A STUDY TO DETERMINE A CURRICULUM PATTERN
BASED ON FIELD PSYCHOLOGY

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BASED ON FIELD PSYCHOLOGY

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CHAPTER I

INTRODUCTION

Statement of the Problem

This is a study to determine a curriculum pattern based on field psychology.

The Situation

In making research upon this problem it is evident that there are two distinct points of view. First, there are those educators who believe in the additive, atomistic, mechanistic, summative-aggregative, associationistic, connectivistic, postivistic, reflexological, authoritarian- types of learning in which the parts are primary. Second, there are those educators who believe in the holistic, organismic, creative, integrative process in which the whole is of primary concern.

The first group take the position that the curriculum should be based upon our social heritage. They conceive of education as something that the individual goes to school to get. It is bundled up in packages and given to him in parts. It is something that he does before he enters his life's work. This education takes place in a modified environment, aloof from his culture and his national life. They
are confident that time spent in school and being educated are synonymous. In accordance with this idea, the effort put forth in study is the essential method of acquiring that which is prepared-in-advance to be learned, learning being the successful acquisition of what has been set up. The evaluation of success is whether the learner can give back on demand what has been designed for him. Under this plan of procedure, the teacher predetermines the assignment, requires its mastery, then tests subjectively and promotes or fails accordingly. The learner is said to possess virtue if he masters his assignments by studying hard and learning well and if he is accurate in his recitation. Under this theory the curriculum is necessarily a body of facts and principles prepared-in-advance under an authoritarian administration, to be acquired under formal discipline.

The second group take the position that the individual should be allowed to follow a more self-directed procedure of learning. They conceive of the individual developing an intelligent, purposeful, goal-seeking, meaningful, expanding, differentiating and integrating process of learning to meet the ongoing experiences of life. They further believe that desirable education should take on more of the experiences of high educative quality outside of the modified environment of the school. They seek to permit the individual to
participate in activities where the goals set up are his own and are felt and pursued as such. On this basis studying is the personal effort of the individual to deal intelligently with each situation. Learning follows from creative thinking and includes all resulting changes in the individual as he interacts with his environment. Study and learning are seen as inherent to the meaningful life process.

Under this conception what is learned is not set up in advance, but accompanies and follows the efforts put forth by the individual in meeting various situations. Social heritage is used only as the individual sees the need of it in the prosecution of his experiences. The curriculum on this position does not consist of bundles of facts and principles to be acquired a little at a time, but is rather a succession of experiences that are of high educative quality. The curriculum is conceived as the daily living of the learner as he interacts with his environment. The design of the curriculum is worked out in the designing and is cultured by a democratic administration.

This study has accepted the second theory upon which to secure data.

Delimitations

This study is limited to the development of psychological criteria of soundness to be used as a plan for designing the curriculum. Concepts of integration, behavior, learning,
teaching, growth, and experiences are to be built into the pattern. The designing is a part of the pattern. The pattern is not to be a finished product. It is to be so constructed as to accept the philosophy that education should provide for the wholesome growth and development of the whole individual to live in his society to the best of his potentialities.

Since the principles and processes of integrative learning are the same for infants, youth and adults, this study does not propose to build a designed pattern for any particular age group. It will not attempt to develop sociological or democratic criteria of soundness.

Definition of Terms

In making research in the field of curriculum development and organization, the writer has found varying concepts of the term. There seems to be divergence of opinions as to what is involved in curriculum designing. Definitions of the curriculum seem to fall into four general categories as follows:

1. Those who restrict its meaning to a particular sequence of subject matter that will lead the learner to accomplish some definite objective in life.

2. Those who think of the term as meaning the selection and arrangement of subject matter for instructional purposes only.
3. Those who base the curriculum on experiences that may be supplied through social heritage.

4. Those who think of the curriculum as a design that will be accomplished in the designing of it. Under this concept the learner will begin with a personal need followed by a purpose that will begin the designing. Social heritage will be used only as the learner sees the need of it in his designing.

This study accepts the fourth concept and will think of the "curriculum" as being a set of carefully selected purposes belonging to the learner.

A purpose is a goal belonging to an individual with a plan of action to reach it. It is the integrating element in learning and will be accomplished through the experiences of the whole individual as he interacts with whole situations in his environment. These situations may be within or without the school.

This study agrees that there should be some arrangement and organization of the curriculum. It is not so concerned with whether or not we have order but is very interested in the basis for order. The source of order is found in the lives of the learners as they meet their carefully selected purposes.

The term "pattern" means a continuous, flexible, relative, mutual, and contingent design that is the product of designing.
The design should parallel the ongoing, intelligent, interacting process of living.

"Field psychology" is a study of human behavior as man operates in his own total psychological field. The environment to which he is attracted gets into his behavior through a process of selection and modification. As he attempts to deal with his external conditions, the self-structuring being reacts as a whole to whole situations. The self-regulating organism always operates as a single pattern of behavior in his own field and demands harmony between the individual and his environment. The organism is an energized system of behavior and will release this energy if he is motivated by goals which he accepts as his own.

Burton gives a brief explanatory statement concerning the field in psychology in the following:

The field in psychology has, currently, three interpretations: organismic, gestalt, and topological. The organismic interpretation finds its basis and derived laws, as would be expected, in the biological concept of the living organism and its growth. Gestalt originates in and is based upon the analysis of perceptions which are regarded as primary wholes. The topological finds its wholes in child and group behavior. There is a definite tendency toward unity among the three interpretations, all of which are doubtless approaching the same central problem from different angles. The general laws of the field-theory process are exemplified in all three.

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Burton interprets the seven general laws of the field-theory process that apply to the three above mentioned versions as follows:

1. Law of Field Genesis states wholes evolve as wholes and are primary.
2. Law of Derived Properties and the Law of Determined Action hold that the meanings and the behavior of the parts are determined by the whole within which they occur.
3. Law of Field Properties holds that the whole is more than the sum of the parts and that the properties of the field are not the same as the sum of the properties of the parts.
4. Law of Individuation holds that parts come to have existence through the process of individuation, or differentiation, or structurization.
5. Law of Configuration holds that a system of energy always functions as a unit and is able to adjust itself to a number of disturbing forces or factors.
6. Law of Least Action states that the organism or energy system will take the most direct route to the relief of tension or the restoration of equilibrium.
7. Law of Maximum Work states that the organism or energy system will exert maximum effort to relieve tension or restore equilibrium.

"Psychological criteria of soundness" for curriculum designing shall mean a safe and healthy set of concepts that will become a part of a curriculum adaptable to the field-theory of learning so that the learner may expand, differentiate and integrate within his field, yet, through intelligent interaction may become a functioning part of a larger unitary whole.

Definitions of other terms will be given as the study develops.

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Ibid., p. 154.
Sources of Data

There have been many studies made and books written upon the subjects of psychology and curriculum organization. These data were screened out from these studies with special attention being given to the field-theory of learning.

Proposed Treatment of Data

This study is presented in five chapters. The first chapter gives the statement of the problem, the situation, delimitations, definition of terms, sources of data, proposed treatment of data and some related studies.

In the second chapter concepts of integration, behavior, learning, teaching, growth and experiences are given.

In the third chapter an attempt is made to analyze several curriculum patterns.

In Chapter IV an attempt is made to produce a proposed curriculum pattern based on field psychology. This pattern is developed through a process of designing using psychological criteria of soundness chosen from data in Chapter II.

Chapter V gives the summary, conclusions, and recommendations.

Some Related Studies

Charles O. Manire, in his thesis "To Determine a Sound Curriculum for the Junior High School Based on the Psychological, Sociological, and Democratic Needs of Youth," made an examination of several types of curriculum. He included the present
junior high school curriculum of Dallas, Texas. In this study he gave much attention to the needs of youth living in a democratic society. He developed psychological, sociological, and democratic criteria of soundness, and after studying six proposed programs, he made an application of his criteria to these programs and reached the following conclusions:

1. The work should be organized around big purposes and need areas.

2. The program proposed by Stratemeyer has a reasonably sound list. Spiritual values should be omitted due to the fact that this phase may be considered a tool rather than a major area. If this is omitted, the following areas will remain:
   a. Member of family
   b. Member of community
   c. Work—occupational
   d. Leisure time

3. The goal sought is not broad areas of subject matter and content, but is functional areas.

As a result of this study he made the following recommendations:

1. That functional purpose areas be emphasized in the junior high school curriculum.

2. That a plan be worked out to provide transition from the present program of separate subjects to the integrating program.

3. That the work be organized around a modified program recommended by Voss in her thesis.

The study made by Manire differs from this study in that the former deals with the junior high school level and includes sociological and democratic criteria of soundness.

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Frances Geraldine Voss, in her thesis "To Determine a Sound Program for Organizing the Needs of Youth and the Curriculum in the Secondary School," made an analysis of the needs of youth, and set up sociological, democratic, and psychological criteria of soundness.

She established the relationship between the needs of youth and the criteria. She came to the conclusion that these needs could be fulfilled in a curriculum built around the following purpose areas of living:

1. Living at home
2. Leisure or recreational living
3. Making a living (vocation)
4. Living in the community.

Here the study differs from this one in that Voss deals with the secondary level and includes democratic and sociological criteria of soundness.

Stratemeyer, Forkner, McKim, and Associates, in their book, Developing a Curriculum for Modern Living, reasoned out a theory of a curriculum which will utilize our knowledge of youth as they grow and mature in a democratic society. They set up

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5 Florence B. Stratemeyer, Hamden L. Forkner, Margaret G. McKim, and Associates, Developing a Curriculum for Modern Living.
this analysis in ten chapters in which they attempt to show the orientation and direction given youth by a democratic society.

In Chapters I through III, they list the major challenges for curriculum workers. Chapter I identifies major curriculum issues and describes the nature of learners. Chapter II and Chapter III analyze the nature of our society and the needs of youth as they point to the curriculum implications of the analyses.

The fourth chapter outlines the resulting concept of curriculum development.

The fifth chapter attempts to analyze those persistent life situations faced by youth at various age levels. They give some of the typical everyday experiences through which youth meets these situations.

Chapters VI through VIII point to ways in which teachers, learners, the whole school, and the community work together to develop the curriculum.

Chapter IX gives a descriptive analysis of the proposed curriculum concept in action.

Chapter X sets up guide lines in evaluating the effectiveness of the curriculum in terms of its purposes.

Their study claims that education in our democracy means the development of the individual through his understandings and responsibilities in dealing with his individual and group
situations of everyday living. They identify these situations as family living, civic living, social living, working, use of leisure time and spiritual development. They see that these are provided through the maximum growth in individual capacities involving such situations as health, intellectual power, moral choice, aesthetic expressions and appreciations together with maximum growth in social participations involving situations such as person to person relations, group membership, and inter-group relations. They claim as the learner grows in ability to deal with environmental factors and forces involving such situations as natural phenomena, technological, economic, political, social structures and forces that he will develop individual understandings and responsibilities.

Their study differs from the present one in that they attempt to set up a designed curriculum, based on certain aspects of living, giving direction to a program involving systematized and analyzed approaches to the experiences of youth.

Harold Rugg, in his book, American Life and the School Curriculum, made a study of the curriculum as it is seen in the framework of our changing society. He divided his study into two books. In Book I he showed how our schools arose out of the hectic times of the pioneering and

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6 Harold Rugg, American Life and the School Curriculum, p. 158.
settlement of our continent during the machine age. He pointed out that education was widely separated and lagged far behind the life which built it. He attempted to show that education is a guaranty for the success of our democracy.

Rugg, in his appraisal of our grade-school program, discusses the lag of the school behind the changing content of American life as follows:

One fact has come out again and again in our study, and that is the vast chasm between the vital problems of American culture and the content of the American school curriculum. Not once throughout the initial building era of American education was the curriculum of the schools constructed from the moving trends of the civilization surrounding the children. We have illustrated this in a threefold division of the school program—that is, in the techniques needed in everyday life, in the social and natural sciences, and in the expressive and appreciative arts. From Franklin's Academy to the modern school of the post-World-War decade the gap has persisted. It still persists.

In Book II he analyzed the problem of educational reconstruction. In this analysis he presented the psychological and educational concepts that have developed out of fifty years of research and practical experience. He further offered a program of next steps in curriculum reconstruction.

Rugg claims that the interrelationship between the three social trends of economic productivity, social inventions, and popular consent point the way to the factors that produce our contemporary chaos.

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7 Ibid.
His theory is that chaos will subside when these three trends keep pace with one another. Then he concluded that all youth should be at least moderately well informed about the basic issues of our civilization. He suggested that if youth understands the above mentioned crucial trends that it is the responsibility of educational workers to formulate school programs that will provide opportunities for their enlightenment regarding these matters.

Rugg's study differs from this one in that he emphasized social reconstruction rather than psychological understanding as a working basis for curriculum designing.
CHAPTER II

CONCEPTS OF INTEGRATION, BEHAVIOR, LEARNING, TEACHING, GROWTH, AND EXPERIENCES

Integration

Integration is a word used to describe the intelligent behavior of an organism from the time it is conceived until senility. The whole organism is in continuous interaction with its environment. When a change takes place within or without the organism, it disturbs this interaction. The organism becomes upset when equilibrium is disturbed, and it moves against the situation to remove the tension. The efforts toward adjusting is called behavior. Every act of an organism is adjusting to the situations of life. This adjusting may be integrated or disintegrated action. Such action is always purposeful and directed toward certain goals. The organism works and re-works its past experiences in attempting to find a pattern of behavior that will assist it in returning to its state of equilibrium.

