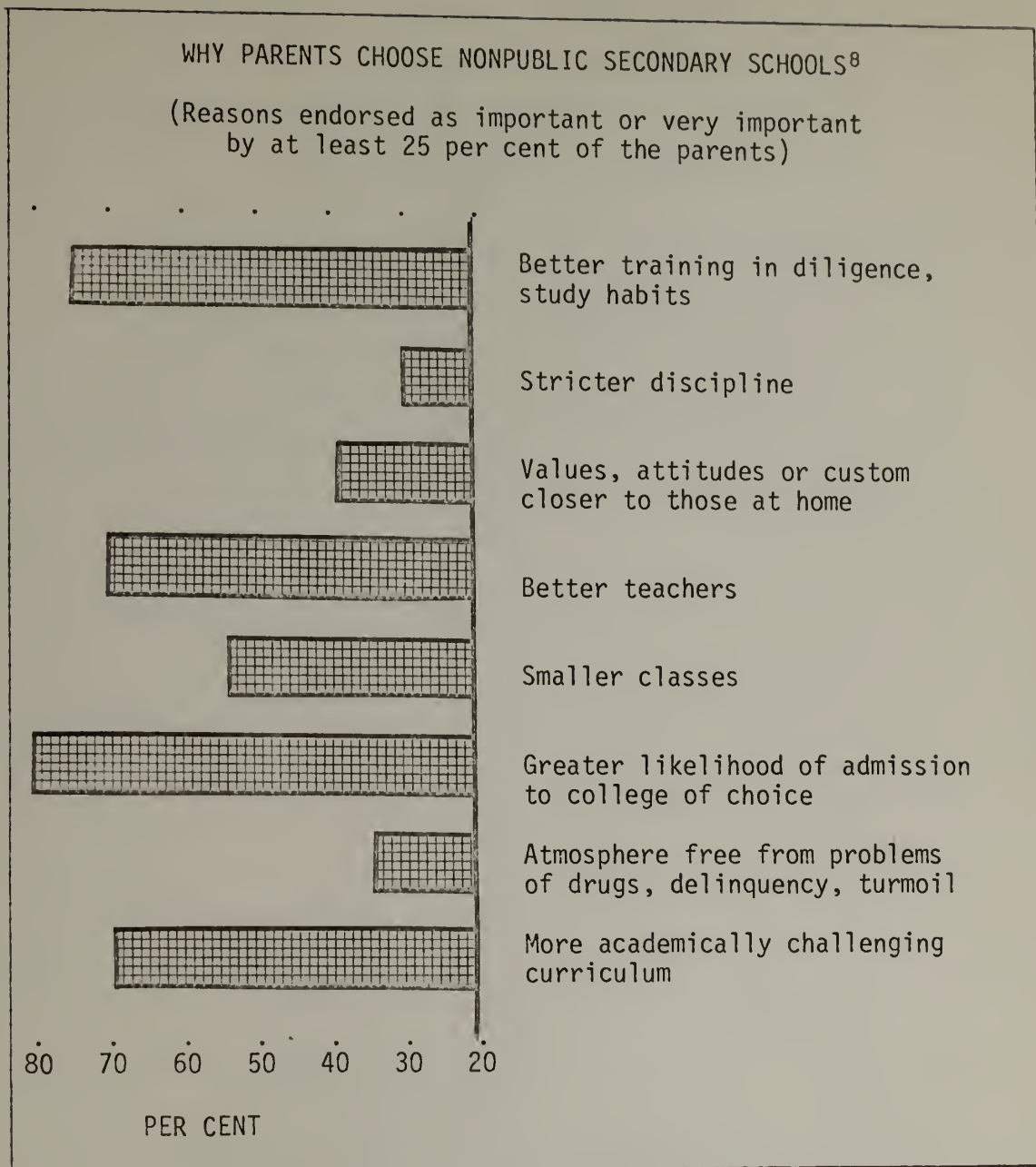[8]Kraushaar, Nonpublic Schools, 105.

and the personal freedom, interests and support needed for active growth is the real challenge of the nonpublic preparatory school.

A Curriculum Model

As previously emphasized, the curriculum in a nonpublic school should be tailored to the needs of the particular community it serves, and developed to a large extent by the personnel and students in the school. Differences in student population, career orientations, social concerns, economic backgrounds and geographic locations should be reflected in the school's programs and structures. The model presented here is best suited to a coeducational day school in the northeast, drawing the majority of its students from middle economic brackets, but with a variety of ethnic and religious backgrounds. While adaptations would be necessary to fit it to any specific school, an overall revision would be necessary for boarding, all-girl, all-boy or denominational schools, and for schools located in a different part of the United States. Any model developed at a university rather than on site also lacks the specific input from the faculty, students, alumni and parents of the school. Thus, it cannot take on the richness and specificity of a school-developed curriculum. Its purpose is well achieved if it can act as a guideline for schools, stimulate program reviews and revisions, and suggest new approaches to program development for their consideration.

Philosophy

The fundamental purpose of the program is to provide an environment for students which will foster the development of their human

potentials, motivate them to seek further education both formally

through higher education and informally through an interest in many

facets of life and an openness to new ideas, and prepare them to take

an active part in the affairs of their community, the country and

the world.

Institutional Objectives

1. To understand and appreciate oneself.

2. To exercise responsible independence, leadership and
   initiative.

3. To develop skills necessary for success in higher education.

4. To develop skills necessary for success in the community
   and the business world.

5. To sample a breadth of intellectual, cultural and social
   offerings both within and outside of the classroom.

6. To become familiar with the workings of the social and
   political systems in the community and the nation.

In Chapter II, the development of middle-class adolescents in

the United States was presented under the following headings:

Physical development,
Development of adult sexuality,
Assuming adult roles,
Decreasing emotional dependence on adults and the increasing
    role of the peer group,
Developing formal reasoning and acquiring an ideology,
Developing a sense of identity.

Any program which presents self-understanding and appreciation as its

first objective must develop learning opportunities that relate to these

developmental tasks. For this reason, the model curriculum will be organized according to these tasks. The developmental tasks are related to the six institutional objectives as shown in Figure 14.

In Chapter III some additional topics were covered: (1) the development of community spirit, (2) freedom and responsibility vs. discipline and authority, (3) disciplinary vs. interdisciplinary approaches to curriculum design, (4) rigor and depth vs. enrichment and breadth in college preparatory programs, and (5) the schedule. These topics will be discussed in this chapter after those relating directly to adolescent developmental tasks. The structures of the school, including the roles of the faculty, administration and students will form the final section of the model.

Programs related to the developmental
Tasks of Adolescents

Physical development

     Program objectives--

1. To be physically fit.

2. To understand the development and care of one's body.

3. To be comfortable with one's body.

4. To participate in physical work.

5. To learn some life-time sports.

6. To participate in some team sports.

     Importance--The relationship between self-esteem and the feelings a person has about his body was pointed out in Chapter II.[9] In view of

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    [9]Chapter II, p. 25.

OBJECTIVE	DEVELOPMENTAL TASKS
1. To understand and appreciate oneself.	Physical development Development of adult sexuality Decreasing emotional dependence on adults Acquiring an ideology Developing a sense of identity
2. To exercise responsible independence, leadership and initiative.	Assuming adult roles Decreasing emotional dependence on adults and the increasing role of the peer group Developing a sense of identity
3. To develop the skills necessary for success in in higher education	Decreasing emotional dependence on the adults and the increasing role of the peer group Developing formal reasoning
4. To develop the skills necessary for success in the community and the business world	Development of adult sexuality Assuming adult roles Developing formal reasoning Developing a sense of identity
5. To sample a breadth of intellectual, cultural and social offerings both within the outside of the classroom	Assuming adult roles Decreasing emotional dependence on adults and the increasing role of the peer group Developing a sense of identity
6. To become familiar with the workings of the social and political systems in the community and nation	Assuming adult roles Acquiring an ideology

Figure 14

this relationship, the physical education program assumes importance,
for it can contribute to the physical and psychological well-being of
the students. Particular care must be taken by the adults responsible
for the program that appreciation is shown for all body-types and all
stages of physical maturation and not reserved only for the athletic
and coordinated students. This is particularly important when working
with adolescents between the ages of twelve and sixteen, as differences
in growth patterns become very apparent during these years, and cause
many adolescents to become self-conscious and fearful about their own
physical development.

Selected learning opportunities--The physical education program
includes formal and informal activities, work as well as play, and
individual life-time sports as well as team sports. Woven throughout
the program is instruction concerning the growth of the body and health
care. This instruction should be a natural part of the program, grow-
ing out of the activities, and not an "extra" taught in classrooms
or in discussions apart from the activities.

Some of the best and most enjoyable physical activities are
more properly classified as work than play: construction or rennova-
tion of school buildings or rooms, laying walk-ways, removing snow and
leaves, gardening, and making furniture and theater props. These
activities can be enjoyed by adults and students, and do not require
competitiveness, great strength or speed. All students can partici-
pate in physical work, and can enjoy the satisfactions that come from
it. These activities develop physical coordination, strength and en-
durance, and can help a student appreciate and use his body.

Hiking, camping and survival activities are another part of the physical education program. These activities stress cooperation with others, build self-esteem and encourage a love for nature. As indicated by the schools which have developed such programs, they also seem to build school spirit.[10] Again students and adults can participate together in these programs, and frequently on equal footing.

As American society continues to develop in a direction that allows more and more leisure time for its working adults, it becomes incumbent upon the school to introduce students to healthy and pleasurable uses of that time. Thus life-time activities have an important place in the physical education program. Swimming, golf, tennis, riding, boating and bicycling can be offered by almost every school. Rather than invest large sums of money in the needed facilities and equipment, community facilities can be utilized. The use of these facilities is not only economical, but it also teaches studenst to use the opportunities afforded by their community. Gymnastics and interpretative dance are also life-time activities that can be taught in the school.

Team sports will always have a place in the physical education program, and for many adolescents they will be a source of challenge, growth and pleasure. While they are most appealing to competitive, coordinated athletes, all students can benefit from participation in some team sports. They offer opportunities to experience the elation

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[10]Chapter III, pp. 60-61.

of winning and the disappointment of defeat. They often require speed

and stamina, quick thinking, and the willingness to work with others

rather than trying to be the "star."

