Brief descriptions of 25 different approaches to learning are given, along with examples of each, areas to which each might be applicable, and possible instructional objectives and methods of evaluation. The selection of methods is rooted in the following premises: that the purpose of education is to serve the educational pursuits of students; that every student differs in interests and abilities and these differences should be utilized and not submerged; and that since high school graduates assume adult responsibilities, their education during adolescence should provide training in responsibility as well as providing knowledge. Thus, while traditional methods are included, the emphasis is on flexible, personalized instruction, with the student making selections of areas and methods of study, and following them up under the guidance, rather than the direction, of a professional educator. (RH)
TECHNIQUES TO LEARNING--
25 APPROACHES

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The authors feel that a brief explanation of this booklet is essential to expedite the purpose for which it was written.

The Preface serves to introduce the reader to the purpose of the book and to the various steps that a teacher might take in actualizing the ideas and approaches contained in the book.

The Philosophy permeates the entire booklet and provides the coherence and unity needed to present one statement and one way of viewing education. Concomitant to the Philosophy is the concept of a "Free School" or "No School."

A rationale for the left to right movement on the following continua may be found in the Questions for Teachers that are herein presented. Answers to these questions form the essence of each segment of this book. On the heels of these questions come the No, No's and the Yes, Yes'. If the teachers are willing to reject these No, No's and accept the Yes, Yes', then they are ready to position themselves on the included Innovator's Continua and move steadily to the right as they become comfortable and find their new position acceptable.

The Vogue Jargon is a selected list of words that express the philosophy of this booklet and are used on occasion to present a particular idea.

The Approaches are defined, goals suggested, examples given, evaluation procedures suggested, and the authors' recommendations are included. Needless to say, space limitations make this booklet only an introduction—a beginning.
PREFACE

Teachers and students are constantly searching for means to resolve the age-old question: How can we make subject matter interesting, relevant, and palatable? Before attempting to answer that question, one should determine what is necessary for a child to learn. Then, the question posed above may have meaning.

The material gathered here is not necessarily new but is an attempt to identify ways by which students can learn, methods that some teachers employ, and approaches to a given study or sequence of studies. The term "approaches" denotes breadth, a way or mode, and does not suggest limitation or restriction. Thus, as you envision in your mind's eye the student seeking to solve the dilemma of commitment so essential to the learning process, perhaps the list of approaches can be of assistance to the student or teacher.

The question a teacher must resolve is: How may a student be turned on to make a total personal commitment in a positive and meaningful relationship to the learning process? The first step, as mentioned above, is to help the student determine what it is that he needs to know. The second step is how he wants to learn the subject matter. The third step is where, and the fourth step is for how long.

Various segments of this booklet attempt to aid each teacher in meeting the four steps presented above.
PHILOSOPHY

Prescription perfect education is an El Dorado long sought after but never found. As Don Quixote charged the windmill, we educators often charge the panacea that forever illudes us. There are many who expose the ills of education, but few who herald the significant step toward progress.

The most significant contribution the authors of this booklet feel they can make at this time is to go from individualized instruction to personalized instruction. Because each child is unique, the authors purport that self pacing, relevancy, and success, based on the student's interests, abilities, and talents, are basic to the development of every child.

Philosophically, existentialism embodies the precepts and concepts put forth in this booklet. If, as the existentialist states, existence precedes essence, then the development of the self must be pre-eminent over the development of all other concerns. It is the right of each person to find out who he is, what he is, and why he is, and to know that he is what he can become. Within the existential matrix is also the idea that the subject-object world is one. This conjugal relationship, in other words, means that a teacher no longer objectifies the student, or vice-versa. To the existentialist, then, the teacher-student relationship can only be meaningful when each looks upon the other as an extension of himself. Conceptualizing this idea in education would mean that all learning is done by both for the betterment of both. This idea would defy the image-making teacher as precursor of all knowledge and the student as a receptacle.

Christian existentialism further promotes the transcendence of self into the selves of
others and into the things of the environment. True understanding, wisdom, and belief, then, can only come to that person who first understands himself, then others, and then the world which surrounds him.

In many of the current periodicals and books written about and by teenagers, one overriding idea keeps repeating itself: self identity is vital for life fulfillment. In analyzing the many forces that impinge on a student's time, interests, and talents, it is not overly difficult to share some of their perplexity. On the one hand, in and out of school, they are expected to act as adults, but on the other hand, they are treated as children. We ask the student to enter into a democratic world but do not allow him to experiment with the inherent factors of democracy. We ask the student to be responsible but fail to teach him the steps leading to responsibility such as commitment. To ride the crest of the present wave of dissatisfaction over the establishment and its rules is to give vent to their frustration. Some of the widespread destruction, defiance, and extremism that one witnesses may well be due to the paternalistic nature of our schools.

Almost all students want and need guidance, firm and consistent, but they do not want to be generalized about and tyrannized over by those whose main objective is to transfer the information in certain books into the heads of unwilling students. If students were given the responsibility for their own education, with the constant advice and guidance of a professional educator, as soon as they could accept that responsibility, we believe there would be less dissension among students and that they would become responsible citizens at a much earlier age.
Experimentation and innovation are in-words in the lexicon of the present-day educator and others concerned with education. One particular area of change needs to be discussed at greater length. A number of schools have gone to no bells, some have gone to no walls, but few, if any, have gone to no schools. Whether this suggestion appears shocking and unrealistic will depend upon your orientation and openness. If we as educators and parents truly believe in providing the best education possible for our children, we should consider all possible avenues of exploration. So, let us explore.

As with most innovations, there are concomitant aspects that serve to enhance the primary objective. Before the no-school education idea can be made operational, other changes must be made. One of these changes may be the option for a student to elect a teacher in a given discipline under whom he wishes to study. If this selection process should prove invalid, then fellow teachers, administrators, and parents could present their opinions as to whom they felt was the best qualified teacher. Other teachers in that discipline, then, would serve as members of a teaching team under the master teacher. Added to this professional staff would be paraprofessionals, teacher aides, and volunteer parents.

At the beginning of a school year, students in groups of 25 or more could assemble in a school classroom, if one were available, or in the basement of someone's home, in a church, or in any room of any building available. Students would be interviewed by a member of the teaching team
as to the type of learning experiences to which he wished to be exposed. After this was determined, the student would choose an approach or combination of approaches he wished to use, the procedure he would follow, and how he wished to be evaluated.

