

BOARD OF EDUCATION  
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CURRICULUM BULLETIN  
Number One

“The Evolution  
of Common Things”

UNIT 1—AVIATION

by

Myrna Ingram Schuck

Teacher—Rapid Learner Class

P. S. 500 (Speyer School)

1937

PUBLICATION NO. 2

This volume is part of a series of units on the theme “The Evolution of Common Things,” which was prepared for the Speyer School, New York City’s experimental school for exceptional learners led by Leta Hollingworth in the 1930s. Our re-publication of the units is directly tied to Dr. Willard L. White’s *America’s First Gifted Program*, published by Royal Fireworks in 2014. Dr. White is the source of the original copy of this text.

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Royal Fireworks Press  
P.O. Box 399  
41 First Avenue  
Unionville, NY 10988-0399  
(845) 726-4444  
fax: (845) 726-3824  
email: [mail@rfwp.com](mailto:mail@rfwp.com)  
website: [rfwp.com](http://rfwp.com)



ISBN: 978-0-89824-550-9

Printed and bound in Unionville, New York, on acid-free paper  
using vegetable-based inks at the Royal Fireworks facility.



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UNIT I: AVIATION

MYRNA INGRAM SCHUCK  
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# THE EVOLUTION OF COMMON THINGS

A Series of Units Developed  
for Rapid Learners  
At Public School 500, Manhattan,  
Speyer School

## UNIT I: AVIATION

by Myrna Ingram Schuck

## *Foreword*

During the last two years, our schools have given special attention to the following problems: individualization of instruction, fitting the school to the needs of "all the children of all the people," and affording optimum growth on the part of pupils who are intellectually immature or inferior, and those who are intellectually gifted.

It has long been felt that it was the function of our public school system to improve itself by planned experimentation and research, and to capitalize the best thinking of our staff in cooperation with the local colleges.

It was with this in view that Public School 500 (Speyer School) was opened in February, 1936, to study experimentally two problems: (1) the curriculum and the type of schooling which will contribute to the continuous social and intellectual growth of the slow learner and; (2) the educational procedures and material best suited to the intellectually gifted child. Accordingly, this experimental school was organized by the Elementary School Division in cooperation with Teachers College, for the division purpose of studying the problem of the education of exceptional children to whom the standard curriculum and courses of study are not suited.

As the joint responsibility of the Elementary School Division and Teachers College, Public School 500 is to function until 1940, so that the supervisors and teachers of our elementary schools may be assisted with a better understanding of what education is best suited for exceptional children, and with better instructional procedures and materials for children who show these marked individual differences.

We believe that much good has already come from the experimental approaches in teaching the seven classes of slow learners and the two classes of rapid learners at Public School 500 (the Speyer School). At periodic intervals the material prepared by the teachers of Public School 500 and found effective in this improved instructional program for exceptional children will be made available for the supervisors and teachers of our schools. These bulletins, to be issued by the Elementary School Division, we hope, will serve the purpose of guiding supervisor and teachers in their efforts to improve instruction continuously, and

of aiding the school to develop the creative and social interests and abilities of “all the children.”

HAROLD G. CAMPBELL,  
*Superintendent of Schools.*

September 21, 1937.

SUPERVISORS AND TEACHERS,

*Ladies and Gentlemen:*

The usefulness of the curricular material prepared by the teachers of Public School 500 (Speyer School), will be enhanced by a recognition of these facts: that the school is an experimental school for two groups of children—the slow learner and the rapid learner; that the developing program of the school has been kept within the limit of practicability for all New York schools that may wish to adapt the experiences of Public school 500 to their own situations; and that the teachers of the school have played a significant part in developing the school’s guiding philosophy, in shaping its policies and administrative procedures, and in preparing the instructional materials and techniques.

This bulletin prepared by Mrs. Schuck, and other bulletins to be made available at periodic intervals, are the outgrowth of much thought and experimentation by the professional staff of Public School 500. It is hoped that these bulletins will be valuable in providing suggestions to other teachers, and in offering tangible evidence of what may be done by a creative teacher guided by a skilled supervisor.

Certain other facts need to be known concerning Public School 500:

(1) *The philosophy of education* to serve as a workable criterion in judging the value of the day to day work in school was developed by the teachers in conference with the Teacher College advisers. Dr. Leta S. Hollingworth for the rapid learner classes, and Dr. William E. Featherstone for the slow learner classes; and with Dr. Benjamin B. Greenberg of the Elementary School Division. It was agreed that the “conventional school education” which aimed primarily to teach facts and develop skills, had only a subordinate place in this new, vital conception of education.