If it is successful in finding a pattern that will assist in the new solution the state of equilibrium is reached at a more rapid pace. In this process of integration, the whole organism is called into play.
Hopkins discusses integration as follows:

Integration is a shorthand word used to designate intelligent behavior. Integrating refers to continuous, intelligent, interactive adjusting. Each individual is born into a culture composed of a great variety of aspects—economic, esthetic, physical, religious, and the like—all of which are more or less complex and interrelated. In developing to maturity and old age, his life is conditioned by his growth needs and the accumulated experience of the culture in meeting these needs. This means that the culture affects him, and he in turn affects the culture. Or, in other words, he is constantly in the process of interacting with his environment. Whenever a change either within or without the individual seriously disturbs this interacting process, the result is an upset equilibrium, causing a strain called a need, want, wish, drive, or the like. To satisfy this need and to restore the desire equilibrium, the individual moves against the situation to relieve the tension. These efforts toward adjusting in the interacting process are called behavior. All living is interacting, adjusting behavior. Since integration is a word used to describe behavior, it means integrated or disintegrated behavior, if we examine the situation after the equilibrium has been restored; integrative or disintegrative behavior, if we examine the process of that one specific act; integrating or disintegrating behavior, if we examine the effect of such behavior for shaping better subsequent behavior in the ongoing, interacting, adjusting process. Since life is an ongoing process, and since education is concerned with the improvement of life and living, it would seem that education must be concerned with improving the ongoing, interacting, adjusting process. Such behavior is purposeful, directed toward ends, consciously formulated and reformulated in the process by the individual as he resolves his disturbance. Purposeful behavior implies intelligent behavior. From the educational viewpoint, then, integration must be the shorthand word to describe the process involved in this intelligent ongoing, interacting, adjusting behavior. 1

Hopkins lists eight characteristics of integrating behavior of an individual:

1. Takes wide contact with the environment.
2. Approaches the ensuing disturbances or problems with confidence, courage, hope, optimism.
3. Collects, selects, and organizes material for the solution of these problems.
4. Draws relevant conclusions.
5. Puts into practice the conclusions in changed behavior.
6. Takes responsibility for the consequences of his behavior.
7. Uses feelings either as instruments or ends as compatible with the preservation of wholeness.
8. Organizes pertinent aspects of his successive experiences so that they are better available for use in subsequent experiences.

Hopkins shows a sharp contrast between integrating behavior and disintegrating behavior. He gives eleven characteristics of a disintegrating individual as follows:

To focus better this picture of the integrating individual, let us consider in sharp contrast some characteristics of the overt behavior of a disintegrating individual. The disintegrating individual:

1. Moves within a narrow, increasingly circumscribed environment.
2. Attempts to escape the disturbances or problems which movement in such limited environment raises.
3. Meets only those disturbances from which there is no escape with a feeling of inferiority, inability to solve the problem, lack of confidence, and in many cases, with despair.
4. Collects materials for the solution of problems more emotionally than thoughtfully.
5. Organizes materials on the basis of feeling rather than intelligence.
6. Draws highly irrelevant conclusions with increasing frequency.
7. Reviews and modifies conclusions without the addition of new and pertinent data.
8. Acts with undue caution and restraint in translating his conclusions into overt behavior.

Ibid., pp. 2-3.
9. Accepts the consequences of his behavior unwillingly when the invalidity or irrelevancy of his conclusions has been established.

10. withdraws to a greater degree within his environment, thus tending to escape more disturbances, and thereby building greater lack of confidence in himself to meet reality.

11. finds an outlet for the presentation of his integrity in an imaginary world, thus developing a disassociated and disintegrating personality. 3

The individual, in trying to restore equilibrium after an upset has been caused by his environment, acts as a whole organism. He brings in to play all of the aspects of his being. Hopkins groups these aspects as follows:

1. The physiological, which refers to internal glandular secretions and chemical changes.

2. The physical, which refers to neuro-muscular activity.

3. The emotional, which refers to the changed physiological state as related to feelings and attitudes.

4. The mental, which refers to the quality of the thinking involved. 4

Hopkins gives a definition of integrating behavior:

Integrating behavior now needs to be interpreted to refer to the quality of the relationship between the various aspects of the whole organism. Since these aspects are normally unified, coordinated, working harmoniously toward the desired end, the individual acts as a balanced whole. This means that the internal aspects of the individual's behavior are characterized by wholeness as he faces, continues to face, and eventually resolves the disturbing situation within or without. Integrating behavior in any situation, then, is that in which the individual begins with, continues with, ends with, and carries on with a unified internal wholeness.

3 Ibid.

4 Ibid., p. 4.
To raise the level of action from physiological to thoughtful purposes with their more intelligent means of attaining and maintaining normal unitary behavior is the integrating goal and process. 5

Hopkins says that "any interacting, adjusting, behavior joins the individual with the environment." 6

In other words, there can be no interaction of an individual with other individuals in any situation without affecting the environment.

Hopkins considers integration from three points of view:

From the standpoint of the individual, it may be thought of as the continuous expanding and developing of the unity or wholeness within. From the standpoint of the environment, it may be considered as a continuous, growing, expanding unity of relationship with the culture. From the standpoint of the interacting process, it may be considered as developing, refining, testing the value and attitude system, thus making for more intelligent control. All three of these are involved in every instance of conscious behavior. Integration, then, implies the conscious intelligent improvement of this interacting, adjusting process. 7

Personality.—Personality is often used to designate behavior peculiar to a certain individual. It represents the individual as he expands and differentiates his total behavior.

As the individual interacts with other individuals he gradually develops certain behaviors which may be grouped around the term self. In other words he makes himself the

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5 Ibid., p. 6. 6 Ibid., p. 7. 7 Ibid., p. 10.
center. When he increases his scope of experiences, he gradually makes a distinction between himself and everything that relates to him. At this point the real self is born. With the emergence of self, an individual begins to differentiate different behavior, with which he is associated, and begins to take on individuality, or personality.

In this process of interacting and differentiating the individual selects certain ways of behavior that are peculiar to himself. As this social process continues, he develops certain tendencies, adjustments, and qualities that set him apart as an individual. Hopkins lists these qualities as: "initiative, industry, dependability, courtesy, critical thinking, and the like." These personality traits represent to a very great degree the interaction of the growing self with the surrounding social culture.

They are developed as the individual struggles to preserve and maintain wholeness. This struggle goes on as a continuous process. It goes on from the time the organism is one cell until senility. All of the personality traits that an individual develops are accepted by him as he recognizes their need in helping him to interact with his environment.

Kilpatrick discusses the problem of the integration of personality:

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\(^8\text{Ibid.}, \text{p. 12.}\)
The principle of the 'whole child' and of the organism acting as a whole leads easily to the problem of the integration of personality. When a person faces a situation of one clearly defined type and learns to deal satisfactorily with it, he does, in some measure, reconstruct his personality on the basis of what is therein learned. If the situation recurs with ordinary variations, the personality may in time be appreciably rebuilt so that a characteristic attitude or set, corresponding to that type of situation, is readily assumed when such a situation presents itself. It may, however, happen that one situation contains within itself contradictory demands which the person cannot harmonize. Under such conditions, he may accept one line of demand and reject the other. If he does so, and it works out acceptably, he will grow to be that kind of person. He might, however, so far as we see, have accepted the other line of demand and so built himself into that kind of person. In each case the organism has acted as a whole and built a pattern accordingly. But a third outcome is possible. The person, while recognizing the conflict between the two sets of demand, may still—especially under compulsion—try to meet both. A child will thus do one thing while the teacher is looking and another when the teacher does not see. In such case, the child's conduct is outwardly of one kind but inwardly of another. In this and other cases of reacting to conflicting stimuli, there results an internal conflict. Both lines of conduct call on the organism to act as a whole but in different ways. The two ways being incompatible, the person's efforts in either direction are interfered with by the demands from the other direction. His personality is thus distraught. He is on the road toward disintegration.9

Personalities may be integrated or disintegrated.

Hopkins discussed this as it is related to differentiation:

Sometimes personalities are referred to as integrated or disintegrated. This term refers to the total wholeness rather than to the differentiated personality traits. When the wholeness is intact,

the tendency of the individual in all situations is toward integrating interaction. Regardless of the terms which may be used to describe personality, the common denominator of all of them is the effort of the individual to interact in such a way as to maintain and develop the integrity of the growing self. In the process of expanding, differentiating, and integrating, integrating is the dominant center. Rarely does the individual expand and differentiate more rapidly than he can integrate except under unintelligent outside pressure. The key concept in personality, therefore, is integration. 10

Hopkins discusses richness of personality as follows:

Richness of personality refers to the number and variety of types of situations which the individual has met in his living and the quality of his interaction. It refers to the clarity and functional efficiency of the internal organization of the dynamic purposing, the critical thinking, meanings and relationships developed, and values accepted in the accumulated experiences. It is the external recognition by others of the internal fullness and richness of the self which is expanded into an unique individuality. On the other hand, meagerness of personality refers to a lack of range and quality of situations in which the individual has interacted in his environment. It means a restricted self, an unrefined individuality, lack of differentiation of personality tendencies or traits, and consistency of behavior only in restricted areas of experiencing or in narrow interpretations in unrelated situations. Richness of personality is definitely related to integration in that the normal integrating, adjusting individual has the tendency to move confidently in an increasingly wider environment and interact with the numerous situations with increasing quality. He tends therefore to develop richness of internal individuality, which is recognized externally as richness of personality. 11

10 Hopkins, op. cit., p. 15.

11 Ibid., p. 15.
Wheeler and Perkins give the following summary of the child’s personality under the organismic laws:

1. The Law of Field Properties. Before the child’s personality can be understood it must be observed as a whole in the complex life situation in which it is found. Personality possesses a field property or form of its own which is called in everyday language by the name of individuality. Individuality, then, is the property of the whole over and above its parts. The parts are traits of character, taken separately.

2. The Law of Derived Properties. Each trait of character derives its property from the total personality. A trait in one child means quite a different thing from the same trait in another child, for the total personalities are different. Therefore, the differentiated traits must be studied in their relation to the wholes of which they are parts.

3. The Law of Determined Action. When seen as a segregated whole, the total personality determines the nature and must be seen in terms of the social whole of which it is a part, for it is that social whole—the human nature-pattern that surrounds the individual—that determines the nature of the individual personality. The individual personality is an adjustment to the types of personality around it and to the demands which these personalities make upon it.

4. The Law of Individuation. Particular traits of character emerge from a primary, undifferentiated and nondescript personality. Each trait is related to all the others as it emerges. The several traits emerge together. In turn, the personality as a whole individuates from a field of human nature that we call society.

5. The Law of Field Genesis. The child’s personality evolves as a whole. It is an expanding, differentiating total pattern. The pattern is not a bundle of so many separate traits; it is not a whole constructed out of parts, it is all ‘one piece’ from beginning to end.

6. The Law of Least Action. The child’s personality is constantly striving toward the goal of balance or equilibrium. It demands harmony within itself and its social environment. Each trait that develops is a process of resolving a state of desequilibration; each act carried out is a process of resolving tensions induced by social environment. One trait develops in the course of balancing another.
7. The Law of Maximum Work. A trait of character never changes without a change in the total personality. Correcting an undesirable trait is a process of re-adjusting the personality as a whole; all other traits undergo a change at the same time. Similarly, when a given trait is induced, or when it is improved, the total personality is changed. The effect of strengthening or diminishing a particular trait can be observed in changes that occur in all other traits.

8. The Law of Configuration. The effect that corrective measures will have upon a given trait depends upon the extent to which all other influences are affecting the personality. In other words, the personality never responds to an isolated influence. It responds to that influence in its relation to all the others that are exerting an effect at the same time. There is no one correspondence between a particular outside influence on the personality and the change going on within the personality. Each change that the personality undergoes can be understood only in the light of a total situation.

Character.--Personality and character are very closely related. However, personality describes the differentiated tendencies to behavior while character places value upon these tendencies in the light of standards developed by a certain culture. Character is examined by the culture in three ways. Hopkins explains this evaluation:

Modern societies have three ways in which they indicate to the individual the standards by which his behaviors will be examined and his character judged. One of these is custom. This means the accumulated body of past behaviors in a particular situation or groups of situations which have been found by the rest as satisfactory and which have received the stamp of approval by their continued perpetuation. Such an instance would be found in the case of a ship in distress on the high seas. When it becomes

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necessary to launch the life-boats, there is a custom of the sea that women and children shall enter first and that men shall remain aboard the sinking ship until all women and children have been safely cared for. To behave otherwise in this situation would be a violation of the accumulated custom, and the violator would be considered to have poor character. Failure to comply with other customs of a simpler nature involved in the courtesies of everyday living probably would not be considered in the same light as a violation of the custom of the sea. A second is that of laws. In America these are supposed to be set up by the majority as socially acceptable guides to behavior in situations involving the interests and needs of large numbers of individuals. Primitive societies depended upon customs, and there were few written laws. In modern complex societies with their many interrelationships, laws are increasing in number and importance in determining standards of behavior. A third standard of evaluation is that of intelligent consideration at the time of crises of all pertinent aspects involved in relation to some criticized principles of action. The individual would be judged by how intelligently he had acted in the light of all the circumstances which include his age, maturity, and experience, the particular situation, and the culture. When custom and law represent the dominating standards, the individual who conforms readily and uncritically is considered to be the 'good' individual and therefore to have 'good' character. This may hold not only in the larger relationships in the culture but also in many primary groups, such as in the home, in the classroom, or in the school. Too frequently the pupil who conforms is the good pupil who receives the good grades and the rewards and satisfactions from the parents and teachers. But, the society which accepts social change, which wishes relationships among individuals to be determined democratically, prizes the development of intelligent critical thinking in each individual, which means the suspension of judgment until all pertinent consequences have been foreseen and weighed in the light of consciously formulated principles and values. Such a society evaluates personality in the light of intelligent critical thinking in the crises of life and approves of such
behavior as representing sound character, even though the result may seriously challenge the established custom or written law. 13

Havighurst and Taba base their study of character upon the postulate that it is learned behavior. They say that it is learned in three general ways:

1. Character is learned through reward and punishment.
2. Character is learned through unconscious imitation.
3. Character develops through reflective thinking. 14

They think of good character as being based upon two levels. Their statement is as follows:

On the popular level moral conduct is controlled by praise and reward from the immediate social environment. A person lives up to the moral expectations of those with whom he rubs elbows. At the second level moral conduct is controlled by ideals; in the pursuit of a moral ideal the person may displease his associates and be blamed and punished for it. 15

Hopkins, in summarizing his viewpoint on integration, has the following to say:

The unit of experience is any particular instance of an individual interacting with a situation within the environment. When a change either within or without the individual causes the equilibrium to be upset, there occurs a strain called need, want,

14 Robert J. Havighurst and Hilda Taba, Adolescent Character and Personality, p. 6.
15 Ibid., p. 7.
wish, and the like. To satisfy this need the individual moves against the situation to relieve it. This results in a change in him and in the situation. In facing effectually a sufficient variety of life situations, the individual:

1. Improves his internal organic state as he faces the situation without.

2. Improves the process of dealing with recurring or novel situations.

3. Increases his contacts with and improves his understanding of his environment.

This means that he becomes increasingly intelligent in his interaction with his situation, resulting in increased integration within himself and with his environment. Since this condition is exhibited in his behavior, integration is a name of the process of intelligent interacting. Out of this process are differentiated types of behavior which are called personality and character. Since the individual interacts to maintain what integration he has and to improve his integrating in subsequent situations, the personality and character developed are dependent upon his success in this primary function. To aid children to make their behavior increasingly intelligent by acting more and more upon better and better thinking is the educational implication. 16

Behavior

Behavior is an act or a movement of an individual as he moves against an upset caused by a disturbance in his equilibrium. The act or movement is the interaction of the individual with his environment, and tends to restore lost equilibrium.

