

- 42 -

4. Acquiring information about major natural resources.
5. Becoming familiar with sources of information regarding natural resources.
6. Acquiring the ability to utilize and to interpret maps.
7. Developing attitudes favoring conservation and better utilization of natural resources.
8. Becoming familiar with a range of types of literature.
9. Acquiring facility in interpreting literary materials.
10. Developing broad and mature reading interests.
11. Developing appreciation of literature.
12. Acquiring information about important aspects of our scientific world.
13. Developing understanding of some of the basic scientific concepts which help to interpret the world of science.
14. Improving ability to draw reasonable generalizations from scientific data.
15. Improving ability to apply principles of science to problems arising in daily life.
16. Developing better personal-social adjustment.
17. Constructing a consistent philosophy of life.

"These sample statements of objectives are of different levels of specificity and might well be grouped together under a smaller number of major headings. Thus, for purposes of evaluation, the several objectives having to do with the acquisition of information in various fields. Similarly, various objectives having to do with techniques of thinking, such as drawing reasonable inferences from data and the application of principles to new problems, could be classified under the general heading of development of effective methods of thinking, because the means of appraisal for these objectives are somewhat similar. Furthermore, the methods of instruction appropriate for these techniques of thinking have similarities even though the content differs widely. Eventually, the following classification was used in general by the Staff:

#### Major Types of Objectives

1. The development of effective methods of thinking.
2. The cultivation of useful work habits and study skills.
3. The inculcation of social attitudes.
4. The acquisition of a wide range of significant interests.
5. The development of increased appreciation of music, art, literature, and other esthetic experiences.
6. The development of social sensitivity.
7. The development of better personal-social adjustment.
8. The acquisition of important information.
9. The development of physical health.
10. The development of a consistent philosophy of life.

"This classification is not ideal but it served as useful purpose by focusing attention upon ten areas in which evaluation instruments were needed".<sup>7</sup>

<sup>7</sup>Smith and Tyler and Evaluation Staff, Adventure in American Education Vol. III "Appraising and Recording Student Progress," Harper & Bros., New York, 1942 pp. 15-18



- 43 -

### 3. Defining Objectives in Terms of Behavior

"The third step was to define each of these types of objectives in terms of behavior. This step is always necessary because in any list some objectives are stated in terms so vague and nebulous that the kind of behavior they imply is not clear. Thus, a type of objective such as the development of effective methods of thinking may mean different things to different people. Only as 'effective methods of thinking' is defined in terms of the range of reactions expected of students can we be sure what is to be evaluated under this classification. In similar fashion, such a classification as 'useful work habits and study skills' needs to be defined by listing the work habits the student is expected to develop and the study skills which he may be expected to acquire.

"In defining each of these classes of objectives, committees were formed composed of representatives from the Schools and from the Evaluation Staff. Usually, as committee was formed for each major type of objective. Since each committee included teachers from schools that had emphasized this type of objective, it was possible to clarify the meaning of the objective not in terms of a dictionary definition but rather in terms of descriptions of behavior teachers had in mind when this objective was emphasized. The committee procedure in defining an objective was to shuttle back and forth between general and specific objectives, the general helping to give wider implication to the specific, and the specific helping to clarify the general.

"The resulting definitions will be found in subsequent chapters; however, a brief illustration may be appropriate here. The committee on the evaluation of effective methods of thinking identified various kinds of behavior which the schools were seeking to develop as aspects of effective thinking. Three types of behavior patterns were considered important by all the Schools. These were: (1) the ability to formulate reasonable generalizations from specific data; (2) the ability to apply principles to new situations; and (3) the ability to evaluate material purporting to be argument, that is, to judge the logic of the argument. When the committee proceeded to define the kinds of data which they expected students to use in drawing generalizations, the principles which they expected students to be able to apply, and the kinds of situations in which they expected students to apply such principles, and when they had identified the types of arguments which they expected students to appraise critically, a clear enough definition was available to serve as a guide in the further development of an evaluation program for this class of objectives. This process of definition had to be carried through in connection with each of the types of objectives for which an appraisal program was developed."<sup>8</sup>

<sup>8</sup> Smith and Tyler and Evaluation Staff, *Adventure in American Education* Vol. III; "Appraising and Recording Student Progress" Harper & Bros., New York, 1942, pp. 19-20



- 44 -

Sample:Objectives

1. He treats all racial and national groups alike socially, economically, politically, and religiously.
4. He incorporates the desirable aspects of other cultures in his own way of life.
5. He regards the mores of racial and national groups with understanding and without prejudice.
7. He recognized the achievement of other racial and national groups in the arts, science, industry and government.
8. He uses the products of many cultures in his leisure time.

Understandings

1. He knows that the culture of the United States is a combination of many cultures.
4. He is aware of the existence of racial discrimination.

Attitudes

2. He is willing to work in mixed racial and national groups.

Appreciations

5. He enjoys participation in some of the characteristic activities of other races.

Skills

5. He uses the facilities of the Library efficiently.
3. He organizes and plans his activities.



-45-

The Overview of a Unit of Experience.

The overview of a unit is a general preview of what may occur. The teacher has studied the pupils in his class. He knows what each has done, what each has learned, in what each is interested, and what each is able to do. He considers the general aims of the school system and of education in general and uses this as a measuring stick to determine wherein his pupils need to change their behavior, what controls of their behavior need to emerge, what problem-situations will result in these emergent controls, what controls need to be strengthened through the repetition of problem-situation, and the like. When he has done this, he writes the list of objectives which was referred to in the section entitled "The Objectives of a Unit of Experience". Now he pauses to look over the whole situation and to take stock of it.

He knows, from cumulative records, what experiences the pupils had had. He knows what experiences have been profitable. He knows what experiences are lacking. With the information at hand, he formulates a tentative plan of action. He states a general idea of what might be done. This is the overview. It gives the scope of the unit which he has begun to plan and some general indication of the way in which it may develop.

The purpose of the overview is two-fold. First of all, it serves to round out the thinking of the teacher and to focus this thinking upon the objectives which he has in mind in relation to some way of achieving them. This pause to reflect is of great value in helping the teacher to see relationships and to acquire a sense of proportion.

The second purpose of the overview is like that of the title. In many units the overview is written just below the title so that a person seeking to know what the unit contains has a clearer picture before him. Any well written overview should meet both this aim and the one given first.

Approach to the Learning Situation.

In the discussion of learning, two diagrams were used. In each something happened to the potential learner which made him carry on excess and varied activity, making numerous responses, until a successful response was made. This response, as it was repeatedly successful, tended to occur more quickly until, finally, it was the sole response. Learning had then taken place.