For example, if a student indicated that he wished to learn something about economics, he would, with the help of a team member, choose an area within economics for individual study. If that area were investments and he selected the Independent Study and Seminar Approaches, he would, with the help of an advisor, structure his own study and schedule himself into the seminars. The procedure might be that he wished to read about investments, preceded by a self-designed bibliography. After completing the reading, a team member could give him $10,000 in bogus money to invest in any type of security he chose. The student would be given a semester to prove the wisdom of his investment and must orally, graphically, or in writing, report the effects of his activity. He could contact as many brokers, read as many security reports, and seek assistance from as many investors as he found necessary. The ultimate result would be the realization that this was his education and consequently his responsibility.

As a follow-up to this independent work, he would attend a seminar in financial affairs, budgeting, investments, or some similar subject. His peers who also chose investments or a related area of interest would, together with a member of the teaching team, discuss, research, analyze, and report findings that had to do with financial affairs. In this way, responsibility for learning would always be placed where it should be, on the student. Moreover, students would then be more
interested in ideas and involved in the decision-making process rather than be receptacles of computerized input--the student would be master rather than servant to known data.

If the student were to choose mathematics, he could elect the Mini Approach; if science, the Lab and Seminar Approach. The point is, the student, after proper orientation, would be free to structure his own learning and would be responsible for it.

This "no-school" concept of education in no way promotes permissiveness or slothfulness in any greater degree than is found in the better classroom situations that now exist. The basic premise in this concept is that the child would no longer be dependent upon the nurturing of parent and teacher until that magical moment of high school graduation, whereupon he supposedly becomes a responsible adult when he never had the occasion to be one before. The student would be given the chance to explore alternatives to learning, commit himself, and develop a responsible attitude toward his chosen task and be involved in important decisions. Most important, the student would discover more about himself, his abilities, talents, and interests; his self identity would come under closer scrutiny and thus come into better focus for him.
QUESTIONS TO BE ANSWERED
BY THE TEACHER

1. Are students unique individuals; that is, is each child a unique individual, different from all others?

2. Do students learn at different rates; that is, does the maturing process differ in boys and girls, age groups, and do children assimilate, synthesize, and conceptualize at different rates?

3. Does each student have different talents and combinations of talents?

4. Does each student have different interests?

5. Does each student have different abilities?

6. Is equipping students to make intelligent decisions basic?

7. Should materials be relevant?

8. Should personalized curriculum be considered for students as opposed to individualized?

9. Should students experience some success each day?

10. Is learning a continuous process?

11. Should the classroom be democratic?

12. What product other than potential is the teacher developing?

If you answer "yes" to the above questions, this pamphlet may be useful to you, for you may, as we did, be looking for alternatives to use--namely, varied approaches.

Furthermore, are we presently considering some rather important concepts? What about self pacing? What about the notion that students learn
in different ways? What about creativity... individuality... self image... domains... responsibility... human dignity?

Should teachers also be involved in the learning process? Should students be limited by teacher limitations?

What has made America great? Uniqueness? Freedom?

What about multiple resources as opposed to multiple texts?

Should teachers reach for more conceptual disciplines such as environmental as opposed to history or biology?
THE NO, NO'S AND YES, YES'

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Just as you moved from left to right on the continua and answered most or all of the questions on the preceding page in the affirmative, you should, insofar as your individual perspective allows you, move from the No, No's to the Yes, Yes' on this page.

The ideas herein are not meant to be exhaustive, but rather representative of the changes in attitudes and values that impinge on a more open-type classroom or open-type school.
THE INNOVATOR’S CONTINUA

Traditional teachers are primarily large-group orientated. Many present-day educators believe that the best direction is toward the small group and the independent or one-to-one teacher-pupil relationship. Thus a continuum can be constructed, moving left to right. The authors advocate experimentation with all three methods rather than to take one position.

The same can be said for the relationship of teacher-directed activities, teacher-student directed activities, and student-created activities. Again if a continuum were constructed, one would move from left to right, dependent upon his educational perspective. Position R would be highly suitable until an acceptable evaluation could be made.

A combination of the continua may offer a preferred relationship that neither continuum possesses in and of itself. It is the responsibility of each teacher to experiment and decide upon the right combination.
VOGUE JARGON

Over the years a jargon has developed that should not be overlooked. Very often a teacher hunts for words that best express what that teacher believes. For the benefit of the reader the authors are taking the liberty of selecting and developing certain "vogue words" into a simple statement of belief that they subscribe to. There is a definite correlation between the jargon reported here and the ideas developed in the other segments of this booklet.

We are dedicated to the notion that our primary function is to SERVE students in their educational pursuits. We believe that this pursuit is best served through a cooperative venture of parent, teacher, advisor, and student.

Furthermore, we believe that a realistic assessment of the student in terms of that student's INTERESTS, ABILITIES, and TALENTS should be the basis for our EDUCATIONAL DIAGNOSIS.

We also believe that each student is unique, and thus our role changes with each individual student or group of students with whom we work. We, therefore, commit ourselves to go beyond individualized instruction and place ourselves in a position where our efforts will be devoted to building a personalized curriculum for each student. The personalized curriculum will contain the concepts of INDIVIDUAL UNIQUENESS, SELF PACING, RELEVANCY OF MATERIALS, and a DEGREE OF SUCCESS EACH DAY. These will in part be the factors that we will attempt to incorporate into our EDUCATIONAL PRESCRIPTION.
Furthermore, we believe the view which the student has of himself—his SELF IMAGE or SELF CONCEPT—is fundamental to that student's sense of well being. Thus the process of PERCEIVING, BEHAVING, and BECOMING finds its genesis in how the student views himself (perceiving) which directs his attention (behaving) and culminates in the attaining of his objective (becoming).

Finally, we believe that we work with the student's POTENTIAL and are entrusted to develop this potential to the fullest of our abilities and talents. To these simple principles we pledge ourselves.

TEACHER, PARENT, ADVISOR, and STUDENT RESPONSIBILITY are our key words, enveloped in an academic atmosphere of QUALITY EDUCATION.
CASE STUDY APPROACH

Domain: Cognitive

Description

Regardless of the subject, a case study may be devised to include a valuable learning experience for the student. Because case studies involve theory and practice, the results of such an approach should prove revealing and educational.

Example

A case study could involve a specific incident in history, coupled with an in-depth approach. For instance, the students could study the assassination of Lincoln, attempting to familiarize themselves with all the facets of the incident to the point where a mock trial could be enacted, based on the facts and circumstances of the incident, or in this case, the actual assassination of Lincoln.

A case study so encompasses all that is known about a particular incident that the incident can be re-evaluated or rejudged in light of all the evidence available.

Instructional Objectives

Though the format is generally predetermined, the student would need to make modifications to meet extenuating circumstances. His plan would need to include the amount of study and the number of contacts necessary to ensure an adequate supply of information and exposure so that the experience would be meaningful and valid.