An individual has to meet two criteria in his interacting behavior. First, he has to satisfy his own wants; second, he has to satisfy the demands of society. In

meeting these two situations, his nervous system is stimulated and he responds as a whole. Each individual always evolves as a single pattern of behavior.

The human organism is an energy system of behavior. The energy of the total human organism consciously conditions the activities of the parts. The will is the medium through which action is obtained from a human being. Every phase of the organism comes from the same cell. The changes that take place contribute to the whole organism. The changes may be physical, mental, emotional, or social. Every change in the organism demands a new pattern of behavior.

When an individual meets a problem, he examines and re-works his past experiences to see if he can cope with it. If he is able to cope with it, he has created a new pattern of behavior.

There is no behavior where there is no goal. Behavior is always directed toward a goal. Once a goal is set up, both the direction and the end of the behavior movement are determined. Behavior is a goal-seeking affair.

Since all behavior is goal-seeking, certain facts about goals are listed here:

1. Goals help the individual to learn best.
2. An individual will not act unless there is a goal.
3. The individual must recognize and accept a goal as his own.
4. Cells remain dormant until they are stimulated by goals.

5. Cells are energized, but will not release this energy unless a goal is set up.

6. Individuals will not accept goals that are too far removed.

7. The value placed upon a goal determines the effort put forth to reach it.

8. Goals provide direction for action.

9. An individual may have many goals, but he reacts to the one that has the most value to him.

10. A goal is the low potential in an energy system. The lower the goal in potential, the greater the effort of the individual in reaching it. The more value, the higher the energy released by an individual.

11. Goals are assets to learning.

12. Goals build up the will to act.

13. Insightful learning is promoted by understanding the goal.

14. Adjustment to environment comes by finding a goal.

15. When an individual finds and recognizes a goal, it usually creates a problem.

It must be remembered that goals are never static. They change with maturation. A person will not make any progress unless there is interest in the thing he is trying
to do. He needs a goal ahead to work toward. If the right stimulation and motivation are used, a tension will be set up. The nearer a person gets to a goal, the harder he will strive to attain it. When the goal is reached, the tension is released, and satisfaction usually follows.

Wheeler and Perkins have this to say about goals in the schoolroom:

Important facts to remember about the goal in learning-situations are, first, that it is the low potential toward which activity will take place. It therefore gives direction and an end to the activity. Second, the goal must be perceived before anything will happen. Third, the desired goal should be the lowest potential in the field of action at the time, guaranteed by making the goal vital and interesting. Fourth, indefinite goals are difficult to perceive, and always result in the setting up of extraneous goals. Fifth, the goal derives its property of attractiveness from a meaning given to it by the total life-situation in which the learning takes place, not from any force which it possesses by itself. This explains the importance of definite instructions and clear-cut explanations of values. Sixth, activity from the perceiving of the goal to the 'closure,' or reaching of the goal, will take place over the shortest route in time. There is only one route to a given goal.

Kilpatrick discusses the nature of behavior from the newer, biological viewpoint:

As we look more closely at life itself, the newer biologic view of organism helps us to understand behavior possibly as never before. Any organism is seen as a self-regulative pattern, intricably interwoven with the environment. When by

a change either within or without the organism the equilibrium of the organism is upset, there ensues a strain which we variously call need, want, wish, drive, preference, or the like. Consequent upon this strain there ensue movements directed toward the environment which tend to restore the lost equilibrium. These movements will (typically) both continue and (if need be) vary until equilibrium is restored. Thus pepper in the nose brings an upset which in turn results in sneezing. 'Nature's effort,' we say, to remove the pepper. Or hunger (as an upset) brings 'seeking' movements which typically find food to relieve the hunger. All such movements so arising we call behavior. It appears that all life activities are of this nature. The specific 'drive' to them comes thus from the upset and continues (typically) till equilibrium is restored. This peculiar and characteristic connection here existing between the upset and the consequent varying behavior is highly significant. The upset furnished the 'efficient cause' to the behavior movements. The same upset—or if you prefer, its removal—supplies at the same time the final end of these movements: the movements typically both continue and vary until the upset is removed. Such a state of affairs presents an essentially teleological character. Behavior is at bottom purposive. 18

Douglas and Holland discuss the role of tendencies in behavior and adjustment:

Somatic behavior is initiated and sustained by some one or a group of tendencies. Unless shocked into action by some tissue need or by an external stimulus potent enough to arouse an emotion, the individual would remain relatively inert. But being acted upon by such stimuli, and experiencing the tendencies that arise therefrom, the human being is normally an active, striving creature in search of the things that will satisfy him. The young infant, for instance, is largely inactive until stirred from within by hunger, pain, the desire for bodily activity, or some other urge. At this time, however, the infant becomes vigorously and continuously active

until the urge is satisfied or its energies are exhausted. Through the help of the social environment, the infant soon learns what things are required to satisfy many of its tendencies. Thereafter, its behavior is directed toward attaining or securing these particular things. For example, the baby comes to know its mother, to recognize the bottle, or any other object related to the satisfaction of hunger, and as a result acquires definite patterns of behavior toward these things. Thus, anything that satisfies a tendency, whether physiological, emotional, or social, is the thing that an individual, of any age attaches value to and thereafter strives to secure when the tendency is present. In this manner tendencies represent the motives that prompt individuals to recognize particular objects and situations and to engage in activities perceived as ways of adjusting to them. 19

Since learning is modified behavior, the discussion of it will give much added light upon behavior as an interacting process.

Learning

When a person is confronted with a new situation, old responses will not suffice. He must find a new response to cope with the situation. This is done by drawing upon past experiences. If he is able to meet the situation with a solution that is satisfactory to himself, he has formed a new pattern of behavior. This achievement is called "learning." Since he did not have this way of responding before, he has created a response new to him. In such a case, the

return to equilibrium is not to the prior state. He is different by the response. Each act of learning adds a certain change to every part of his whole organism. Learning then involves two aspects: one creative, in which a new response is found; the other conserving, in which this newly found response is added to the very structure of his being.

The behavior process mentioned in the preceding discussion brings successive additions to his being. On this view, there is no end to the state of development. Development becomes a continuing process. Since development is a dynamic thing, it is ever changing the whole person.

This structure building in a human being is the answer to habits, skills, knowledge, and the like. This structure building idea allows us to recognize habits and attitudes as human structure alone with ear or foot. Each becoming a permanent part of the human being, and as these become a part of the human being, they contribute to all future responses. Without anyone of these we would be very different.

Development and learning form a continuous series. This structure building idea gives one a new conception of learning. The learning process becomes clearer as it relates to behavior.
The whole organism is involved in each act of learning. Learning then takes on a very broad meaning. It is not simply a new way of behaving, but in each new behavior comes a re-making of the whole organism. The far-reaching significance of this conception cannot be disregarded by educators. The whole organism is in some degree changed in each learning experience.

The Committee on the Orientation of Secondary Education thinks that the following propositions are fundamental to the psychology of learning:

1. Learning proceeds more rapidly and tends to be more permanent when relationships between what is being experienced and the welfare of the learner are seen by him. Because of this it is said that the learning situation should be 'meaningful;' 'interest' must be present, or the learner must 'give attention.' In childhood and adolescence the 'welfare' is conceived of as something relatively personal and immediate; with increasing intellectual maturity the learner may be equally well motivated by a relationship to welfare which he recognizes as more remote, impersonal, abstract, and intellectual. He is more likely than the immature to demand that this relationship be seen and accepted.

2. Learning proceeds more rapidly and tends to be more permanent when it is an outgrowth of, or a development from, the experience of the learner. This is a corollary of the above. Therefore, it is said learning proceeds 'from the known to the unknown' or that we must 'build on the past experience of the learner.' The greater the degree of intellectual maturity attained by the learner the more experience there is to build upon.

3. Learning proceeds more rapidly and tends to be more permanent; in proportion to the amount of satisfaction the learner derives from the process of learning, and in proportion to the immediacy of the satisfaction. With the increasing intellectual maturity of the learner, the attainment of the satisfaction by the learner may be longer delayed with less
danger of interfering with or inhibiting learning ideas about what values or satisfactions are to him worth a sustained effort. He is not only a more persistent but a more critical learner. The type of satisfaction must, therefore, vary from such elemental goals as having hunger appeased to more intellectual goals such as preparing for a state bar examination. Consequently, we read that immediate values are more potent than 'remote' ones; 'nothing succeeds like success;' learning should be an 'enjoyable process'; and that for effective learning every learner must have a 'worthy purpose.'

4. Learning proceeds more rapidly and tends to be more permanent when it involves activity—physical and mental—on the part of the learner. This is true whether the activity is simple like 'looking it up in the dictionary' or complex like functioning as a member of a student government body. With increasing intellectual maturity the character of desirable learning activities tends to become more highly organized whether mental or physical, more socially significant and to require a long period of sustained application. If it is self-initiated activity, for much the better as this is indicative that the relationship to one's own welfare called for in "1" above probably is apparent to the learner.

5. The probability that what is learned will later be recalled for use when needed increases in proportion as the learning situation resembles that in which the learning is used or applied. High degrees of intellectual ability and maturity probably supply sheer ability to bridge long gaps between the learning and the use-situations, but there is no advantage in leaving longer gaps than absolutely necessary. The common error in the secondary school is to over estimate the power of the learner to carry over from the learning—to the use-situation. Thus it is argued that 'schools should be life-like;' that activities should be 'drawn from life,' and that Briggs' Golden Rules indicate the general nature of the curriculum.

6. The probability that what is learned will later be recalled for use when needed increases in proportion as the relationships between each element (skill, idea, fact, ideal) which is being learned and the other elements being learned is understood by the learner. It is greatest when many relationships between the elements being-learned-in-relationship
and a larger more complete 'whole' situation are seen by the learner. 20

Conceptions of learning.---Hopkins gives us six important conditions contributing to a desirable conception of learning. They are as follows:

1. Learning is affected by the philosophy of life of the group in which the learning takes place.
2. Learning is conditioned by the available information concerning child growth and development in the culture in which the conception is formulated.
3. Learning is conditioned by the traditions which are already in operation or by the existing theories which lie back of the tradition.
4. Learning is conditioned by the experimentation of the psychologists.
5. Learning is affected by a theory of knowledge and experience. The conception of knowledge and experience affects the attitude toward cooperative interaction, and with it the basis for desirable learning.
6. Learning is conditioned by the results of practices in American schools. 21

These conditions as listed by Hopkins, should always square with the democratic way of life. They are not static, but ever changing with the American democracy. These conditions imply that any adequate conception of learning must be flexible. All conditions which contribute to learning must take in consideration wholesome individual growth and development.

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What is learning?--Hopkins gives four definitions of learning. They are as follows:

1. In the most general sense, learning is any change in the behavior of an organism.
2. Learning is sometimes defined as any desirable change in the behavior of an organism.
3. The additive conception of desirable learning operates today in a majority of schools and is accepted by many psychologists. Learning is acquiring, by conditioned and associative responses, mastery of facts, skills, and other logically organized subject matters set out by adults for children to learn on the assumption that the children may have occasion to use them at some future time. Additive learning is a curious mixture of philosophy, tradition, and psychology. It is a philosophy since it assumes that (a) knowledge should be learned for its own sake; (b) the study of their experiences by children in cooperative interaction with adults represents low quality learning; (c) the main function of the school is to help children prepare for future rather than present life; (d) the needs of individuals in the relatively remote future can be foreseen; (e) the best preparation for the future is to have in hand or in storage facts, skills, and other logically organized subject matters. It is a tradition in that it represents an authoritarian control over children by adults which has been in operation in school and in life for many centuries. It is a psychology in that it represents the process by which the facts and skills are to be acquired. The conditioned and associative responses show that the selection, control, direction, and evaluation of learning is external to the child.
4. Learning is sometimes considered as the progressive changes which an individual makes in the logic of his experience due to his increasingly purposeful efforts to resolve his own personal problems of living more intelligently. This conception of learning is a philosophy and a psychology, but not a tradition. It is a philosophy in that (a) it emphasizes present living; (b) it centers in the personal problems of living of the individual learner; (c) it gives important place to purposeful behavior; (d) it conceives knowledge as emerging through thoughtful inquiry and action in moving experience; (e) it finds direction in the ever more intelligent action of the learners.
It is a psychology in that (a) the unit of learning is an individual facing his own personal problems of living; (b) the control is within the learning situation, not outside of it; (c) the learners see the purposes for they set them for themselves; (d) the learners determine the most satisfactory means to achieve their purposes; (e) individual differences are realistically considered since the same learnings are not expected of everyone; (f) evaluation is a continuous part of the process of attaining the purposes; (g) a great variety of possible learnings in a given situation are taken into account; (h) the improvement of the process in a better logic of experience by each individual is vital to good learning; (i) desirability comes through the creative integrating quality of the total situation, not in the quantity summation of various parts of it.

This conception of learning squares well with the democratic beliefs in creative individuality, the upbuilding of critical inquiry and thoughtful judgments, cooperative interaction, and internal management, direction, and control of the experience. It is not a tradition since it has only recently come to operate in a few classrooms and schools in which teachers and others have felt the inadequacy of the conventional additive viewpoint. Based upon biological interpretations of growth and development, it is referred to as the integrative or organismic approach to learning. 22

Harold Alberty makes five observations on the nature of the individual and eight on the nature of learning. His statements are as follows:

1. The human organism is a dynamic whole that develops in interaction with an active environment.

2. The physical, intellectual, and emotional aspects of behavior are inseparable and operate as a unity in behavior.

3. The goal of the individual (interests, ideals, wants, needs) is the source of the driving power for development.

22 Ibid., pp. 136-141.
4. Human behavior is essentially purposeful and goal seeking.
5. The ability to think reflectively varies with individuals, but all normal individuals possess it in some degree and can improve their ability through appropriate training.