The activity, the responses, and the learning would not have occurred unless something had occurred to the potential learner to start things moving. The organism is referred to as "motivated" after this "something" occurs. The organism must be motivated to learn. "Motivating conditions initiate and energize activity, direct the organism's behavior, and dispose it to select some responses and disregard or eliminate others." 9 "For example, a child who wants to attract attention when it has been ignored by a group of adults may become very noisy, may do things which are certain to cause reproof by its parents, may walk in the center of the group and go through its favorite stunts, or may break into the situation in some other way. These obviously are not random acts, but are ones which have some possibility of satisfying the child's desire. One of these responses may relieve the motivating condition... thus the attention-getting device which works is the one which will probably be used when the child itself in the same situation at a later time." 10 "Motivations seldom act alone,

<sup>9</sup>National Society for the Study of Education, 41st Yearbook, Part 2, "Psychology of Learning" page 262, Public School Publishing Co. 1942.

<sup>10</sup>Same as above pp. 263



-46-

or independently. A field of motives nearly always, perhaps always, exists. For example, Lewin has shown that the individual must often choose between two activities both of which are disliked, but not equally repugnant--and that the field may have to be enclosed in some fashion to make the person choose one activity or the other instead of permitting him to escape. He has also explained that the action which a given situation will evoke depends upon the meaning which it has for the organism--in other words, upon the relationship of that situation to other factors in the total field of the individual at the time. Thus the child will eat some things away from home which he will refuse at his own table; he may use correct language at school or in his home and speak the language of the street on the playground; the adolescent or the adult may indulge in activities he once was taught were wrong if he later finds that the 'best people' are doing them. These are all illustrations of the fact that motivation is a structural phenomenon."11 "... no motive exists without some tension between the organism and its environment." 12 "Motivation has to do with the why of behavior. It relates to the more remote causal factors. Conditions within the organism which produce increased activity and which give direction to behavior are motivating conditions."13

The motive is within the person, it cannot be observed. What can be observed is that he becomes active toward some end. The term incentive is used to indicate this end.

Incentives are objects or symbols that the organism strives to attain. The behavior of a motivated organism is to a large extent directed toward incentives of a particular class. When the appropriate incentive is attained or avoided, a motive or drive is temporarily satisfied, and as satiation is approached the activity of the individual diminishes. Incentives are usually thought of as being external to the organism (the drive or motive is internal) in the sense that the incentive situation is provided by something or someone other than the experiencing individual. This, a task which challenges the individual's 'mastery motive', praise to be expected for work well done, relief following avoidance of a situation which is feared, or food which satisfied the hunger drive are all examples of incentives." 14

The teacher's greatest task is that of getting pupils started on the learning process. Unless this is done with care and thoroughness, none of the desired outcomes will occur. This process of getting things underway has been referred to many times in books on method as "motivation". This use of the word is different from that of the psychologist. It is confusing to use the word in two ways. The terms "motivated", "motive", and "motivation" should always refer to the internal condition of the pupil. What the teacher does is to present those incentives, or to select those existing incentives, which will lead the pupil to do what is desired.

This part of the teacher's activity, as it is stated in a unit and as it is carried on in the classroom, will be called the approach to the learning situation. One of the ways in which this approach can be carried on is through using the interests of the pupil.

"How is motivation to be secured? We have filled heaven and earth with debates over the problems of interest ... Who ever heard of a farm being run on the basis of immediate interests? Milking the cows and feeding the pigs were not projects; they were just plain chores. They were done, not in response to 'felt needs,' but in conformity to a schedule. These chores were bound up with the whole

11 Same pp. 265-266

12 Same page 266

13 Same page 291

14 Same page 294



-47-

way of life on the farm. This way of life was the natural and normal outlet for energy and ambition. The average boy on the farm, in his eagerness to be rated as a man, was willing to endure a great deal of strenuous work and monotonous drudgery in order to secure recognition. There was no conscious attempt to relate every phase of the work on the farm to interest, because the larger or more remote interest was expected to sustain the individual in the performance of disagreeable tasks.

"In other words, the doctrine of interest may be interpreted in either of two ways. It may be construed to mean either that every activity must be motivated by immediate interest or that every activity must have a recognized bearing on a way of life which the individual accepts as his own. It is chiefly in the latter sense that the occupation of farming is related to interest. Immediate interests, of course, are not excluded and may have great significance. But they must either be derived from or be merged into the larger interest if there is to be a dependable basis for continuity of effort, without which there can be no adequate sense of responsibility and discipline of character."

"... To interpret the doctrine of interest as meaning that all activity must be motivated by immediate and spontaneous interests is to misrepresent it. There is no warrant for such interpretation in the facts of everyday life. We have this doctrine of interest because we have 'progressive' schools." 15

"Learning always takes place as a result of the organism's accomplishing something. The responses which are successful are learned. The motivation of the organism is reduced when the successful response occurs. The condition of being motivated is always produced by some factor other than the mere solution of the problem. Methodologists who attempt to develop a theory of method in which the goals of learning are learning, can not justify their reasoning on the basis of psychological research. They set up experimental situations and discover what "rewards" or "punishments" will produce the best results. What they need to discover is what situations exist in which the responses of reading, or writing, or of using numbers, will be successful in reducing motivation, and so will be learned. The methods of the old school, which Prescott condemns, were efficient ways of producing the desired responses, but the affective learning which accompanied them was disastrously bad. Some new school methods (called 'the approach to the learning situation') center around the creation of a situation in which the pupil is motivated, and then assist the pupil to make the successful response. 16

"One individual can produce learning in another individual by either of three methods: (1) the 'teacher' may create the 'problem,' i.e., make the 'student' uncomfortable, and the student may solve it; (2) the student may have the problem, and teacher may help him find the solution "or (3) the teacher may both create and help solve the student's problem. Although the same basic learning process will be involved in any case, the social consequences will be very different according to which of these three methods is employed. If method 1 is used, a negative (avoidant) attitude toward the teacher will develop; if method 2 is used, a positive (approach) attitude will develop; if method 3 is used, a mixed, or ambivalent, attitude will result. The good 'leader', like the good 'teacher,' naturally employs method 2 as extensively as possible." 17

15 Boyd H. Bode, "Progressive Education at the Crossroads," 1938 pp. 51-53

16 Willard B. Spalding and William C. Kvaraceus, "Making the School Lore Effective Through A Basic Consideration of Motivation." Harvard Educational Review, Vol. 13, No. 3; May, 1943, pp. 238-239

17 O. H. Mowrer, "Motivation & Learning in Relation to the National Emergency," Psychological Bulletin, Vol. 38, No. 6; June, 1941, pp. 424-425.



