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CURRICULUM GUIDE FOR THE SLOWER-LEARNER IN SECONDARY ENGLISH, SOCIAL STUDIES, AND SCIENCE.

MEXICO PUBLIC SCHOOLS, MO.

PUB DATE JUN 66

EDRS PRICE MF-$0.75 HC-$6.44 159P.

DESCRIPTORS- *CURRICULUM GUIDES, *ENGLISH INSTRUCTION, *SCIENCE CURRICULUM, *SLOW LEARNERS, *SOCIAL STUDIES UNITS, INDIVIDUAL INSTRUCTION, INDIVIDUALIZED PROGRAMS, LANGUAGE ARTS, ORAL ENGLISH, SECONDARY EDUCATION, TEACHING GUIDES, MEXICO PUBLIC SCHOOLS, MISSOURI

TEACHERS OF THE MEXICO, MISSOURI, PUBLIC SCHOOLS DESIGNED A CURRICULUM GUIDE FOR IMPROVING INSTRUCTION FOR THE SLOWER-LEARNER AT THE SECONDARY LEVEL. THE ENGLISH CURRICULUM EMPHASIZES THE DEVELOPMENT OF ORAL SKILLS, NOT BY THE STUDY OF THE FORMAL STRUCTURE AND THEORY OF LANGUAGE, BUT THROUGH IMITATION OF MODELS AND CONSISTENT PRACTICE. THE LANGUAGE ARTS PROGRAM AT THE JUNIOR HIGH SCHOOL LEVEL IS ORGANIZED TOPICALLY. UNITS SUGGESTED ARE ORAL COMMUNICATION, WRITTEN COMMUNICATION, USAGE, AND SPELLING AND VOCABULARY. FLEXIBLE SCHEDULING OF THESE TOPICS IS ENCOURAGED. AT THE SENIOR HIGH SCHOOL LEVEL, THE LANGUAGE ARTS PROGRAM IS ORGANIZED BY THEMATIC UNITS WHICH DEAL WITH HUMAN VALUES, AND PERSONALITY AND CHARACTER DEVELOPMENT. THE LABORATORY APPROACH IS RECOMMENDED, AND MOST CLASS PERIODS ARE DEVOTED TO SUPERVISED STUDY OR ACTIVITY AND INDIVIDUALIZED INSTRUCTION. THE TOTAL PROGRAM IS DESIGNED TO INCREASE THE STUDENT'S COMMAND OF OBSERVING, THINKING, READING, WRITING, SPEAKING, AND LISTENING SKILLS. SUGGESTED PROCEDURES AND ACTIVITIES ARE PROVIDED BY GRADE LEVEL FOR THE SEQUENTIAL DEVELOPMENT OF SKILLS. A SECTION ON TOOLS FOR TEACHING THE SLOWER-LEARNER BRIEFLY DESCRIBES BOOKS AND PROGRAM MATERIALS FOR TEACHING SUCH A GROUP. SAMPLE UNIT PLANS FOR GRADES 7-11 CONTAIN TEACHING PROCEDURES, READING LISTS, ACTIVITIES AND PROJECTS, AND SUGGESTIONS FOR CLASS DISCUSSIONS AND WRITING ASSIGNMENTS. ALSO INCLUDED IS A BIBLIOGRAPHY OF WORKS ON TEACHING THE SLOWER-LEARNER AND AN APPENDIX LISTING SUCH MATERIALS AS APPROPRIATE TEXTBOOKS FOR EACH GRADE LEVEL, AUDIOVISUAL AIDS, AND EASY READING BOOKS FOUND IN MOST SCHOOL LIBRARIES. THE REMAINING TWO-THIRDS OF THIS CURRICULUM GUIDE CONTAIN RATIONALES AND PROCEDURES FOR TEACHING SOCIAL STUDIES AND SCIENCE TO SLOWER-LEARNERS. THIS GUIDE, RECOMMENDED BY THE NCTE COMMITTEE TO REVIEW CURRICULUM GUIDES, IS NOTED IN "ANNOTATED LIST OF RECOMMENDED ELEMENTARY AND SECONDARY CURRICULUM GUIDES IN ENGLISH, 1967." (SEE TE 000 140.) (DL)

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MEXICO PUBLIC SCHOOLS

MEXICO, MISSOURI

June, 1966

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THE SLOWER-LEARNERS GUIDE FOR

ENGLISH, SOCIAL STUDIES, AND SCIENCE

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MEXICO SCHOOL PHILOSOPHY

When we teach boys and girls, we must remember that the students differ in emotional maturity, aptitudes, abilities, interests, background, etc.