A well-balanced program will offer all five of these elements:

instruction about the growth and care of the body, work, outdoor pro-

grams, life-time sports and team sports. Each student should try his

or her hand at all types of activities. Differences in temperament,

interests and skills will lead some students to stress one aspect of

the program, while others stress a different one. This individuali-

zation is to be expected and encouraged, but no student should exclude

himself totally from any part of the program. A flexible schedule

will be necessary to accomplish this program, as some activities named

require long uninterrupted time periods, and others are better accom-

plished in shorter ones. The schedule will be discussed in another

section of this chapter.

Sex Education

Program objectives--

1. To understand human sexual development.

2. To discuss personal and social aspects of sexuality with

peers and adults.

3. To be familiar with the issues of population control,

soical deseases, contraceptives, female medicine.

4. To develop a personal ethic concerning sex.

Importance--In Chapter II, the importance of sexual development

to the adolescent was discussed, and it was noted that many adolescents

feel a need for better and more comprehensive sex education.[11] The

programs described in Chapter III seemed to ignore sex education to

a large degree.[12] Given the centrality of sexual maturation to the

developmental processes of adolescents and its importance in the for-

mation of identity and self-esteem, the sex education program should be

of real concern to those responsible for planning the curriculum.

Selected learning opportunities--During the first years of

secondary school (ages eleven to fourteen), the focus of the program

is on supplying explanations of the sexual development of the human

male and female, and on discussions of various physical and emotional

aspects of sexuality as they are manifested in an individual. Differ-

ences in the timing and rate of maturation should be carefully ex-

plained in order to alleviate the fears of abnormality and inadequacy

experienced by many early and late maturing youth. The discussions

of the physical, emotional and social aspects of adolescent and adult

sexuality should be small and informal, but planned. For this age

student, many of the discussion can be grouped according to sex, as

girls and boys tend to be restrained by each other's presence in the

discussion of sex. Male and female sexuality should be explained and

discussed with both groups. Carefully chosen doctors, psychologists,

teachers and married couples can be invited to lead these discussions.

It is important that the leaders be at ease during the discussions, and

be able to facilitate relaxed and open meetings. Film strips, discussion

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[11]Chapter II, pp. 29-30.

[12]Chapter III, pp. 62-64.

guides and printed materials may be utilized when appropriate. Discussions dealing with topics such as dating, parental and peer expectations about sexual behavior, societal codes and personal feelings about sex differences are suited to groups composed of both boys and girls, and can help to put them at ease with each other.

During the later secondary years (ages fifteen to eighteen), students need opportunities to discuss the moral and social aspects of sexuality, as well as the physical and emotional ones. Single term electives in ethics, morality, religion, cultural differences and sex discrimination can supply this need. Students should elect to take these courses when and if their needs and interests make them appropriate. All students need to be given accurate information about the pros and cons of birth control, the roles of parenthood, causes and treatment of impotence and frigidity, and medical aspects of sexuality. Discussion groups should be planned to cover these topics, and all seniors and juniors scheduled to participate in them. It is also important to see that there is ample opportunity during the school day for boys and girls to work together, relax together and talk together. Sports and other activities that lend themselves to coeducational groups should be so scheduled. Care should be taken to avoid sex stereotyping in work assignments, career guidance, play and study, and instances of stereotyping should be pointed out when they occur.

Assuming Adult Roles

Program objectives--

1. To assume responsibility for the school.

2. To become familiar with the demands and rewards of a variety of professions and careers.

3. To develop the skills necessary to succeed in a work situation.

4. To assess oneself in a work situation.

5. To be aware of local community organizations.

6. To become familiar with the workings of local and national government.

Importance--As discussed in Chpater II, adolescence is a time of preparation to assume the roles of homemaker, worker and citizen.[13] Schools which provide opportunities for a student to examine the demands and rewards of these roles, develop a sense of his own needs and desires in relation to them, and try his skills at them to some limited extent, foster his maturation in important ways. By providing opportunities for a student to become familiar with the world of work and politics, the school enables him to make a more informed choice of college, major field of study, and eventually, career.

Selected learning opportunities--A complete program should include opportunities to exercise responsibility for the care of the school, examination of various careers, exposure to community and political organizations, and a relatively extended apprenticeship in one or two work situations.

A "self-help program," or program which utilizes students in the care and maintenance of the school, gives students a chance to

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[13]Chapter II, pp. 22-23.

understand the many facets of an institution and experience the day-to-day demands of work. It can also lower the cost of operating the school. This lowered cost should be reflected in the tuition, and noted as a credit earned by the student. This allows him to see the result of his labor for himself as well as for school. Self-help programs give students an opportunity to assume responsibility, exert leadership and learn organizational techniques. They can also contribute to the students' pride in their school, and lessen incidents of vandalism.[14] The program is organized so that each student spends an average of twenty to thirty minutes a day in it. Most jobs are assigned to teams of five or six persons: cleaning rooms, kitchen duties, ground work or clerical duties. One member of the team is responsible to plan and oversee the work. Leadership can be rotated among members of the team on a regular basis. Students may also learn to repair equipment, operate the heating plant and run the cafeteria. Some can help with bookkeeping or recruiting. Some tasks are better done once a week for a length of time rather than daily. Whatever specific tasks are turned over to the students, they must be given the training necessary to do a good job, and should be encouraged to take as much responsibilities that can be assumed by the students. Decisions about decor, colors of paint, brands of supplies can also be left to the students in many cases. This type of responsibility makes the school belong to the students in tangible ways, and can be expected to heighten their pride in it.

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[14]Chapter III, 68.

To introduce students to a wide variety of professions and occupations, the program needs to be suited to the interests and abilities of each age level. It should include visits to work sites, conferences with professionals and workers, presentations at the school, volunteer service opportunities and apprenticeship programs. In general, while two to eight week apprenticeships have proved beneficial to seniors and juniors, younger students frequently are not ready for such lengthy off-campus programs. Flexibility should be allowed, however, to respond to individual differences and needs even within the same age range. During the seventh and eighth grades outings to businesses, courts, hospitals, government offices and other work sites are included in the program. Whenever possible these visits should be in small groups (three to eight students), and a person on the site should talk with the students and answer their questions. (Larger groups are often difficult to manage, both logistically and behaviorally, and students frequently dislike traveling in large groups, for not everyone gets a chance to ask questions or hear the explanations.) At the ninth and tenth grade levels, the program includes opportunities for students to talk individually with persons in careers that interest them. Parents can be a great help in contacting persons in the community who are willing to speak with students, and in offering themselves to be available to students for this purpose. Students at this age need to begin to think about the direction their education must take to enable them to pursue a desired career, and they need to

learn what that career actually entails.[15] The apprenticeship pro-

gram for the older students (sixteen to eighteen) affords them the

opportunity to get some first hand knowledge of one or two career

situations, and to assess themselves in work situations. It may help

a student choose the type of higher education he needs, and may also

increase his motivation for learning, his self-knowledge and his con-

fidence. The program needs careful planning and supervision to be

successful.[16] Although the school may make the first inquiries to

get students suitable placements, the students themselves should draw

up their own programs, stating their objectives and the methods by

which the apprenticeship can be evaluated. They also should present

themself for an interview at the apprenticeship site, and learn the

expectations of their "employer." Each student should choose a faculty

advisor who will help him with planning, be available to him during the

apprenticeship (visit on site, if possible), and participate in the

final evaluation of the program. The final evaluation should include

assessments by the student, his employer and his faculty advisor. This

account of his apprenticeship is part of his high school record. The

evaluation is very important for the student's increased self-knowledge

and self-confidence.

At all age levels volunteer work can be made accessible to stu-

dents. The school can operate as a clearing house for community

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[15]See Chapter III, p. 36.

[16]In the early 1970's, students at Newton Country Day School in
Newton, Massachusetts undertook a study of "senior-Project" programs in
preparation for one in their school. Their most emphasized finding was
that the programs with adequate preparation and supervision succeeded,
while those lacking either element often were of very limited value.

organizations in search of volunteers, and can enhance the value of
the students' work by alerting them to the expectations of the organi-
zations, seeing that some arrangements are made to train them ade-
quately, and that periodic evaluations are given to the students by
the organizations. The school can also provide training in the
writing of reports, in communications and group process, and in the
handling of responsibility. The organizational activities of the school
can, to a large extent, be handled by students. The arranging for
transportation, scheduling of work and listing of openings can all
be done by students.

The final aspect of the program acquaints students with the
workings of local and national government. Academic courses on the
"problems of democracy" are not well suited to this purpose unless
they encompass an action componant that allows students to get involved
with political organizations and experience them first hand. Students
should have opportunities to visit party headquarters, to meet local
politicians, to learn about current issues and to become personally
involved with politics if they wish. Students can provide real ser-
vices to the community, especially at election times, by researching
the issues and candidates and presenting written and oral reports on
their findings. The presentations can be made at open assemblies,
through school publications, at workshops or debates, and even through
contributing articles to local newspapers. One of the chief aims of
this aspect of the program is to give students an experience of working
with the political system so that they are not awed by it and do not

feel powerless in view of it. These activities are particularly important as many of the oldest students are of voting age, and are already called upon to assume adult roles in the politics of their community and country.

Decreasing Emotional Dependence on Adults and the Increasing Role of the Peer Group

Program objectives--

1. To assume increasing responsibility for one's behavior and performance at school.

2. To make responsible decisions concerning one's program of studies.

3. To organize one's own free time.

4. To go to appropriate sources for help and guidance when needed.

5. To exercise responsibility for school governance.

Importance--As was pointed out in Chapter II, schools can promote or retard a student's growth in responsible independence.[17] They provide an arena for·him to try his skills at relating to others, solving problems and exerting influence without the overriding presence of his parents. By careful planning of its basic structures, a school can foster this independence and encourage students to make responsible decisions for themselves and their futures. Two dangers must be avoided: that of expecting too much, too soon and with too little guidance and

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[17]Chapter II, pp. 68-69.

that of giving too little room for freedom out of fear of the mistakes and wrong decisions that will inevitably occur. In this area, almost more than in any other, the individual differences and needs must be taken into consideration.