-48-

"The way ahead may well be along this path. Children are bothered by many situations in the environment which impinges upon them. They are attempting to find satisfactory responses to many of the problems which face them. The methods of the school can well begin with a search for ways of encouraging pupils to ask its help in solving the many problems which they inevitably have." 18

The part of a unit of experience which is called the approach lists various procedures which the teacher hopes will motivate pupils. Each way must meet the following criteria.

1. It must set up some goal or incentive for the behavior of the pupils they will endeavor to reach.
2. The goal or incentive must not be reached too easily and yet must be an attainable one.
3. The goal or incentive must be such that its attainment is desirable to society and the school as well as to the pupil.
4. The goal or incentive must be one which the pupil can be prevented from attaining by the insertion of a problem-situation which will interrupt his on-going motivated behavior.
5. The insertion of the problem-situation is always frustrating and may result in unpleasantly aggressive behavior by pupils if their motivation is too strong.

Learning, as process, was experiencing or doing. If pupils are to learn what society wishes them to learn, then the school, the instrument of society, must provide experiences which will make it possible for this to take place. These experiences must be coordinated and guided so that socially desirable controls will emerge and will become integrated into the pupils' personality.

Children are doing and experiencing continually, both in school and out; learning is taking place willy-nilly; teachers guide its direction, but can neither initiate it nor prevent it. The problem, then, is how to get a grip on this fast-moving business of learning so that one can guide it toward the ends which society has set for itself. This business of getting the attention of the pupil directed toward a goal with the subsequent rise of a purpose for his activity is called the approach to the learning situation.

The approach to the learning situation must be planned most carefully. Out of it those interests are discovered which will lead the pupils to discover cooperatively a purpose which will direct their subsequent activities toward the desired outcomes. This purpose will be discovered only when the situation has been planned with sufficient care.

The approach to the learning situation is like setting the stage for a dramatic scene. The properties must be intelligently and attractively arranged. The characters must be ready for their cue to enter. The lights must be properly adjusted. Then the curtain is ready to be raised.

It is not possible to overemphasize the importance of carefully planning this phase of unitary teaching. Unless the teacher and pupils approach the

18 Willard B. Spalding and William C. Kvaraceus, "Making the School More Effective Through A. Basic Consideration of Motivations" Harvard Educational Review, Vol. 13, No. 3; May, 1943, p. 239.



-49

learning situation correctly nothing desirable will occur. There will be no impetus toward continuing purposeful activity. There will be no desire to have further guided experiences. No desired outcomes will emerge. In short, the hoped-for learning will not take place.

Suppose, for example, that a teacher is planning to begin an experience with colonial life in America. He may have used the partial list of outcomes given previously. He now considers ways and means of getting this experience underway.

Possible approaches to a unit about colonial life in America:

- ✓ 1. Through moving pictures. The moving picture is an important interest in young people of today. The quality of the commercial picture is improving. Frequently pictures which have the possibility of arousing purposeful behavior are exhibited locally. If one of these depicting colonial life were of recent occurrence it would serve as a point of awakening interest. If no such picture has been exhibited locally the teacher might arrange to use one of the films from the Chronicles of America series as a starting point.
- ✓ 2. Through literature. The teacher will select a number of interesting books, both fiction and non-fiction, which he will place in the room. Pupils will then be allowed to read freely for as long a period of time as is necessary to stimulate interest and arouse curiosity. The teacher can, by conferring with individuals, discover if any such phenomenon is taking place.
- ✓ 3. Through pictures. The teacher should collect and display pictures of the activities of colonial life. If pupils happen to wish to add to the collection they should be encouraged to do so. The pupils should be allowed to inspect these leisurely with the teacher remaining in the background alert to detect remarks or other behavior which indicate the beginning of interest.
- ✓ 4. Through magazines and newspapers. The teacher should collect and display magazines and newspapers which have articles and pictures about colonial life. The pupils should be allowed to read and inspect these while the teacher, by conference and discreet observation, discovers the presence of real interest.
- ✓ 5. Through exhibits of materials. The teacher should collect materials which are of colonial origin, or which are good reproductions. These should be displayed in the room. The pupils are allowed to study and inspect these while the teacher notices the beginning of worthwhile interest.
- ✓ 6. Through the last unit. The unit just presented may have left unanswered certain questions in which the pupils are interested and which will naturally lead to exploring the colonial period in search of the answer. Carefully planned units frequently provide for this.
- ✓ 7. Through chance. The teacher should be alert to recognize pupil interest as it exists. He should notice what pupils are discussing in their own groups, what they read in the daily paper, what they are hearing over the radio. If any real interest arises which is related to experiences with colonial life the teacher should use this as a starting point.

An ingenious teacher can probably discover or invent other approaches to the same experience. The more that are planned the better. The teacher should never stake all of his planning on one approach.



-50-

At this point it is important to emphasize the desirability of fluidity of action. The teacher should not choose a plan and use it whether or no. It is extremely important to arouse a real interest if a usable purpose is to arise from it. For this reason, if for no other, it is better to drop a poor approach, once started, rather than attempt to impose a teacher-prepared pattern upon the pupils. If one approach fails to engender worthwhile interest, then it is wise to try another. If no approach will do this, it is best to give up the unit for the time being and await a better opportunity for presenting it. A good course of study will contain enough units so that the teacher should be able to approach another, rather than to attempt to impose one on an uninterested class.

If one of the approaches to colonial life arouses interest, the pupils usually begin to discuss items which appeal to them. Many questions are asked. There is disagreement among them. The teacher then steps into the discussion unobtrusively and guides it into intelligent lines so that pupils will ask and demand reasons, instead of recriminating those who disagree. Soon there will come a time, which a sensitive teacher will soon recognize, when he can say, "Well, you are quite interested in something. What is it? What do you want to do?" A question or suggestion of this kind is essential here. The emphasis must always be upon the incompleteness of the situation in which the pupils find themselves and upon what they propose to do in order to make it complete.

When interest has been aroused, when the group has been led by the teacher to crystallize its point of view until the group agrees that it wants to do something, it can be assumed that the group is motivated and that the approach to the learning situation has been successful.

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-51-

### The Stating of Probable Learning Experiences

When the approach to the learning situation has been carried on correctly, the pupils will be motivated toward a desirable goal. If they are to learn, a problem-situation must arise which will give rise to excess and varied behavior. That part of the unit of experience which states what the problem-situation is, how it is to be inserted, and some probable types of excess and varied behavior is entitled "Learning experiences and probable outcomes."