The student would indicate the type of background he had relative to the subject he is to study; how much study he would need to do, including
a bibliography; how he plans to make his contacts; the number of contacts, and the method of reporting.

Evaluation

An evaluation of a case study could be an objective analysis of the data collected, a subjective reaction to the material presented, or based on the verdict rendered in a case where a mock trial would be the culminating activity.
CONCEPTUAL APPROACH

Domain: Affective

Description

Especially characterizing the conceptual approach is its freedom and flexibility, for it allows a teacher to limit its use to any part of one discipline or extend it to include many disciplines. Basic to conceptualizing is divergent thought which allows a student to view one idea from many different aspects.

Example

The first task of the student is to set the limitations of his study; for instance, the student may elect such subjects as the history of war, or the economics of war, or a specific war. The list may be extensive or relatively short. The first academic responsibility of the student is to recognize the limits of his study. The student proceeds to investigate these areas he has selected. The culmination of the study is the conceptualization that results. The final concept may be as simple as: war is evil, war is necessary; war is inherent in the national development of man.

Instructional Objectives

A probable schema through which students could analyze the factors which lead to an idea; the attendant circumstances that relate to those factors; the synthesis of factors and circumstances concerning the idea; and, finally, the evaluation of the idea to test its validity.

One student or any combination of students may elect or be assigned to the various taxonomic levels. To further the thought process, students could elect or be assigned to the
opposite point of view to test the validity of each and all taxonomic levels.

Evaluation

A caution—this approach is probably one of the most difficult for it involves a very sophisticated level of learning and academic discipline. The student gathers data through reading, interviews, and discussions with one goal in mind—to conceptualize, to leave the study with a conviction, a belief or notion that he can defend. The study does not create a closure as might be suspected. The student experiences a change but at the same time recognizes the fact that the belief that has been established is based on only one sphere of information and thus has limits; consequently, this approach serves more as a beginning than a conclusion.

The instructor can measure the materials read, notes or log developed, or the reports submitted. A subjective evaluation may be accomplished through a dialogue having the student defend the concept in terms of data collected, his logic and interpretation of current happenings on the local, state, national, and international scenes.

The conceptual approach is difficult to initiate but very rewarding once under way. Students with high achievement records or those who have shown an aptitude toward a high level learning process are candidates. One recommendation is that extreme patience be exercised in regard to time, for it needs sufficient time to develop.
CORE APPROACH

Domains: All

Description

The core approach includes teachers or teaching teams, which may involve students, in two or more disciplines, who combine their talents and resources to construct a learning unit consisting of specified elements of each discipline.

Example

The core approach is any combination of disciplines attempting to interrelate subject areas. An example of this approach might be the joint venture of the following departments—industrial arts, social studies, science, English, and business—to create a student corporation. This student corporation would meet periodically to decide the characteristics of space exploration in terms of new industrial processes, economics, history, government, sociology, language, and marketing. Each student would have a responsibility to investigate, analyze, synthesize, evaluate, and report.

Instructional Objectives

Students interested in this approach would solicit the help of teachers and other personnel to help them identify and glean information from such available sources as textbooks, library, and community resources. This information together with any materials, such as audio-visual, would be assimilated and structured into a learning unit. The
basic idea in the planning would be to demonstrate convergent thinking.

Each student in a given discipline would meet with students of other disciplines and decide, with the help of teachers and other learning catalysts, what idea, event, person, or category should be developed in a core approach. Once that was decided, students would then make and take their own assignments and decide on an acceptable method of reporting.

Evaluation

Several means of evaluation may be employed: objective tests, pre and post tests, business practice, and composition such as correspondence and minutes. Evaluation might be employed on pre-planning, product design, and cooperation. A realistic measure could be employed judging the total project on the sole basis of its ultimate success; that is, the production, distribution, and the final real profit in terms of time, materials, overhead, and sales.

This approach has proven successful with small groups of students who have diverse interests. The core approach allows each student to proceed at his own rate, and a synthesis takes effect in the culminating stages of the work undertaken. It is recommended that the teachers involved are in agreement as to the final objectives.
ENVIRONMENTAL APPROACH

Domains: All

Description

This is a science-social studies approach wherein a student may select a socio-scientific subject, such as pollution, to study and gather data to support his original thesis that had been approved by his teaching team. The study may include field trips, travel, the viewing of films, and individual research.

Example

A study in pollution can serve as an example of an environmental approach. The area of science and social studies would be combined—in science, the student would gather the data; in social studies, the human interpretation would be made. The student would decide the area of pollution he wished to study, such as water pollution. Then he would gather the samples, analyze them under scientific conditions, and then summarize his findings. The next phase would be to interpret these findings in terms of man—his social existence, his political existence, and man's past and future. Recommendations could serve to conclude this study.

Instructional Objectives

The student would demonstrate the comprehensiveness of his science-social studies experience by constructing a developmental plan that would ready him for such an experience, the structuring of that experience with an appropriate authority, and deciding on the mode for delivering the data he had collected and the outcome of that data.
The student would submit to the team, in some medium, the manner in which he chose his authority, the evaluative criteria of that authority, and a log of his activities while experimenting with the subject.

**Evaluation**

The evaluation of this study would be in terms of the student's study proposal—the changes initiated in the development of the original plan, the logical steps, and the equation of the proposed study to the end product. Secondly, the evaluation would consider the quality of the study as to scope, depth, and deportorial effects. Thirdly, the evaluation should include a measure of the cognitive domain. A post test—a report, a paper, or conference geared to specific information—should be designed and evaluated in terms of the student's interest to measure the quality and quantity of knowledge obtained in the study.
EXCHANGE APPROACH

Domain: Affective
Cognitive

Description

This approach is basically a reassignment of personnel. Students would become familiar with a different setting, problems, and conditions by exchanging the environment of which they were accustomed to one that was new.

Example

An important element in the exchange approach is the reality of the experience. For example, a student may wish to study in depth the American Indian problem. A letter to a representative of a reservation could initiate the program. Food, shelter, and a home base for the student may be arranged by a simple exchange. A week, month, or any other time block may be agreed upon. Three-way exchanges are more complicated but sometimes are needed to satisfy the interests of students. Students do not have to have similar goals for an exchange program. White students may wish to study Indian culture, whereas Indian students may wish to explore vocational and college opportunities. A single student or groups can be involved in an exchange program.

Instructional Objectives

Rural students could be placed in an urban setting; inner-city students could be placed in suburban schools; and students in a structured system could be placed in a less-structured or unstructured system.

It would be incumbent upon the student to suggest the circumstances for developing a suitable learning experience with the advice and
consent of the instructional staff. First, the student would determine what he wanted to learn, then determine the research, and then the expected outcome.