We expect from each pupil only what he can do at his present stage of development, and it is our responsibility to help him achieve from that point.

Our curriculum must be organized to meet the needs and abilities of students.

We must provide learning opportunities which are within the experiences of the child, or which can be built on his experiences.

Since individuals must learn that life is made up of successes and failures; pupils should be helped to earn a reasonable number of successes and to accept failures.

We believe that true learning is largely an active process in which the pupil is a cooperative citizen analyzing problems, searching for information, organizing and evaluating the information, solving problems, reaching some conclusion, and judging whether or not it is the satisfactory answer.

Pupils should be taught that as a member of the democratic society they have the responsibility of perpetuating and improving that society. We must provide each pupil with experiences which will enable him to assume these responsibilities.

We believe that effective teaching and learning results in a changing of attitudes and efforts toward accomplishment.

We must learn through the available means to understand better the children for whose development we are responsible. We believe that an effective guidance program is essential.

We believe that our school personnel should make every effort to become acquainted with parents. We should tell the parents honestly and frankly about the work and attitudes of their children in the classroom and at all times be willing to discuss the problems of their children.

Our aims, ideals, and values of life must be set high and kept constantly in mind.

We believe that the public schools have a responsibility toward every child attending school who is educable as long as that child makes a sincere effort.

PREFACE

During the summer of 1966, a curriculum team of teachers in the Mexico secondary schools was engaged in a study, for a period of one month, of ways and means of working with slow learning students. The areas of English, social studies, and science were included in the curriculum study. Consultants from the State Department of Education worked with this group, giving directions and special help.

During the 1966-67 school year, each teacher in these fields will receive copies of the material. An inservice training program will be set up. Plans include a continuation of this study during the regular school year.

Working with the underachiever and slower-learner requires a team effort on the part of all members of the staff, including the administrators. The teacher is especially a key person in the teaching and training of these young people. An understanding teacher can do much to create interest and motivate learning.

The curriculum study has done much to stimulate a desire, on the part of all concerned, to help the educationally deprived students meet with success in school. These successes will help these students maintain interest in school and decrease the dropout rate.

L. Buford Thomas
Superintendent of Schools

HOW TO USE THE GUIDE

Edward A. Krug said, "The curriculum becomes the instrumentality by which the schools seek to translate our hopes for education into a concrete reality.....curriculum planning is the rational way of responding to the problems of schools." * One of our problems is how to best teach the slower-learner.

This guide was written for the purpose of defining this problem and seeking ways to solve it. This guide has been prepared by teachers for teachers' use as one means of improving instruction for the slower-learner at the secondary school level. It is intended to bring about some unity of purpose and serve as a means of stimulating interest in the improvement of the teaching of this student.

A curriculum guide is one useful way in which a group may state its ideas and assist teachers in identifying patterns of organization. In this guide, emphasis is placed on a problem to be studied by all teachers, rather than seeking abandonment of any teaching procedures. However, certain changes may become apparent as we go about our day by day planning for the teaching of the slower-learner. Each of us may find a two-fold job confronting us: first, to introduce into our planning the significant content needed for this student, second, to examine critically our present content to see what materials and methods can best reach the slower-learner.

This guide is released in tentative and incomplete form, and the committee requests that each teacher in the fields involved assume some responsibility for reading it and join in the process of discussion and appraisal. Curriculum building is a continuing activity, slow and tedious, and in order for any curriculum, or parts therein, to develop into a functioning structure, the assistance and ideas of all its faculty, administrators and counselors are required.

Curriculum comes to life in the classroom in the form of subject matter and related activities. However, subject matter presentation in outline form is not the function of this guide. There is no proposal for standardizing detailed courses of study in the Mexico schools. Rigid subject matter prescriptions do not allow for creative effort and outcomes on the part of teacher or student, nor can they anticipate the personal interaction of both which is the real source of learning. An outline type course of study tends to become static, authoritarian and stereotyped. Therefore, the committee has chosen to present a rationale for each area which serves to define its role regarding the slower-learner and to identify its contribution to the education of this student. Following these rationales, there is a variety of sample techniques and materials from which a teacher may gather ideas and use them in the individual teaching situation.

* Edward A. Krug, (University of Wisconsin) Book Curriculum Planning, New York: Harper Brothers, 1958.

OVERALL POINT OF VIEW FOR THE SLOWER-LEARNER'S CURRICULUM GUIDE

INTRODUCTION:

The educational patterns have separated the intellectual development of the secondary school students into two areas: the junior high and senior high schools. The present pattern in the Mexico Public School System is a 2 - 4 plan. Furthermore, there is a trend in the Mexico Schools toward grouping students according to ability. This curriculum guide is directed toward the below average secondary students enrolled in English, social studies, and science.