There are innumerable ways of proceeding from the point where the pupils are motivated onward through the learning process. Teachers who have not had long experience with unitary teaching like to have some definite sign posts along the way. Flexibility of plan, within the general pattern of the learning process, is of extreme importance. The teacher must act only as a guide, who because of his greater experience, is able to expand the number of ways of behaving. He must never impose a set procedure on his class.

A purpose has arisen from the interests of the pupils. They should now be led to define this purpose, to state it clearly. Here the teacher's guidance can be most helpful. He must never say, "What you wish to know is--," or "What bothers you is--." He should use questions like the following: "Just what is it that you wish to know? Have you said exactly what you mean? What do you think bothers you now?" His aim is not to get a nice statement of the purpose which has arisen, but to make sure that each pupil has grasped with his own mind the purpose to which the interests of the group have given rise. The group should be allowed to discuss this purpose freely until they are aware of what they wish to do.

This purpose may not be the one for which the teacher has planned when the unit of experience was planned. This is unimportant. If the purpose which arises is one in which the pupils are truly interested and if it will lead, as it is explored, to the emergence of socially desirable controls of behavior, it should be used. If a carefully planned approach through pictures leads to a real interest in pictures rather than in colonial America, guide it until a purpose arises. There are countless valuable learnings in this field. The teacher must be ready to give up his preconceived plan if the real interests of the pupils lie elsewhere. Should an unexpected purpose arise, as does occasionally happen, the teacher should consider carefully its inherent possibilities for learning. From this careful consideration he should be able to state those socially desirable controls of behavior which might reasonably emerge as a result of the experiences which will result from the purpose of the pupils. These should be stated in the manner presented in the section entitled "The Objectives of a Unit."

The purpose of the pupils should be expressed and understood by them. If it arises from worthwhile interests, and, if it has inherent possibilities for desirable learning, it need not be the one which the teacher had expected to arise from his planned approach to the learning situation.

Having guided the class to recognize and understand the purpose of the experiences which have been begun, the next function of the teacher is to guide them toward planning an extension of these into broader fields and an intensification of their vividness. The first step in this guiding



-52-

is found in two questions. 1. What do we need to know? 2. What are we going to do? These questions should, if possible, arise from the class. When they do so arise, as is very frequently the case, the pupils should be encouraged to answer them. These answers should be recorded in two lists. One might well be labelled "Things which we need to know," the other "Things which we need to do." The compiling of these lists will take some time. Here the teacher can be a great assistance to the pupils. When they are obviously at a loss, and cannot proceed, he can give a word of advice, or a hint of a procedure to use. If, in their listing of knowledge to be sought and activities to be carried on, they omit an important aspect of the experience, he can, by careful questioning or by hints, lead them to consider this. The teacher is one of the group, and is as responsible as is any other member for the success of the group's activities. He may suggest ideas in the same manner as do the pupils. Because of his greater experience, and because he has not as much to learn, he will usually do this only when no one else seems able to do so. A group of average students will usually be able to think of every thing which would come to the teacher's mind, if allowed time to do it.

These two lists give many ways of behaving. The teacher should keep in mind the results of Carr's study, referred to in the section entitled, "A Brief Summary of the Way in Which Man Learns." He should not give too much guidance, and what he does give should expand and increase the excess and varied activities of the pupils.

After these lists are made, usually by the secretary of the class or by some other person whom the pupils select, they will need to be organized. The need for organizing a heterogeneous list of ideas and activities will usually be felt by some member of the class. If it is not so felt, then here is an opportunity for an important understanding to emerge as a future control of the behavior of these pupils. We have said that controls emerge as a result of experiencing, of doing. It is not easy for a traditionally trained teacher to forego telling the pupils that they must organize their ideas before proceeding, but this must not be done. The pupils should be allowed to proceed until they become blocked and appeal to the teacher for assistance, when he may suggest that the organization of ideas could be improved. Very frequently, however, the incipient blocking will be perceived by some member of the class and a suggestion will come from him. In both of these cases, the need of organizing is emerging as a control of future behavior in a much more final and conclusive manner than if the teacher had told the pupils that it existed. A willingness to wait, to hold back, to allow blocking to occur, is essential to the proper guidance of learning.

The need of organization, like the need of deciding what to do and what must be known, is part of the complex problem-situation which confronts the pupils and which interferes with the immediate realization of this goal. This type of problem-situation is mildly frustrating and does not usually produce unpleasantly aggressive behavior.

When these lists are organized there will usually be well defined groups of ideas which are related by logical outline to the purpose which has arisen. Comparing these outlines will usually suggest relationships between some of the knowledge and some of the activities. The next step is to decide upon what to do first and how it should be done. Pupils should be encouraged to plan the order of their experiences and the methods of bringing them into being. The teacher should again hold back and wait before giving advice. Here, again, real learnings are taking place. The abilities to look ahead, to plan, to consider ways and



-53-

means, and to make decisions are all repeated each time that the pupils meet these experiences. As a result, these pupils, after planning successfully during their school life will have learned to look ahead and plan in real life. A necessary control will have been successfully set up through the action of the school.

When the plans are completed, there will usually be some provision made for activities by single pupils, by committees and by the entire class. The selection of talented individuals for particular tasks which are of value to the group and which others in the group could not perform will lead, after its repetition in many meaningful school experiences to an understanding that the best interests of the group are served by making use of the talents of its members. This understanding, as a control of adult behavior, is of great importance to the democratic way of life. The use of committees to carry out particular tasks which are important to the entire group is typical of democracy. The understanding of the use and value of these is, again, a socially desirable control of behavior, as is also the understanding that some functions had best not be delegated. There are many other controls, of the four types mentioned, which will emerge from the experience of selecting persons to do what the group has planned to do.

This section has included the beginning of the purposive experiences of the pupils. This beginning is at the point where the stimulating approach has aroused interests which produce a feeling of incompleteness which, when formulated and understood by the class, is the goal of their subsequent experiences. The teacher should have a flexible plan in mind so that he may help to guide the experiences which result from this purpose so that socially desirable controls of behavior emerge. He should be willing to encourage worthwhile experiences which he had not anticipated. The expressed purpose should result in plans of what to do, what to learn, how to do, who will do, what each will do, and the like. The teacher should be reluctant to take part in this planning, since it is itself a real experience from which emerge some of the controls of behavior which are basic to our democratic ways of living. The teacher's reluctance to participate should yield only to the felt needs of the pupils when they are no longer able to go ahead on their own.