Selected learning opportunities--As students mature, they can be given an increasingly important voice in the use of their time at school, the selection of their programs, and the internal government of the school. As they progress through adolescence they should experience different levels of responsibility and freedom. The program will be described by age levels, but individual exceptions should be common, based on the specific needs of students.

Students between the ages of eleven and thirteen should be given options about how to spend their "free" time. The options could include supervised or unsupervised study, work in the library, use of the gymnasium, art studios or science laboratories, or a recreation room. While not all areas need to be supervised, an adult should be readily available to supervise when necessary. Students who are unable to organize their time so that their work is done properly should be assigned to a study hall until they seem ready to make their own decisions. It is frequently helpful to have students of this age request privileges (such as to determine the use of their own free time without supervision), and to be granted or denied them by a panel of teachers and peers. The act of requesting the privilege reinforces the fact that privilege brings responsibility.

From fourteen to sixteen, the same basic options can exist for the students, but with less supervision of the "free" areas. Students who wish to leave campus should be allowed to do so, though again, a system of requesting the permission is often helpful. Students uanble to handle their freedom should be given the supervision described for younger adolescents.

At seventeen and eighteen, students should be able to handle their own time. Those who are unable to do so at this age should be given special guidance from a qualified professional. In general, students should be free to leave campus, though for purposes of notification and record keeping, they should report their destination when leaving the school. Abuse of this freedom results in withdrawal of the permission to leave campus. It is important that the freedom given students be matched to their ability to use it for their own benefit. Students who continually abuse their freedom should lose it for specified lengths of time. Though this may have reprocussions on their program (by limiting their ability to use the resources of the community), it is important that the school be concerned with the personal as well as the cognitive growth of students. There is a temptation to treat older adolescents as adults, and to refrain from punishing or showing displeasure with their behavior. This can only be a disservice to them, as it deprives them of the feedback they need to modify their behavior. They are becoming adults; they have not yet achieved the maturity and independence of adulthood.

To help students assume responsibility for their performance at
school, progress reports should be written for the student rather
than for his parents. Opportunities for faculty-student conferences
should be arranged after each term, to allow for an exchange between
the teachers and students. The student should bring the reports and
information gained at the interviews to his parents. When a conference
with the parents seems advisable, the student should make the arrange-
ments, and participate in the conference. In this way, the school
highlights the fact that it is the student and his education that is
the concern, not the parents' expectations or school's desires. It is
the student, then, who is responsible to take whatever steps are nec-
essary to insure the success of his school years. Teacher-parent con-
ferences without the student present are often threatening to the stu-
dent, and should be avoided when possible. Occasionally, as in the
case of emotional difficulties, they may be necessary.

Adolescents should be encouraged to go to the appropriate
sources when they need help or guidance. Teachers, administrators and
counselors can help them by treating their concerns with the same care
and respect as they would their parents'. It should not be necessary
for a parent to request a change in program or schedule, early dis-
missal, or help in solving a school-based problem. The student can
request these things himself. Both academic and career guidance need
to be available to students. While the school may supply some of this
guidance, it should also encourage students to make use of the services
provided by the community, private organizations and professionals.

Students can participate in the governance of their own school
by participating in meetings of the Board of Trustees, in faculty-
student program planning, in the setting of rules, decisions about
discipline and even in financial planning. While they cannot assume
full adult responsibility in all areas, they can in some. Because the
trustees of a school assume legal and financial responsibilities not
allowed by law to adolescents, student membership on the Board of
Trustees should not include voting rights. Their presence and voice
adds an important dimension to board decisions, however, and also helps
the students understand the workings of their school. Decisions which
require a degree of experience and knowledge unavailable to adolescents
are not their responsibility. The necessary minimum requirements in
a field of study and decisions about individual disciplinary problems
that require an understanding of family problems or psychological needs,
planning investments or overall financial budgeting are some examples.
Students can help decide some programs, school rules and regulations,
ceremonies, speakers, decor, certain budgets and evaluation procedures
for programs. Their participation in these decisions is an important
part of their high school education. They may need some training in
group process to be able to function well in group decision-making, and
this can be planned into their program. Whenever special training is
needed for full participation on a committee, the student must be given
the training, or taught how to get it on his own. Without it, his
participation becomes a mere token presence, and he may not come to
realize that to make adequate decisions, knowledge and skills are nec-
essary.

Developing Formal Reasoning and

Acquiring an Ideology

Program objectives--

1. To practice the process of formal-operational reasoning.

2. To acquire the skills necessary for success in higher
    education.

3. To sample a breadth of intellectual, cultural and social
    offerings both within and outside of the classroom.

Importance--Both parents and students look to the nonpublic
schools to provide a strong academic program that will prepare them
for higher education.[18] Any program based on the needs and desires
of the learners, then, must be concerned to fulfill their expectations
in this important area. Intellectual maturation can be fostered by
suitable learning opportunities, and intellectual interests and moti-
vation can be stimulated by well-taught classes, interesting exper-
iences and lively discussions.

Selected learning opportunities--There are basic skills that
are necessary for success in high school and college. The faculty of
a school should identify these skills, and make provision for every
student to become proficient in them. As a general rule, they should
be acquired at as young an age as possible. Basic in the field of
mathematics and science are the computational skills of addition, sub-
traction, multiplication and division. In addition, it is necessary to
be able to translate word problems into number sentences, to use fractions,

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[18]Chapter IV, pp. 112-113, 116.

decimals and per cents, to understand area and volume, to know basic set theory and to solve first degree equations. Most students can acquire these skills by the age of thirteen. Basic to the field of humanities are reading, writing (creative and expository), summarizing, speaking and listening. While these skills are developed throughout secondary and higher education, they should be well begun by the age of thirteen. Each discipline can further specify the basic skills necessary for it, such as the writing of laboratory reports for science or an understanding of perspective for art. The skills program is designed to respond to individual differences by being open to all students who show a need for more work in any basic area, whatever their age, and not required of those who can demonstrate a satisfactory level of proficiency in the skills. It could be expected that the majority of eleven to thirteen year olds would be enrolled in several skills courses, while the majority of seventeen and eighteen year olds would take very few, if any.

To foster the development of formal operational thought, programs suited to each stage should be developed. The three substages described by Piaget are typically reached from the ages of eleven to sixteen.[19] Substage 1 (relations involving the inverse of the reciprocal) lends itself to exercises involving cause-effect relationships in science, history and the creative arts. Exercises which require students to speculate on the results if a cause is changed, to guess the outcome of an historical or scientific event when given the causes, or

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[19]Chapter II, p. 46.

to guess the causes when given the results all foster the development of formal reasoning. Substages 2 and 3 are fostered by exercises requiring the isolation and systematic testing of variables. Scientific experiments, mathematical logic, proofs, and the analysis of social systems all foster the development of these stages. It is important that the teacher planning these learning opportunities teach students how to reason abstractly rather than assume that they already know how. The majority of college-bound students will master it by the end of their high school education, but they are in the process of developing it for most of their secondary education. The ability to reason abstractly is one of the skills needed for success in higher education.

The only limits to a program that aims to provide a breadth of opportunities in intellectual, social and cultural spheres are the imaginations of the persons in the program and the resources of the community. To make a variety of educational experiences possible, short term electives are a necessary part of the curriculum. Some sample offerings are introductions to different cultures (Chinese, Indian, African, etc.), studies of specific literary modes (novel, poetry, expository writing, etc.), introductions to a specific craft or type of art (silk screening, jewelry making, charcoal, etc.), or subtopics in mathematics or science (basic computer language, probability, the pollution of a local body of water, microbiology, etc.). Some learning opportunities, such as the study of a foreign language, or surveys of a culture or type of literature, need to be scheduled for longer periods of time. To accommodate a truly varied program, the schedule needs to

allow for short and long daily meetings, courses of one to many terms, and some that meet not daily, but even weekly.

While no student can avail himself of all opportunities offered by such a program, and no school could include everything in one year, their inclusion in the overall program exposes the school community to a wider range of ideas and experiences that is provided by the traditional college preparatory program. No school need try and offer all programs within its building. Drama, music and dance can be learned at theatres, museums and concert halls. Politics and government are learned in party headquarters and town halls. Extended visits to the United Nations or the Senate can introduce students to national and international issues.

There exists a wealth of material published by text-book companies, educational organizations and media centers to help a teacher build a particular course. The real challenge of a high school faculty is not so much to develop specific courses, but to develop an overall program that makes sense in the light of the students' interests, maturation and future needs. A balance of disciplinary and interdisciplinary approaches, on and off campus learning, broad survey courses and narrow in-depth specialities should be sought. This will necessitate a curriculum committee or person who sees that the overall program is well balanced, that the offerings are cyclic so that each student can get the courses necessary to him while having options among the electives, and that provisions are made for students to receive adequate guidance when planning their programs.

Developing a Sense of Identity

Program objectives--

1. To develop one's own interests, talents and hobbies.

2. To develop a personal code of behavior.

3. To assess oneself in different roles.

4. To appreciate oneself as a unique person.

Importance--Although all experiences at school can contribute to an adolescent's sense of identity, this aspect of his maturation is so central that it is well to consider factors that are particularly suited to its development. At school an adolescent is a person in his own right, relatively independent of his family. It is an ideal place for him to come to terms with his own needs, wants and aspirations, and to build a sense of his uniqueness and worth. Programs and structures which help him do this are important in the curriculum.

Selected learning opportunities--One of the significant factors in an adolescent's development of a sense of identity is the feedback he receives from adults and peers. For this reason, the teachers and staff in a school must take care to be open, honest and respectful in their dealings with students. This involves listening to them, taking their opinions and demands seriously and explaining one's reasons for agreement or disagreement, giving honest feedback about their work and behavior, and trying to know them as whole persons rather than only an students in a particular class or section. It also involves encouraging their hobbies and interests, and showing real appreciation of their talents. A professional counselor can be of help to both faculty and students in these areas.

