

SUPERVISORY GUIDANCE OF TEACHERS IN SECONDARY SCHOOLS

BY

ELLSWORTH COLLINGS

DEAN OF THE COLLEGE OF EDUCATION

PROFESSOR OF SCHOOL SUPERVISION

UNIVERSITY OF OKLAHOMA

NORMAN, OKLAHOMA

NEW YORK

THE MACMILLAN COMPANY

1934

INTRODUCTION

There are in reality only two basic theories of teaching. One is the theory of passive receptivity of boys and girls. This theory regards the mind as a blank upon which are to be recorded certain facts usually included in the traditional school subjects. This is the theory that has controlled the practices of teaching in the past and still controls the practices of teaching in the traditional high schools of today. The second is the theory of active boys and girls. This theory regards the mind as the total functioning of boys and girls in real life situations. It interprets learning as the improvement of this complete functioning in real life situations. In short, this theory regards young people as living, changing, purposeful beings. Enrichment of the life of boys and girls is the great thing after all.

The second theory of teaching is the theory that guides the program of teaching discussed in this volume. This theory demands the following of teachers :

1. Teachers should provide real life situations in school so as to stimulate the purposeful activities of boys and girls along fruitful lines. Teachers should provide a school environment suggestive of these numerous, varied, and productive activities.

2. Teachers should formulate teaching procedures designed to guide successful participation of boys and girls in activities of the fruitful kind. Particularly, teachers should formulate procedures to guide successfully boys and girls in setting-up fruitful activities to study ; in planning new and better materials for study of the chosen activity ; in practicing new and better ways in executing the activity ; and finally in judging more effectively successes and failures ensuing in study of the chosen activity.

3. Teachers should measure improvement of teaching in terms of the improvement of boys and girls in participating in activities of the

fruitful kind. Teachers should formulate means for measuring progress of boys and girls in the process and outcome phases of activities.

The introduction of such a program of teaching in high schools necessitates a revision of the present program of teaching along several vital lines. Supervision is interpreted in this volume as *supervisory guidance of teachers* in reconstructing the present program of teaching in accordance with these ideas. The program of teaching set forth in succeeding chapters has been tried out in a number of high schools over a period of years and has been found helpful and practical to teachers and supervisors. It has been helpful in the sense that it has enabled supervisors to guide teachers in getting a better insight into the process of growing in boys and girls, and practical in the sense that it has enabled supervisors to guide teachers in practicing in the schoolrooms procedures of teaching that enrich the lives of their pupils from day to day. This volume ought, therefore, to be of genuine service to other teachers and supervisors in similar positions and to teachers and supervisors in normal schools, colleges, universities, and training schools preparing to guide the growing process in boys and girls.

ELLSWORTH COLLINGS

THE BAR C RANCH
TURNER FALLS
DAVIS, OKLAHOMA

TABLE OF CONTENTS

PART I. THE THEORY OF SUPERVISORY GUIDANCE OF TEACHERS

CHAPTER	PAGE
I. SUPERVISORY GUIDANCE OF TEACHERS IN STUDYING HOW BOYS AND GIRLS GROW	3
II. SUPERVISORY GUIDANCE OF TEACHERS IN ANALYZING THE PURPOSEFUL ACTIVITIES OF BOYS AND GIRLS	12
III. SUPERVISORY GUIDANCE OF TEACHERS IN STUDYING HOW TO GUIDE THE PURPOSEFUL ACTIVITIES OF BOYS AND GIRLS	19
IV. SUPERVISORY GUIDANCE OF TEACHERS IN EXPRESSING SCHOOL WORK IN TERMS OF THE PURPOSEFUL ACTIVITIES OF BOYS AND GIRLS IN LIFE OUTSIDE OF THE SCHOOL	30
V. SUPERVISORY GUIDANCE OF TEACHERS IN INTEGRATING SUBJECT MATTER IN THE PURPOSEFUL ACTIVITIES OF BOYS AND GIRLS	39
VI. SUPERVISORY GUIDANCE OF TEACHERS IN CONSTRUCTING TEACHING PROCEDURES	52
VII. SUPERVISORY GUIDANCE OF TEACHERS IN PERFORMING TEACHING PROCEDURES	59
VIII. SUPERVISORY GUIDANCE OF TEACHERS IN MEASURING PROGRESS IN TEACHING	63
IX. SUPERVISORY GUIDANCE OF TEACHERS IN MEASURING PROGRESS OF BOYS AND GIRLS IN SCHOOL ACTIVITIES	99
X. SUPERVISORY GUIDANCE OF TEACHERS IN PROVIDING THE SCHOOL ENVIRONMENT	129
XI. SUPERVISORY GUIDANCE OF TEACHERS IN MEASURING PROGRESS IN CLASSROOM MANAGEMENT	136
XII. ORGANIZATION OF THE SCHOOL STAFF FOR EFFECTIVE SUPERVISORY GUIDANCE OF TEACHERS	142