1. **Effective learning takes place when there is a reconstruction of experience, which functions in future behavior.**
2. The reconstruction of experiences begins when equilibrium is upset by doubt, confusion, perplexity; in short, when established modes of behavior are inadequate.
3. Integration is a process of restoring the equilibrium of the individual in the case of organic or environmental upset.
4. Most effective learning takes place when goals are clearly seen and are accepted by the learner as ends worthy of achievement.
5. Reflective thinking is the most effective method of learning since it is the process by which understandings are evaluated and established.
6. Routine and mechanical modes of response have value only as they have meaning to the learner and help him to reconstruct his experience.
7. Learning is a process that involves both analysis and synthesis in relation to wholes.
8. Every new mode of behavior is, for a particular individual creative.

**What the child inherits as a basis for learning.**—Since a child is a simple, biological organism, he is not born with humanness. He has to acquire this humanness as he grows up in a social culture. He begins his life with certain inherited tendencies, which may be potentialities or limitations in his wholesome growth and development. Hopkins lists four of these inherited tendencies:

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23 Harold Alberty, *Reorganizing the High School Curriculum*, pp. 53-54.
1. A child inherits a tendency toward physical characteristics.
2. A child inherits a susceptibility to certain diseases.
3. A child inherits a capacity to learn.
4. A child inherits the capacity of the primary physiological integrating mechanisms which are the nerve and endocrine systems. 24

Since we have discussed certain inherited tendencies, it might be well at this point to give consideration to some things that a child does not inherit. Hopkins says that a child does not have the following tendencies at birth:

1. A child is not born with a tendency to be a troublesome child in school.
2. A child is not born with a tendency to be morally or socially good or bad.
3. A child is not born with a tendency toward any particular life occupation.
4. A child is not born with a mind, but he is born with a brain. The mind is developed by the child as he grows up in the culture. 25.

The place of integration in learning.—The place of integration in learning based upon the conception of the whole-part relationship in which the whole is primary and therefore comes first. Hopkins discusses the place of integration in learning with the parts coming second since they are developed out of the growing whole. His discussion of integrative education follows:

The parts come second since they are developed out of the growing whole. This means that all life starts from very simple yet whole beginning. The complex structure which later develops either in the physical organism or its behavior is developed in, through, and from this simple wholeness which was the beginning. The process by which these parts come into being has three important aspects. The first is expanding, in which the simple whole increases its size, thus occupying larger area. A second is differentiating, in which various related parts are brought into being or created by the whole organism. The third is integrating, in which the organism the differentiating parts into functional unity so as to preserve and elevate the wholeness of the growing life. Thus the key words in the part-whole relationship in living organisms are expanding, differentiating, and integrating.

A simple illustration of this process is found in a seed. When placed in sympathetic environment which gives it warmth and moisture the seed begins to expand. It is now larger, but it is still a unitary whole. Soon parts begin to differentiate. Roots go down into the ground and shoots come up into the sunlight. As the roots take up minerals from the soil and the sunlight turns them into food for growth, and the plant begins to put out new parts. The original stem thickens, the branches appear, the leaves develop. Eventually buds begin to form. Each of these parts functions in the total life of the plant. When anything happens to a part so that it loses this integrating relationship, the part withers and dies. The original seed or the original small whole has now disappeared. In its place there is a large plant with its many cells and its complex organization, but with its unitary functioning which is the very essence of the life from which it grew. This process of differentiating and integrating parts into a complex structure is known as the organic conception of wholeness. It is the only tenable conception of integration for living organisms.

Principles of learning.—Kilpatrick has this to say about principles of learning:

The organism (in a case of learning) contrives a new response. If this reduces the disturbance, it is accepted for future use. Learning has so far taken place. The principle of 'effect' is written thus in the very constitution of learning. And 'satisfaction' (to use Thorndike's term) is explained. This comes not from some prior existing pleasure, but the reverse. Pleasure from eating, for example, depends (as everyone knows) upon satisfaction of appetite, and appetite here appears simply as organic urge or 'upset' due to depletion of energy within the body. Satisfaction in essence is successful restoration, actual or promised.

We may restate the foregoing from a slightly different angle. That the organism should, under the conserving aspect of learning, incorporate into itself as abiding new structure the selected results of experience is perhaps as marvelous a fact as anything known to man. But we are not content to marvel; study should aim to find the conditions under which such incorporating (learning) takes place. The answer seems to be that what one thus learns (incorporates) in and from an experience depends on what one accepts from it. The fact of present organic acceptance as basis for further conduct seems to determine the fact of learning (organic incorporation). As we engage in conduct, we accept elements in the process variously as facts to act upon, as ends to work for, as plans to guide action, as attitudes to act on, as movements (skills) to work with. When we try these out, some we reject or modify, others we accept as now suitable for subsequent use. Whatever then stands the test of thought and trial so that we accept it for subsequent action, that we learn and it becomes a part of us. It must be insisted in connection that one learns only and exactly with and under the conditions and limitations that enter into the process of acceptance. To make acceptance fundamental in learning seems to force attention and emphasis where it belongs, namely, upon the organism acting as a whole. In the case of humans, conscious consideration has thus its proper opportunity of serving focally in the fact of learning. 27

Hopkins discusses principles of learning as they are grounded in the integrative viewpoint:

1. An individual learns best when he has his own purposeful goals to guide his learning activities.
2. An individual learns best when he is free to create his own responses in the situation which he faces.
3. An individual learns best when he is free to make his own organization of materials in the process of satisfying his own purposeful goals.
4. An individual learns best when he can share cooperatively in the management of the learning experiences with his fellows under the guidance but not the control of adults.
5. An individual learns best with sympathetic adult guides, such as parents and teachers, who know and understand him as a growing personality.
6. An individual learns best with adults who view learning as a genetic process, not as mere immediate overt behavior.
7. An individual accepts and acts upon the learnings which he believes are personally valuable to him.28

Wheeler and Perkins give eighteen important facts about learning. Their summary of the learning process follows:

1. Learning is a growth process.
2. The growth takes the form of maturation when regarded from the standpoint of the nervous system.
3. The growth takes the form of an evaluation of insight when regarded from the standpoint of the organism's experience.
4. The growth occurs in an orderly fashion through a definite cycle from undifferentiated to differentiated response. It is an expanding differentiating unit of behavior. Local individuated movements, such as reflexes, do not integrate.
5. Learning is the expression of a potential.
6. This growth potential, expressing itself in maturation, differentiates under stimulation and resolves itself toward remote ends. This means that mental development is a goal-activity.
7. Particular processes of learning commence in tensions that are relative to remote ends (low potentials) and, therefore, demand resolution toward goals. Expressed psychologically, they commence with purpose and demand fulfillment.

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8. The picture of the learning process is that of an undeveloped pattern of response, demanding completion through expansion and individualization.

9. The energy of the learning process is derived from internal and external stimulation; the effects of the one are relative to the effects of the other. In other words, the learner is responding to a total situation and the goal is the locus in that situation.

10. There is no learning without the will to learn, because the will to learn is the only factor that, in human life, satisfies the procedure demanded by the laws of dynamics. The will to learn is the energy of the total organism conditioning the activities of its parts.

11. At no stage in the learning process is there random activity. To interpret learning in this way commits the fallacy of the double standard.

12. Each step in the learning process is organized under the law of least action. The most direct route to a given goal depends upon the alignment of stresses induced by the stimulus-pattern, and upon the degree of maturation of the learner.

13. That situation will always be responded to which best resolves the learner's tension.

14. There is always motivation in learning. Motivation is the process of raising potentials. This comes about in two ways: First, through intraorganic stimulation. This stimulation gives to learning its emotional aspect. Second, motivation comes through external stimulation in such a way that the stimulus pattern provides a problem within the learner's level of insight. This is motivation by giving the learner understanding into the situation to which he is responding.

15. Motivation is a process of energizing and definitizing the learning process. Motives are not external to learning; they are the aspects of the more rapid and efficient learning that comes, first, with intensity of stimulation and second, with the fitness of the problem with respect to the learner's level of insight.

16. The development of the nervous system of motility in the embryo, of motility in the infant, of co-ordination of movements in children and adults, and of perception and thinking, all follow the same fundamental set of laws.

17. There are not laws of learning that are not also laws of intelligent behavior, volition, emotion, and personality.
18. Learning does not take root in instinct or drive, or in the original nature of man, as ordinarily understood, for there are no instincts or drives, nor is there an original nature of man. Man has the same nature when old as when young; his behavior is no different in principle at any two stages in his development. Searching for food, self-protection, and solving calculus are to be explained by the same set of laws applied to different sets of stimulus-conditions and levels of maturation. 29

Burton summarizes the salient characteristics and principles of learning:

The Characteristics of a Learning Organism
1. The learner is a behavior organism. Activity is primary and continuous.
2. The learner is a goal-seeking organism. Activity is directed toward and controlled by purposes.
3. The learner reacts to whole situation or total patterns and not to isolated or abstracted parts thereof.
4. The learner reacts as a whole. He reacts all over intellectual, emotional, and physical reactions being simultaneous.
5. The learner reacts in a unified way. Unless interference occurs, his total reaction, intellectual, emotional, physical, is coordinated and integrating toward achievement of purpose and products.

The Characteristics of Learning Processes
1. The learning process is experiencing, reacting, doing, and undergoing.
2. The learning products are responses and control of response, values, understandings, attitudes, appreciations, special abilities, and skills.
3. The learning process proceeds best when the numerous and varied activities are unified around a central core of purpose.
4. The learning products accepted by the learner are those which satisfy a need, which are useful and meaningful.
5. The learning process proceeds and the learner grows through continuous individuation of new patterns out of original wholes.

6. The learning products are perfected through a series of discrete, identifiable experiences.
7. The process of organization implied in 5 and 6 may be slow and gradual, or relatively rapid or sudden.
8. The learning products, when properly acquired, are complex and adaptable, not simple and static.
9. The learning experiences, to be of maximum value, must possess lifelikeness for the learner.
10. The learning experience, initiated by need and purpose, is likely to be motivated continuously by its own incompleteness.
11. The learning process and its products are conditioned by heredity and environment.
12. The learning process and its products are affected by the level of maturity of the learner.
13. The influence of previous experiences upon learning is regarded quite differently by the two major schools.
14. The presence of many errors in a learning experience is usually, though not always, an indication that the experience is too difficult for the learner's level of maturity.
15. The learning process and the acquisition of products are materially affected by individual differences among the learners.
16. The learning process proceeds best when the learner has knowledge of his status and progress.
17. The learning process is unified functionally, but distinguishable types of learning may be separated for discussion.
18. The learning products are interrelated functionally but may be listed separately for discussion.
19. The learning process proceeds more effectively under that type of teaching which guides and stimulates without dominating or coercing. 30

Fox, Bish, and Ruffner give a summary of learning as follows:

Learning may be defined as the process which results in a change in the behavior (psychological function as well as motor functions) of an individual brought about by action taken in response to a felt need. Different kinds of learning may be identified, and in terms of educational objectives learning may be

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divided into the following areas: skills and habits, knowledge and understanding, and attitudes and ideals. These different kinds of learning call for different kinds of activities to be used in the learning process. Learning takes place in an individual through seeing, hearing, feeling, smelling, or tasting something which causes him to recognize a need, thereby causing a change in his behavior.

Seven general characteristics of all learning are as follows:
1. Learning is growth-like and continuous.
2. Learning is purposeful.
3. Learning involves appropriate activities that engage a maximum number of senses.
4. Learning must be challenging and satisfying.
5. Learning must result in functional understanding.
6. Learning is affected by emotions.
7. Learning is affected by the physical and social environment.

Teaching

The task of the teacher.-- It is the responsibility of the teacher to guide and direct the pupils in preparation for the art of living. In performing this responsibility, he should live with the child. In keeping with this viewpoint, Wheeler and Perkins list four tasks of the teacher. They are as follows:

1. Guardianship over personality
2. Stimulating the development of intelligence
3. Motivation of the child
4. Directing of specific learning processes with over-emphasis upon 'efficiency.'


Ruth Strang, in writing on personnel work of the teachers, gives a summary in the first chapter that gives light on the task of teachers. Her summary follows.

1. Studying individuals in order to ascertain their specific interests, needs, and abilities.
2. Providing curricular, extra-curricular, and vocational opportunities suited to individual needs and abilities.
3. Guiding individuals into useful work and healthful recreation that will develop their abilities. 33

Winifred E. Bain says that:

Teachers need to have much knowledge about the usual growth and development of children. They need to know how individual children may differ in varying respects. Then, too, they should understand how different factors affect the growing child; how one child may be shy and retiring because of an over-aggressive parent, another may be troublesome and combative for the same reason, while still another may be forward going and trustful because of the security which he has always felt in his home surroundings.

No small job this of understanding one child and another—all somewhat the same, yet all different. After one understands, it is no small job to adjust the work of the school to the needs of the children. You are impressed with the fact that the teacher must needs be a scientific person. You always knew that a physician had to be scientific to be able to understand what was wrong with innermost parts which function but which are not seen; but somehow you had thought that a sentiment of love for children, oh, not too sentimental, was one of the highest qualifications for a teacher.

There was Miss X who taught your father and mother and lingered on to teach you. Her devotion to the children was unceasing. Every one in the community adored her, but she didn't know about the eyes, the nerves, the bones, and the glands, nor mental ages, nor fears. She knew that children learned through repetition, and she loved children and loved to teach them.

'Can a teacher be too scientific,' you ask. Never.

But it is conceivable that one might be unbalanced in

33 Ruth Strang, The Role of the Teacher in Personnel Work, p. 15.
her emphasis on scientific findings and fail to apply them in a human, natural way. Children need affection. They need to have someone like Miss X who loves them and enjoys teaching them. But need scientific knowledge of children dim the human quality? The more one knows about children, the better able one should be to direct affections wisely and the better able to know what to do for each child. 34

Harold Spears has formulated eighty-nine principles of teaching. He discusses seventy-seven of them, and lists twelve others that speak for themselves. Fourteen of them may have some value for this study. They are given below as they appear in his book.