Many times teachers are puzzled and bothered because unitary teaching and the use of unitary teaching has no definite time schedule of subject matter, no classes in arithmetic at 9:15, and no division of the day into regular periods. A description of the use of a unit on colonial and pioneer life is given below with comment to show that these time divisions are necessary. All of the usual activities in the traditional school take place, and much more that never occur in a traditional school.

The teacher had planned to use the Daniel Boone era, when persons were settling in the wilderness as the center of interest. Her approach to this was through pictures and exhibits of objects of the period. These were related to the home as she planned to start with the frontier home and to use other available exhibits as the interests expanded. Books were introduced to the class which contained stories of this period. Pupils were encouraged to examine these and comment on them. Free reading was followed by free discussion of what had been read. The pupils wished to do something about this interesting period. At



-54-

the suggestion of the pupils the teacher wrote on the board a list entitled "Things we want to do." The items in this list were all given by the pupils who recorded the plan on what they termed a work sheet.

It soon became apparent to the pupils that their ideas of the appearance and construction of colonial houses were hazy and inaccurate. The diversion of points of view in the group led to discussion. Here we have the learning situation ready. There was disagreement. Some thought one thing, some another. All wanted to know.

The teacher now suggested sources in response to requests for information. The entire group listed questions and problems which must be answered before they would feel that they had a satisfactory experience with colonial life. Seventy-four of these were listed. The teacher, by suggestions and advice made sure that all areas of pertinent information were included in these questions.

More books were provided of varying degrees of difficulty so that all would contribute. Library books were made available. The pupils were confused by the welter of material and requested the teacher to assist them. She straightened out the situation by teaching the proper techniques of using books as sources of information.

The pupils, after this, listed the topics under which the questions naturally grouped themselves. They developed a card file which listed the references for each topic. They prepared this carefully enough so that others could use it.

Using this file, as well as through their own research, pupils looked up material and made reports to the class. These reports were not always good. The class was not satisfied that it was getting the information which it wished to have so it set up criteria for a good report.

Some pupils who were looking for information about rifles could not find what was wanted. They asked the teacher to get this for them, when it became obvious that the material was not within their physical reach. She helped by finding the desired material in a city library, had it mimeographed, and gave a copy to each pupil.

Many ideas and suggestions were continually arising. The class realized that it would be necessary to organize these and to plan to use them. Committees were formed for each main topic or activity. Each committee made plans for work and research and held daily conferences with the teacher. Each committee made a daily report of progress to the group as a whole.

Finally, the experience was unified by the compilation of a completed booklet about Colonial America, a completed card file of sources of information about Colonial America, additional pictures and exhibits related to this period, a model home of this period, and original stoves, drawings, and songs.

This is an abbreviated record of what actually took place. Let us look at this from the point of view of traditional teaching and discover what activities there are which we would expect to find in a classroom.

These children wrote. They were using their own language to describe, to narrate, to compose, to give expositions, and to give reports. All of this writing would have been required in a traditional class. Notice the difference here, however. These pupils wanted to write and to write well. They set up their



-55-

own standard and held themselves to it. They set, for themselves, a task which is probably greater than the toughest teacher would dare give and they came through, not because of compulsion but because of desire. Their emotional impetus was toward further writing, as they had learned that writing was a necessary and usable tool in expressing their ideas.

These children read. They read books of the teacher's selection and of their own selection. This reading was for a purpose. They read for information and for enjoyment. Because they needed to know how to use books more intelligently, they learned how to make a card file and how to use it. They learned how to use books as sources of information.

These children used their hands. They made model houses, they painted, they modeled in clay, they used tools. They were using manipulative skills. They were coordinating hand and mind and eyes for one purpose.

These children used mathematics in their planning and in their executing. They computed costs. They measured.

All of these activities are a part of the usual school program. In this instance we find them taking place as a part of the pupils' program of what they wished to do.

One familiar part of the traditional school, drill, seems to be absent. There is no substitute for drill in acquiring and improving those skills which do not or should not require thought. How then are these included in among learning experiences?

While there has been no mention of drill in the activities listed, drill must and does occur. It is one of the learning experiences which will result in definite controls. Below are illustrations of drill as it inheres in unitary teaching.

Referring to the experiences given previously in this section, it is found that the pupils were confused by the welter of material and asked for assistance. The use of reference material is a skill which can be taught by repeated practice. Here the pupils wished to do better. The need for drill was obvious to them. The motivation for the drill was present. The drill then took place. It was accompanied by use of the skill. This accompaniment by use is essential. The pupils then know how well they can perform. This motivates the further practice which is necessary to reach a satisfactory degree of skill. The child cannot act satisfactorily. He practices or drills. He uses his improved skill. He finds that he needs more practice. He again drills. The drill is purposeful and the improved skill contributes to the ends of the group.

Some of these pupils did not spell as well as did others. The teacher asked each child to discover the words which were different and assisted him in this discovery. There would then be drill in spelling. Each pupil would be learning to spell words which he wished to use for his own and the group's purpose. His motivation would be found here. The drill would take place because he felt that he needed it and wished to fill this felt need.

Drill, with unitary teaching, arises always from the realization by the pupil of his evident deficiency and his desire to improve. It is individually planned and executed. It is always accompanied by use. It is purposeful. It contributes to the success of the group.

The learning experiences in a unit include all that the traditional school includes. They also include many in addition to these so that the pupils' possibilities of learning are made greater.

Drill, arising from the felt need of the pupil, is an inherent part of unitary teaching.

Drill in Social Studies - use of library + catalogue, asking people for info, writing letters requesting info.



CONTRIBUTIONS OF RACIAL AND NATIONAL GROUPS TO ARTS AND LETTERS

Problems	Activities	Materials	Bibliography
<p>What has the negro done for American arts and letters?</p>	<p>Invite a negro leader to talk to the class.</p> <p>Listen to records of negro music and music by negro musicians.</p> <p>Plan a visit to a museum or other places rich in negro things.</p> <p>Write a report on negro schools.</p> <p>Prepare and give oral reports by those who have been in negro regions.</p> <p>Read and report on the influence of the negro on American arts and letters.</p>	<p>Exhibit of negro materials</p> <p>Collection of music and records from negro sources.</p> <p>Film - "The Negro Farmer," U.S. Dept. of Agriculture</p>	<p>Washington, B.T.: <u>Up From Slavery</u></p>
<p>What have the refugees contributed to American arts and letters?</p>	<p>Invite a representative of a foreign relief society to talk to the class or school.</p> <p>Interview local refugees by members or committee from the class.</p> <p>Plan a visit to refugee centers of art and other interesting work.</p> <p>Make a study of the activities of the refugees in the community as teachers, musicians, etc.</p> <p>Read and report on the refugee's contribution to present-day American arts and letters.</p>	<p>Pamphlets from Freedom House etc., by men like Frederick, Salvamini.</p> <p>Film - "The Refugee, Today and Tomorrow," March of Time</p>	<p>Mann, T.: <u>Death in Venice</u>; N.Y., Knopf, 1935</p>