Peer feedback is very important to adelescents, and can have a profound effect on them.[20] The school can enhance the positive effects of the peer group by making students aware of their effect on each other, and by introducing them to some small group theory. This can be down informally, in group discussions, workshops or scheduled classes. Students from sixteen to eighteen often display a strong interest in many of these activities. By encouraging activities that involve adults and students, some of the negative effects of peer groups can be avoided. Adults help adolescents to avoid scape goating and ridiculing their peers. Activities in the self-help program, physical education and program planning give opportunities for this.

Introductory courses in psychology, philosophy, religion and ethics also have an appeal for older adolescents, and help them understand themselves and shape their value systems. They are less appropriate for young adolescents because they require an ability to reason abstractly that is generally not well developed in students younger than sixteen.

The responsibilities given to students during their high school years also help them achieve a sense of their identity. They allow them to assess themselves in many roles: leader, organizer, follower, critic and dreamer. The feedback a student receives when in these roles, and his own experience of comfort or discomfort within them help him determine who he is and what he wants. Different roles are more easily

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[20]Chapter II, pp. 41-42.

tried and discarded at school than at home, as the emotional stakes are lower and there are fewer set expectations of the student's behavior and personality. This provides a better opportunity for experimentation.

In the spheres of achieving identity, almost more than in any other, the school can only structure what seems to be an environment conducive to growth, and leave the growing to the individual student. Achieving identity, though dependent on the response of others to a significant degree, is a highly personal struggle.

Reflections on the Concerns Most Frequently
Expressed by Administrators During
the Visits to Schools

In Chapter III, five concerns frequently expressed by school administrators were reported: (1) the development of a spirit of community within the school, (2) freedom and responsibility versus discipline and authority, (3) disciplinary versus interdisciplinary approaches to curriculum design, (4) rigor and depth versus enrichment and breadth in college preparatory programs, and (5) the pros and cons of different types of schedules.[21] The author was struck by the fact that most of the persons interviewed did not relate these concerns to the needs of students, but rather handled them as isolated administrative problems. In fact, they are not isolated administrative problems, but are closely related to theneeds of adolescents and can be examined within that framework.

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[21]Chapter III, pp. 81-93.

The Development of a Spirit of Community

Artificially contrived attempts to build community, such as school outings or meetings, seem less apt to achieve their purpose than do the natural interaction and interdependence of students and adults that stem from the programs designed to foster independence, give experience in adult roles or those in the physical education department. In these programs students and adults work together to plan and evaluate programs, share responsibility for the maintenance of the property, and join in recreation. These joint efforts prevent an artificial separation of faculty from students, and provide structures and experiences from which a spirit of community can develop in a natural way.

Freedom and Responsibility vs. Discipline
and Authority

The question of freedom and responsibility versus discipline and authority was discussed in the section entitled "decreasing emotional dependence on adults."[22] Students should be encouraged to take as much responsibility and freedom as they can handle, but if the abuse their freedom, it should then be restricted. In the instance of abuse, the school exercises its authority and imposes external forms of discipline until the student can function profitably without them. Students who do not want the responsibility offered them by the school should not be admitted to it.

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[22]Chapter IV, pp. 131-136.

Disciplinary vs. Interdisciplinary Approaches

It is the opinion of the author that curriculum design should be neither disciplinary nor interdisciplinary, but should rather be learner-centered. In the model presented, the developmental tasks of adolescents are the organizing structures, and both disciplinary and interdisciplinary programs are suggested. The purpose of a college preparatory school is not to turn out scholars in a specific discipline, but to graduate young persons who are capable of directing their own future education, who are aware of their personal needs and desires, and who can avail themselves of the opportunities that exist in their society. To focus on these purposes is to render the disciplinary-interdisciplinary debate a nonquestion.

Rigor and Depth vs. Enrichment and Breadth

Similarly, a focus on the purposes of secondary education helps clarify the controversy of rigor and depth versus enrichment and breadth. Schools cannot neglect a rigorous training in the basic skills needed by college-bound students. However, one would be hard-pressed to find a convincing argument that seventeen or eighteen year old adolescents, with two or more years of formal education ahead of them need to be experts in history, literature, science or any other specialty. For them, excellence in education is better defined as an exposure to many fields of study that can lead to an appreciation of intellectual, social and artistic aspects of life. As many colleges allow students to specialize in a chosen field as early as their freshman year, it

becomes imperative for high schools to provide students with a broad
education. Therefore, a secondary school should offer a broad,
enriched curriculum with a strong and rigorous foundation in the basic
language and mathematical skills. Specific fields may also want to
offer strong courses in the basic skills necessary to them.

The Schedule

As explained in Chapter III, the schedule has far reaching ef-
fects on the curriculum of a school.[23] In some of the schools visited,
the schedule seemed to dictate the program rather than be dictated by
it. To accommodate the curriculum suggested in this model, a flexible
schedule is necessary. One designed along the lines of the Tatnall
nova would be very well suited to it.[24] Figures 15 through 19 summarize
this schedule paln. A fuller explanation, published by the Tatnall
School, is given in Appendix D.

The nova is a time frame. Each Tatnall nova contains twenty-
one teaching days, and each mini nova contains eight teaching days.
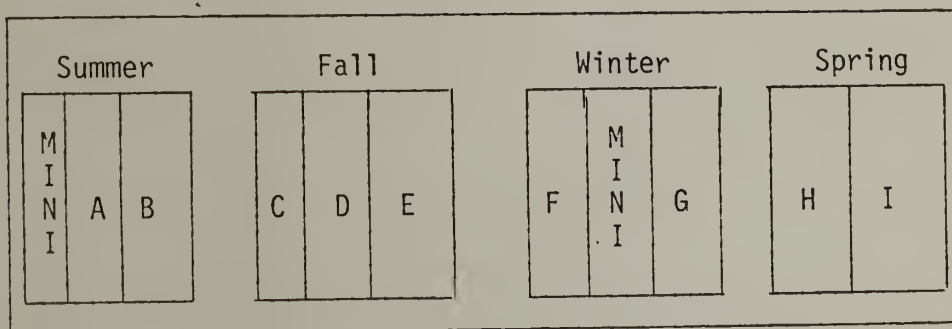Figure 15 illustrates the Tatnall calendar.

Figure 15

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[23]Chapter III, pp. 89-93.
[24]The Tatnall School, Wilmington, Delaware.

Within the time frame of the nova, there are other time divisions.
The Tatnall school also refers to these time divisions as novas. They
represent class periods, and may be forty minutes long, one hour and
twenty minutes, two hours, four hours, or four hours and twenty minutes.
Figure 16 illustrates the nova time frames.
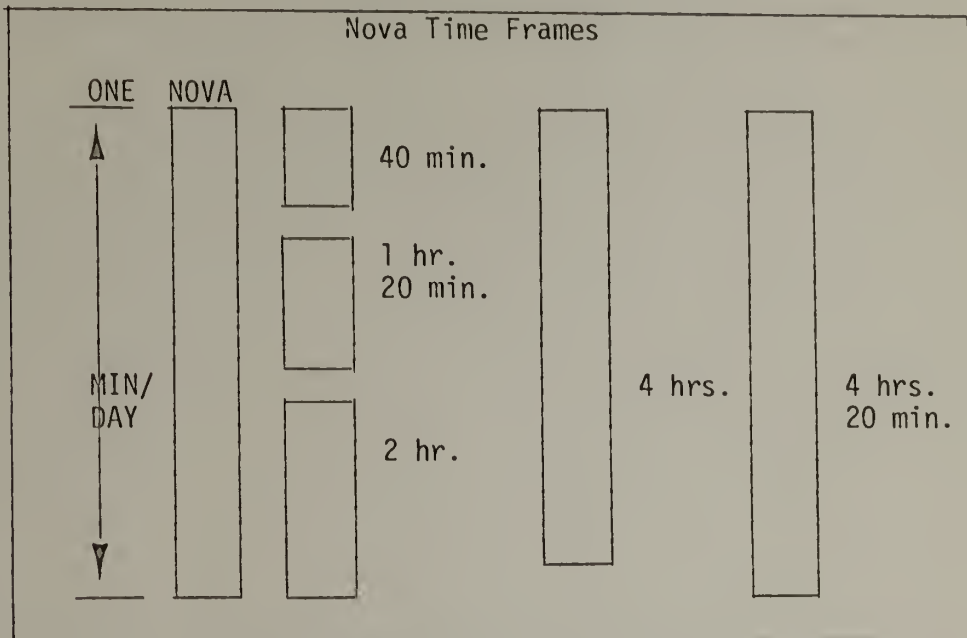
Figure 16

The time frame may be fitted to the needs of the course and to the parti-
cular group of students involved. Thus there is a possibility of daily
short courses, long ones or even a total immersion selection. The
courses requiring most preparation can fit in the mornings, leaving
afternoons for recreation and sports, hobbies, outings, school meetings,
etc. Courses can be planned for as many novas as needed, and utilize
the most advantage nova time frame. Figure 17 illustrates how the same
material can be "packaged" in three different ways to meet the needs of

fast, slow and average learners. Two packages extend over three novas,
while the third is planned for two novas.