9. Good teaching is a matter of drawing-out rather than a matter of putting-in.
15. The student who is learning is working for himself rather than for the teacher.
16. We must not mistake conformity for learning.
17. Learning begins where the learner is, not where the teacher is.
18. Learning begins where the child is now, not where he was yesterday or where he will be tomorrow.
19. The teacher cheats the child of part of his education unless he permits him to engage in all three of the closely related aspects of a learning situation, namely, (1) planning the experience, (2) carrying it out, and (3) evaluating it.
24. Educators need to respect the research that has been carried out in their profession, just as any other profession follows its findings.
26. The teacher is a director of learning rather than a hearer of lessons.
43. No two pupils are alike.
50. Whether he realizes it or not, a feeling of belongingness is the first thing that a school child asks of the new classroom or the new school that he enters.
64. The curriculum represents the total life of the school.

34 Winifred E. Bain, Parents Look at Modern Education, pp. 86-87.
65. The curriculum is something to be experienced, rather than something to be learned.
69. Most teachers have more freedom in determining what they teach than they seem to think they have.
79. Learning takes place better when the pupil knows where he is going and that place is somewhere that he wants to go. 35.

Yoakam and Simpson point out that good teaching is characterized by certain basic principles. They are:

1. Good teaching involves skill in guiding learning.
2. Good teaching is kindly and sympathetic.
3. Good teaching is well planned.
4. Good teaching is cooperative.
5. Good teaching is suggestive.
6. Good teaching is democratic.
7. Good teaching is stimulating.
8. Good teaching takes into account the past experiences of the children.
9. Good teaching is progressive.
10. Good teaching diagnoses difficulties.
11. Good teaching is remedial.
12. Good teaching liberates the learner. 36

Yoakam and Simpson think that persons who wish to be teachers should make a serious study of the art. They have this to say about the study of teaching:

The nature of teaching demands that persons who wish to be teachers shall make a serious study of the art. It has its history. There are more classics based upon teaching and upon great teachers. The importance of teaching requires that a study be made not only of its history and philosophy, but also of its fundamental techniques and of its current practices. Without this study, the novice will fail to get a true

35
Harold Spears, Some Principles of Teaching, pp. 25-143.

36
understanding of what teaching means and will be unable to obtain from the practice of teaching the supreme satisfaction which it gives to persons most devoted to it.

Such a study of teaching should include an introduction to education in its larger aspects, in order that the student may know how to choose a field for study. Either concurrently or immediately following, a study of the nature of learning should be undertaken in order that the student may appreciate the function of teaching and how it may accomplish its function. This experience should be followed shortly by an introduction to the techniques of teaching and learning, with abundant observation of 'in school situations' and with as wide a reading as possible of the literature of teaching side. General preparation should then be supplemented by practice teaching and more careful study of special methods and techniques which the teacher is to use in his profession. It goes without saying, of course, that parallel with this study of teaching should go a study of the major fields in which the teacher wishes to practice.

The study of teaching should be conducted under the guidance of ably trained instructors, masters of analysis, and thorough judges of good teaching in all its aspects. Such study should be continued until the student has assimilated at least the basic principles of the art.

It cannot be expected that in the pre-service period a prospective teacher will master the art of teaching. Years of experience are essential to a complete mastery of this difficult art.

There are two distinct viewpoints as to the meaning of teaching. Hopkins discusses these as follows:

The first represent the authoritarian, atomistic conception in which (1) the teacher is superior to the pupils in administrative authority; (2) he knows what subject matter is to be taught or what subject matter the pupils are expected to learn, whereas they are relatively ignorant of it; (3) he controls and directs the process of learning toward his own preconceived ends; and (4) he evaluates the results of learning.

Ibid., p. 10.
through his measure of the performance of pupils. The second viewpoint is the integrating conception, in which (1) the teacher is a guide in the learning situation rather than controller and director of it; (2) he removes to the remote background his administrative authority and becomes a cooperating member of the group; (3) he places his more mature experience at the disposal of the group as a means toward more adequate study of their problems; (4) he emphasizes improving the process of inquiry, attaining greater validity of judgments and making reasonable choices of action; (5) he helps the children develop their subject matters in the process of inquiry into their problems; and (6) he aids them to evaluate by increasingly better means the results of their own efforts. The teacher who is a true guide becomes a learner in every situation with his pupils. He reads, studies, thinks, plans, advises, and leads, but he expects each pupil to grow in each of these same activities. 38

Burton summarizes the salient characteristics and principles of teaching. His characteristics of the teaching process are as follows:

1. The teacher will aid pupils in defining their purposes; set the stage for the emergence of desirable purposes.

2. The teacher will aid pupils in distinguishing between levels and types of purposes; will aid them to choose those leading to outcomes deemed desirable by our civilization.

3. The teacher will guide or direct pupils in planning procedures for the achievement of their purposes. That is, she will guide or direct learners into experiences possessing maximum lifelikeness, which satisfy the selected purpose which are continuous and interactive. Direct experiences will perforce be supplemented by vicarious experiences which should be as vivid as possible.

4. The teacher will guide pupils in a sufficient number of these experiences to guarantee, as far as it can ever be guaranteed, the acquisition of desired outcomes.

38 Hopkins, Interaction, Its Meaning and Application, pp. 142-143.
5. The teacher will guide pupils into or will provide for numerous and diverse learning activities. That is, she will provide for responses from the whole organism.

6. The teacher will aid pupils in selecting experiences fitted to their abilities, needs, interests, and levels of maturity. That is, she will adapt learning experiences to individual differences among learners.

7. The teacher will aid pupils in discovering how to judge their own progress, and will encourage the constant self-evaluation of status and progress. 39

Growth

Research has given use to many generalizations about how learners grow and develop. We can no longer ignore the factors of individual growth and development in curriculum designing. These generalizations are available in published resources and should be known and understood by all who deal with learners. We know that the individual reacts as a whole. We know that physical, mental, emotional, and social growth and development are inseparable and equally important phases of individual growth and development and that the "whole individual" must be given due consideration in building the curriculum. We know that maturity and readiness are important factors in learning and school programs should be adjusted to these factors.

Ernest R. Hilgard of Stanford University explains maturation versus training as follows:

Growth is learning's chief competitor as a modifier of behavior. If a behavior sequence matures through regular stages irrespective of intervening practice, the behavior is said to develop through maturation and not through learning. If the training procedures do not speed up or modify the behavior, such procedures are not causally important, and the changes do not classify as learning. Relatively pure cases like the swimming of tadpoles and the flying of birds can be attributed primarily to maturation. Many activities are not as clear-cut, but develop through a complex interplay of maturation and learning. A convenient illustration is the development of language in the child. The child does not learn to talk until old enough, but the language which it learns is that which it hears. In such cases it is an experimental problem to isolate the effects of maturation and of learning. The ambiguity in such cases is one of fact, not of definition. 40

We have known for a long time the extent and nature of individual differences, but our school programs are still highly resistant to the establishment of procedures for adapting to individual differences. Uniform texts for all, inadequate library sources, lack of guidance and supervision, and large graded classes are but a few of the areas that need educational attention. If progress is to be made in the proper growth and development of our youth, we must give immediate consideration to this phase.

Stratemeyer discusses growth and the learning process as a guide to curriculum development.

Children need to be understood and treated as the individuals they are, each with his unique potentialities and rate of growth, each with his own background

40 Ernest R. Hilgard, Theories of Learning, pp.4-5.
problems to be solved, specific habits to be formed, interests and curiosities to be satisfied. The curriculum must reflect these differences among learners. This is important if the essential democratic value of respect for personality is to be realized. It is important if natural growth trends are to be recognized and if the educational program is to foster the learning process rather than interfere with it or set up additional conflicts for the learner. Children and youth should be studied to discover their differences, not with the idea that these should be eliminated but with the recognition that much of the richness of living and many of society's significant achievements come from the wealth of diversity in capacity, interest, and viewpoint. Those who would aid children and youth in achieving maximum development are faced with the problem of building a flexible curriculum geared to the needs and potentialities of individuals.

We know that anecdotal records and cumulative records, containing the growth and development of individuals, would be an asset to our dealing with youth; but somehow the schools are poorly organized to give the proper considerations to these important ways of promoting growth.

We know that growth is a continuous process from the time life begins as a cell until senility. Each normal individual has a constant rate of growth, and follows a straight line of development, even though he may have certain spurts in his emotional, social, physical or mental development.

An individual's growth comes through his co-operative participation. This shows that personalities are

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41 Stratemeyer, Forkner, and McKim, op. cit., p. 57.
interdependent and are related to the growth of the whole situation in respect to the other personality members of the group. Each individual evolves as a single pattern of behavior. His intellectual growth is determined by his ability to develop and by the motivation derived from his environment.

Growth shows that there is unity in the organism, and unity between the organism and the environment. The one directing the learning process should be careful to make the best environmental adjustments possible. The individual's needs should be investigated and the instructor and the individuals should have a unified purpose in fitting into their curriculum any worth-while interest of their environment.

There are several characteristics of growth effected by proper simulation or hindered by lack of proper simulation. The growth of knowledge is a succession of mental acts becoming more discriminating and more integrative in the real world.

The relationship between an organism and its environment is very close. Haldane has this to say about the relationship:

An organism and its environment are one, just as the parts and activities of the organism are one, in the sense that though we can distinguish them, we
cannot separate them unaltered, and consequently cannot understand or investigate one apart from the rest. 42

These are strong words, but they appear to represent the trend of thought in the field-theory conception of psychology.

Wheeler and Perkins discuss growth as expansion:

The human being grows in the course of cellular multiplication, but growth is the expansion of a dynamic field, not an accumulation of cells. As the body develops, its tissues become more specialized or differentiated into types and organs. Societies come into being through expansion. The mere addition of numbers does not adequately describe the process. Addition or accumulation must be defined as expansion and differentiation. 43

Hopkins thinks that crises in growth have much educational significance. He has this to say about it:

When the growing pupil is striving to assimilate the accumulated and basic knowledge of the world; when he is striving to discover a logical relationship between the various areas of knowledge; when the real and the ideal impinge upon him from different angles; when his latent feelings seem to be at variance with the tone of adult life which surrounds him; when his relations with others become more a matter of choice than of accident or proximity; when these relationships precipitate problems of right and wrong, candor and secretiveness, beauty and ugliness, fairness and injustice; when the growing person reaches this stage in experience, his educational experience should be infused and transfused with value.

Though crises in growth occur throughout the life of the learner, there is one period in which a series of crises furnishes and excellent opportunity for integrating educational experiences. It begins,


approximately, at that period when the pupil enters the first of the last two grades of the standard elementary school and continues until he reaches the last of the first two grades of secondary education. In other words, it begins when the child leaves the seventh grade and when he is about to enter the eleventh grade of a standard school system. These four years (approximately) of pubescence and early adolescence constitute that stage in growth when the confluent problem of adaptation reveals acute needs in the spheres of logic, emotion, ethics, and esthetics. This is, then, essentially a value-stage in growth. Unhappily, however, youth is confronted at this age with at least two formidable barriers: in the first place, the institutions of society as represented in the community are not prepared to grant a sufficient amount of freedom for the proper exploration of value spheres, and in the second place, the school is not equipped to supply appropriate nourishment for the pupil's value-needs. The teachers who guide youth at this period are not themselves trained in philosophy. In fact, it is at this very point that the pupil first comes into contact with specialized teachers who know some single field or subject-matter but know practically nothing about other subjects nor about the relationship between subjects. The flood of subject-matter which now descends upon pupils in rivulets streaming from academic departments, each with its label, and each in turn demanding a separate loyalty begins the first of those vicious separations in our educational system which keeps learning from being an integrative experience.

Douglas and Holland list six general principles of growth and maturation. They are as follows:

1. Growth is irregular, each organ having a different rate of increase; the growth curve for the brain, for example, will differ somewhat from one for the growth of a skeleton. Moreover, general physical growth proceeds at an irregular pace, being more rapid at certain periods than at others.

2. Some organs maintain a rate of growth in harmonious proportion with the growth of the body as a whole. This is true of the bones and muscles. Other

organs, however, grow rapidly and stop, maturing at an early age; and still others have a long period of slow growth and reach maturity late in life.

3. Organs most nearly mature at birth reach maturity earlier than those that are less mature and are less influenced by intrinsic factors than are the less developed traits.

4. Individuals differ in the rate of growth and in the levels of maturity attained, but these differences tend to remain about the same during the total period of growth and development. A tall individual at infancy, for example, remains relatively tall throughout life; or a short infant usually becomes a short man or woman.

5. The growth of a particular organ in a given individual tends to maintain a relatively constant relation to the growth of the same organ in other individuals so that growth curves for various individuals tend to have the same general form.

6. Irregularities in the growth of a particular person or organ are most likely to be caused by environmental than by hereditary factors. By 'irregularities' is meant any unusual fluctuation or variation in the size, weight, or developmental status of that person or organ when such irregularities are not observed in the growth and development of other individuals. Such irregularities are most frequently due to inadequate sunshine, improper feeding, diseases, infections, etc. When an environment free of irregularities, as noted above, is provided, heredity tends to conserve individual similarities and differences at all stages in life. 45

Experiences

An experience may be defined as a process of responding to a whole wherein the individual refines his meanings and understandings by differentiating the mutually dependent parts from the whole. For example, an individual responds first to an image. His first impression of a bush is that it is like

45 Douglas and Holland, op. cit., pp. 102-103.
an umbrella without limbs, leaves or bark. Later, through the process of differentiating, these new wholes are recognized. Thus meanings and understandings are developed through a process of refining. A good experience is based on past experiences that have high educative quality.

Every experience should do something to prepare a person for later experiences of a deeper and more expansive quality. No individual can learn without having experiences which will enable him to have a proper understanding of his environment. Experience is of the right type only when objective conditions are subordinated to what goes on within the individual having the experience. The experience must be a whole life experience and should be related to past experiences if it is to be of interest to the individual.