-57-

## References--The Beginning of Purposive Experience

- Wheeler and Perkins--"Principles of Mental Development"  
Chapter 14 pp 279-346, 505-513
- Burton--"The Nature and Direction of Learning" pp 69-81
- Frederick, et al--"Directing Learning" Chapter 5
- Lee and Lee--"The Child and His Curriculum" Chapter 6
- Wynne--"The Teacher and The Curriculum" pp. 201-208, 215-218, 294-303
- Caswell and Campbell--"Curriculum Development" Chapter 9
- Harap, et al--"The Changing Curriculum" pp. 142, 143-146, 152-155
- Mursell--"The Psychology of Secondary School Teaching" pp. 37-56
- Spears--"The Emerging High School Curriculum" pp. 139-144, 250-252
- Everett, et al--"The Community School" Enclosure 102-103
- Umstattd--"Secondary School Teaching" Chapter 11

## References -- What are Learning Situations?

- Wheeler and Perkins--"Principles of Mental Development" pp. 342-346  
pp. 404 Pacing and Maturation
- Wheeler--"The Science of Psychology" pp. 248-358
- Dewey--"How We Think" pp 285-286, 268-279, 248-359
- Hopkins--"Integration, Its Meaning and Application" Bottom of page  
227-233
- Brown--"The Sociology of Childhood" Chapter 241
- Burton--"Introduction of Education" pp. 408-419
- Frederick, et al--"Directing Learning" pp. 183-197
- Rugg and Shumaker--"The Child-Centered School" pp. 132-141
- Lee and Lee--"The Child and His Curriculum" pp. 341-354
- Mursell--"The Psychology of Secondary Teaching" pp. 46-50, 110-111
- Umstattd--"Secondary School Teaching" pp. 205-208, 210-212



- 75 -

A Comparison of Aspects of Unitary Teaching.

Four aspects of the same problem have been presented in the preceding sections, (1) the way in which man learns (2) the way in which unitary teaching is carried on (3) the process of solving problems and (4) the democratic way of life. This separate presentation has, perhaps, tended to create the impression that they are separate entities. This is not so. All are inextricably inherent in the nature of man. This summary section is intended to bring these aspects together so that their sameness will be evident.

<u>The Way in Which Man Learns</u>	<u>Unitary Teaching</u>	<u>Problem Solving</u>	<u>Democratic Living</u>
1. The potential learner is motivated.	1. The approach to the learning situation.	1. The pupil is motivated.	1. Group selects a purpose.
2. A problem-situation intervenes so that the motivation cannot be reduced immediately.	2. Pupils define area of interest.	2. The pupil is bothered by something.	2. The purpose is not readily reached.
3. Excess and varied behavior occurs.	3. Learning experiences.	3. Hunches, guesses, hypotheses, testing hypotheses.	3. Group planning, selecting leaders, sharing ideas, selecting committees, helping others, etc.
4. Success in continuing the behavior beyond the problem-situation.	4. Reaching the goal defined in (2).	4. An hypothesis is successful in solving the problem.	4. Some of the activities developed (3) reach the purpose.
5. The successful behavior emerges as a control of behavior.	5. Learning begins to take place.	5. The process of solving problems emerges as a control of behavior.	5. The democratic way emerges as a control.
6. Repeated analogous problem-situations.	6. Further experience, more units, study, practice.	6. New problems arise.	6. New purposes arise.
7. Successful behavior continues to be successful and behavior is changed.	7. Controls become a part of the personality of the pupil.	7. The pupil is able to solve problems.	7. The pupil becomes democratic.



- 76 -

The school, using the methods of unitary teaching, is acting in accordance with the way in which man learns, in which man solves problems, and in which man lives together democratically. It does this because it is dealing always with one problem and not with three. Living democratically and solving problems are two special ways of behaving. Since unitary teaching will change the behavior of pupils in these complex fields as well as in simpler ones, what appear to be various separate entities are, in reality, but parts of the general problem, that of changing the way in which man acts.

When unitary teaching is present, it is possible to ask the question "What can pupils do, or do better, as a result of attending school?" and to receive answers in terms of the activities of man rather than in terms of verbal responses.

Dr. William Burton of Harvard University has prepared an outline contrasting and comparing modern and traditional practice which is included here as an excellent final summary.

THE CONTRAST BETWEEN TRADITIONAL AND MODERN INSTRUCTIONAL PRACTICE

Prepared by Dr. William H. Burton

Traditional Instructional Practice

Modern Instructional Practice

I. Outcome

Memorization of subject matter

An integrated and integratin individual. Controls of conduct

Repetition of formulas and recipes

such as: Understandings, Appreciations and Attitudes, Special Abilities

Ability to follow recipes

Achievement of levels of skill

Achievement of adult designated levels of skill through drill in isolation from use

suitied to level of maturity through practice related to use and purpose

II. Testing the Outcome

Essay tests containing arbitrarily selected questions

Balanced and tested essay questions with explicit methods of marking

Standardized objective tests

Observation of behavior

Home made objective tests

Various techniques of observing and recording behavior

Anecdotal records



- 77 -

Traditional Instructional  
Practice

## Modern Instructional Practice

## III. Marking and Reporting Outcomes

Arbitrary per cents, numbers or letters, based on arbitrary sampling of subject matter--or based on uncontrolled subjective judgment of the teacher  
Use of very general descriptive terms such as Excellent, Good, Poor, etc.  
Formal report card giving fragmentary account of general matter achievement and practically no account of other learnings.

Paragraphs descriptive of actual types of behavior, levels of skill, etc., prepared by teacher.  
Printed statements, sentence or short paragraphs descriptive of actual types of behavior, levels of skill, etc. printed and arranged for checking by teacher; a behavior scale  
New type report cards giving as adequate as possible report on types of learning.