Because of the flexibility that may occur using this approach, the student may elect a number of methods of reporting the results: a film strip, oral or written reports, or a printed newspaper.

Evaluation

Evaluation can be objective or subjective. Themes, readings, logs, and reports can be evaluated at the termination of the exchange experience. Subjective discussion sessions employing the conceptual techniques or the totality techniques can be utilized. The service approach techniques could also be employed, putting the student in a position where the exchange experience is only an initiatory activity. Teaching Indian culture for the white student, guest speaker engagements, or the successful completion of satisfying a need or involving a meaningful change could serve as an evaluation.

The exchange approach has a built-in appeal to youngsters; however, only mature students who can easily adjust readily to a foreign environment should be considered. To insure that the exchange setup runs smoothly and effectively, all the conceivable minute details should be worked out well in advance.
FIELD TRIP APPROACH

Domain: Affective

Description

Common to the field trip approach is on-site learning. This approach may be used in any discipline as often and for as long a period of time as the situation warrants. In fact, one or more students may elect to cover an entire learning experience through field trips.

Example

A student may elect a series of field trip experiences in his local community. For the sake of definition, this approach is limited to the local or at most regional area. In the case of a pollution study, a student may select a number of sites to visit to increase his awareness of water pollution, such as rivers, swamps, lakes, and sanitation plants.

This approach is utilized on the elementary level very effectively because of the local nature of the field trips. However, it can also be used on the junior and senior high levels very effectively in ecology studies, employment studies, urban renewal, and city planning.

Instructional Objectives

Students should be instrumental in designing the format of the field trip. They should decide what kind of experience they want, how the particular agency, event, or place may help them gain the experience desired. They should go through all the steps necessary to plan, organize, and conclude each trip.
One or more students would indicate in writing the kind of experience wanted. The students would then write to on-site and school authorities for permission to make the trip. Then they would have to furnish the finances, the transportation, food, and lodging, and an itinerary. Moreover, they would need to consider any supervision necessary, and in what ways they would make each trip the most beneficial.

**Evaluation**

Evaluation by the instructor would consist of determining the meaningfulness of the students' observations. Impressions, planning, utilization of time, enthusiasm are factors which can be discussed, and a subjective evaluation determined by the instructor. Combinations of other approaches, such as the reading, could be employed to create a more objective measure of the student's performance and acquisition of knowledge. However, in its pure state, this approach is refreshing and a change for the student and can serve as a means of initiating an interest in an area that needs further exploitation.

This approach is particularly effective on the elementary level or with students who have a low degree of motivation and can be used as a means to generate interest in a particular area of study.
GAMING APPROACH

Domain: Cognitive

Description

This approach utilizes specific information within gaming theory limitations—rules, restraints, and rewards. The predetermined information is then collected, organized, categorized, manipulated, and recorded in such a manner that a student overcomes restraints and collects rewards by using the information properly.

Example

Educational games are a means to acquire a specific block of information. If, for example, an instructor wanted to teach valances in chemistry, parts of speech in English, or the agencies of the New Deal in social studies, gaming would be a means to arrive at that end. A simple format of baseball, College Bowl, or a spelling bee could be employed. Rules would have to be determined in advance, restraints or questions formulated, and a reward predetermined. Students find gaming motivating because of its inherent characteristics, namely, an element of chance, a degree of reinforcement, and an air of competition.

Instructional Objectives

The student discusses with the teacher the information he wishes to gain. The teacher in turn suggests possible games the student may design and use. Questions a student would have to answer in his use of games would be: how long and how difficult will it be to construct, how costly, how many may play, how long will it be used, and will it really achieve the expected results?
Important to the success of the gaming approach is the student's proper development of rules for the game, the employment of realistic restraints, and the use of rewards fitting for the difficulty of the game. It would be necessary for the student to answer each of the questions in the preceding objective as completely as possible before he could realize any success.

**Evaluation**

The evaluation of gaming could depend on many factors but usually are predetermined; for instance, the length of time a team or individual dominates, the points acquired, or the completion of any given set could be translated into a specific measure. Secondly, and vital to gaming, could be a standardized exam. If valance knowledge were the basis for the game, a test on valances could be employed. Gaming arrives at a specific objective in the cognitive domain but utilizes many affective techniques and thus makes the knowledge a part of the student's total experience.

Gaming is a useful teaching approach when multiple information is the chief objective. It is recommended that careful consideration be given to the rules and outcomes or rewards.
PERSONALIZED INDEPENDENT STUDY APPROACH

Domains: All

Description

The personalized independent study approach allows the student to study any area of particular interest. He may choose any subject, any method, any locale, and for any period of time, as long as he meets minimum requirements acceptable to the teaching staff. The teaching staff, in this approach, serve as catalysts and resource personnel.

Example

A student, or group of students, may select a topic, design the unit as an initiatory activity, carry out the overall plan as a developmentary phase, and present a predetermined culminating activity. A student may choose to study literature in a manner more conducive to his abilities than that which is normally offered. The student might select readings, develop dramatizations, or write analyses, dependent upon his interests, abilities, and talents. The study could be solely independent or student-teacher planned, executed, and culminated. The teacher acts more as a consultant than the dispenser of knowledge.

Instructional Objectives

A student would be asked to design a learning unit that would include the behavioral objectives, scope of the study, learning techniques, and evaluation procedures.

A student would submit a plan to the teaching staff in which he clearly defined a problem or presented a learning unit. After a student identified the conditions, period of time, and place in
which he desired to carry out his plan, he would then indicate how he would proceed from his initial plan to his final conclusion and evaluation. The student and/or teaching staff may build in deadlines or reporting times into the independent study so that students and teachers would know at what stage each student should be at any particular time.

Evaluation

The evaluation is predetermined as to design, time, and procedures—the fulfillment of the objectives is, in effect, the evaluation. This could be in the form of an oral presentation, written material, or any combination of reporting methods. If this approach is combined with another, such as the conceptual or totality, then the inherent characteristics of the other approaches employed should be reviewed and the culminating activity designed accordingly.

This approach has proven successful with students who can manage their time well. One shortcoming is the absence of group dynamics and group dialogue. A careful diagnosis should be made of the student prior to prescribing this approach.
LAB APPROACH

Domain: Psychomotor

Description

In contrast to many of the other approaches which emphasize the cognitive or affective domains, this approach is primarily psychomotor. The basic intent of the lab approach is to experiment with materials and equipment to develop a concept, prove a theorem, or construct a model or project.

Example

A student choosing the lab approach is in effect selecting the challenge of materializing an idea. The student may build a model, attempting in the construction to plan carefully the necessary stages and concepts. A student may choose to construct a model house centered around the theme of the home—year 2000. The model should be based on reason and have a logical basis; for instance, will the home in 2000 have quiet rooms, an education center, or a computer health area? Uniquely, this approach materializes an idea or concept.