Figure 17

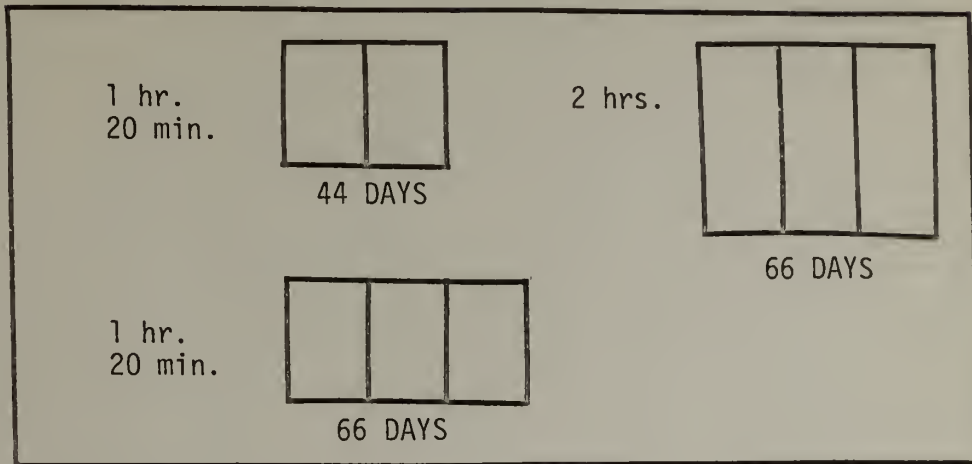Figure 18 compares the time spent per year in courses in the traditional
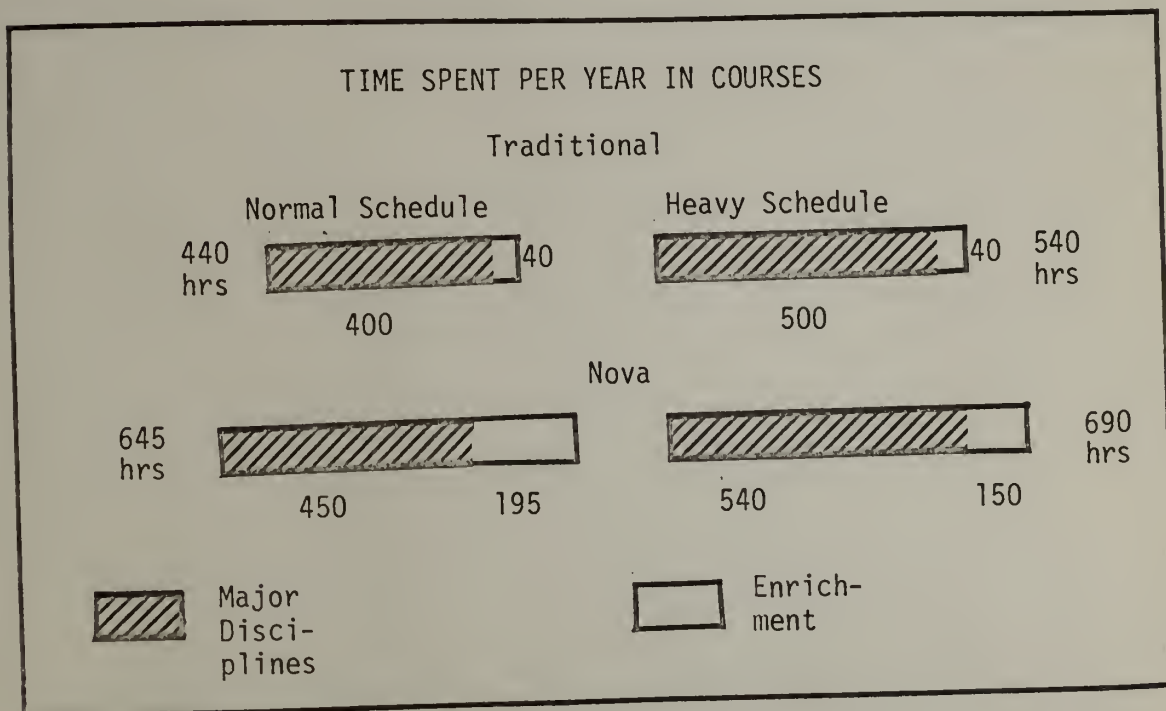and nova schedules, and Figure 19 compares free time per week.

Figure 18

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┌─────────────────────────────────────────────┐
│        FREE TIME PER WEEK FOR STUDENTS        │
│                                               │
│                 Traditional                   │
│                                               │
│    Normal                            Heavy     │
│   ┌───────────────┐        ┌───────────────┐   │
│   │   16.5 hrs.   │        │   14.6 hrs.   │   │
│   └───────────────┘        └───────────────┘   │
│                                               │
│                    Nova                       │
│       ┌──────────────┐      ┌──────────────┐  │
│       │   9.1 hrs.   │      │  6.7 hrs  │     │
│       └──────────────┘      └──────────────┘  │
│                                               │
└─────────────────────────────────────────────┘
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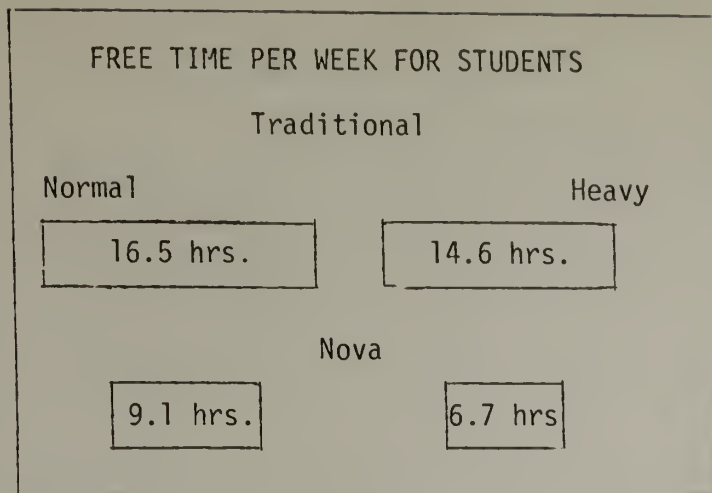
Figure 19

Additional Supporting Structures

for the Model Curriculum

Administration

The role of the Headmaster in a school designed to meet the
needs of adolescents as described in this model is that of a facilitator.
He needs to oversee the curriculum design, to provide sufficient time
in the schedule for faculty and student meetings, to explain the school
to parents, the Board of Trustees and to other educators, and to hire
faculty who are sympathetic with the aims of the school, and able to
work effectively within its structures. He cannot afford to be so
caught up with paperwork that he ignores people, as his chief obligation
is to set the tone of the school. For this reason, he needs executive
secretaries and administrative assistants who can relieve him of some
of the tasks associated with running a school. As a sharing in the
responsibility for the governance, financing and maintenance of the

school is built into the students' programs, all members of the admin-
istration must be able to function as educators, and be willing to work
with students. For some, this will entail retraining and a fuller grasp
of the principles of education than is usually required of them. The
administration of such a school cannot be isolated from either the
students or the faculty.

Within the administration there must be persons assigned to help
students plan their programs, with a term, yearly and overall perspec-
tive. The more creative the school's curriculum is, and the more free-
dom it allows, the more it is the school's responsibility to see that
the students are given the assistance they need to make wise selections.

Faculty

One of the chief responsibilities of the faculty is to work with
each other and with the students to develop the curriculum. They will
occasionally need outside help to construct and evaluate programs, but
even more, they will need time. This should be one of the important
considerations when scheduling the year. The faculty needs time to
research new learning opportunities. These may take the form of com-
munity-based programs, academic pursuits or exchange programs with
other schools. Most of the schools visited for this study reported
that their faculty gained most from visiting other schools and talking
with other teachers. They lamented the paucity of resources for in-
service teacher education, program development and curriculum materials.
It seems then that some free days within the school year will be neces-
sary. The nova schedule, which allows for a new term every twenty-two

teaching days, could easily provide this. Teachers also need time weekly that can be used to plan and evaluate programs. Again, the schedule must be arranged so that they can meet together as needed.

Students

The admissions policy must be such that students who do not want the type of curriculum offered by the school, with the responsibilities it entails, are not admitted to it. Several of the schools visited found that by using students as members of the admissions committee they were better able to discover applicants who were not suited for the school than they were with an all-adult committee. It seemed that the applicants talked more openly with their peers than they did with the adults.

Students need structures to support their active role in the school. Many of the activities described in the model require that students be able to get together during the day to plan their jobs, courses or recreation. Again, a schedule modeled after the Tatnall Nova could easily accommodate these needs. The "enrichment" time, indicated in Figure 18, is much longer in the nova plan than in traditional ones.[25] Some of this time could be made available for these uses.

Conclusion

The model presented in this chapter is designed to meet the educational and personal needs of college-bound adolescents. The rationale

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[25]Chapter IV, p. 147. The traditional schedule allows about forty hours per year in "enrichment" activities, while the nova schedule allows between one hundred fifty and one hundred ninety-five.

presented illustrates an organized approach to curriculum design and stresses the participation of parents, students, faculty and Board of Trustees. The model proposed is designed around the developmental tasks of adolescents. Program objectives and selected learning opportunities are suggested for each specific task. Structures to facilitate the model are suggested, and a schedule particularly suited to its demands is described. The programs, models and structures are designed to be consistent with the expressed educational philosophy.

It should be again stated that the purpose of this model is to stimulate thought about college preparatory programs, and by suggesting a new organizing principle for one, to promote curriculum reform in nonpublic preparatory schools. The model has drawn heavily from the information supplied by the more than three hundred schools participating in the study, and from the research of educators and adolescent psychologists. Hopefully this blend of experience and theory will prove useful to schools.

C H A P T E R   V

SUMMARY AND CONCLUSION

Summary

This study opened with a survey of the history of secondary
curriculum development. It was noted that programs specifically related
to the needs and concerns of students, such as those developed under
the auspices of The Progressive Education Association in the thirties,
or the core-curriculum plans of the late forties and early fifties, were
largely successful in accomplishing their goals. Discipline-centered
programs, begun in the late nineteenth century and greatly strengthened
during the post-Sputnik era of the late fifties and sixties, were less
successful at achieving their goals, but more readily adopted by schools.
Some educators, concerned that curriculum planning was too disorganized
and piecemeal, developed rationales, or steps and procedures to guide
the development of curricula. While the rationales assured an ordered
process of planning, they did not provide answers to the questions that
were plaguing educators, students and parents: what are the purposes of
the schools, what values should they transmit, whom should they serve?
Should the curriculum be dictated by tradition, by college entrance re-
quirements, by subject specialists, by philosophical considerations, by
the desires of the learners, or by some combination of these?

Parents who send their children to nonpublic preparatory schools take on a considerable expense to exercise their constitutional right of determining the type of education to which their children will be exposed. Although there are many reasons for their choice of schools, the most frequently reported were a desire to offer their children an education that will prepare them especially well for college, and a desire that their children receive individual attention at school so that their unique talents and personalities will be developed.