PART II. THE PRACTICE OF SUPERVISORY GUIDANCE OF
TEACHERS

CHAPTER	PAGE
XIII. SUPERVISORY GUIDANCE OF TEACHERS OF SOCIAL-SCIENCE AC- TIVITIES	153
XIV. SUPERVISORY GUIDANCE OF TEACHERS OF NATURAL-SCIENCE AC- TIVITIES	208
XV. SUPERVISORY GUIDANCE OF TEACHERS OF COMMUNICATION AC- TIVITIES	274
XVI. SUPERVISORY GUIDANCE OF TEACHERS OF MATHEMATICAL AC- TIVITIES	410
XVII. SUPERVISORY GUIDANCE OF TEACHERS OF OCCUPATIONAL AC- TIVITIES	463
XVIII. SUPERVISORY GUIDANCE OF TEACHERS OF FINE-ART ACTIVITIES .	534
XIX. SUPERVISORY GUIDANCE OF TEACHERS OF PLAY ACTIVITIES .	574
INDEX	611

PART I

THE THEORY OF SUPERVISORY GUIDANCE OF TEACHERS

CHAPTER I

SUPERVISORY GUIDANCE OF TEACHERS IN STUDYING HOW BOYS AND GIRLS GROW

1. Boys and girls are active. One of the most difficult, if not impossible, things to find in this world is an inactive thing. Everything is active. Every lump of matter, every atom is spinning. Everything is in a state of continual motion; nothing is at rest. The old Greek Heraclitus knew that. Nothing is static. You would be astonished if you could see all the activity taking place in a stagnant pond, in a tumbler of water, in your own body. Throughout the universe everything is in a constant state of activity. All the heavenly bodies are moving fast. The star Arcturus is going at 200 miles a second. The earth is going at about twenty miles a second. That is a very good speed compared with the rate of a cannon ball — like an express train compared to a snail. So there is an enormous amount of activity going on about us at all times. All things seem to be responsive agents along some particular line. Activity of some kind appears to be at the bottom of all things, whether it be the boy or the girl, the man or the woman, the atom or the star, the tulip or the frog. It seems the rule of all things about us, for in the words of Lowell, "Whether we look or whether we listen we hear life murmur or see it glisten."

Boys and girls are living organisms and everything that has been said about life in the previous paragraph is equally true of them. A healthy boy or girl is always doing something. This activity is extremely varied. At one time it may be seen in play, such as running, jumping, and various competitive games. At another time, it is in evidence in constructing something, as in making a radio, a library table, or a bookcase. Again, it may be seen in exploration of something novel. The boy explores the cave to see the underground streams and the giant columns of calcium deposits. At still another time it is observed

in the communicative responses of boys and girls. They tell stories, write letters, and read books. Finally, it can be seen in the development of skills, such as learning to play the piano, operate a typewriter, or sing a song. In any event, the bent of boys and girls is to do, to create, to make, to discover, to reach onwards. Activity of some kind is the very essence of the daily lives of boys and girls.

There is one outstanding characteristic of the activity of boys and girls that is of great importance in education. Boys and girls are active all over. The whole boy and girl responds in a situation. Activity is not merely the action of a particular part of a boy or girl, for example, vocal expression. Boys and girls do not act in piecemeal fashion; they act as a unit in every situation in life.

2. Activity of boys and girls is purposeful. The activity of an organism is always pointed toward some end-result. This statement does not imply that the organism is necessarily aware of the final outcome of its activity. But at least there is an "activity-set," a "response-posture," or an "anticipatory attitude" which makes it possible for the animal to keep itself in such relation to its environment as will result in the proper discrimination and selection of stimuli to which it must respond. Frequently, in the case of human beings there is evidence, certainly, of a definitely prearranged mode of attack in order to reach a definitely premeditated purpose. Many of the responses are only "preparatory" in orienting the organism in its environment so that it can most effectively make the "consummatory" or final response. But the net result of the whole repertoire of responses of the organism, when it is confronted with a problem, is to bring about an end-result which is beneficial to the organism. An illustration from Woodworth¹ will help to simplify the point in question.