Instructional Objectives

The design of the lab approach would be an identification of materials and equipment to be used, the procedure to be used, and the expected outcome.

The student's procedure would include the identification of a problem or project, the materials and equipment, the step-by-step process of developing the project or meeting the problem, and a method of reporting the results.
Evaluation

The evaluation involved in the lab approach can take several courses. One might be to place a value on the initiatory, developmentary, and culminating stages of the project. Another might be to allow a trial-and-error course of action to take effect and evaluate the completed project only. Still another might be to allow the student to establish his own objectives, and the instructor would act more as a consultant, possibly having veto power.

This approach has proven extremely successful with elementary and junior high school students. It is recommended that a lab room be established, preferably adjacent or near the industrial arts room.
MEDIA CENTER APPROACH

Domain: Cognitive

Description

Free reign is given to a student to develop any area of interest by using any medium of communication he chooses. The student, for instance, may develop a film strip portraying all the steps necessary to make a dress, plus an accompanying tape that would explain each of the steps.

Example

The media approach is appropriate in a unit of work when materials take priority over a strict teacher-pupil relationship. The media may be print or non-print. A student pursuing a particular study may wish to concentrate on a finite point and would need time to survey all types of materials and resources to fulfill his particular objectives. Another method would be for a student to report to a media area, such as a library, rather than the more traditional classroom.

Instructional Objectives

Designing such an approach would certainly test the ability of the student, for inadequate planning would result in failure or near failure. For instance, a student may need to consider photographic and developing competency, his own or someone else's; resources, monetary and physical; appropriate personnel; materials; and equipment.

The step-by-step development of film strip would be most important, for the steps being illustrated should not be so minute that you bore the student, or so large that you lose him. The pictures should be clear and meaningful. Timing
would be of extreme importance in relating the explanation on tape with the pictures on film. The student would need to check each phase carefully before moving on.

**Evaluation**

The media approach has several evaluation possibilities. The quality and quantity of media scanned, examined, or digested could be subjectively evaluated. However, when one considers the value of a student submerging himself in the media of a particular discipline, professionally one is inclined to subjectively evaluate the intensity and pursuit of the student involved.

This approach works well with the serious student or as a companion approach. It should be employed where sufficient media or resources are available in a center or library setting with an atmosphere conducive to free selection and movement.
MINI APPROACH

Domains: All

Description

Many junior and senior high school students prefer short-term goals; therefore, the mini approach is ideal to suit their needs. Through this approach any student may study, research, discuss, or learn in any manner as much or as little as he could in a predetermined length of time. The particular benefit of the mini approach is its adaptability to any learning situation, whether it be curricular, co-curricular, or extra-curricular material.

Example

Mini approaches are designed, as the name suggests, as short in-depth studies in a particular area of interest. A student may wish to study only a relevant segment of a particular discipline. Perhaps a knowledge of sentence structure, a historic personage, or a math skill, as opposed to an entire course in English, history, or math, is desired. This approach can satisfy a particular requirement by designing subsequent mini courses; or mini courses can complement a major course of study for needed understanding, depth, or dimension.

Instructional Objectives

A student would structure a learning unit, formal or informal, based upon his own interests and abilities. He may choose to study a segment of a period in history, a facet of language, one sociological concept, or an inter-relationship of all three. Whatever his decision, he would
present a definite plan to his teaching team for approval.

The student's main obligation in the mini approach would be justification. So long as the student could justify the criteria used to structure the mini course, he would be free to develop any subject he chose. The student should present a rationale for the course, behavioral objectives, methods of reaching those objectives, and an acceptable form of evaluation.

Evaluation

Mini courses can be measured or evaluated as any unit, short study, or daily lesson. In that mini courses are usually an effort to gather certain data, pre and post tests are found to be very useful. The mini approach is particularly effective for in-depth study, interest study, and complementary studies. A series of mini courses can be of particular interest to a student because not only does the topic change, but the student can design topics relevant to his interests, abilities, and talents.

The purpose of a mini course, or series of mini courses, is closely related to the design employed by the instructor. Thus it is recommended that careful consideration be given to the purpose of the project so that an effective design will be constructed which will develop into a meaningful course of study and satisfy the objectives.
NATIONAL PROJECTS APPROACH

Domains: All

Description

Each national project possesses some of the best thoughts, research, experimentation, and reporting of experts in a given discipline or combination of disciplines. Students exposed to such prepared materials may gain keen insight into a subject matter area that was unfamiliar to them.

Example

The national projects approach is a device to use or incorporate into a study tested projects of national renown. The Minnesota projects in social studies, Fenton's social studies, the Georgia geography project, or the Minnesota environmental project are examples. A unit, a course, or a total K-12 project could be employed, or any combination. The unique advantage of this approach is that the material is available, tested, and of superb quality.

Instructional Objectives

The design of this study may be more dependent on a teacher in a chosen discipline than some of the other approaches. The student would still need to identify an area of interest and what he would specifically choose to learn or apply in that field. After the student has discussed with a teacher what he wants, the teacher may suggest starting with one or two national projects, rather than others, because of their structure, content, or some other characteristic that applies to the student's design.

After the plan is agreed upon, the student would then obtain a copy of a national project,
scan it and decide if it meets his needs; if so, then he would analyze its content, do any related reading necessary, probably discuss the content with a teacher, and then prepare it for some manner of presentation. If the project did not meet his needs, he may want to select another project or projects and use a combination approach.

Evaluation

Projects such as those listed above are usually complete with measurements and evaluation techniques. Instructors are usually recommended to use the resource tests in particular ways, however adaptation to a particular instructor's use or needs is very possible.

This approach is very effective when new curriculum materials are needed, when a change is necessary, or when tried and tested materials are desirable. It is useful to students or teachers who wish to achieve certain predetermined goals or evaluate and compare themselves in accordance with state or national norms and levels. It is also recommended to produce a change in school or class curriculum or to pursue an orderly course of study rich in materials, projects, and activities.
PAIR & SHARE APPROACH

Domain: All

Description

Especially appropriate to heterogeneous classes is the pair and share approach, for it capitalizes on the differences of students, rather than succumbs to them. Opportunities are made available to all students to experience a teacher-learner situation in the most positive manner. Moreover, teachers are free to aid those children who are having difficulty or who need extrinsic motivation or some other concomitant necessary for improved learning conditions.

Example

If a teacher of English wanted students to develop better written communication, he could first ask each student to write some type of composition concerning one or more selected subjects. After analyzing them, or some other diagnostic activity, he could assign students to pair, based on similarity of interest and differing abilities, or on some other criteria. Then each pair of students would be given an assignment which they complete individually or together and then exchange papers to start with prevision, and then revision. By so doing, the students would learn more, and the teacher could spend less time in correcting.