Many nonpublic schools indicate a concern for the personal development of the students in their statements of philosophy, but frequently these statements are not sufficiently reflected in their curricula. The college preparatory program in both public and nonpublic schools is most often a discipline-based program, with too little regard for the needs and developmental tasks of adolescents. A comparison of these needs and tasks with the programs described by the schools participating in this study shows this. Particularly lacking are learning opportunities that foster independence, prepare students for adult roles, and help them develop a sense of identity. Strong programs exist in the cognitive domain, but they may presume the ability to reason abstractly rather than seek to develop it. Surprisingly few schools described a unified, cohesive curriculum; most were collections of programs with little or no apparent relation to each other. The schools were aware of many of the deficiencies in their programs, and were seeking more unified and humanistic curricula.

By selecting the most appropriate programs from the traditional curriculum, the curricula of the schools visited and surveyed, suggestions of educational specialists and her own experience, the author presented a model preparatory curriculum for students from eleven to eighteen years of age. The organizing structures for the curriculum were drawn from a study of the developmental tasks of middle-class adolescents in the United States. The model was offered as a catalyst to stimulate evaluations and revisions of programs in nonpublic preparatory schools.

The model proposed lacks the richness and specificity of a curriculum developed on site by a competent faculty. It also does not include evaluation criteria. This is in keeping with its purpose as a stimulus for thought, and with the author's conviction that the faculty and students concerned should be responsible for the development of the specifics and the evaluations of the curriculum. Outside consultants and curriculum designers can suggest new ideas, methods, materials and directions, and by doing so, can aid the process of curriculum development. They can also help examine the program for internal coherence, strengths and weaknesses. But for education to be vital and relevent, it is necessary that the students and teachers take an active role in the design and in decision-making.

Recommendations for Further Research

This study of nonpublic college preparatory programs could be well complemented by an in-depth study of a few selected programs. The majority of schools visited for this study were seen during the summer

months. This fact severely limited the number of students and teachers who were available for interviews. An in-depth study of a few schools could provide data on programs of special interest, such as those involving students in decision-making, those introducing them to politics and the world of work, and those aimed at helping them develop a personal code of behavior and a sense of identity. Such a study might lead to the development of materials and evaluation instruments in these fields. A need for such materials was expressed by many of the schools visited.

There is also a need for further research into the most favorable methods and conditions for introducing changes in nonpublic schools. In a few schools, where significant changes had occurred within a few years, the opinion was expressed that it was easier to make sweeping changes than to try and change gradually. If this is so, it would be helpful for school administrators to be aware of it.

It would also be helpful to extend this study to public high schools, and develop a learner-centered college preparatory program suited to the special needs and abilities of these schools.

The most significant study, however, would be a long-term one of students educated according to the model presented here. This would necessitate implementing the model, noting student progress in secondary school, college and careers. Not until such a study is possible will the value of a learner-centered preparatory curriculum be known.

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APPENDICES

APPENDIX A

School_____Grades_____Enrollment_____

Address_____

Please indicate which of the following are <u>required</u> by your school for
graduation with a college preparatory diploma, and indicate the number
of years of study required. If scheduled irregularly (two week ex-
perience, etc.) indicate the amount of time given to the study. Use
blank spaces to add courses as needed.

____Creative Arts (dance, music,   ____Social Studies, U.S.A.
    photography, studio art, etc.)
                                       ____Social Studies, Non-Western
____English Language (grammar,
    speaking, writing, etc.)   ____Social Studies, Western

____Language, Classical   ____ _____

____Language, Modern   ____ _____

____Mathematics   ____ _____

____Physical Education   ____ _____

____Science   ____ TOTAL CREDITS REQUIRED FOR
                                            GRADUATION (1 credit = 1 year
                                            of study)

Please list <u>additional</u> courses and learning opportunities provided by
your school, but not required for graduation. Use general categories,
as above, and indicate the number of years (or other length of time) of
study possible in the category listed. Use additional sheets if necessary.

COURSES AND LEARNING OPPORTUNITIES   COURSES AND LEARNING OPPORTUNITIES
AIMED AT INTELLECTUAL GROWTH   AIMED AT AFFECTIVE GROWTH OR SOCIETAL
(elective courses, advanced offer-   CONCERNS (social action, value clari-
ings, debate classes, etc.)   fication, group dynamics, work ex-
                                       periences, etc.)

____ _____   ____ _____
____ _____   ____ _____
____ _____   ____ _____
____ _____   ____ _____
____ _____   ____ _____
____ _____   ____ _____
____ _____   ____ _____
____ _____   ____ _____

APPENDIX   B

TOPICS INCLUDED IN THE INTERVIEWS

AT ALL SCHOOLS VISITED

1. Goals and philosophy of the school.

2. Role of the Board of Trustees.

3. Administrative structures and responsibilities.

4. Academic and personal leadership in the school.

5. Discipline and climate of the school.

6. Academic programs.

7. Social programs.

8. Students' feelings about the school.

9. Parents' feelings about the school.

10. Success and failures of the present curriculum.

11. Plans for the future.

12. Faculty responsibilities.

13. In-service opportunities for faculty.

14. Faculty's feelings about the school.

15. Financial programs.

SCHOOLS VISITED AND PERSONS INTERVIEWED

The Asheville School
Asheville, N.C. 28006
   Mr. Irwin H. Ornduff

The Athenian School
2100 Mt. Diablo Scenic Blvd.
Danville, Calif., 94115
   Mr. John Galloway
   Mr. Ed Ellis

The Baldwin School of N.Y.C.
160 West 74th Street
New York City, N.Y. 10023
   Dr. Rollin P. Baldwin

Berry Academy
Mt. Berry, GA 30149
   Mr. Ed Laird

Brandon Hall
2500 Spalding Drive
Dunwoody, GA 30338
   Mr. Robert E. Detweiler
   Mr. John C. Mayer

Brooklyn Friends School
375 Pearl Street
Brooklyn, NY 11201
   Mr. Irving S. Asch

Collins Brook School
RD #2
Freeport, ME 04032
   Mr. Dick Watson

Colorado Rocky Mountain School
Carbondale, Colo. 81623
   Mr. Richard L. Herb

Deerfield Academy
Deerfield, MA 01342
   Mr. David Foster

Edmund Burke School
2126 Wyoming Ave., N.W.
Washington, D.C.
   Mr. Richard J. Roth

The Friendsville Academy
3871 Main Street
Friendsville, Tenn. 37737
   Mr. Arthur Masker
   Mr. Ronald Johnson

The Gill/St. Bernard's School
Claremont Road
Bernardsville, N.J.
   Mr. John Wright
   Mr. Littleford

The Harley School
1981 Clover Street
Rochester, NY 14618
   Mr. Stephen Hinrichs

High Mowing School
Abbit Hill Road
Wilton, NH
   Mrs. Beulah H. Emmit

Indian Springs School
Rt. 1, Box 473
Helena, Ala. 35080
   Dr. J. L. Jackson

Keith Country Day School
1 Jacoby Place
Rockford, Ill. 61107
   Mr. Philip B. Dundas

The Lakeside School
14050 First Ave., N.E.
Seattle, Wash. 98125

The Louise S. McGehee School
2343 Prytania Street
New Orleans, LA
   Ms. Maria L. Fernandez

Margaret Hall
117 Elm Street
Versailles, KY 40383
    Rev. & Mrs. Colley W. Bell, Jr.

Metairie Park Country Day School
300 Park Road
Metairie, LA 70005
    Mr. Robert Demaree

Midland School
Los Olivos, CA 93441
    Mr. & Mrs. Carl E. Munger

The Newport School
Ruggles Avenue
Newport, RI 02840
    Mr. Sidney S. Gorham

Northfield-Mr. Herman School
East Northfield, MA 01360
    Mrs. Jean P. Hatheway

Oregon Episcopal School
6300 S.W. Nicol Road
Portland, OR 97223
    Rev. David Leech
    Mr. Fred Wood

The Orme School
Mayer, AR 86333
    Mr. Stanley C. Gloss

Pacific High School
12100 Skyline Blvd.
Los Gatos, CA 75030
    Mr. Michael S. Kaye

The Palm Beach Academy
690 N. Country Road
Palm Beach, FL 33480
    Mr. Clarence J. Aikey

The Park School of Baltimore
Old Court Road
Brooklandville, MD 21022
    Mr. Earl Ball

Park-Tudor School
7200 N. College Avenue
Indianapolis, IN 46240
    Mr. William Goerge Young
    Mr. Thomas E. Black

Phillips Andover Academy
Andover, MA
    Mr. Simeon Hyde

The Prairie School
4050 Lighthouse Drive
Racine, WI 53402
    Mr. John M. Mitchell

Robert Louis Stevenson School
24 West 74th Street
New York City, NY 10023
    Mrs. Lucille Rhodes

Rudolf Steiner School
15 East 79th Street
New York City, NY   10021
    Mr. Henry Barnes

St. Andrews School
St. Andrews, TN   37372
    Father Franklin Martin

Scattergood School
West Branch, IO   52358
    Mrs. B. Scattergood

The Selwyn School
University Drive West
Denton, TE 76201
    Mr. Legare Van Ness

Southwestern Academy
Rimrock, AR
    Mr. Denis Gray

Sunset Hill School
400 West 51st Street
Kansas City, MO   64112
    Miss Barbara Belknap
    Mrs. M. Atwood

Swain Country Day School
1100 South 24th Street
Allentown, PA 18103
   Mr. James E. Swain, Jr.