The teachers realized that school and society are interrelated in many important respects; and that the activities and experiences of children within and without the school must merge into a unifying whole, if they are to have true educative value. With this in mind, the teachers of Public School 500 (Speyer School) determined to promote as effectively as possible, the wholesome, well-rounded development of human personality in all its manifold aspects—physical, intellectual, spiritual—to the end that their pupils here and now, as children and in later years as adults, may participate effectively, both as givers and receivers, in a democratic society.

The aim of the school is primarily to cultivate all the traits and characteristics which are thought to be desirable in any member of a democratic society, whatever his level of intelligence. The teachers, therefore, sought to bring about the fullest expression of each child's personality according to his abilities and his developing resources. Reading, arithmetic and the other skills were to be taught functionally and truly as a means, and not as ends in themselves. [Such activities as drawing, forms of music, and the like, are considered basic process of communication and expression, and are regarded as tools of learning in much the same way as are reading and arithmetic. The well-rounded development of the personality of each child therefore, demands not only activities based upon the more conventional literary skills and processes, but also those, equally important, which make use of such processes as drawing, singing and the like, and the manipulation and modification of material.]

(2) The teachers were made *aware of the background of their pupils* through their study of the environment of each child, through frequent visits to the pupils' homes, through the establishment of a friendly relationship with each child, and through a knowledge of each pupil's educational, physical and personality status. This detailed study of each child revealed that though the children of the seven slow learner groups (75-90 I. Q.) were slow in reading and the other literary and abstract fields of learning, they showed in some cases, exceptional ability in mechanical aptitudes, social adjustment, pictorial representation, etc. The children of the two rapid learner groups (130-200 I. Q.) gave



evidence of superior ability in reading as well as in the cultural, social and manipulative activities.

(3) The philosophy of education thought through and accepted by the teachers was the guide for the educational program which concerned not only pupil-teacher relationships, but also supervisor-teacher relationships. The best creative efforts of each teacher were permitted as far as possible in the use of techniques and skills of which she was a master. Each teacher was made to feel that she was a responsible, independent, creative artist rather than a person who is made to carry out a program laid out for all teachers to follow uniformly. The teachers were encouraged to work in an atmosphere of freedom which is the only proper atmosphere for fruitful experimentation.

(4) *The curriculum for Public School 500*: The school decided not to retain the conventional school subject arrangement and curriculum which prevail throughout much of the city. For the slow learners a "modified activity program" was initiated with a series of fairly large comprehensive units or activities, touching at least the most obvious areas in which children's interests operate. In the development of these units, it was possible to stimulate considerable participation by pupils in the planning of the work, and in the sharing of the search for the solution of problems. Paralleling these major units were a series of "lessons" for the direct teaching of reading and the other skills, highly individualized and employed whenever analysis of the experiences of the pupils in the more comprehensive units indicated a need. In every case, the early functional use of the skills thus learned was kept in view.

This problem of implementing the general philosophy of the school through conducting pupils' learning activities demanded from the teachers and the advisers of the school resourcefulness and initiative. The choice of major units of learning depends upon the availability of suitable materials for their development, such as reading materials in books, magazines, leaflets, pictures, objects, trips, etc. In view of the slow learning ability of the children of these classes and the lack of books of demonstrated value for these children, the teachers, assisted by the W. P. A. Remedial Reading workers, prepared their own reading material. The bulletins that will be issued giving the units of instruction,

will include samples of this reading material prepared by the members of the staff of Public School 500 (Speyer School).

In this approach, the pupils of Public School 500 are expected to learn all they can, and to achieve in proportion to their capacity to learn.

Children will continue with their teachers from term to term, and it is expected that this arrangement will do much to further the program of individualization of instruction.

For the rapid learners in the two classes, the curriculum includes instruction in the skill subjects in terms of achievement test results for each child, planned on a "contract" basis. In addition, there are units of activity based on the evolution of common things, and on the growth of civilization in which history, geography, science, civics and nature study is integrated. The program of the rapid learners is further enriched by instruction in French, art, and music; and the interests of each child expand on a level of his intellectual capacity.

(5) *The instructional procedures* utilized by the teachers recognized the creative character of the learning process, and showed respectful regard for the talents, special abilities, interests and individual differences of pupils. The resources of the neighborhood, provided by the community institutions, agencies and individuals, were carefully studied, and liberally utilized. Reading materials within the vocabulary limits of the readers were provided; and activities both in school and out which would contribute to the successful launching and carrying forward of major projects were carefully evaluated and definitely planned in advance.

Visual material was frequently a part of the learning process. Expression in every practical medium was provided for and encouraged. Extra-curricular activities organized in the form of clubs, were considered essential in this new conception of education.

The unit of instruction printed in this bulletin reflects the philosophy and meaning of education as conceived and thought out by the teacher and adviser of Public School 500; and it seems to further our efforts to influence the every day living of the exceptional children:

the slow learners of which there are at least 150,000 in this city; and the very rapid learner of which there are probably 7,000.