Instructional Objectives

Any class may benefit from the pair and share approach by placing greater responsibility on students for their own learning. Not only are students exposed to the pure acquisition of
knowledge, but also to leadership, communication, and learning skills; to sharing and helping others; and to becoming part of the direct learning process. The teacher then becomes a true catalyst, a director of learning.

Students may be paired for any length of time to cover any given material through socio-ramas, free choice, or by assignments. The basic idea is to let students share, ask questions of each other, and help each other develop the necessary requisites for learning a particular subject or part of a subject.

Evaluation

Evaluation should be based on the individual growth of each student. Naturally, some expectancy level or norm should be included, but a teacher using this approach, especially if behavioral objectives could be incorporated into the norm, should rely heavily on how much each student has improved in the academic area. Tests and other measurement devices may or may not be used, but a great deal of weight should be placed on continuous evaluation of a student's performance and method of reporting.
PERSONALIZED READING PROGRAM APPROACH

Domain: Cognitive Affective

Description

Flexibility makes this approach adaptable to any student who wants to learn something in a verbal manner. Built into the approach is self-pacing, self determinism, and self evaluation. The ultimate responsibility for learning is always on the student.

Example

The personalized reading program is in all practicality for students who enjoy reading and who feel they learn through this type of educational media. The student selects a topic or area of interest that is relevant, selects the books and reading materials that would satisfy the objectives and commences with his reading. The instructor can assist in the reading selections and work with the student during the developmentary phase as well as the culminating phase.

Instructional Objectives

Planning, using the personalized reading approach, is dependent upon the student's interest. After he has identified an area of concern and indicates insofar as possible what he wants to learn, with the aid of a teacher, he then must collect his material, decide how he will organize it, and what he will do with it.

After the student has decided upon an area in which he wishes to read, he develops a bibliography which he submits to the teacher.
along with a set of objectives he wishes to meet through his reading program and a time schedule he plans to follow. If the advising teacher agrees to the submitted proposal, the student may orally or in writing outline how he plans to synthesize and organize the material he has read, and how he plans to integrate and report it.

**Evaluation**

The reading program can be evaluated on the basis of quantity or quality (or combination thereof) of selected reading materials. The culminating activity could serve as the vehicle for measure or evaluation.

The reading approach has proven very successful with a very diverse range of students. For the most part, this approach satisfies most criteria of individualized curriculum. One restriction to this approach is that in its pure form it depends on the reading skill. Thus, on one hand, a freedom of choice exists; on the other, the freedom depends on the proficiency of a particular skill and can be restrictive.

No limitations should be placed on students, such as bibliographies. Allow the student to seek out and use all available sources, agencies, and media.
PROGRAMMED APPROACH

Domain: Cognitive

Description

Primarily concerned with such prepared materials as textbooks, newspapers, packaged projects, and published curriculum guides, the programmed approach systematically confronts a student with prescribed materials.

Example

A simple illustration of the programmed approach is a text. Projects, published materials, and other closed-ended type materials are available. These materials can be excellent and do allow students to work independently and at their own pace. Computer programs are another excellent example. Care should be used in selection of a prepared program so that it suits the particular need.

Instructional Objectives

Relatively simple to design, the programmed approach is one way of helping the student pace himself through specific material from start to finish, according to his own ability, interests, and time. He may use the approach for one book; a combination of books; or a combination of periodicals; or a combination of periodicals, books, and ephemeral materials.

The procedure in this approach is more dependent upon the ability of the student than some other approaches. It may be better for a slower student, for instance, to identify one type of material and complete the accompanying work and then go on to other material. The better students may wish to identify different
related materials and devise their own programming. Basic to the approach, regardless of the student's ability, is that specific materials are identified and the knowledge contained therein is tested as part of the exercise—a test-as-you-go plan.

Evaluation

Evaluations for programmed instruction are usually built into the programs, similar to the National Projects. Programmed materials are usually equipped with pre and post tests and are rich in projects and activities.

This approach is very appealing to youngsters who are capable of planning their own time or seek an order to their academic pursuits.
PROJECT & ACTIVITY APPROACH

Domains: All

Description

Emphasis in this approach is given to the creativeness of the student in planning, organizing, and reporting on some learning experience that he may wish to undergo. For example, he may construct an Elizabethan stage and present a play with the type of costumes, furniture, and stage directions used at that time.

Example

The project and activity approach should not be confused with the laboratory approach. Often these approaches work together but also work well separately. The lab approach involves construction, whereas the project and activity approach can be another type of involvement. For instance, a student may select to build an item or design bulletinboards, make surveys, or conduct interviews. The project and activity approach may be used as an alternate approach to create a change of pace. The approach can stress the psycho-motor domain.

This approach can be designed along the contract plan wherein a group of students, or a single student, would establish a list of projects and activities with predetermined objectives.

Instructional Objectives

Regardless of the subject, it is incumbent upon the student to plan for time, personnel, resources, materials, equipment, space, and whatever other considerations he must make. He
should carefully consider the preliminary investigation and work as part of the project or activity. He must then outline the various parts of the project or activity in whatever manner is suitable for the occasion.

The student should act as independently as he is able in a project or activity, unless it is to serve a specific educational purpose for a small or large group. However, he should carefully decide on what he wants to do, why he wants to do it, how he wants to do it, where and when, and for whom he wants to do it.

**Evaluation**

Quality and quantity can both be considered in the evaluation. Preparation can be incidental, that is, the instructor can judge only the final result, or preparation can be considered in the overall evaluation.

This approach should be used in combination with a more academic approach.
RELEVANCY CENTERS APPROACH

Domain: Affective
Cognitive

Description
The relevancy center approach is a form of an on-site learning experience. The student determines a particular area that is relevant to his interests, abilities, and talents; develops a program; submits it for approval, and begins working in that area.

Example
This approach may involve a single student or a group of students in a type of on-site learning experience. A student may elect to work in a bank or a broker's office and combine these work sessions with appropriate readings. Mental hospitals, legislative bodies, community agencies may all be considered as relevancy centers.

Instructional Objectives
The student works out a formula of credit with the instructor. For example, if the credit to be earned is on a quarterly basis, 40 hours of on-site learning and 5 related books would be adequate. If a semester credit is to be earned, an adjustment to 60 hours of on-site experience and 7-8 books could be considered as adequate. The rationale is that on a quarterly basis the student is involved in a classroom situation for 60 hours and reads one textbook.