Caswell and Campbell say that an experience has its beginning with purpose:

The development of purpose is the dominant characteristic for the initial stage of experience. The pursuit of activities to achieve the desired end then tends to become dominant. And finally, there is a tendency to react to the total series of activities, or, in other words, to evaluate them. Thus, purpose may be considered an element of experience which interacts continuously with other elements to make experience what it is, but which is especially pronounced during the initial stages of an experience.

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Stratemeyer, Forkner, and McKim point out the duty of the teacher in regard to helping the children to find the areas in which they need experience:

It is a function of the teacher to guide learners in going beyond the immediate situation, helping them to become aware of related problems, to see further implications of the immediate situation, and to grow in ability to deal with the persistent life situations which are a part of it. It is the responsibility of the teacher to assist the learner in identifying areas in which he needs experience and competence and of which he, himself, may or may not be conscious. 47

Hopkins discusses the experience of the individual as a biological need:

The individual needs opportunity for rich and varied experiences. A reasonable variety of experience is a tonic to the organism affecting all cells throughout the body. This gives a healthy tone to the body processes which is favorable to normal growth of all individuals at all age levels. Richness gives the depth which every growing organism tends to explore. To deny either of these circumscribes the normal movement of the organism and tends to build abnormal ways of behaving. On the other hand, an environmental demand of too great an amount and intensity of varied experience tends to be as unadjustive to some individuals as too limited an amount. Many children may be too shielded and protected in some homes, whereas in others they may be overstimulated. This is also true in schools. The amount, variety, and richness of experience must be determined by the effect of such experience upon the behavior of the individual. 48

Hopkins defines experience as follows:

Experience is the continuous interaction of what at the time constitutes the individual and what at the

47 Stratemeyer, Forkner, and McKim, op. cit., p. 83.

48 Hopkins, Integration, Its Meaning and Application, p. 182.
time constitutes the environment. It is continuous, relative, mutual, and contingent. 49

Experience is the interaction of an individual with his environment. Since this is true, the school should promote a high type of experiences that have high educative quality. Hopkins lists twelve criteria to test experiences:

1. The experience must begin with and continue to grow out of the real felt needs of pupils.
2. The experience must be managed by all of the learners concerned—pupils, teachers, parents, and others—through a process of cooperative democratic interaction.
3. The experience must be unified through evolving purposes of pupils.
4. The experience must aid each individual to mature his experiences by making progressive improvements in the logic of such experiences.
5. The experience must increase the number and variety of interests which each individual consciously shares with others.
6. The experience must help each individual build new and refine old meanings.
7. The experience must offer opportunity for each individual to use an ever-increasing variety of resources for learning.
8. The experience must aid each individual to use a variety of learning activities compatible with the variety of resources.
9. The experience must aid each individual creatively to reconstruct and expand his best past experience in the developing situation.
10. The experience must have some dominating properties which characterize it as a whole and which usually give it a name.
11. The experience must close with a satisfactory emotional tone for each participant. 50


50 Hopkins, Ibid., p. 218.
Stratemeyer, Forkner, and McKim give an insight into what experiences the curriculum should afford the pupil:

The school curriculum, then, like the learner's out-of-school curriculum, centers in individual and group concerns of everyday living that are meaningful to children and youth in the world in which they live. They are the situations with which the individual or his group is trying to deal—caring for wraps or other personal property, sharing materials with others, deciding how to spend an allowance, keeping clay moist for the needed period of working time, working effectively as a member of a group, deciding how to spend free time, considering the implications of governmental legislation for the general welfare, securing information to supplement a newspaper report about life in another country. These are typical of the experiences and situations with which education must deal. They are the situations and experiences which have meaning for learners, for which they are ready, and from which maximum learning will result. 51

A careful study of the data given regarding integration, behavior, learning, teaching, growth, and experiences has been made and the psychological criteria of soundness will be chosen from these data to be used in Chapter IV in the designing of a curriculum pattern with field psychology as a basis for order.

51 Stratemeyer, Forkner, McKim, op. cit., p. 78.
CHAPTER III

ANALYSIS OF SOME CURRICULUM PATTERNS

There have been many meetings and clinics held to re-organize the curriculum. It is, perhaps, the most pressing problem facing educators today. If any progress is to be made, it will have to start with an insight into the nature of the problem as a whole. This objective will direct one to begin with the curriculum in its early stages and trace its development as various patterns have been produced.

Research in this field reveals that there has been a constant struggle for curriculum revision that has gained great momentum since the beginning of the century. The problem can never be solved once and for all but must be met again and solved again every day.

Krug discusses the stages we have passed through in the curriculum development movement in American education:

Our present situation in curriculum development is one point in a continuous historical process. To see a few of the ways in which our past has led up to our present, we arbitrarily identify four previous stages: (1) that of following and adapting the curriculum of the European heritage; (2) that of defining the curriculum through national committees of experts; (3) the scientific measurement movement; (4) the society-centered, democratic 'curriculum development' movement. Perhaps today we are entering a new stage,
as yet unidentified by name, in which the concepts of social dynamics will play a large part.

Following and Adapting the European Heritage

A number of complex historical factors came together to produce the educational pattern characteristic of seventeenth-century culture on the European continent and in the British Isles. This pattern was symbolized by the humanistic secondary school, a product of the Renaissance, dedicated to the mastery of the ancient classics, plus selected features of the old 'seven liberal arts' curriculum. The mastery of Latin and Greek was seen as the means of liberating man from medieval other-worldliness so that he could enjoy and improve the life of this world. As time went on, however, the mastery of Latin and Greek became more an end in itself and came to depend upon the theory of formal discipline for its justification.

National Committees

The next stage in our curriculum history consisted of having small national committees go to work on the various school subjects. This movement probably arose out of a feeling that we should start doing something ourselves more consciously to order and direct the school program. The form it took probably arose out of a preoccupation with the selection of content and the feeling that a small group of scholars in the content fields were most competent to make this selection. There are still many people today who feel that the only efficient way to develop curriculum is to get a small group of experts together and let them work it out.

The Scientific Measurement Movement in Curriculum

The movement for the scientific study of education brought with it the scientific determination of curricular objectives and materials. Bobbitt and Charters led the movement to arrive at curricular objectives by a quantitative determination of adult activities. Billings made an excellent analysis of basic generalizations in the social sciences held by a large number of authorities in those fields. Washburne and the Committee of Seven tried to get at the most favorable age levels for the introduction of operations in arithmetic.

In the public schools, this scientific measurement emphasis was translated into the writing of detailed course of study materials. Teachers were drafted for service on committees to prepare content outlines for the various instructional fields. Theoretically, this content selection was to serve purposes scientifically and objectively predetermined. Curriculum
development was seen as proceeding logically from objectives determined in the initial phase of the program, through selection and arrangement of materials, to the tryout of the materials. The tryout was supposed to proceed along scientific lines and to give the answer to the problem of retaining, selecting, or rejecting curriculum content.

The Society-Centered Democratic Movement

This is the movement which has given rise to the greatest amount of controversy. It has seemed to be almost impossible to write or talk about this movement without falling into the temptation to indulge in uncritical laudation or in bitter caricature.

It might be said that this movement combined a variety of possible reactions against the three previous curriculum movements in American education. For one thing, it was definitely a revolt against following tradition, European tradition or any other variety. It was hooked up to the pragmatic-experimental philosophy and its distrust of the traditional philosophies, which were for the most part European in origin. Then, in the second place, it was a revolt against the kind of prestige authoritarianism symbolized by the committee movement. This revolt featured the idea that the classroom teachers of our country knew as much about what ought to be done as a small group of 'experts.' In fact, one feature of the movement was the use of the term 'expert' as a negative symbol! And, in the third place, the movement represented a revolt against the tyranny of quantitative measurement, which was denounced as atomistic, mechanistic, and deterministic in its direction and influence.

The movement also revolted against some of the characteristic activities of the preceding movements. It rejected the 'quest for certainty,' at least in the attempt to discover and state absolutes. Since the small committee movement had emphasized the outlining of content, the new curriculum movement rejected course of study writing and went so far as to discredit getting anything down on paper. One of the characteristic activities of the 'scientific' students of education had been the conducting of experimentation, and such studies, particularly if employing statistics, became suspect in the new curriculum movement.

Harold Rugg makes a historical survey of curriculum-making during the past century. His survey reveals that the gap between the curriculum and current civilization has been markedly cut down by changes made in purpose, in leadership, in method, in content and in organization of the curriculum. His discussion of these changes follows:

Change in Purpose

In the first place there is the change in purpose. The theological orientation of the colonial Latin grammar school and of the early academies gave way to a half-century of 'knowledge for knowledge's sake' and rigorous mental discipline. The disciplinary purpose of education, so all-persuasive in the latter half of the nineteenth century, was slowly displaced under the attacks of the dynamic psychologists by the fundamental principle of maximal child growth at minimal expense.

So today in America we find advocates of both the disciplinary and the growth function of the school. College and secondary instruction is still organized much more largely on the former basis than on the latter. It is in a small but increasing number of progressive public and private centers of educational reform, especially in elementary schools, that the curriculum is controlled more by child activity, spontaneity, creative self-expression than by conformity, regimentation, and unquestioning acquiescence. The desideratum in the work of the more eclectic reformers seems to be that of disciplined initiative, rather than chaotic freedom on the one hand or regimented conformity on the other.

Correspondingly the great aim of a tolerant understanding of and an active participation in contemporary life is slowly taking its place beside the fundamental creative one of growth through self-expression. Recently the dynamic psychologist has modified our thinking concerning the disciplinary functions of instruction. A generation of research has taught that training in tolerance, in generalization, must be given through the direct study of contemporary issues and problems and their historical development. The formerly prevailing conception of general mind-training through content remote from American life is being discarded.
Change in Leadership

This change in goals, in orientation, has been brought about primarily because of the change in leadership in curriculum-making. The end of the century is revealing the emergence of new types of professional curriculum-makers.

The past two decades have shown the manifold nature of the tasks involved in the preparation of the activities and materials of instruction for the great public-school system. The setting of ultimate and immediate objectives, the wise selection of content, the discovery of child interests and abilities, the adaptation of materials to levels of growth and to individual differences, and the organization of activities and other materials—all these jobs are difficult and can be managed only by those with definite training and experience. Curriculum-making increasingly has become a co-operative enterprise. Frontier thinkers, poets, and other singers of American life, students of child learning and educational administration, and specialists in measurement and experimentation must join hands with the students of subject-matter values if the staggering problems of curriculum construction are to be solved. Already the foundations are being laid for the co-operation which will produce the new curriculum of tolerant understanding and creative self-expression.

Change in Method

Personnel determines procedure. The new point of view which is setting up child growth and intelligent understanding and participation in place of academic scholarship and mind-training is also beginning to utilize more scientific and unprejudiced methods. Educational classrooms are responding slowly to the demands of the laboratory spirit. In many centers the armchair is being scrapped. The critical eyewitness recorder of school activities is beginning to replace the armchair writer of scholastic textbooks. There is a growing willingness to try new types of materials in public schools, to experiment with new groupings of school subjects, to compare alternative procedures, and to depend more and more upon objective measurement of results. Advances are being made, even though but slowly.

Change in Content

The new procedures and the new vision are steadily cutting down the lag between American society and the school curriculum. The subservience to morphology, to the very ancient past, to the classical, to the academic, is beginning to be replaced by a dynamic interest in contemporary life. Hundreds of schools do give courses in 'problems of democracy,' even though the instruction is reserved for only those few who remain in school
until the last year of the high school. An increasing number of schools do discuss how people live together and how they are affected by their physical and natural environment. Every year sees a larger area of the nation throwing off the worship of British Victorian literature and utilizing in its place the indigenous writings produced by a growing American culture. Nevertheless, even when viewed in the perspective of a hundred years of development, progress toward the development of a dynamic school curriculum is slow. If for no other reason than to speed up the process, we need to master a vivid historical perspective of the movements of which we are now an active part.

Change in Organization

Although progressive change is clearly discernible in the purposes, personnel, procedure, and some extent in content, the 'subject,' or 'compartmental,' organization of the materials of the school curriculum responds least easily to the demands of the times. Teaching in the mass-school is still badly hampered by the barriers between the school subjects. Learning is still inhibited even more than it is promoted by the network of pigeonholes into which the materials are classified. Although some beginnings have been made in the direction of merging school subjects into broader and more integrated courses, hundreds of thousands of educational workers are not yet persuaded to ignore conventional subject divisions in the creation of a new and effective departmentalization of materials.

The direction in which we are moving, however, is clearly toward a new synthesis of knowledge and a departmentalization of the curriculum which will consist of a few broad integrations of child activities, readings, pupil research, what not. Under the necessities of mass education and to guarantee smooth administration of class instruction, we shall continue to break up curricular materials into departments of knowledge. The tendency, however, is markedly in the direction of cutting down the number of departments and expanding the area covered by each. To discover the most effective boundaries of the new departments, we shall increasingly tend to experiment with unique schemes of integration, ignoring in this process the unproved academic subject divisions of the past. In this way, by actually sweeping away the barriers between related materials and activities, we shall advance toward that unified curriculum for which the reform movements of thirty years ago strove so valiantly.

Rugg, op. cit., pp. 206-209.
Research reveals that many stages have been reached and many changes have been made as educators have struggled to bring about a revision in the curriculum. During this struggle there have been various approaches and patterns of organizing and projecting the curriculum. This study will attempt to give a brief analysis of those curriculum patterns that have been developed sufficiently to be recognizable and lend themselves to description and explanation.

The Subject-Textbook Curriculum Pattern

This type of curriculum consists of grouping the sum total of the accumulated knowledge of man into selected subjects. The material on each subject is compiled in a textbook. The supposition is that an individual will be educated when he has mastered a required number of textbooks on a given number of subjects.

The fallacy of this curriculum pattern is apparent to field psychologists. They reveal that education does not consist solely of isolated subject matter. Furthermore, it cannot be assumed that any given textbook is accurate and represents all that is known about any given subject. Textbooks are valuable to the learner only as he sees the need of them in the prosecution of his experiences.

The Subject-Matter Curriculum Pattern

The subject-matter curriculum pattern consists of grouping materials into units usually following a sequence
that is in accord with certain notions of developmental status and importance. A series of such units is usually thought of as a course. Under this plan it is assumed that proper subject matter has been chosen and can be presented by the teacher in logical sequence. These units usually follow a definite outline including the approach, the objectives and aims, the activities, the organization of materials and the evaluation of what has been accomplished in terms of the objectives.