"Suppose you whistle for your dog when he is some distance off and out of sight. Presently the dog swings around the corner and dashes up to you. Now, what kept the dog running towards you after your whistle had ceased and before he caught sight of you? Evidently he was directed towards the end-result of reaching you, and this directing tendency governed his movements during the process. He made many

¹ Woodworth, R. S., *Psychology for Teachers*, p. 77.

preparatory reactions on the way to his final reaction of jumping up on you; and these preparatory reactions were, of course, responses to the particular trees he had to dodge, and the ditches he had to jump; but they were at the same time governed by the inner state set up in him by your whistle. This inner state favored certain reactions and excluded others that would have occurred if the dog had not been in a hurry. He passed another dog without so much as saying, 'How d'ye do?' And he responded to a fence by jumping over, instead of trotting around through the gate. That is to say, the inner state set up in him by your whistle facilitated reactions that were preparatory to the final reaction, and inhibited reactions that were not in that line."

This purposive nature of activity is equally true of boys and girls. For example, observation of Jim's behavior in making a rabbit trap reveals this fact quite clearly. One sees him carefully study different kinds of lumber and finally reject one kind of lumber and select another kind. Then he works hours figuring out dimensions and marking off the various pieces with a good deal of precision and definiteness. Again, he spends much time in cutting and assembling the various parts into a definite whole. All these responses when observed together reveal that Jim's behavior is directed toward a definite end-result. This end-result — purpose — guides his action in each instance. It causes him to reject one kind of lumber and select another kind. It tells him successes and failures in determining various dimensions of lumber, in cutting the various parts, and in assembling the parts into one whole. Jim's activity in this instance, in other words, is along a particular line. It is purposeful and is typical of the activity of boys and girls in life outside of the school.

Kilpatrick distinguishes four steps in the purposeful activity of boys and girls. They are: purposing, planning, executing, and judging. The purposing step sets-up the purpose to study; the planning step prepares the means necessary for studying the chosen purpose; the executing step performs the means included in the plan; and the judging step evaluates the extent of success and failure in realizing the chosen purpose.

Any particular step of purposeful activity involves drive and response of boys and girls. In the first place, action along any particular

step, for example, purposing, involves drive in the sense that boys and girls are in a state of readiness to set-up a particular purpose to study. Drive is, in this sense, voluntary action of boys and girls. It is Thorndike's Law of Readiness. In the second place, any particular step of purposeful activity, for example, purposing, involves response in the sense that boys and girls overtly participate in setting-up a purpose to study. Response is, in this sense, overt participation of each boy and girl in the step of purposeful activity under way. It is Thorndike's Law of Exercise. Drive and Response are, in this sense, the basic factors of purposeful activity.

3. Growth takes place through the purposeful activity of boys and girls. As the environment stimulates and acts upon boys and girls and they in turn react upon the environment through purposeful responses, the activity of boys and girls is modified, changed. The snow has fallen and John purposes to make a bobsled in order that he may coast downhill with other boys and girls. But by the time the sled has been completed John's activity with respect to the condition of bobsleds has improved. He can make a better sled thereafter as a result of having had this experience. But as boys and girls reach their purposes, they again launch out ever in search of purposes more remote and more difficult of attainment. But in the reaching they improve their ability to reach higher and farther levels of attainment. And this change, growth, is at the foundation of all education.

Growth of boys and girls involves two phases of importance. First, it involves the learning inherent in the purposeful activity of boys and girls. In particular, it involves the learning inherent in each step of purposeful activity. In the purposing step, the learning inherent involves setting-up new and more fruitful purposes to pursue; in the planning, it involves finding and formulating new and better means for realizing the chosen purpose; in execution, it involves more effective use of the means included in the plan; and in judging it involves increased ability to find and improve mistakes made in the work. In brief, the pursuit of purposeful activity always involves learning new things. Growth is learning these new things.