These students are generally non-verbal and are unable to read many of the textbooks which are aimed at the average or above average students. What then is the fate of the slower-learner? He may be assigned to sit and suffer through an entire year in a regular course he cannot understand, piling one failure on another until out of frustration he may become a discipline problem, withdraw behind a wall of silence, or drop out as soon as the law allows. In short, because of the problems inherent with the teaching of the slower-learner and the lack of materials designed for this student, he is often the forgotten member of the school population. The purpose of this guide is to suggest some guidelines with which to help this student to find his place in the school society and to experience successes geared to his ability. This guide is based on the premise that there are certain simple concepts to which each slower-learner should, and can, be exposed and that each student, regardless of ability, can master these concepts if they are presented on that student's level of understanding. This student will be a voting citizen in less than a decade, and it is important that he feels that he has a place in the interactions of his community.

STUDENT IDENTIFICATION:

The identification of an academically unsuccessful student at first thought is simple.....he does not measure up grade-wise with the so-called average. True, this is a definition of a low-achiever. However, in taking a closer look, there may be at least three categories within this group: (1) the well-adjusted student who has achieved limited academic success in spite of low ability, (2) the student of higher ability who because of personal problems has never been successful, (3) the student who may be lazy or poorly motivated and who is difficult to distinguish from the under-achiever.

The true slower-learner generally can handle only one idea or one task at a time. Furthermore, he has even greater limitations because of his low mental ability. He lacks the ability to draw upon experiences for concepts which he cannot verify except by his senses. He reaches a plateau of reading comprehension at approximately the sixth grade level.

This student does think, maybe to a lesser degree than the average student and over a shorter period of time. He also has an attitude, he wants to learn something, he has curiosity, he likes successes, and he may not be slow in all subjects or skills. He has feelings, and he wants to be accepted as a person. This student wants a niche, but has difficulty in relating himself to others or to the world around him.

TEACHER ATTITUDE:

The instruction of the slower-learner is a task full of many more frustrations and failures than the teaching of a regular class. The approach to the successful teaching of these students begins not with developing a curriculum, nor with a testing program, but with the teacher selected to guide these students. Teacher attitude causes students to respond differently. Any teacher instructing the slower-learner must possess the desire to teach these students based on the belief that teaching these young people is important. One of the first things that is observed in dealing with slower students is their relative inability to give attention over the full span of the normal class period to any one type of activity: listening, discussing, writing, etc. Patience, experience, experimentation, and a desire to teach these students will bring out ways to change the tempo of the class and thus hold their interest.

The teacher of the slower-learner needs to be a creative teacher who has patience, empathy, and imagination. Relaxed in manner, he should have a good sense of humor, plenty of determination, and the ability to be completely objective. At home in his subject matter, he should feel sufficiently confident to work with these students where he finds them. He has a professional commitment to be alert, and happy to recognize growth in skills and personal development, rather than to be downcast over snail-like academic achievement.

With the slower students of genuinely low ability, he will need kindness and an objective understanding of the precise nature of their mental limitations, the thought processes they cannot use. He will avoid setting tasks beyond their scope.

With the under-achieving slower students of better ability, the teacher knows that the necessary re-teaching means, besides a clinical analysis of his problems, an attempt to change a discouraged attitude toward learning in general. Skills and content must be presented in a fresh and lively fashion in units based on student interest, making use of audio-visual devices, and providing for simple motor activities rather than passive seat-work drill. The teacher needs to use the services of the nurse and the counselor in working with these students especially, since they often represent the social, economic and educational casualties of our society, worlds apart from the teacher in experiences and values and forced by law to stay in school against their wishes. The teacher of the chronic under-achiever needs a social worker's objective viewpoint and a sense of humor to lighten the job both for himself and for the under-achiever.

The third type of student--the goof-off--represents usually, an incomplete maturation problem who has capitalized--and still will!--on his nuisance value. With him, the teacher needs objectivity and determination as he holds him to an increasing assumption of responsibilities, at the same time trying good-humoredly to discover his interests and motivate him toward adequate job preparation.

The teacher of the slower-learner needs the help and support of his colleagues in an in-service training course which can act as a clearing-house for methods and materials as well as a source of new ideas and constructive professional viewpoints.