The fallacy of this curriculum pattern lies in the fact that it conflicts with the field psychology of learning in that it is set-up-in-advance of the learning situation. It often breaks down because the emphasis is placed upon subject matter rather than upon individual development.

The Integrated, Correlated, or Fused Curriculum Pattern

This type of curriculum pattern consists of putting two or more subjects together to form a large area of related subject content, yet allowing each subject to retain its individual identity. Under this pattern American history and American literature may be taught concurrently. History, geography, economics, and government are grouped as social studies, Reading, writing, spelling, language and grammar are combined as language arts. The objective of this
plan is to center the learning situation around some activity that will predominate over a period of time.

Field psychologists point out the fallacy of this plan in that there can be no putting together of parts to form the whole. They point out that synthesis is an atomistic attempt to derive a whole from the summation of parts.

The Broad Fields Curriculum Pattern

The broad fields pattern of curriculum organization is the welding of similar subjects into a few large areas in such a way that the separate subjects lose their identity. The curriculum offerings under this plan set up certain required areas with a limited number of electives. This is an attempt to get away from a multiplicity of elective and isolated subjects. Its goal is to give unity, stability and direction to the concept of activity. This pattern is built around such areas as language arts, social studies, mathematics, sciences and creative arts.

The fallacy of this plan is founded upon the fact that it is based on synthesis, and field psychologists tell us that there can be no synthesis unless each part maintains its original identity.

The Core Curriculum Pattern

This pattern is usually built around some core area such as social-living. The core becomes the center around which a group of learners work. It is thought of as a
project for learners who have a common choice of growth experiences. The plan is very flexible and takes into account the planning of the group. It is sometimes thought of as the unit-of-work curriculum.

The fallacy of this pattern is apparent to the field psychologists in that it places emphasis upon uniformity of learning for everyone rather than upon variable achievements. Individuals vary in ability, social-background, interests, and in many other ways. This plan permits the aggressive individual to dominate the group.

The Experience Curriculum

This curriculum pattern is built upon the theory that learning comes through experiencing, and that such experiences should be provided that will produce the desired types of learning. It is composed of a series of purposeful life experiences of high educative quality that grow out of pupil interests. It is sometimes thought of as the person-problem-of-living curriculum. It is centered in the present and the future.

The fallacy of this curriculum pattern from a field theory standpoint might rest in the word, desirable, or the phrase, of high educative quality. In other words, who is to decide whether an experience is desirable and of high educative quality? It might rest in the word experience.
If an experience is the continuous interaction of an individual with his environment, then all curriculums are experience curriculums.

Hopkins sets up a sharp contrast between subject and experience curriculums and make a simple chart of some of the characteristic differences in emphasis between the two. The chart follows:

<table>
<thead>
<tr>
<th>Subject Curriculum</th>
<th>Experience Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Emphasis upon teaching subject matter.</td>
<td>2. Emphasis upon promoting the all-around growth of learners.</td>
</tr>
<tr>
<td>3. Subject matter selected and organized before the teaching situation.</td>
<td>3. Subject matter selected and organized cooperatively by all learners during the learning situation.</td>
</tr>
<tr>
<td>4. Controlled by the teacher or someone representing authority external to the learning situation.</td>
<td>4. Controlled and directed cooperatively by learners (pupils, teachers, parents, supervisors, principals, and others) in the learning situation.</td>
</tr>
<tr>
<td>5. Emphasis upon teaching facts, imparting information, acquiring knowledge for its own sake or for possible future use.</td>
<td>5. Emphasis upon meanings which will function immediately in improving living.</td>
</tr>
<tr>
<td>6. Emphasis upon teaching specific habits and skills as separate and isolated aspects of learning.</td>
<td>6. Emphasis upon building habits and skills as integral parts of larger experiences.</td>
</tr>
<tr>
<td>7. Emphasis upon improving the methods of teaching subject matter of specific subjects</td>
<td>7. Emphasis upon understanding and improving through use the process of learning.</td>
</tr>
<tr>
<td>8. Emphasis upon uniformity of exposures to learning situations and in so far as possible uniformity of learning results.</td>
<td>8. Emphasis upon variability in exposures to learning situations and variability in the results expected and achieved.</td>
</tr>
</tbody>
</table>
9. Education as conforming to the patterns set by the curriculum and its various associated instruments.

10. Education considered as schooling.

Otto says that there is a much broader view of the curriculum emerging. His comments follow:

It is said that at one time the curriculum of the elementary school consisted of the 'three R's.' Later the content subjects, the fine arts, the practical arts, and science were added. Still later other subjects were introduced. Even though the curriculum was broadened a great deal by the addition of many new subjects, the emphasis continued to be on the learning of subject-matter. The gradual crystallization of the subject-matter emphasis led many teachers to view the curriculum as a series of subjects to be learned. This narrow view still predominates in American schools. Fortunately a much broader view is emerging. To discover in a realistic way that the child brings his whole family and all his previous life experiences with him when he comes to school and much of what he learns in school is selected by him in terms of that background gave educators an entirely different notion of the child's total curriculum and the relations of the school curriculum to the child's total curriculum. The word 'curriculum' assimilated new meanings.

The whole child began to appear in teachers' eyes, not only the child's previous background as a conditioner of participation and learning and behavior in school, but also the organism as a whole, reacting in each situation. If the organism as a whole is engaged continuously in maintaining a dynamic equilibrium between itself and its environment, then physiological, or social, or emotional needs are conditioners of school performance as well as psychological factors. Children's health, nutrition, bodily comfort, and family affairs must be given due consideration even if one is interested only in teaching a few spelling

words. Curriculum is thus beginning to mean 'helping children to grow and develop in desirable directions in a democracy,' rather than teaching a list of subjects.

Equally significant enlargements of views about the curriculum grew out of the genuine realization that learning comes from experience and that all experiences have their educative counterparts. The very nature of the relations between teacher and pupils, between pupils and pupils, and the general life of the school compose significant experiences out of which children are getting certain kinds of educational values. The administrative practices of the school, children's contacts with school nurse, physician, dentist, and casual visitor are obvious aspects of the child's school curriculum.

To give children an education which will assist them to effective participation in our culture requires realistic contact with that culture. The man intimate, obvious, and inescapable interrelations between the school and its culture were additional factors which have led to a much broader view of the curriculum. One's notion of the elementary school curriculum can no longer be confined to the teaching of a selected list of subjects.

Wheeler says that an integrated curriculum will be possible only when it is organized about the principles mentioned below:

1. The condition of being integrated is primary. We should speak of an integrated whole, not an integration of parts.
2. Integratedness is a condition which exists only in terms of energy potentials distributed within a unitary whole in accordance with laws of energy behavior, known as laws of dynamics.
3. Wholes condition or regulate the expenditure of energy, or the work done, by the parts.
4. Wholes evolve as wholes. That is, integratedness is as complete at the beginning of the life of an organism as it is at any other time during its history.

4 Henry J. Otto, Elementary School Organization and Administration, pp. 94-95.
5. Any whole is constantly renewing itself through a transposition process. The identity and integratedness of the whole is preserved while the parts change.

6. The evolution of a whole can be described as an exchange process going on between properties known, respectively, as homogeneity and heterogeneity.

7. The activity of a part within a whole, no matter what the conditions, obeys the law of least action.

8. Principle of maximum work.

9. The whole responds relationally to a total situation; that is, to one disturbance in relation to other disturbances. 5

Harl R. Douglass has the following to say in regard to planning a curriculum:

1. Planning a curriculum to conform with the varying stages of readiness of learners imposed upon the curriculum maker the obligation of providing for the individual learner a learning environment and material in harmony with the learner's abilities, interests, concepts, and understandings.

2. Training to be effective, should be coordinated with interest, intellectual development, and emotions, social and general-experimental maturity at each grade level.

3. Whenever the curriculum designer gives major emphasis to the learner, his abilities, interests and needs, the situation is conducive to the growth of a healthy personality.

4. No two learners may be expected to show the same degree of interest in a given type of learning material; and no two learners may be expected to possess the same abilities to learn from it.

5. We begin with the learner—his present status whatever it may be—and assist him in shaping a program of training consistent with his abilities, interests and needs.

6. Sound personality development may be expedited only when the learner has experienced successfully a variety of situations definitely challenging to his abilities and interests.

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7. The curriculum maker's first responsibility is the organization and the planning of learning material in the utilization of interests already developed.

8. If learning materials have meaning for the learner, a reasonable degree of efficiency in learning is assured. And to the extent that they have a personal as well as a general meaning for the learner, efficiency and interest will be increased.

9. The principle of psychological organization means that in preparing learning material the focal point of concern is the learner's state of maturity and experience.

10. Materials and their form of organization should be sufficiently flexible as to allow for variations in learners.

11. The continuity postulates that learning material should be planned as a series of learning experiences which grow out of those preceding and lead directly to those succeeding.

12. Distributive learning during a comparatively long period is necessary for learning to re-open into meaningful and comprehensive knowledge, insight, and understanding.

13. 'Concentrated' learning may be justified under certain conditions. Intensive training in vocational fields, at present, is psychologically justified by the fact that the skills developed will continue to be used on the job.

14. As a means of developing motor or physical skills and habits, drill is relatively more effective though even here, the speed, thoroughness, and permanence of learning are all increased by the factors of purpose, insight, and motivation. 6

Mort and Vincent have this to say about school programs:

Modern adaptable schools are constantly designing and realigning their programs and their practices in the light of new knowledge, good common sense, and carefully evaluated experience. When practices do not measure up to what was expected of them, they are altered or dropped and others more successful in the light of this experience are developed to take their place.

6
place. Rarely, however, is a practice which is dropped totally unsuccessful in every respect. It is that a better way is found. 7

It has not been the purpose of this chapter to convey the notion that any curriculum pattern is all bad or that one can be determined that is perfect. The analyses of the foregoing curriculum patterns reveal that certain steps of progress have been made in curriculum designing. However, all of them were formulated ahead of the carefully selected purposes of the learners, and field psychology points out that consideration of the purposes of the learners should precede any curriculum designing.

7 Paul R. Hong and William S. Vincent, *A Look at Our Schools*, p. 106.
CHAPTER IV

A PROPOSED CURRICULUM PATTERN BASED ON FIELD PSYCHOLOGY

The purpose of this chapter is to develop a curriculum pattern based on field psychology. It recognizes the curriculum as a set of carefully selected purposes belonging to the learner. A purpose is thought of as a goal set up by an individual with a plan of action to reach it. Under this conception the learner differentiates his purposes from his needs with these purposes serving as the integrating elements in his learning. The integration of the learner takes place as he differentiates new meanings and understandings from the whole.

The arrangement and organization of the curriculum pattern is not so much concerned with whether we have order or not, but is very interested in the basis for order. The source of order is found in the lives of the learners as they attempt to maintain integratedness in meeting their carefully selected purposes.

The curriculum pattern is to be a process of designing based on the concepts of integration, behavior, learning, teaching, growth and experiences. The psychological criteria of soundness chosen from the data from Chapter II are used
as guide lines in the designing of this pattern. These concepts are built into the pattern as they square with field psychology. The procedure followed is one of using a criterion as a guide line followed by certain specifications in the form of statements or requirements for the carrying out of each criterion.

Psychological Criteria of Soundness

The process of designing the curriculum should be based upon the understanding that:

1. The whole is primary and should be conceived as a unitary whole, that is, the parts do not exist first in the absence of the whole. Wholes evolve as wholes and are primary.

2. The individual is constantly striving to maintain a state of integratedness. The meanings and the behavior of the parts are determined by the whole within which they occur.

3. The whole regulates the amount of energy expended by the parts as it operates in its field, but the properties of the field are not the same as the sum of the properties of the parts.

4. The whole is complete in all stages of development. Development is a process of preserving integration as the whole becomes more complex.
5. The whole is constantly changing through a process of individuation, differentiation, or structurization. Through this process the individual is becoming a new being.

6. The behavior of the whole is not predictable. This does not indicate the lack of order in the whole. It means that the relationship of the parts to the whole is constantly changing. The system of energy is able to adjust itself to a number of disturbing forces at the same time. The behavior of a part is predictable when the whole is under control.

7. The activity of the parts of a whole will follow the line of least resistance in resolving a disturbance, the motion being directed by the whole. The system of energy will take the most direct route to relieve tension.

8. The whole will spend all of its energy to maintain a state of integratedness. If this energy is not sufficient, the whole will be in a state of complete collapse.

The foregoing criteria of integration are summarized into the following criterion:

Criterion I

Wholes evolve as wholes and are constantly striving to maintain a state of integratedness. The actions of the parts are directed by the whole in preserving integration. As the whole becomes a new being, it maintains perfect order
in resolving disturbing forces. The whole system of energy will follow the line of least resistance to relieve tension, but it will spend all of its energy in so doing. This process is recognized as integration.

**Specifications.--** The curriculum should:

1. Take into account that the whole individual is called into play in the process of adjusting to his environment.

2. Provide for the learner to integrate rather than disintegrate his personality.

3. Take into account that action takes place when the field of an individual is upset.

4. Provide for the giving up of old ideas and the acceptance of new ones.

5. Recognize that the individual responds to a total situation and acts as a balanced whole.

The process of designing the curriculum should be based upon the understanding that:

1. Behavior is an act or movement of an individual as he moves against a disturbance in his environment.

2. Behavior involves the meeting of two criteria: first, he has to satisfy his own wants; second, has to satisfy the demands of society.

3. Each individual always evolves as a single pattern of behavior.
4. The will is the medium through which all behavior of an individual is obtained.

5. The individual is an energized system of behavior stimulated by goals.

6. Behavior is always directed toward a goal; the goal being the low potential in an energy system.

7. The individual behaves toward the goals that have the most value to him; each goal creating a new problem for him.

8. Each act of behavior brings about a change in the whole individual. These changes are physical, mental, social and emotional.

9. Behavior is purposive.

10. Behavior is a continuous process of planned action to accomplish a purposeful need.

The criteria of behavior are summarized into the following criterion.