## IV. Improving Learning

Repetition after school;  
more drill  
exhortation  
Scolding or other punishment

Diagnostic tests and analyses  
Remedial teaching  
(Theoretically under expert teaching diagnostic and remedial procedures would become less and less necessary)

## V. Curriculum Improvement

Correlation of subject matter  
Better organization of given blocks of subject matter for immediate teaching purposes;  
subject matter units  
Broad field organization  
Determined by textbooks used or constructed by specialists

The core curriculum; fusion, addition of new subjects; use of so-called centers of interest, areas of experience in place of subjects; functional units for immediate teaching purposes  
The special subjects; more functional organization and content within subject or field boundaries  
Determined by cooperative social planning



- 78 -

Traditional Instructional  
Practice

## Modern Instructional Practice

## VI. Individual Differences Cared For

Irregular promotions  
 Special sections  
 Homogeneous grouping on  
 limited basis; no change in  
 materials or methods  
 Opportunity rooms  
 Special organizations touch-  
 ing administration, cur-  
 riculum and instructional  
 practice; Gary (or platoon),  
 Winnetka, Dalton

Homogeneous grouping on basis of  
 social maturity with frequent  
 rearrangement due to flexibility  
 in shifting individuals; ac-  
 companying changes in material  
 and method  
 Disappearance of fixed, arbitrary,  
 grade (or other) levels of achieve-  
 ment indicative of adjustment to  
 demands of the world must eventually  
 be achieved but at rate consistent  
 with individual's capacity and  
 rate of work  
 (This is all sometimes called the  
 "no failure" plan which is a very  
 misleading term. "Continuous pro-  
 gress" plan is a better designation.  
 New types of furniture, rooms,  
 buildings.

## VII. The Teacher

A task setter and drill master.  
 Often kindly and sympathetic  
 but none the less a task  
 master.

A participating guide and stimula-  
 tor

## VIII. The Pupil

A docile performer of tasks, a  
 follower of recipes  
 A failing pupil is stupid or  
 perverse

An active, free participator in  
 determining, organizing and carry-  
 ing out learning situations  
 A failing pupil needs diagnosis  
 to discover factors interfering  
 with normal growth

## The Organization of Teaching-Learning Situations

The Assignment-Study-Recite-  
 Test-Stereotype

The Functional Organization  
 Utilizing Pupil Purpose and  
 Socially Significant Material

## I. Assignment

## I. Initiating a Unit

Arbitrary assignment of pages,  
 exercises, topics or chapters

Cooperative selection and defini-  
 tion of a purpose or purposes



- 79 -

The Assignment-Study-Recite-  
Test-Stereotype

Intellectual preparation through recall of related information (Herbartian)  
Differentiated assignments--minimum essentials for all plus enrichment--two and three track systems  
Problems and projects with varied assignment

II. Study

Unsupervised individual study of assigned text  
Supervised study of assigned text  
Unsupervised or supervised study of supplementary references  
Study coach for individuals and small groups  
Home rooms  
Formal teaching of study procedures

III. Recitation

Individual answers to fact questions  
Individual and group reports  
Socialized recitation

IV. Testing

Essay tests containing arbitrarily selected questions  
Standardized objective tests  
Home made objective tests

The Functional Organization Utilizing Pupil Purpose and Socially Significant Material

(pupil or teacher initiated).  
Pupil acceptance the important thing.  
Cooperative distribution of work and contributions  
Cooperative organization of plan of attack

II & III Working Period of a Unit

Individuals and small committees carry on various activities; consult many printed sources, interview persons, listen to lectures, make excursions, perform experiments, hold group discussions, hear committee reports, and make analyses thereof make original and creative contributions, gather exhibits of real materials, construct apparatus and illustrations, paint, draw, etc.

IV. Demonstration of Learning

Balanced and tested essay questions with explicit methods of marking  
Observation of behavior  
Various techniques for observing and recording behavior  
Anecdotal records



- 80 -

## The Effort to Align Natural Experiencing with School Experiencing

## The Processes of Natural Experiencing

Behavior ongoing

Need, want, wish, drive  
arises because of  
disturbed equilibrium  
Purposes emerge  
Efforts to satisfy need  
arise  
procedures emerge

## The Corresponding Processes in School Experiencing

Behavior ongoing

Purposes are defined as the ini-  
tiation of a unit

Procedures are planned and exe-  
cuted in carrying a unit

Outcomes of the unit emerge in  
terms of definite control of  
conduct

Understanding

Attitudes

Appreciations

Special abilities--Skills

Further experience is necessary: More units, study, practice

Controls are individuated  
and integrated continuously:  
perfected subject to change

Controls become part of personality  
The organism has been changed  
Learning has taken place subject  
to change

Behavior is changed

The proof of learning is its ap-  
pearance in the modification of  
behavior

New needs arise and learning  
continues



- 81 -

A Summary.

The six steps in the process of learning, as given previously, are:

1. The motivation of the potential learner toward a goal.
2. The confronting by the potential learner of a problem-situation which must be overcome, if the goal is to be reached.
3. The carrying out of excess and varied behavior by the potential learner in order to solve the problem-situation and so reach the goal.
4. The discovery through use that one of the ways of excess and varied behavior is successful, i.e., reaches the goal.
5. The reduction of motivation through success.
6. Repetition of analogous problem-situations until behavior is changed.

As the unit is used it will mean the planned organization of experience along these six steps so that the method instruction used will be in accord with them and will thus facilitate learning. A unit, then, will be planned tentatively by a teacher and planned, as it is used, by teachers and pupils working together. It is intended to produce specified changes in behavior. Its value will be measured by the degree in which these changes occur.

The first step in the preparation of a unit is that of studying the pupils by the teacher. Records of the growth and development of each child should be as complete as possible. The results of his education up to the present should be known. The way in which his behavior has been changed by the school should be noted. Much has been written about the need of knowing the individual child. There is no need of restating these known facts to good teachers. One additional aspect, which is fundamental to our program, does need emphasis. If we are to endeavor to change the way in which pupils do things, we must know what they do and wherein they should do differently. In a fifth grade, for example, there might be many pupils who could divide correctly when the divisor was a two digit number but who could not do so when it contained three digits. Many might be able to play together well on the playground but could not cooperate in joint action to accomplish some aim such as selling more war stamps and bonds. Many might have a liking for good music, but have little understanding of it. Many might have learned to read with mechanical accuracy and yet show no evidence of discriminating good taste in their choice of what to read. The lists of what these pupils could do and could not do would each be long. In order for them to learn to do what they can not yet do, the teacher must know his pupils well enough to know what these activities are. He should list these.



- 82 -

The second step in the preparation of a unit is to select an area of human activity in which the teacher is confident that most or all of the members of the class will be interested. What have they done in the past? What do they do when out of school? What are their hobbies? What are their pastimes? What do they talk about? Any and all sources which show any promise of revealing genuine interests of the group should be explored. Problems which confront them in their lives outside of school are of tremendous value.