EVALUATION OF STUDENT EFFORT:

The slower-learner is characterized as one who fails to conform to the traditional educational modes. The attitude that the slower-learner cannot be taught successfully will defeat the philosophy of American public education--that we must teach all students who enter the public schools. The purpose of education is to find ways to raise each student to his maximum potential achievement, not to limit growth. Ways must be found to individualize and personalize education. In the final analysis, any blame for failure must be laid at the feet of the educational system rather than on the student. It is essential that several means be used to evaluate the progress of the slower-learner. Only in extreme circumstances should he be allowed to fail. Means of evaluation will be presented with the rationale of each subject guide.

There will be fringe-average students in this group. Provisions must be sufficiently flexible to permit this fringe-average student to be shifted into sections where average students predominate if his performance warrants it and he is psychologically ready.

E N G L I S H C O M M I T T E E:

Sara Bailey - Chairman

Marilyn Moore

Marilyn Sickman

Connie Lynn Willson

TABLE OF CONTENTS FOR ENGLISH

A POINT OF VIEW IN ENGLISH FOR THE SLOWER-LEARNER

WHAT IS ENGLISH?

English is properly considered not a subject at all, but a set of complementary skills establishing effective habits of observing, thinking, reading, writing, speaking, and listening. These skills are continually practiced in the language arts class. The three areas of knowledge--LANGUAGE, COMPOSITION, AND LITERATURE--are considered the structure of the subject. Tedious as work may seem at first to the teacher unaccustomed to the slower-learner, good instruction will produce progress in each of the skills and improved understanding of the functions of language.

TEACHING LANGUAGE TO THE SLOWER-LEARNER

Since the student's language is the product of his total personality, the teacher of the slower-learner needs both a very clear understanding of his student and of his real objectives in language instruction.

The slower-learner will not be able to profit greatly from study of the formal structure and theory of language, but he can, through imitation of good models and consistent practice, improve his use of it. The teacher probably realizes that the point of attack in teaching language to the slower-learner is the oral skills. However, a student's speech is a clear index of his socio-economic and cultural level. The dialect and usage problems he represents merely reflect conditions, attitudes, and values whose influence on the learner's personality will inevitably be stronger than mere precept. Changing a student's language depends on correcting his environment at least to the extent of providing him with real or vicarious experiences which are a broadening source of richer vocabulary and more desirable locutions. This may be done by trips, reading, or audio-visual experiences, carefully planned and student evaluated. Above all, the student needs to use language responsibly in a social situation in the classroom--to speak to be heard and appreciated and to write to be read for reasons the class recognizes are important.

The teacher should not feel that progress in minimal language skills in grammar, spelling, and sentence structure is beyond the slower-learner. Such progress will only be slower than in average groups. Practice materials and speaking or writing tasks should be within the real world of the student. He can master the concepts of capitalization, subject and predication, and the spelling of many words which he is carefully taught to articulate and pronounce. For these language skills he has to rely more on his listening and reading training for clues than the average student. Hence his teacher may better induce cognition by these methods than by direct attack and drill on grammar rules and precepts--to him meaningless abstractions.

Finally no language improvement will result unless the teaching is affective. The student must come to identify with users of better English. Since this is a process full of emotional and social conflicts for the student, the teacher of the slower-learner must be content in any one year to merely begin or support the process.

TEACHING COMPOSITION TO THE SLOWER-LEARNER

Using language involves composing one's thoughts. The teacher of the slower-learner should understand that oral composition is a thought process which precedes writing. Hence he will see that opportunity and help are given the student in composing orally before he is asked to write.

Oral and written composition for the non-academic student should be a course of practical, functional value. He should be taught to write a literate simple sentence on topics suited to his experience and have practice in writing a coherent brief letter.

After the teacher recognizes and accepts the slower-learner's limitations, he can see the uses for composition in helping these students. Since writing can perform an important guidance function by helping the slower-learner to understand himself, his desires, emotions, and values, topics should be related to the student's normal interests. The student should be allowed to experience the satisfaction of sharing his accomplishment in writing with other people. The teacher's role in this process should be to encourage freedom of expression.

Student achievement in oral and written composition will result in practical application in other language arts areas. In other words, practice in writing is practice in thinking. Better sentence comprehension produces better reading. The ultimate purpose of oral and written composition for the non-academic student is to improve his study skills, his social skills, and citizenship skills in his daily life.

TEACHING LITERATURE TO THE SLOWER-LEARNER

The teacher needs to approach the teaching of literature with care. To limit the student to the strictly utilitarian is to stunt imagination and emotional growth. However, the reteaching of reading skills is an extremely important basic task. Perhaps each task has some materials better suited to the teacher's objectives, and reading content should include both the practical and the imaginative.