The Tatnall School
1501 Barley Mill Road
Wilmington, DE 19807
   Dr. W. Rodman Snelling
   Many faculty, staff
   and students

The Urban School of San Francisco
2938 Washington Street
San Francisco, CA 94115
   Mr. Bob Wilder

Verde Valley School
Sedona, AR 86336
   Mr. John C. Huie

Villa Maria High School
Evergreen Road
Villa Maria, PA 16155
   Sr. Carolyn Marshall

Washington College Academy
Washington College,TE 37681
   Mr. T. Henry Jablonski

Westledge School
Westledge Road
West Simsbury, CT 06092
   Mr. Robert Vibert
   Mr. David Holt

West Nottingham Academy
Colora, MD 21917
   Mr. Kenneth E. Dietrick
   Mr. Richard L. Funk

Westtown School
Westtown, PA 19395
   Mr. Earl G. Harrison, Jr.
   Master J. Kirk Russel

Wilmington Friends School
101 School Rd., Alapocas
Wilmington, DE 19803
   Mr. Donald Holmes

Worcester Academy
81 Providence Street
Worcester, MA   01604
   Mr. Robert A. Hughes

Wykeham Rise
Wykeham Road
Washington, CT 06793
   Mr. W. Smith

Tatnall Nova

If you asked a teacher to tell you honestly whether education ever reaches its ideal, he (or she) would have to answer "No."

The ideal in education is to help every student make maximum use of his potential. To achieve this ideal, courses and schedules should be developed around the needs of students. But there are obvious problems which every educator, every teacher, faces in trying to meet this ideal.

Students differ. They differ in ability, motivation, achievement, interest span, emotional stability, and in many other ways.

Teachers differ. They differ in their approach, their personality, their ability to communicate.

Courses differ. They differ in content, in complexity, in the skills they require.

But perhaps, the biggest problem in helping each student make maximum use of his potential is *time*. Here at Tatnall, we realized several years ago that we had very little flexibility in meeting the individual needs of students as long as we were locked into the traditional time concepts: a 40-minute class period, eight classes a day; 180 school days a year.

If you go to a high school — any school, public or private — it is not unusual to find that more physical education time is spent in the locker and shower rooms than in class. And in the science labs, so much time is spent in setting up laboratory apparatus and then taking it down for the next class, that there isn't enough time left for learning. To make the 40-minute period fit into an eight-class day, a student's program may have one or more "study periods" (frequently conducted in an atmosphere not conducive to study.)

As long as the 40-minute class period exists, a parent may think his child is getting a full 40-minutes of instruction eight times a day, but in reality, the student may be receiving an average of only 30-35 minutes of learning six times a day — simply because the teacher and the school are locked into a time-period that doesn't have sufficient length.

At Tatnall, we also found that under this rigid system we could not respond to the needs of the individual student. A student with high ability and high motivation frequently doesn't need a full year to complete a given course. Another student, however, may need more than the regularly allotted time.

In sequential courses — for example, Spanish 1, 2, and 3 — the rate of learning moves so slowly for the superior student that he often loses interest in the subject before he is allowed to go on to the more advanced levels. But the slower student may find himself falling further and further behind as he moves from one level to the next.

In short, our educational needs demand flexible "time frames." But when we look at our existing academic schedules, there is no way we can make these flexible time frames fit.

Here at Tatnall, we first looked to other schools to see what they were doing. We were impressed by the total immersion idea developed by some institutions — a technique in which a student studies only one subject at a time until he has learned what he must learn. But we also felt that total immersion is not the best approach to all courses, for all students, for all teachers.

We looked at college winter-term programs and saw the tremendous advantage of providing a "break" in the school year when students have a chance to pursue a particular interest in depth.

We looked at programs that were primarily achievement-oriented rather than time-oriented: advanced placement, independent study, programmed learning, and others.

We looked at modular scheduling and saw the advantages of varying the length of class periods to fit the subject matter — but noted that such scheduling often results in large blocks of wasteful "free time."

Nowhere did we find a completely satisfactory answer.

Then we brainstormed. We tried to identify the best of what other schools were doing, blend them with ideas of our own, and develop an academic structure that would provide us with the flexibility we know is essential if a student is to realize his full potential.

The result was the Tatnall Nova.

The Nova concept is quite simple. It breaks the year into 9 terms, each of which has 22 uninterrupted teaching days. Each of these terms is called a Nova. In addition, there are two short terms of eight teaching days each, which are called mini-Novas.
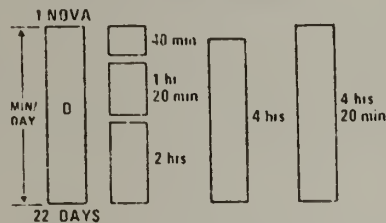
The NOVA Calendar
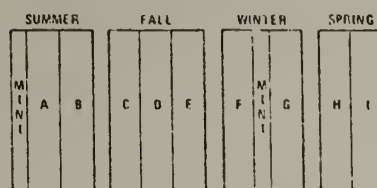
22 Full Teaching Days in Each NOVA
8 Full Teaching Days in Each Mini-NOVA

Thus, a Nova itself is a time frame. But other time frames may be placed within it. A class period may be the traditional 40 minutes long; or it may be 1 hour and 20 minutes; or it may be 2 hours, 4 hours, or 4 hours and 20 minutes.

NOVA TIME FRAMES

The size of a time frame is measured in Nova units. A 40-minute class held for 22 days represents three units. Other time frames, in order of size, are worth 6, 9, 18, and 21 units. A Nova unit, therefore, is nothing more than a way of measuring time.

Courses may last for different numbers of Novas. The minimum is one Nova in length (22 days). The maximum is four Novas.

Within any given Nova, a student may be taking as many as four courses. Of course, if he's taking a total immersion course, he is taking only one course during that Nova.

Each student must carry from 18 to 21 units per Nova. One student may schedule his work so that he is carrying two 9-unit courses during the Nova — taking one course in the morning, the other in the afternoon.

The point is this: the time frame may be fitted to the course, but also to the particular group of students involved.

For example, an above average student may be able to absorb a full year's mathematics course in just two Novas of 6 units each. An average student — taking absolutely the same course material — may require three Novas of 6-unit time frames. And a student who needs greater teacher direction to understand the mathematical concepts may require 3 Novas with 9-unit time frames.

Because the time units can be shaped to the capabilities of the individual student, the faster student can move ahead to more advanced courses sooner, while at the same time, the other students, each working at his own pace, get equivalent instruction rather than watered-down versions — or rather than completing a term without fully comprehending the concepts.

In this way, Tatnall has made achievement the primary consideration, and has used time as the means for achievement.

There are many advantages to the Tatnall Nova. The student spends more hours with a teacher. Deadtime is held to a minimum. Unstructured time is scheduled only when it is educationally desirable, not when it is administratively convenient.

Nova allows for total immersion. For example, on some days a course called "The City"— which includes aspects of English, sociology, political science, anthropology — takes the students to a metropolitan center where he can observe and study ethnic and racial neighborhoods, functions of the local government, city planning. On other days, visiting speakers come to campus to discuss various aspects of the city. For 22 days, the student is totally immersed in this one subject.

But not all courses lend themselves to this approach. Total immersion is offered only where course content and student abilities make it educationally beneficial.

The longer daily sessions in the Tatnall Nova invite the use of a wide variety of teaching techniques: independent study, audiovisual presentations, team teaching, individual and group reports, projects and experiments, group lectures. And this diversity of techniques tends to make learning more exciting.

Furthermore, the teaching environment now extends outside the classroom — as can be seen in the explanation above of "The City." This is excellent preparation for college because, to a greater and greater extent, the best colleges and universities are introducing off-campus experiences in their programs so that students can learn by doing. Through his off-campus educational experiences, the Tatnall student is better prepared for the transition to college life.

Tatnall also has incorporated extracurricular activities into the total educational program, making each a learning experience during the academic day. Under the Tatnall Nova, nonacademic involvement is as much a part of the student's schedule as his academic commitments — but only after he has completed those commitments essential for admission to college. Just as physical educational experiences are built into the school day, so such activities as drama and stagecraft, band, yearbook, and student government are part of the total educational program. As a result, after school involvement in voluntary interscholastic sports does not conflict with other school activities.

Seven Novas and one mini-Nova constitute an academic year; nine Novas and two mini-Novas constitute a 12-month year. Each student has a large number of Novas and mini-Novas from which to make (with faculty guidance) those academic disciplines that will best answer his needs and interests.

Furthermore, the Nova program enables a student to go to school 12 months a year, an exciting possibility. With a 12-month program, the student with high motivation and high ability can accelerate his secondary school experience. Or he can expand his secondary school experience, thus enabling him to take advanced placement tests in college. And the Tatnall faculty members have the option of teaching 12 months a year: the School can realize more efficient operation of its plant and facilities; courses that are seasonal in nature may be offered — to Tatnall students as well as to students from other schools.

Because Tatnall has a primary commitment — to prepare its students for college — the curriculum had to be reorganized so we could be sure that it would satisfy this commitment and at the same time satisfy the best interests of the students, the teachers, and the development of concepts. Different courses and different groups of students needed the time frames appropriate for them. Some courses and students needed extensive time every day; others were best developed in more traditional patterns of small "doses" every day.

The entire curriculum was evaluated. Each course was carefully analyzed and broken into component parts. (Courses divide naturally into components of differing numbers and sizes.) Each component, after it was isolated, was examined, and the faculty asked itself these questions:

1. Is this component essential? Or is it a peripheral component that simply became buried in the course over a period of years? Or was it added just to fill out time to make a course last for 40 minutes a day for one semester?

2. Is this component independent? Could it stand on its own two feet as a separate course?

3. What is the relationship between this component and other components in the same course? Does it have a relationship with components in other courses? In other departments?

4. How difficult are the concepts or skills involved in the study of this component?

Having answered these questions, we found that there were some components that were clearly related and would have to remain related. We found that there were other components that had a closer affinity to components in other courses. And there were still other components that had been added simply to fill the traditional 40-minute time frame and therefore could be discarded. And of course, there were some new components — such as study of the computer — that had to be added because they were unknown 10, 20, or 30 years ago but are very much a part of our world today.

We therefore took all these components and started to create new courses that consisted of more logical grouping of components. As we devised these courses, we put each under the microscope and asked these questions:

1. What is the degree of difficulty of this course?

2. What type of student will be taking this course? How able is this student? What is his or her background? In short, what is "the audience?"

3. What faculty member will be teaching this course? What is his character, his personality, his ability to motivate the student? How will he adjust to and interpret the material within this course?