In the second place, growth takes place through conditioning the drive and response of boys and girls along the line of the new things

involved in purposeful activity. The drive in purposing can be conditioned if it can be aroused along a new line, or, in other words, if there is a general state of readiness to initiate a purpose along one line but this general state of readiness is directed to initiate along another line, the drive in purposing is conditioned. For example, suppose the teacher wishes to develop in John the desire to read better literature. John wants to read literature but the teacher is not satisfied with the quality of the books that he reads. The general state of readiness is, let us say, in the line of communication activity. The class desires to dramatize some piece of literature. John wishes to dramatize *Jiggs and Maggie*, which, it will be readily seen, is not the desirable type of literature to dramatize in school. By proper stimulation and direction of John in finding better literature to dramatize, he may be induced to initiate the dramatization of such a selection as *Silas Marner*. If this choice is made finally as a result of an inner urge; if the teacher finds at some future time that John is reading better literature in school and at home than he had hitherto been reading, then it may be assumed that John's drive in purposing better literature has been conditioned. The test for a conditioned drive in purposing is whether the direction of inner urge has been modified in the free and natural activity of boys and girls. If John purposes to read better literature without any external force or coercion, then his drive in purposing along this line has been conditioned.

Likewise the response in purposing can be conditioned. Response in purposing has been conditioned when it reacts to a stimulus (new stimulus) for which it formerly did not have a state of readiness to react. For example, in the purposing step illustrated above, John responds at first in initiating *Jiggs and Maggie* to dramatize. In this instance the stimulus is the story *Jiggs and Maggie*. Later John responded by initiating *Silas Marner*, which was a different story. The stimulus in this instance is the story of *Silas Marner* and is a substitute or new stimulus introduced by the teacher or other boys and girls of the class. John's response in purposing has conditioned since he responds to a substitute or new stimulus to which he did not formerly respond.

In similar fashion the drive and response of boys and girls can be conditioned along the line of new stimuli in the other steps (planning,

execution, and judging) of purposeful activity. It is in this fashion that boys and girls grow. They grow through learning the new things inherent in the activities in which they engage. And this learning takes place in every instance through conditioning drive and response of boys and girls to the new things at the time the activity is under way. This is nature's mode of growing.

Perhaps one other additional characteristic of the growth of boys and girls should be noted. Growth involves complete change of boys and girls. It does not include conditioning of drive and response along a narrow line of stimuli. It involves, on the other hand, conditioning of many drives and responses of boys and girls in the same activity and for this reason the whole boy or girl is changed in every situation engaged in. Boys and girls, in common with all living things, normally act all over in situations and as a result are changed all over. This fact is of paramount importance in education. It calls attention to the fact that boys and girls grow as a unit in every situation in life.

4. Growth is effected through guidance of the purposeful activity of boys and girls. Growth involves learning inherent in the purposeful activities of boys and girls. As such, it depends upon conditioning the drives and responses along new stimuli in the steps of purposeful activity. Conditioning of drives and responses along any particular step of purposeful activity depends upon appropriate stimulation. It depends, first, upon stimuli in line with the prevailing drive of boys and girls at the time, and, second, upon the presence of the stimuli at the time the activity is in progress. For example, in the illustration of conditioning of purposing, John first initiated *The Benson Murder* story to dramatize and later initiated the *Treasure Island* story. The initiation of the second story depended, first, upon providing a better quality of adventure stories to dramatize since John's drive at the time was to dramatize an adventure story, and second, upon the presence of a copy of *Treasure Island* and other similar books in the classroom at the time the initiation of stories was under way. Thus, the first condition of growth is appropriate stimulation.

In the second place, conditioning of the drives and responses of pupils depends upon successful participation along the line of the new stimuli in the step of purposeful activity under way. For example, in the

illustration of conditioning in purposing, John's initiation of *Treasure Island* as a story to dramatize depended upon assistance in understanding the content of the story and other similar stories to include adventure of a better kind than included in *The Benson Murder* story. It depended, in this sense, upon direction in overcoming any difficulties in initiating the story. Stimulation and direction are, in this sense, the primary conditions of growth.

Guidance is providing these conditions. In the first place, guidance provides stimulation of boys and girls. It provides stimuli capable of conditioning the drives and responses in purposeful activity. In the second place, guidance provides direction of boys and girls. It sees that success attends the response of pupils along the line of the new stimuli in purposeful activity. Guidance through stimulation and direction, thus, is basic in growth, for the growth of boys and girls takes place through conditioning their drives and responses along the line of the new stimuli inherent in purposeful activity. Growth is effected, in this sense, through guidance of the purposeful activities of boys and girls.