The initiatory activities in this approach should center around a rather comprehensive and, at the same time, specific contract between the teacher and student: objectives, book selections, on-site learning stages identified, and the culminating activity specifically spelled out. The development stage would be the actual program agreed
upon by the student and teacher. The culminating stage could be a conference, a written report, or a presentation to a class.

Evaluation

The relevancy center approach can be evaluated in several ways. The evaluation may be based on the same format as the personalized reading approach; that is, a quality or quantity evaluation of book selections. A second means might be the on-site evaluation—written or oral—by the personnel concerned, or any combination.

This approach has proven very successful with all age groups, 10-18 particularly, and all achievement levels. A reality and dimension is employed in this approach, and it is recommended for vocational as well as academic areas of pursuit.
RESEARCH APPROACH

Domain: Cognitive

Description

Similar to the Independent Study Approach, this approach may differ in two important aspects: (1) The student could do in-depth study in one area that is directly related to the subject matter of the immediate curriculum. (2) The student should use at least one research tool, considered adequate by a teaching team, and an appropriate format and procedure to complete the research.

Example

The research approach is a means by which students can interpret human behavior. Computers, surveys, and data analysis are all means to arrive at research ends. The skills involved in research and the analysis of the data are by-products of the research approach. Combinations of teams can and in most cases will be utilized in this approach. The research approach is very appropriate for interpretation, in-depth study, and analysis of new or existing data.

Instructional Objectives

The student, with the advice of an instructor, should agree on a research tool or tools, the manner in which a subject is to be chosen and limited, and the thesis statement or hypothesis(es). Beyond these preliminary considerations, the student should agree to deadline dates for the various phases of the research and for the final paper. Moreover, the student should choose an acceptable research guide and meet the requirements stipulated.
The student would follow the normal procedure of any formal research. He would need to include data-gathering, data-organizing, and data-reporting information.

Evaluation

The evaluation can be on the data collected, skills, interpretations, or any combination thereof. An interesting evaluation could be the end result. Thus, in the initial or planning stage, a goal is established and the accomplishment of the goal is paramount; thus a worthwhile goal must be established initially.

This approach is effective when an in-depth study is desired or when a student wishes to combine disciplines.
SEMINAR APPROACH

Domain: Affective
Cognitive

Description

This small-group approach promotes face-to-face discussion about some topic or subject of interest to the participants. Each participant brings to the seminar research, information, or material pertinent to the discussion which stimulates the interchange of ideas and the analytic, synthetic, and evaluative ability of each member.

Example

The seminar is a small-group approach in any particular area of study. A current issues class or a news analysis class are good examples. Topics are cooperatively selected by students and teacher, readings assigned, movies viewed, filmstrips and tapes utilized. Dialogue, confrontation and resolution of current, personal, and relevant topics, events, and happenings are inherent. Characteristics of the seminar approach are informal instructional techniques, interest, and involvement, but not necessarily a total commitment to the pursuit of a topic.

Instructional Objectives

The design would include the selection of a subject, an analysis of the facets, and the establishment of a procedure for discussing the facets, the assignment of discussion leaders and roles others are to assume, and evaluation criteria.

The seminar process would include how the subject area is to be chosen (by students, teacher, or both); which student or students...
will be responsible for the various facets; whether the procedure will promote the facetal approach or an integrated approach; who will be the discussion leaders, recorders, evaluators, or will fill some other role; and how the participants wish to be evaluated.

Evaluation

The seminar approach can be evaluated in terms of prepared assignments, participation, and a written evaluation at the conclusion of a topic or at the end of a particular time period. The evaluation can be objective, subjective, or any combination thereof, using predetermined objectives.

The seminar is very successful with students who find large-group participation a threat. The informal atmosphere, relevancy of materials, and direct confrontation are elements lending to the success of the seminar approach. Seminars may be used for all grade levels and all classifications of achievers.
SERVICE APPROACH

Domain: Affective

Description
Primarily based on the participation of an individual student, the success of this approach would be dependent upon the type of service, the duration and acceptability of the service, and the sincerity of the student who wished to offer his service to individuals, organizations, or agencies. The service could well be to a charitable agency in the form of helping incapacitated or disabled persons, writing reports, soliciting aid, repairing equipment, furniture, or some other meaningful activity. These on-site experiences would be far reaching in their effect on conscientious students.

Example
An illustration of the service approach might be a student vitally interested in the area of environmental cleanup who plans a course of action and pursues it to its conclusion. The reading, interviews, and organization are implied activities, but the final result, the cleanup, is what is evaluated. One advantage of this approach is the satisfaction derived from formulating a strategy, overcoming the obstacles, and arriving at a solution to a real problem.

Instructional Objectives
Designing such an approach would basically depend on the interest of the student or the need of a community. The teacher could serve in a liaison capacity between the agency and the student. The student should identify why he
wants to offer the service, for how long, and for what duration each day or week. He should also indicate any prior training or study he would need, transportation, resources, and remuneration he expects, if any.

The procedure in the service approach would be so dependent upon the type of service that it would be difficult to identify. However, basic considerations would include an acceptance or identification of a service, the working out of a time schedule, providing transportation, identifying the exact resources and training or study needed, and the expected date of completion or termination.

**Evaluation**

The evaluation of the service approach is unique in that only the end product is subject to evaluation. Furthermore, the student attempting to make some meaningful change submits the change for evaluation regardless of time or effort. The initial commitment is translated into an objective, and this objective is the sole item evaluated. The by-products of reality, satisfaction and accomplishment, are left for the student to enjoy and are not a part of the formal evaluation.

This approach is excellent for the dissatisfied student, the student seeking change, or the student impatient with the status quo. It provides a means to accomplish a meaningful experience for selected students.
SIMULATION APPROACH

Description

Based on the predetermined characteristics of a model, the simulation approach involves the student in decision making, analyses, and value assessment. Behavior and the Assessment, evaluation, and modification are fundamental to this approach.

Example

Simulation is an approach designed to work with the decision-making process. Excellent models are available from many sources. The Instructional Simulations Inc. (ISI) at Macalester College, St. Paul, is one of many excellent sources for simulation packets. There are simulations for all grade levels, constituting a wide range of subjects and topics. Democracy, history, and economics are examples of the many possibilities available.

Instructional Objectives

Because the design is predetermined, unless the students would want to write up their own simulation as a consequence, the student's main task would be the assignment or the volunteering for roles, indicating time, place, and resources required, and agreeing to the method of evaluation.

Procedure, for the most part, is predetermined. However, students may wish to analyze further by tape recorder or video-tape the decisions that were made, the assessment of values and behavior, and the outcomes.
Evaluation

The evaluation of simulation is a very sophisticated process in that human behavior, strategy and values are under consideration. A form can be followed; a discussion of success or failure or self evaluation can be employed. Taping sessions are effective. A real life experience is valuable. The professional judgment of the teacher as to student involvement and participation, growth and self, as well as total analysis, are very important.