As was pointed out in a previous section, learning never takes place for itself alone but always as a result of the learner's success in reaching his goal. If the pupils are already confronting problem-situations, as most of them are, and if the school can provide opportunities for great varieties of attempts to solve these, as it can, then the school will become an increasingly important factor in the growth of the child. The best center of interest or area around which to organize a unit is one which includes some of these problem-situations which are facing many children in their lives out of school. By helping children to solve these, the school will not only assist in adjusting them to life as it is, but will also produce those changes in behavior which it wishes to produce most quickly.

(Examples of two types of centers of interests or areas of interests:  
1. Those centering in usual school experiences; 2. Those centering in the children's problems of out-of-school life)

The third step in the preparation of a unit is that of stating the changes in behavior which it is hoped will result. These should be written in precise language so that the exact meaning of each is clear. With each should be a brief description of the way in which a person acts when the change has taken place. If, for example, the ability to comprehend what is written in the editorials of The Oregonian is a change of behavior which is desired, then the way in which the acquisitions of this ability is to be recognized should be put beside it.

The desired changes in behavior can be classified in the following categories:

1. Skills
2. Understandings
3. Appreciations and Attitudes
4. Special Abilities

This classification arose out of a theory that a generalization, when made by a learner out of his experiences, emerged as a control of his behavior. Under this theory, which is widely held, a person who had generalized the germ theory of disease out of many specific experiences would there-after behave differently. This understanding, that germs transmit disease, would emerge as a control of his behavior and he would exhibit



- 83 -

many new activities such as washing his hands before eating or after using the toilet, being vaccinated, covering his nose and mouth while sneezing or coughing, and the like. The categorizing of desired changes in behavior has become fairly well standardized and survives as a part of the literature about units. These terms are defined and discussed below.

1. Skills. A skill is that type of behavior which can be carried on best without reflection, covert trial and error, or thought. An example of a simple skill would be that of walking. The infant, at first, must concentrate much of his person in mastering and carrying on this activity. An adult does it with almost complete automaticity. Swimming, driving an automobile, hitting a golf ball, are other examples of skills which are largely the result of trained coordination of muscles. Skills may also involve the mind. Addition, subtraction, multiplication, and division are intellectual skills which can be acquired to the point of automaticity. Some involve both mind and body in various degrees. Measuring accurately, drawing straight lines, using a paint brush correctly are examples of this type of skill. (List of many skills - choose many which involve out-of-school activities of child.)

2. Understanding. An understanding is a generalization of specific experiences which may act as a guide of future experiences. If, for example, a group of pupils discover that it is necessary for them to have a chairman in order to conduct an orderly meeting, if they choose a chairman, and if the meetings are then more orderly, we could assume that the understanding that a presiding officer is necessary to an efficient meeting had begun to emerge. As their further experiences showed that the use of this understanding produced success, then it might well be adopted by them as a general rule. We could then say that this behavior was an understanding on their part. (Examples of understandings - many out-of-school).

3. Appreciation or Attitude. An appreciation is a liking for an experience which results in a predisposition toward activity directed toward securing a repetition of the experience or of others like it. In its simplest phase it consists of liking or disliking some experience. This is largely emotional in character. As the experience is repeated or as similar ones occur, there may develop an understanding or understandings which are part of the appreciative experience. Genuine appreciation is a necessary concomitant of many experiences if the teacher hopes to have them become meaningful and to affect permanently the way in which the pupil behaves. (Examples of appreciation - many out of school).

4. Special abilities. The field of special abilities is a catch-all for partly understood ways of behaving. Talents such as those of the artist, social behavior such as salesmanship or leadership, and many of the activities of man which are based upon what appears to be innate flairs are classified here. These are the areas in which it has been assumed that persons were "gifted". The term special abilities is used to denote changes of behavior in areas where the pupil uses those ways of behaving which tend to be characteristic of his own personality rather than common to the group as a whole. (Examples of special abilities - many from out-of-school).



- 84 -

✓ The fourth step in the preparation of a unit is writing a description of the whole area which will give the teacher a broad outlook on what might be done. This is the overview.

✓ The fifth step in the preparation of a unit is that of discovering, suggesting, and inventing ways in which the pupil may be motivated. This aspect of the unit is usually labelled "the approach". It is here that the teacher puts down the ways in which he hopes to arouse the interest of the pupils and to focus it upon a problem-situation, the solution of which will develop the changes in behavior which it is hoped will occur. In this part of the unit the teacher must call forth all of his ingenuity and resourcefulness. Prior to this, there has been a selection of the desired changes in behavior, based upon a careful study of the pupil's growth to the present, and a selection of a probable area of interest, based upon a study of what pupils do and of what bothers them. The teacher is usually sure of what is needed and of what should be done to meet the need. This sureness results frequently in an assumption that nothing is needed but action. The connections between need and the plan for filling it are so obvious to the teacher that he assumes that they are obvious to the pupils. Probably more excellent teaching is spoiled at this point than at any other. The action of the teacher in studying his pupils and in selecting areas in which they can do better has motivated him to act. Too frequently the teacher does not distinguish between his motivation and that of his pupils, assuming that they are motivated because he is. Nothing could be further from the truth. The teacher must include in the unit several possible ways of motivating the pupils to approach the learning situation.

The sixth step in the preparation of a unit of experience is that of listing many of the ways of excess and varied behavior which are expected. These ways of behaving should include the use of the skills and knowledge which usually result from schooling. They should include as well the many other learnings which are important and which have been treated as incidental to the main purpose of the school. Here should be listed the processes of democratic living out of which should emerge the desired skills, appreciations, understandings, and special abilities which constitute the American way of life. It is here that the classroom becomes a vital force in the developing personalities of pupils. As these ways of behaving become varied, so there is more chance of a better way being found. As the pupils are encouraged to try bold experiments, so they will have more chance of being successful. The teacher's problem here is to expand the pupils' vista, to suggest more and more things to be done, not to restrict their activities to the area which will be successful. (Examples of excess and varied behavior - many from out-of-school).

The seventh step in the preparation of a unit is that of preparing ways of evaluating the quality and quantity of the learning which may have occurred. This evaluation should always be in terms of the desired ways of behaving which have been outlined in the early part of the unit. It



- 85 -

should include tests of skill and of recall, but should go far beyond this to include anecdotal records, observation of pupils while at school and while out of it. The keeping of a daily diary or a log is of great value. (Examples of evaluative techniques).

The eighth step is that of preparing the bibliography and the list of materials used. (Examples)

The ninth step is that of writing a title which includes the name, area of interest, and grade or group for which designed. (Examples)