5. School work should be expressed in terms of guidance of the purposeful activities of boys and girls. Since the school is an institution established by society to further the growth of boys and girls, it seems logical that its most consistent function would be to provide guidance of the purposeful activities of pupils, for in no other way is it possible for them to grow. The purpose of succeeding chapters is to suggest how school work can be expressed in terms of guidance of the purposeful activities of the pupils. The introduction of such a program of education necessitates a revision of the present program along several vital lines. Supervision is interpreted in succeeding chapters as supervisory guidance of teachers in revising the present program along these lines.

6. The problem of supervisory guidance is to help teachers understand the process of growing in boys and girls. First, the supervisor should help teachers study life outside of the school for the purpose of understanding the dynamic nature of things. In this connection, she should help teachers see that boys and girls are active by nature and that the activity involves the whole boy and girl. Second, the

supervisor should help teachers understand that change, growth, learning, and education take place in and through the activity of boys and girls. She should help teachers to see that learning involves conditioning the drives and responses of boys and girls along the lines of new stimuli in the activities in which they are engaged at the time. In addition, the supervisor should enable teachers to see clearly that learning involves changing boys and girls all over. Third, the supervisor should help teachers to understand that the fundamental problem of teaching is guidance of the purposeful activities of boys and girls along fruitful lines. She should enable teachers to see that the problem of teaching is, first, providing the new stimuli that are necessary in the activities of pupils, and, second, directing the responses of boys and girls successfully along the lines of the new stimuli. In brief, the supervisor should help teachers to see clearly that boys and girls are active, that they learn in and through their activities, and that maximum learning depends upon wise teacher guidance.

The particular ways the supervisor may help teachers to understand the process of growing in boys and girls are as follows:

1. *Observation of boys and girls.* The supervisor should arrange for teachers to observe boys and girls in life outside of the school. In this connection, the supervisor should arrange a plan for the teachers to make a record of the various outside activities of boys and girls. The records made by the teachers should be discussed in a regular arranged conference between the supervisor and teachers.

2. *Group-conference study and discussion.* The supervisor should suggest books and periodicals for teachers to study along this line; such as, Kilpatrick: *Foundation of Method*, Chs. 2, 3, and 4; Dewey: *Democracy and Education*, Ch. 4; and Collings and Wilson: *Psychology for the Teachers*, Chs. 1 and 2, or Collings: *Progressive Teaching in Secondary Schools*, Ch. 1. In addition, the supervisor should discuss the materials with the teachers in regular arranged conferences for the purpose of getting a better understanding of the process of growing in boys and girls.

3. *Extension-class study and discussion.* The supervisor should arrange with a near-by college or university for an instructor to conduct a course along the line of how boys and girls grow.

4. *Correspondence study.* The supervisor should suggest correspondence courses teachers may take that will enable them to understand better the process of growing in boys and girls.

5. *Summer-school study.* The supervisor should suggest to teachers courses that are offered in summer schools that will enable them to understand better the process of growing in boys and girls.

CHAPTER II

SUPERVISORY GUIDANCE OF TEACHERS IN ANALYZING THE PURPOSEFUL ACTIVITIES OF BOYS AND GIRLS

1. Boys and girls normally set-up an activity to study. Observation of boys and girls in participating in activities in life outside of the school reveals that they first set-up an activity to pursue. For example, in the dramatization of "The First Thanksgiving," boys and girls first suggest stories to dramatize. Then they discuss what the suggested stories include and the possibility of dramatizing them at the time. They evaluate individually the desirability and practicability of each suggested story. When the stories are thus evaluated, observation further reveals that they select one from the suggested list to dramatize. They choose a particular story to dramatize, in this instance "The First Thanksgiving." Kilpatrick suggests that "Purposing" is a proper name for this step. It includes three very definite traits. They are: initiation of purpose, evaluation of purpose, and choice of purpose. Fruitful purposing always includes these three traits. They are clearly observable in human activity of the fruitful kind.

2. Boys and girls normally formulate a plan for studying the chosen activity. When boys and girls set-up an activity to study, they normally find and select the necessary things needed in realizing it. In the illustration of "The First Thanksgiving" dramatization, observation reveals that boys and girls first suggest possible scenes, characters, conversation, and stage furnishings. They initiate individually possible means (scenes, characters, conversation, stage furnishings) to use in attainment of the chosen activity. They then discuss the fruitfulness of each suggested mean. They evaluate individually the desirability and practicability of each suggested scene, character, conversation, and each piece of stage furnishing. Further observation reveals that boys and girls finally select particular scenes, char-