Because reading is the basis of much of his learning, the slower-learner needs general improvement in reading skills. He needs to improve his reading comprehension, including getting main ideas, remembering what is read, visualizing what is read, and perceiving relationships such as time-order and cause-effect. To improve his reading comprehension, the slower-learner must have experiences, with the help of audio-visual aids, that will improve his vocabulary. Eliminating such bad habits as vocalization, lip reading, regression, and word-by-word reading will also help him become a better reader. The slower-learner must have pleasant experiences with reading in order to interest him in the vital skill of reading.

No one needs the refreshment and enrichment of literature as an art form more than the slower student. Research has shown that non-verbal students may be creative in art and music. The teacher of these students needs to use every opportunity to help students establish links between non-verbal and verbal expression, knowing that any externalization of thought and feeling is a first step toward removing language block. Examples of such methods are to be found on page 45 of Missouri's - A Guide for the Language Arts, Grades 10, 11, 12.

Literature for the classes where there are many students whose values and experiences are not middle-class will need to be chosen carefully for style, suitability, and quality of appeal to their feelings and imaginations. The moral and ethical values of literature must be inductively developed without preaching. However, since the slower student is relatively quite normal in social adjustment and interests and is separated from literary appreciation chiefly by his reading problem, the teacher will read aloud to him a great deal and provide records and tapes for listening and discussion. With the tape recorder, the student can be encouraged to record privately his own attempts at interpretation or dramatization, both very creative language activities. When he is satisfied with his tape performance, it may be triumphantly played for the class.

LANGUAGE FOR DEMOCRATIC COMMUNICATION: GOALS OF OUR ENGLISH PROGRAM

1. A sense of the importance of order in communicating.
2. A sense of the interrelatedness of language activities.
3. A sense of the importance and value of accuracy.
4. An evolving sensitivity to language.
5. A sense of the levels of usage and the ability to use them appropriately.
6. A sense of the humor and vitality of dialect as it speaks for democratic individuality.
7. A sense of the importance of observation and logic.
8. A sense of the need to reflect and to interprete experience.
9. An ability to follow transitions of thought, especially in listening.
10. An ability to determine emphasis in listening or in reading.
11. A sense of what is involved in the full development of an idea.
12. An ability to analyze what one reads in relation to one's personal experience.
13. An ability to distinguish between concrete and abstract language, to be coherent.
14. A sense of pride in honest and thoughtful speech and writing.

A RATIONALE FOR TEACHING ENGLISH TO THE SLOWER-LEARNER

Culturally speaking, the slower-learner is not an object of charity. His language represents subcultures which need to relate to our society and can enrich us. Missouri teachers who are proud of Huckleberry Finn, internationally regarded as a great American novel, need to read Mark Twain's Pike County argot aloud to slower students and then ask for value judgments and perception of irony usually reserved for better classes. Student response--also in argot--will be surprising! The same procedure, using Negro authors of today or the spokesmen for other disadvantaged people, will be a step toward real communication. The teacher of the slower-learner, for rapport's sake, should make an effort to understand and appreciate his students' dialect as the growing fringe of language meaning, representing better levels of diction and usage as changes in behavior likely to be economically rewarding.

The changes in behavior--in internalizing better language--will come about only if the teacher likes the pupil, and the pupil likes the teacher. The teacher needs to show this liking for the slower group physically by smile, manner, intonation, and casual gesture. The teacher who is really sensitive to the implications of the slower-learner's language and to his problems learns to appreciate and respect him. He should neither pity him sentimentally nor over-identify with him, because he can best help by maintaining objectivity and a realistic outlook.

Interpersonal relationships among the students also largely determine language change. It is very important that the teacher study the dynamics of each class by sociogram or other measurement and then work with student leadership rather than against it, at the same time directing student energy toward her own ends of improved speech and writing. The teacher needs to be sure the students are receiving favorable impressions of better diction, responding to them affirmatively rather than negatively, valuing good usage in social situation where it seems to produce better results than the argot, grasping the principles of grammar to a degree, and voluntarily incorporating some of those principles in spontaneous speech or writing.

THE SLOWER STUDENT'S LIMITATIONS

Perhaps a general description of the mental characteristics of the slower-learner will be helpful. In his Guidance of Learning Activities, Burton lists the following:

1. Slow reaction time
2. Weak ability to transfer learning
3. Short interest span
4. Little initiative and ability to plan
5. Illogical thought processes
6. Weak powers of abstracting
7. Inability to organize
8. Narrow range of interests
9. Inability to correct his own failures
10. Oftentimes a lack of confidence

It will be seen immediately that these traits severely limit the teacher's choice of methods with the slower-learner of genuinely low ability. However, since any one class is a composite of low, handicapped or retarded, and irresponsible students, the teacher may usually assume that they can work normally but slowly with simpler materials.