**Criterion II**

The behavior of an individual as he interacts with his environment involves the satisfying of his own wants as he considers the demands of society. It is a continuous process of planned action to accomplish purposeful needs. The will is the medium through which the energy of his system is released toward goals that are of most value to him. As he moves toward his goals in a purposeful manner, complete changes take place in his physical, mental, emotional, and
social life. Behavior becomes increasingly intelligent by acting more and more upon better thinking.

Specifications.--The curriculum should:

1. Take into consideration that goals give direction to behavior.

2. Recognize that the individual will choose his own goals.

3. Take into account that behavior is purposive and goal seeking.

4. Be based upon the assumption that each individual evolves as a single pattern of behavior to reach ends of his own.

5. Accept the fact that the individual is an energized system of behavior and will release this energy toward desirable goals when he is properly stimulated and motivated by a wholesome environment.

The process of designing the curriculum pattern should be based upon the understanding that:

1. Learning is the process of whole individuals responding to whole situations. It is the process of refining meanings and understandings by differentiating the mutually dependent parts from the whole.

2. Each act of learning results in a certain change in the individual which is structure building.
3. Learning is increasingly purposeful as it centers more intelligently upon the personal problems of living.

4. The control is within the learning situation and not outside of it.

5. Learning is more effective when the learner selects his own purposes.

6. Learning proceeds best when the learner determines his own satisfactory means of accomplishing his purposes.

7. Learning is evaluated by the learner as he attains his purposes.

8. Learning produces satisfaction through creative thinking.

9. Learning begins from a tension produced by what others are doing divided by what the individual is doing.

10. Learning begins with a potential that has been stimulated by the environment.

The criteria of learning are summarized into the following criterion:

**Criterion III**

Learning is the process of a whole individual responding to whole situations in life, wherein he refines meanings and understandings by differentiating from the whole. The process brings about changes in the whole structure of a being. It is purposeful when centered upon the personal problems of the learner. The control of the learning situation
should rest within the individual as he determines satisfactory means of accomplishing his purposes. Learning is evaluated as purposes are attained and brings satisfaction through creative thinking. It begins with a tension and is resolved through a potential that has been stimulated through the proper environment.

**Specifications.**—The curriculum should:

1. Provide for a modified environment that will be conducive to self-expression of the learner.
2. Provide situations that are meaningful.
3. Provide for relationships between what is being learned and the welfare of the learner.
4. Be based upon the recognition that new meanings and understandings are the products of the re-working of past experiences.
5. Take into account that the learner is seeking satisfaction in the process of learning. He begins with immediate goals and accepts more remote ones as he matures. This makes learning an enjoyable process.
6. Be based upon the assumption that learning is the product of self-initiated doing.
7. Be based upon the fact that learning is retained for future use when it comes through purposeful activities that are life-like.
8. Begin where the learner is.
9. Provide for a feeling of belongingness on the part of the learner.

10. Be based upon the assumption that learners are not born with tendencies to be good or bad.

11. Provide for challenging situations for the learner.

12. Be flexible and elastic enough to meet the felt needs of the learners.

The process of designing the curriculum pattern should be based upon the understanding that:

1. Teaching is the art of living with the learners.

2. Teaching is the guardianship over personalities.

3. Teaching is the process of stimulating the development of intelligence on the level of the learner.

4. Teaching is the process of motivating or energizing the learners. This means the process of elevating potentials.

5. Teaching is directing the learning process with emphasis on efficiency.

6. Teaching is guiding individuals into useful work that will develop their potentialities.

7. Teaching is a well planned cooperative effort.

8. Teaching should tend to liberate the learner.

9. Teaching should aid the learner in defining their purposes.

10. Teaching is the aiding of learners in determining their progress.
Criterion IV

Good teaching is the art of living with the learners. It is the guardianship over personalities through a well planned cooperative effort to liberate the learner. It is a process of aiding the learners in defining their purposes and determining their progress. It involves an efficient effort of stimulating, motivating, guiding and directing the individuals in the wholesome and desirable development of their potentialities.

Specifications. — The curriculum should:

1. Be based upon the fact that good teaching is a process of drawing-out rather than one of pouring-in.

2. Provide for teaching to begin where the learner is.

3. Provide for pupil-planning under the guidance of the teacher.

4. Provide for freedom of procedures on the part of the teacher.

5. Provide for the teacher to cut across rigid routine in carrying on purposeful activities of the learners.

The process of designing the curriculum pattern should be based upon an understanding that:

1. Growth is learning's chief competitor as a modifier or behavior.

2. Growth includes the physical, mental, emotional, and social development of the individual.
3. Growth of a normal individual follows a straight line of development.

4. Growth is a continuous process from the time life begins as a cell until senility.

5. Growth is the product of an individual's cooperative participation with other individuals.

6. Growth is determined by one's ability to develop by the motivations of his environment.

7. Growth is evidence that there is unity in the organism, and unity between the organism and its environment.

8. Growth is a process of cellular multiplication and differentiation—the expansion of a dynamic field, not merely a summation of cells.

9. Growth comes in cycles of crises usually referred to as stages of development.

10. Growth is irregular. Some organs maintain a rate of growth in harmony with the body while others may grow fast or slow.

11. Growth takes place best in the center of the realities of present life.

Criterion V

Each individual has a continuous irregular rate of growth all his own. It includes physical, mental, emotional and social expansion and differentiation. Growth does not take place apart from one's environment, but is the product
of cooperative participation with it. Each individual follows a straight line of development even though he may experience spasmodic spurts of growth.

**Specifications.**—The curriculum should:

1. Provide for the wholesome growth and development of each learner.

2. Evolve with the growth and development of each individual.

3. Be based upon the fact that growth is a gradual and a continuous process.

4. Grow parallel with the growth of the child.

5. Should recognize that growing up is the individual's problem and not the teacher's.

6. Be based on the fact that growth cannot be measured by a semester's work nor by anecdotal or cumulative records.

The process of designing the curriculum pattern should be based upon an understanding that:

1. An experience is a process of responding to whole situations. It is the dynamic interaction of an organism with its environment.

2. An experience has its beginning with a purpose.

3. An experience is continuous, relative mutual and contingent if it is to be of high educative quality.

4. The quality of an experience determines the quality of learning.
5. A desirable experience allows learners to work cooperatively and, yet, each retains his individuality.

6. Each new experience should expand the field of interests.

7. Each new experience clarifies old meanings.

8. Each individual needs opportunity for rich and varied experiences.

9. Low levels of experiences take place under compulsion, compromise, exploitations, bargaining, and dictatorial leadership.

10. Experiences can be successfully managed by the one having the experience.

11. A good experience is meaningful if it is based upon past experiences.

Criterion VI

An experience is the continuous interaction of what at the time constitutes the individual and what at the time constitutes the environment. It is dynamic, never the same, interwoven with the environment and never predictable or fixed. It has its beginning with a purpose, and its quality determines the quality of learning. Desirable experiences allow one to retain his individuality as he works cooperatively with others as he expands his field of interests. Each new experience clarifies old meanings and provides for rich and varied opportunities. A good
experience is meaningful if it is based upon past experiences and does not take place under compulsion, compromise, exploitation, bargaining, or dictatorial leadership.

Specifications.--The curriculum should:

1. Provide experiences that will prepare the learner for later experiences.
2. Provide experiences that are related to past experiences.
3. Provide experiences that begin with and continue to grow out of the purposeful needs of the learner.
4. Provide experiences that will increase one's power to make intelligent choices.
5. Provide experiences that produce self-satisfaction.
6. Provide meaningful experiences.
7. Provide experiences that will develop creative thinking.
8. Provide a backlog of desirable experiences.
9. Provide experiences that will afford opportunity for each individual to use an ever-increasing variety of resources for learning.
10. Provide experiences that establish the security and status of the individual.
11. Provide experiences wherein many individuals may make contributions through their initiative and self-expression.
12. Provide experiences that have some dominating properties which characterized it as a whole.

This type of curriculum pattern should be conceived of as a basis for order in curriculum designing. It demands redesigning with each new learning situation.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The problem of this study, as stated in the introduction, was to determine a curriculum pattern based on field psychology.

Research revealed that it is very evident that there are two distinct points of view. First, there are those who believe in the atomistic theory of learning, and second, those who believe in the field-theory of learning.

The data of Chapter II give an understanding of integration, behavior, learning, teaching, growth, and experience.

An analysis of several curriculum patterns revealed that many and varied attempts have been made to set up curriculum patterns to meet the needs of learners. All of these have met with more or less success. Much good work has been done by teachers, consultants, administrators, and experts in the field of curriculum organization and revision. As a result of these efforts many schools have made great strides of progress toward cutting down the gap between a formal discipline program which is prepared-in-advance of learning situations and a self-discipline program which is
not prepared-in-advance of learning situations. The latter program permits the learners to pursue their own carefully selected purposes through a goal-seeking, meaningful, expanding, differentiating, and integrating process that parallels the ongoing interacting stream of every-day living.

It is further evident from this study that in designing and redesigning a curriculum pattern that the following psychological criteria of soundness should be used:

**Criterion I.**—Wholes evolve as wholes and are constantly striving to maintain a state of integratedness. The actions of the parts are directed by the whole in preserving integration. As the whole becomes a new being, it maintains perfect order in resolving disturbing forces. The whole system of energy will follow the line of least resistance to relieve tension, but it will spend all of its energy in so doing. This process is recognized as integration.

**Criterion II.**—The behavior of an individual as he interacts with his environment involves the satisfying of his own wants as he considers the demands of society. It is a continuous process of planned action to accomplish purposeful needs. The will is the medium through which the energy of his system is released toward goals that are of most value to him. As he moves toward his goals in a purposeful manner, complete changes take place in his physical,
mental, emotional, and social life. Behavior becomes increasingly intelligent by acting more and more upon better thinking.

**Criterion III.**—**Learning** is the process of a whole individual responding to whole situations in life, wherein he refines meanings and understandings by differentiating from the whole. The process brings about changes in the whole structure of a being. It is purposeful when centered upon the personal problems of the learner. The control of the learning situation should rest within the individual as he determines satisfactory means of accomplishing his purpose. Learning is evaluated as purposes are attained and brings satisfaction through creative thinking. It begins with a tension and is resolved through a potential that has been stimulated through the proper environment.

**Criterion IV.**—**Good teaching** is the art of living with the learners. It is the guardianship over personalities through a well planned cooperative effort to liberate the learner. It is a process of aiding the learners in defining their purposes and determining their progress. It involves an efficient effort of stimulating, motivating, guiding and directing the individuals in the wholesome and desirable development of their potentialities.

**Criterion V.**—**Each individual has a continuous irregular rate of growth all his own.** It includes physical,
mental, emotional and social expansion and differentiation. Growth does not take place apart from one's environment, but is the product of cooperative participation with it. Each individual follows a straight line of development even though he may experience spasmodic spurts of growth.

Criterion VI.—An experience is the continuous interaction of what at the time constitutes the individual and what at the time constitutes the environment. It is dynamic, never the same, interwoven with the environment and never predictable or fixed. It has its beginning with a purpose, and its quality determines the quality of learning. Desirable experiences allow one to retain his individuality as he works cooperatively with others as he expands his field of interests. Each new varied experience clarifies old meanings and provides for rich and varied opportunities. A good experience is meaningful if it is based upon past experiences and does not take place under compulsion, compromise, exploitation, bargaining, or dictatorial leadership.

Conclusions

As a result of this study the following conclusions have been formulated:

1. The curriculum should be conceived of as something that is designed in the process of designing. The designing is to be repeated with each new learning situation.
2. The curriculum should be conceived of as something that parallels the ongoing process of living.

3. The curriculum should be conceived of as something that evolves with the whole individual.

4. The curriculum should be conceived of as something that is synonymous with the environment.

5. The curriculum should be conceived of as the flexible environment in which the individual can adjust to a complex society.

6. The curriculum should be conceived of as the dynamic environment that will make provisions for the individual differences of the learners.

7. The curriculum should be conceived of as the environment in which the individual can function as a whole to whole situations.

8. The curriculum should be conceived of as the environment in which the individual can approach a state of integratedness.

9. The curriculum should be conceived of as the environment in which the individual can strengthen his creative individuality.

10. The curriculum should be conceived of as the environment in which the behaver can differentiate from his own varied needs and select as a goal the one that has the most value to him at the time.
11. The curriculum should be conceived of as the environment in which the behaver can live while he learns.

12. The curriculum should be conceived of as the environment in which the individual's carefully selected purposes are considered the integrating elements of learning.

13. The curriculum should be conceived of as the environment in which the individual can solve his own personal-problems-of-living that appear in his psychological field.

14. The curriculum should be conceived of as the environment in which the individual can select some learnings that will improve his quality of living.

15. The curriculum should be conceived of as the environment in which the individual will have ample time for functional reflective thinking.

16. The curriculum should be conceived of as the environment in which the individual can be stimulated, motivated, guided, and directed by kind, sympathetic, and competent adults.

17. The curriculum should be conceived of as the environment in which the individual, through a process of differentiation, can define new meanings and refine his understandings from the same whole.
18. The curriculum should be conceived of as the environment in which the individual can manage life-like situations.

19. The curriculum should be conceived of as the environment in which the individual can enjoy wholesome growth and development.

20. The curriculum should be conceived of as the environment in which the individual can expand, differentiate, and integrate within himself and continually grow through the process of intelligent interaction.

21. The curriculum should be conceived of as the environment in which the individual can develop his potentialities to the best of his ability.

22. The curriculum should be conceived of as the environment in which the individual can pursue the interests that have ever increasing value to him.

23. The curriculum should be conceived of as the environment in which the individual can utilize his past experiences.

24. The curriculum should be conceived of as the environment in which the individual can choose subject matter as he sees the need of it in the prosecution of his experiences.

25. The curriculum should be conceived of as the environment in which the individual can have many and varied first-hand experiences.
Recommendations

As a result of this study the following recommendations are made:

1. That the field theory concepts of integration, behavior, learning, teaching, growth, and experiences be built into all curriculum patterns.

2. That the designing of curriculum patterns be a part of the patterns.

3. That the basis for order stem from the field-theory of learning which will allow the source of order to come from the lives of the learners.

4. That no attempt be made to integrate subject matter, but every effort be put forth to provide for the integratedness of learners as they pursue their carefully selected purposes.

5. That field psychology techniques be utilized in designing and redesigning the whole school program.
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