It is hoped that our alert supervisors and teachers may find many valuable suggestions for a more vitalized, socialized, individualized program of education.

STEPHEN F. BAYNE,  
*Associate Superintendent of Schools.*

BENJAMIN B. GREENBERG,  
*Assistant Superintendent of Schools.*

September 28, 1937.

SUPERVISORS AND TEACHERS  
OF INTELLECTUALLY GIFTED CHILDREN,

*Ladies and Gentlemen:*

How shall we educate those children who are a far above the average as mentally deficient children are below?

Mental measurement clearly reveals these children. We know in modern time how to identify them. We also know at what rate they learn. Children of the mental calibers selected for rapid learner classes, at Public School 500, Manhattan, learn so rapidly that they easily cover twice as much ground in a term as does the average child. Thus these children have much spare time in the ordinary classroom. What do they do with this time?

The present Board of Superintendents of New York City, feeling strong dissatisfaction with the way in which gifted children have drifted without special consideration of their needs, has undertaken to find the best education for such pupils. Educational measurement tells us that these children will have at least half of every school day, through the elementary school, for intellectual work not now offered. Before this additional education can be given to those capable of it, it is necessary to arrive at a justifiable theory as to what knowledge is most suitable for this special purpose.

At the outset, we must recognize that no absolute criteria exist, by which to select from all phases of human experience those most valuable for such a group. Nevertheless, we are not altogether at sea. We may note first a few negative considerations. It is useless to consider intensive work in classical languages or in mathematics, for instance, as a “general sharpener” or a “general discipline” of the minds of these rapid learners. The education given should be such as will actually function *specifically* in their lives. It should afford a mental content to which can be assimilated that which is perceived in the world of their time.

Another negative consideration involves avoidance of subjects which are already taught in high schools. Latin and algebra, for instance, can be learned by very gifted children when they are nine and ten years old. But what is the use of having this done?

Coming to positive criteria, modern thought about education emphasizes preparation for life as it will be lived. The child should have brought to his attention whatever will help him to understand his world, and to render to others the maximum service of which he is capable. We know that civilization depends upon the highly intelligent for innovations, for improvements. “Progress means the discovery of the capable. They are our natural master. They lead because they have the right. And everything done to keep them from rising is a blow to what we call our civilization.” This is the essence of democracy at its best.

Others can conserve, but only the exceptional person can originate improvements. Therefore, should not the education of the most intelligent be primarily for initiative and originality? But originality depends first of all upon sound knowledge of what has been done previously, and of how it was accomplished. To take their rightful places in civilization, therefore, it would seem that the intellectually gifted need especially to know the history and evolution of culture, as it relates to common things. At present, this is not taught to children (or to adolescents) except in fragmentary and casual ways. A person may graduate from elementary school, high school and college without ever learning the evolution of refrigeration, of textiles, of ships and like common things. These things are taken for granted, and the knowledge

of life that is to be derived from study of how they came to pass never enriches the thought or attitude of the person.

The activities which make up the life of civilized man may be classified and designated in various ways. For instance, such topical classification might be as follows: (1) food, (2) clothing, (3) shelter, (4) health and sanitation, (5) trade, (6) time-keeping, (7) illumination, (8) law, (9) government, (10) education, (11) science, (12) philosophy (history of thought), (13) institution, (14) warfare, (15) labor, (16) recreation.

Each of these areas of culture can be studied, as a "project" of deep interest to gifted children. It is in the years from 7 to 12 that intellectual curiosity is in full possession of the person. In early years the mind is not distracted by economic struggles, love affairs, or similar interests of later years. It occupies itself primarily with questions of fact. These are the intellect's own years, as it hounds knowledge relentlessly with questions of Where? When? How? What? Who? Why?

At Public School 500, Manhattan, a series of enrichment units is being worked out with rapid learners in the form of teachers' handbooks, dealing with *The Evolution of Common Things*. The present unit, Number 1 of the series, ably formulated by Mrs. Schuck, deals with one phase of transportation, i.e. transportation by air. It will be followed by other units, covering various aspects of human culture.

It is true that this unit, and others to follow, will be especially adapted to the instruction of pupils in large cities. However, highly intelligent children everywhere in the modern world can use the materials, in some measure.

In closing we would point out that this undertaking in curriculum construction did not spring full-grown from our own foreheads. It grew out of previous experiments with gifted children, at Public School 64, Manhattan, at Public School 11, Manhattan, and at Public School 165, Manhattan, in years long gone by.

LETA S. HOLLINGWORTH,

*Educational Adviser to*

*Public School 500, Manhattan.*