Helpful techniques at each grade level will be discussed under course content, where the guide will attempt to work out a program of the sequential skills in English.

The teacher who is successful with slower students is usually the one who is most concrete in his own thinking and in the tasks he works out for his students.

METHODOLOGY FOR JUNIOR HIGH

The Language Arts program for the slower-learner at Hardin Junior High has been divided into topical, rather than thematic units. The division of reading and English classes in the seventh and eighth grades has rendered this procedure necessary. Since a short attention span, restlessness, and failure orientation are characteristic of the slower-learner, these units are not to be taught separately, but as interrelated activities each week. The following units are suggested:

1. Oral Communication
2. Written Communication
3. Usage
4. Spelling and Vocabulary

Schedules for the slower-learner should be flexible--never rigid. It is recommended that an average of one period per week be devoted to oral communication, one period per week to written communication, one period per week to spelling and vocabulary, and two periods per week to usage. But teaching the same subject on a certain day each week, eg., teaching written communication every Tuesday should be avoided. The charts below only suggest how these subjects might be arranged in an individual week. Teacher creativity should be exercised to vary this schedule.

FULL PERIOD SCHEDULE PLAN A

Units	Monday	Tuesday	Wednesday	Thursday	Friday
50 Minutes	Spelling and Vocabulary	Written Communication	Usage	Oral Communication	Usage

A specific period may be divided into two or three sections as illustrated in Plan B. This may be desirable when one lesson is closely coordinated with another.

FLEXIBLE SCHEDULE PLAN B

Units	Monday	Tuesday	Wednesday	Thursday	Friday
16 Minutes	Spelling	Oral Communication	Vocabulary	Oral Communication	Spelling
16 Minutes	Supervised Study	Written Communication	Supervised Study	Written Communication	Supervised Study
16 Minutes	Usage		Usage		Usage

The slower-learner should have a minimum of homework assignments, if any at all. Provision for supervised study should be made in the fifty minute period. During this study time, emphasis should be placed on individual instruction.

METHODOLOGY FOR SENIOR HIGH

In the senior high school, literature, composition and language are usually taught in thematic units for the slower-learner which are constructed to meet his emotional needs and interests. They deal chiefly with human values and personality and character development, using all six skills. All necessary description of thematic units and their processes is to be found in the Missouri Guide to the Language Arts, Grades 10, 11, 12. Since the thematic unit takes the laboratory approach, most of the class period is spent in supervised study or activity and in individualized instruction. Usually homework assignments are not given in 2's classes, but voluntary contributions, however slight, are a sign of real progress.

EVALUATION PROCESSES

While standard tests are given each year--the Iowa in the junior high school, the SRA Reading Record, the Purdue English Test, and certain diagnostic tests given in the reading program at the senior high--it should be understood that these measure groups rather than indivduals. The only real criteria for passing or failing a student is growth and effort. The standard test serves as an objective yardstick of academic progress for normal students. With the slower-learner, teacher-made tests, the student's individual theme file, and the subjective judgment of teacher and counselor determine promotion.

CLASS SIZE

Administrators try to limit the size of most slower classes to 25 or less. At the high school all classes in English are kept close to 25, because of the large amount of theme reading and clerical work the teacher must do. Individualization of instruction among the three types of slower-learners, means that teachers of these classes need time for multiple planning and preparation of attractive materials.

DISCIPLINE

Because of the many tensions from habitual failure, socio-economic and emotional conflicts, absence of work habits, and general low verbal ability, slower-learners tend to present a discipline problem, especially when tasks and materials set before them are not suited to their abilities. Setting orderly routines and work habits kindly but firmly and maintaining democratic attitudes of mutual responsibility help to create favorable climate for learning. Establishing mutual confidence may be a year-long task, but it is the secret of real educational progress for these students. The clown or the erratic individual should be quietly removed and worked with by teachers, assistant principal and counselor to the point where he can re-enter class and assume his proper place in the joint effort. At the high school, the weekly report gives the teacher an opportunity to let these other school people know that trouble is brewing. It is best not to allow matters to reach the point of a public clash between teacher and pupil. This in itself is emotionally disturbing to other students--and to the teacher.