Simulation is most effective with students who are seeking a rationale for their actions, a means to evaluate their decision-making strategy. This approach is especially good for serious students on all levels of achievement, and a secure and experienced teacher is needed in the simulation techniques.
SKILLS APPROACH

Domain: Cognitive

Description

Regardless of the domain—cognitive, affective, or psychomotor—the student would capitalize on his skill to initiate and follow through on a learning experience.

Example

The skills approach is designed to utilize a skill to learn a particular discipline. Examples of this would be the extra curricular activities of speech and debate. Students become intensely involved in such activities. This approach transfers this intense involvement which students display in competition to the classroom. Thus, a student could design a series of debates, utilizing the research, organizing and participating in the actual debates to learn, for instance, history. A coupling or learning partnership is formed between a skill and a selected academic discipline.

Instructional Objectives

Designing a learning experience, using the skills approach, is so highly dependent upon the individual skill that it is difficult to generalize. However, the student would need to determine how, for instance, he would use his analytic ability to study a particular subject. This may include the similarity between two or more subjects or one or more parts of one subject. He would establish a hypothesis, how he would analyze the material, and what he would do with his analysis.
The student could establish an original problem, then indicate the variables he would include, what he hoped to find from his analysis of the data, and what he actually found.

Evaluation

The evaluation of the skills approach can be accomplished by the same means the skills are evaluated. For example, if a series of debates is chosen, then a judging can be arranged to determine the level of performance.

The skills approach is very desirable with students involved in various extra curricular activities, contests, and inter- and intra-school competition. The authors recommend the skills approach for students whose competitive nature compels them to achieve excellence.
TOTALITY APPROACH

Domain: Affective
Cognitive

Description

Implicit within the totality approach is the fundamental concern of unifying knowledge and understanding into a conceptual framework. The analytical, synthetic, and decision-making processes would facilitate the study of such ideas as progress, truth, beauty, justice, honor, epicureanism, and monotheism.

Example

The totality approach, as opposed to the conceptual approach, moves the student from the specific to the general. For instance, the student selects a topic such as man, life, or death, and seeks understanding by continuous exploration of the topic of his choice. In essence, the totality approach is a study without end. If a student selects the topic "man," he might explore man's spiritual makeup, political makeup, social makeup, and economic makeup. The study might last the entire year. It leaves the student with the notion that there are studies without ends.

Instructional Objectives

The design of this approach may well include what to study, establishing a direction for study, who will study the various segments, how these segments will be studied (the research methodology), and in what manner the students will meet (possibly the seminar approach) so that each student will need to deliver his portion of the study, be ready to field responses, and be able to respond to the reports of others.
Students should, individually or collectively, establish a determination of what to study (they may wish to integrate various subject-matter areas); an hypothesis or a thesis statement which will provide adequate direction; limitation factors as to time, personnel, research tools, and resources; bibliography; and how the members of this particular group will report the findings and synthesize the findings into a conceptual framework.

**Evaluation**

The evaluation of the totality approach is a rather delicate and professional undertaking. The instructor must be able to recognize the intellectual growth and progress the student is undergoing. Papers could add an element of objectivity to the evaluation but might at the same time have an adverse effect. The instructor must bear in mind the question: What is best for the growth of the student?

The totality approach is designed for the mature and sophisticated student. A high level of intellectual interchange is necessary for the success of this approach and is recommended for use with superior students. Small informal sessions are most desirable.
TRADITIONAL APPROACH

Domain: Cognitive

Description
The traditional approach includes any of the more common learning methods found in secondary and elementary schools. Labeling this approach "traditional" does not make it less acceptable or uninteresting. Generally, teacher-made assignments, activities, and tests, together with textbooks, lectures, and other traits characterize this approach.

Example
The traditional approach is, as the name suggests, the tried and tested approach. A student may elect a course of study which centers around a text, assignments, lectures, and discussions. This approach has been proven successful for most of us are products of the traditional approach. This approach is useful for those students who are seeking educational involvement centered around a classroom setting.

Instructional Objectives
Course units and daily plans, or at least weekly plans, that are turned into the principal's office are an integral part of this approach. The teacher may choose to structure the planning according to the design of one or a number of texts, a commercial guide, or his own ingenuity and ability.

The general procedure is to start at one point, possibly at the beginning of a text or texts, and proceed toward another during a given period of time. Ramifications may include a field trip,
special projects, movies, or some other audiovisual aid.

**Evaluation**

The evaluation of this approach can be along the traditional lines of pre and post tests, assignments, reports, etc. The evaluation can, for the most part, be objective with a degree of accuracy being insured by the number of performance tasks.

This approach is very successful with many types of students for it encompasses order, stability, and stages of development. This approach can be used for all levels of achievers with one basic consideration—student choice.
TRAVEL APPROACH

Domain: Affective

Description

Colleges and universities have granted credit for various travels, including schools aboard ships. To employ this approach as a regular method of learning at any level is the important idea. A student could then convert any trip into an educational experience by making prior arrangements, outlining educational activities during the trip, and summarizing the experience at the end of the trip.

Example

The travel approach has several immediate advantages—it helps students plan a trip, coupling education and enjoyment. Travel in itself is an education and harnessed by a careful plan can be a very successful and rewarding experience.

For example, a student sets a goal of touring Washington, D.C., as a part of a political study. Visitations enroute as well as at the destination can be planned. Additional work in research, writing, library, and art can be accomplished and correlated into one total experience. The initial objectives and culminating activities should equate except where reason dictates a change—flexibility should be a key word.

Instructional Objectives

Whenever a student knows he will be taking a trip, he can design a learning experience according to the subject matter area or areas. He would plan each phase of the learning experience and
determine the possibility of visiting the places cited and decide what he wanted to obtain from each location and from the trip as a whole.

Initially, the student would need to study a map, possibly a travel book, a geography book, or some other resource. Then he would outline the reading and studying necessary to become informed about the various locations enroute, indicating the must stops, secondary and tertiary stops. He would determine how he would report the trip; e.g., he may want to use slides and a cassette, or a written report.

Evaluation

The evaluation of the travel approach can be objectively realized by evaluating the end product in terms of the predetermined goals. Reports, completed itinerary, readings, pictures, and a travelogue can all be assembled as a culminating activity. Again, the total experience can be beyond an objective evaluation, and a subjective and professional evaluation would be in order.

The travel approach has been successful for all grade levels and achievement levels. This approach is a once-around experience and, in view of the cost factor, should not be considered unless extensive planning is undertaken.
ABOUT THE AUTHORS

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