4. What sort of teaching environment will best serve the educational goals of this course? What educational experiences must take place within the classroom? Outside the classroom? Off campus? How much time is needed for the student to learn this material?

In answering these questions — and in the consequent restructuring of our courses — we always kept the capabilities of the individual student in mind. For some students, a course might be "packaged" in a simple time frame. For other students, the same amount of material might be "packaged" in two or three time frames. It is possible to take the same volume of material and package it for one group of students on a relatively small time frame with a high density, while other students might require the same material in a series of packages of much lower density.

44 DAYS
1 hr 20 min

66 DAYS
2 hrs

66 DAYS
1 hr 20 min
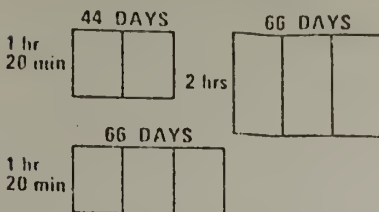
In the course of a day, a student might take two demanding academic courses as well as some minor or short exposure courses involving little conceptual work and perhaps no homework. The day might be completed by some athletics.
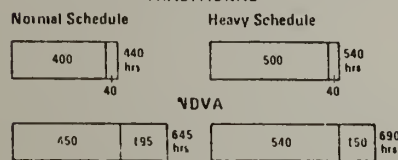
Because many courses can be completed within a single Nova of 22 days, it is possible for Tatnall to supplement its faculty with specialists from the outside world — men or women who can spend all day, or part of each day, for 22 days, but who would never consider doing this for an entire semester of 90 days. In the first year, 28 able, experienced, supplemental faculty have been involved in teaching the Nova. Some have been parents and community volunteers (such as the person who taught a wood carving minor). Others may be professionals or businessmen, (such as the analysts — among the best on the East Coast — who taught a very popular course entitled "Stock Market"). Still others are creative persons (such as the free lance writer and the graphic designer who taught a communications course).

In redesigning the courses, we frequently assigned new names. "Stock Market" is, to a great extent, a course in economics, but to the student the new name has much more glamor than has the traditional label, and he enters (and leaves) the course with far more enthusiasm than if it bore the traditional name.

The Nova student also spends more time in class. Under the traditional program of instruction, the normal four-major-course student spent 400 clock hours in the classroom, dividing this time among five academic disciplines: English, language, mathematics, science, social study. And he spent 40 hours in other courses — primarily physical education and the arts.

Under the Nova program, this same student is spending 450 hours in study of these five academic disciplines, plus 195 hours in enrichment courses.

TIME SPENT PER YEAR IN COURSES
TRADITIONAL

Normal Schedule | Heavy Schedule

400 | 440 hrs | 500 | 540 hrs
40 | 40

NOVA

450 | 195 | 645 hrs | 540 | 150 | 690 hrs

The five-major-course student shows a similar increase in the number of hours in a classroom. Under the Nova program, he has 690 classroom hours as opposed to only 540 classroom hours in the traditional program.

Both the four-major-course student and the five-major-course student are spending approximately 10% more time in the major academic disciplines. But the significant growth is in the enrichment areas.

Under the traditional program, our enrichment efforts had to be confined primarily to physical education and the arts. But under the Nova program, we have been able to add such enrichment courses as ecology, philosophy, formal logic (taught by a university professor), situation ethics, and many other areas of human relations, service, and recreation.

But where do these extra hours come from? Primarily from a dramatic reduction in the number of hours of "free time" each week.

FREE TIME PER WEEK FOR STUDENTS
TRADITIONAL

Normal Schedule | Heavy Schedule
16.5 Hrs | 14.6 Hrs
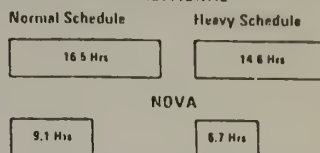
NOVA
9.1 Hrs | 8.7 Hrs

Amazingly enough, none of these time comparisons include the mini-Nova. Every teacher is aware that in January or February of each year, students (and oftentimes, teachers) enter a "doldrums" period. They need a change of pace. But the traditional program has no allowance for the doldrums.

With the mini-Nova, however, the student has an eight-day change of pace — yet he is still immersed in learning, in learning things that he couldn't possibly learn under a traditional program.

For example, we were amazed at the number of students who responded to a mini-Nova course in small motor mechanics. And although we expected some male students to evince an interest in the "workings" of a motorcycle and motorbike, we did not anticipate women's lib, for female interest also was high. Furniture refinishing was another popular mini-Nova program. Each student brought one piece of furniture from home and, under the guidance of an expert, in just eight days "recycled" the item. Meanwhile, other students were in Vermont, involved in an Outward Bound type of experience in winter survival, living in temperatures as low as 25° below zero. In all, 30 courses — each an educational experience, but far removed from the ordinary classroom experience — were offered to the 250 Upper Division Tatnall students.

In subjective tests, we found that under the Nova program, student morale is higher. There is a psychological uplift as the student changes courses and looks forward to new experiences under different teachers. The change of faces and of course materials is equally attractive to the teacher.

When asked to compare their educational experience under the Nova program with their experience under the traditional program of the year before, 82% of the students felt that the Tatnall Nova was superior to — or as good as — the traditional experience.

STUDENT OPINION

59% More Desirable

23% As Desirable

18% Less Desirable
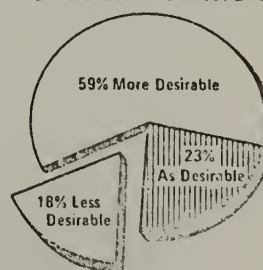
When the faculty was asked the same question, 95% said that the Nova was as good as or better than the previous traditional program. (And the faculty responded to this question in mid-year when they were at the peak of fatigue from implementing new courses and working longer hours.)

## FACULTY OPINION

70% More Desirable
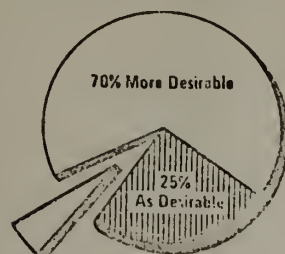
25% As Desirable

5% Less Desirable

We also asked the faculty to evaluate student motivation and the realization of student potential under the Nova program as opposed to the traditional program. Again, 95% felt that student motivation was as good as or better than under the traditional program, and 90% felt that realization of student potential was better than or as good as under the traditional program.

FACULTY EVALUATION

STUDENT MOTIVATION

REALIZATION OF STUDENT POTENTIAL

67% Greater

78% Equal

5% Less

40% Greater

50% Equal

10% Less
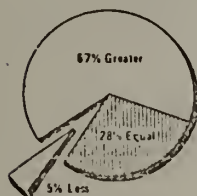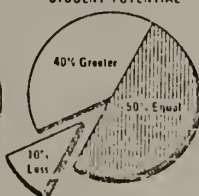
In one academic area — languages — Tatnall has been able to develop some objective measurements of the Nova program. Where a year's equivalence of language has been completed, tests (developed by the Modern Language Association) show that the Nova student has significantly higher median scores than were recorded under the traditional program.

Of course, with an eye to refining its program and to documenting its progress, Tatnall will continue both subjective and objective tests of its Nova program. (A major foundation has provided funds for just such purposes.)

For years, school curriculums have been based on four assumptions:

- Each course meets daily for 180 days.
- A period consists of 40 instructional minutes.
- Courses are offered strictly in terms of grade levels.
- Every student should take every course.

But if an educator — or a parent — accepts the above assumptions, then he must also accept the following four conclusions:

- Every student is equal in ability and need. (After all, each is given the same amount of time in each course.)
- Students of different grade levels should not mix academically. (Yet acceptance of this idea would make a lie of the advanced placement tests given by colleges, tests that frequently place a freshman in a sophomore or junior level course.)
- All courses are of equal worth.
- There exists a sacred order of courses.

Colleges long since have refused to subscribe to these last four ideas. Many colleges provide tutorials or remedial courses for students who are slower than normal, and almost all colleges offer the superior student the opportunity to work with other students of his intellectual ability, whether they are sophomores, juniors or seniors. Colleges also recognize that courses are not of equal worth — assigning them different unit values or even teaching some for much shorter lengths of time. As for a sacred order of courses, today's college allows students to design their own curriculums — within certain limitations — and only where another course is absolutely a prerequisite for a second course is any "sacred order" adhered to.

At Tatnall, we believe that a school not only must prepare a student academically for college,

but it also must prepare him for the decision-making and problem-solving that are a part of the college learning process today. We believe that our Nova program provides such experience.

As for the academic preparation, college admissions representatives who have visited the Tatnall campus and have had the opportunity to see the Nova program in practice have unanimously praised it and commented on how well it prepares the student for college-level programs. The calibre of the colleges and universities that have accepted members of Tatnall's graduating class of 1973 vouches for the approval of the Nova program by higher education.

During the first year of operation under the Nova system, Tatnall's Upper Division has been visited by educators from throughout the United States, some men and women who wanted to observe the Nova, some educational consultants who were retained to assure that the program would meet the highest college admission standards. Among their observations were these:

"Clearly, the School and its leadership is uniquely qualified to pursue the Nova and its implications with educational integrity and honest self-criticism. Too often educational institutions, try as they will, cannot abide criticism. In this instance, Tatnall is willing to open up its experience for the educational community at large to observe. If the program succeeds, as I predict it will, the investment in the endeavor will have significant impact on not only independent school education but the public sector as well."•

John C. Hoy, *Chancellor*
University of California at Irvine

*Mr. Hoy, formerly director of admissions at Lake Forest, Swarthmore, and Wesleyan, noted the need for such a program and predicted enthusiastic response from colleges.

"A note of appreciation to you for the exciting presentation of the things you are doing in the Tatnall Nova. I found the project to be very innovative."

Arland F. Christ-Janer, *President*
College Entrance Examination Board (CEEB)

The Tatnall Nova has moved away from the old time-worn restrictions and limitations and has zeroed in on meeting the needs of its students. Human beings in general — and high school students in particular — learn best when they are happy and they do well in the studies they enjoy.

For more information, use this business reply card—or write

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