COURSE CONTENT IN ENGLISH FOR THE SLOWER-LEARNER

SEQUENTIAL PROGRAMMING OF SKILLS

As we have defined English, the term denotes the processes and skills of clear communication, whether reading or writing. These are just as essential in earning a living as in the transmitting of the American culture. Since English is a process, teaching it effectively probably consists of providing a series of sequential experiences or practices from 7th through 11th grade. In 7th grade these begin with simple sensory responses, learning to think, and to find and arrange words in useful patterns. The 8th grade student begins to see the design and meaning in these patterns. In the high school years he broadens his life experiences, begins to perceive the interrelationships of subject matter, and grows toward mastery of the skills.

Following is an attempt to show sequential experiences which are likely gradually to bring about such outcomes. It is suggested that the teacher consider these as ideas for teaching and use them at his discretion where applicable.

OBSERVING

7th Grade

a. Present problems and situations which allow students to discover the difference between fact and generalization
b. Simple phonetic spelling
c. Pantomimic verse and speech rhythms
d. Observing films or taking trips as a basis for more satisfactory reading experiences
e. Providing experiences for students with different kinds of words and getting them to perceive the functions of the several kinds--nouns, verbs, and modifiers. Observing patterns of simple sentences.
f. Observing how a teacher checks out a book in the library

8th Grade

a. Teaching time order in simple narration
b. Working on spelling of homonyms, noting clue similarities and differences
c. Observation of simple and compound sentences
d. Observing films or taking trips as a basis for more satisfactory reading experiences
e. Observing how to find information in atlases and encyclopedias

9th Grade

a. How to discover new words through dialect, discussion, context, and dictionary
b. How to express opinion politely in speaking and writing
c. How to reconcile differences of opinion democratically
d. How to value personality differences
e. Observing spelling patterns in verb tenses, plurals, and possessives of nouns

f. Observations of sources of news--newspapers and newscasts
g. Observing films or taking trips as a basis for more satisfactory reading experiences
h. Discovering methods of arranging books in the library and how to use the card catalog

10th Grade
a. Observing how to express opinions tactfully in oral discussion and in writing
b. How to read and visualize simple metaphors
c. How to summarize what one has understood in reading
d. Observing films or taking trips as a basis for more satisfactory reading experiences
e. Observing different types of magazines in the library

11th Grade
a. How to make interesting reports
b. How to read the different parts of the newspaper
c. How to perceive relations between American history and American literature
d. Observing films or taking trips as a basis for more satisfactory reading experiences

THINKING

7th Grade
a. Compare the important with the less important
b. Compare the truth and fiction--how to identify

8th Grade
a. Simple proof of a hypothesis--giving reasons why they think something
b. Derivation of spelling rules for plurals and possessives
c. Derivation of rules for nouns, verbs, modifiers

9th Grade
a. The paragraph as a group of related thoughts
b. Study of synonyms and connotative words
c. Illustrating by simple analogy--perceiving likenesses

10th Grade
a. Writing the summary of reading material that includes both generalization and detail
b. Laying the basis for comparison by the use of the very simple syllogism

11th Grade
a. Understanding how to read a test in order to answer it
b. Sticking to the subject in answering a question on a test directly
c. Concentrating when writing tests or reading for information

READING

7th Grade

a. Identifying key words
b. Recognizing key statements
c. Habit of inward visualization
d. Use of reading guide questions placed on the board which are reviewed orally before reading starts--an aid to concentration and purpose in reading.
e. Cog words and their bearing on sentence meaning
f. Conscious building of vocabulary from context of reading
g. Animal, adventure, and mystery books
h. Speed and recall drills to promote the habit of concentration
i. Use of Tachist-O-Flasher and Instant Word Filmstrips to develop his basic sight vocabulary
j. Interpreting maps, tables, and graphs

8th Grade

a. Using the adult vocabulary he knows
b. Word recognition and analysis through root, suffix, prefix
c. Ascertaining time order in narration
d. Perceiving and interpreting inference
e. Introduction to the world of romance, cars, and sports books
f. Speed and recall drills to promote the habit of concentration
g. Use of Tachist-O-Flasher and Instant Word Filmstrips to develop basic sight vocabulary
h. Regular library time for browsing
i. Making certain that the student uses new words found in his reading in ordinary conversation and writing so that it can be certain he has mastered the word
j. Interpreting maps, tables, and graphs

9th Grade

a. Dealing with abstract words
b. Following thought sequences
c. Making use of encyclopedic reference
d. Discovering the pleasures of hobby magazines
e. Examining different types of books for personal interest reading
f. Books of adventure leading into other types of reading
g. Reading to compare and contrast
h. Use of Tachist-O-Flasher and Instant Word Filmstrips to develop basic sight vocabulary
i. Regular library time for browsing
j. Speed and recall drills to promote the habit of concentration
k. Reading for sensory impressions
l. Interpreting maps, tables, and graphs

10th Grade

a. Interpretation of description and character analysis
b. Reading of news stories and editorials
c. Reading and following directions
d. Interpreting maps, tables, and graphs
e. Reading to compare and contrast
f. Regular library time for browsing
g. Speed and recall drills to promote the habit of concentration

11th Grade

a. Other library tools such as almanacs, Blue Books, Who's Who, year books, vertical file, historical and economic atlases
b. Reading magazine articles for personal satisfaction, information, and opinion
c. Speed and recall drills for concentration
d. Interpreting maps, tables, and graphs
e. Regular library time for browsing

WRITING

7th Grade

a. Topic sentences written followed with oral talk
b. "Guess who" sentences
c. "We write a story"--group project on overhead, teacher writing at dictation and letting students find their errors and inconsistencies
d. Writing headlines to make vivid verb sentences
e. Writing friendly letters
f. Rewriting for correction of mechanical errors

8th Grade

a. Make, build, do--"how to" paragraphs
b. Writing dialogue interviews on opinion or experience
c. Taking notes on reading and on listening
d. Writing sentence summaries of reading experiences
e. Rewriting for mechanical correctness

9th Grade

a. Explaining by example
b. Further summarizing of books and articles
c. Reducing abstract generalization to concrete particulars
d. Using transition words in process themes
e. Rewriting to correct mechanical errors

10th Grade

a. Writing character sketches
b. Making a newspaper, using the factual reporting style who, what, when, where, why, how
c. Avoiding verbal shifts, maintaining use of the past tense in narration
d. Writing library reports
e. Rewriting for mechanical correctness

11th Grade

a. Writing letters of application and other business
b. Writing a library resource paper for other classes
c. Rewriting

SPEAKING

7th Grade
- a. Telling jokes, human interest items, folktales
- b. Learning to articulate, pronounce and project well enough to make class announcements
- c. Role-playing and sociodrama
- d. Private taping of acted out written scripts derived from reading news or stories, with a great deal of teacher help on scripts
- e. One act plays taped privately at first
- f. Training in choral reading
- g. Opportunities for books sales talks for reading stimulation

8th Grade
- a. Choral reading for rhythm, cadence, and tone
- b. Voice production skills--projection and oscilloscope to observe inflection
- c. Taped practice drills in articulation (tongue twisters)
- d. Word pronunciation drills based on diacritical marking clues
- e. Reading aloud for punctuation inflection
- f. Noting humorous changes of meaning due to inflection
- g. Book sales talks for reading stimulation

9th Grade
- a. Oral interpretation of fiction
- b. Verse interpretation
- c. Panel discussion
- d. One act plays
- e. Sociodrama and role playing
- f. Book talks

10th Grade
- a. Imitation of TV programs--I Have a Secret, College Bowl, sports reporting, with student written questions
- b. The acting out and taping of scripts derived from stories students have read
- c. Reading their own themes aloud on tape for playback
- d. Impersonations and "guess who," using characteristic pantomime and noting body movements
- e. Book talks
- f. Panel discussion
- g. Telephone manners

11th Grade
- a. "Mr. Attorney"--mock trial procedures for answering questions directly and fully.
- b. Elements of rules of order in conducting a socialized recitation such as book discussions
- c. Putting your best foot forward in job interviews
- d. Telephone efficiency

LISTENING

7th Grade
- a. Stories read by teacher where listening guide questions are placed on the board prior to the reading and where there are oral or written recall activities
- b. Listening to teacher-made tapes of narrative verse read against appropriate musical background. Students discuss (preference testing?) mood or effect of poem
- c. Listening to records which are dramatic readings of great novels and comparing them with simplified versions
- d. Teacher reads aloud for narrative tension using excerpts from Tom Sawyer and Huckleberry Finn
- e. Enjoying drama in relaxed manner

8th Grade
- a. Taking fact notes from teacher lecture
- b. Writing one or two sentence summaries of student reports
- c. Hearing an argument and deciding the right conclusion
- d. Picking fallacies in sales talks
- e. Enjoying drama

9th Grade
- a. Summarizing talks on panels, noting different opinions and contributions
- b. Reporting on TV newscasts or documentaries
- c. Reporting on the preacher
- d. Picking fallacies in political talks or slanted articles

10th Grade
- a. Listening to lyric as well as narrative poetry
- b. Listening to drama for theme or ideas
- c. Further summarizing of panel talks
- d. Keeping a log of TV newscasting listened to

11th Grade
- a. Listening to public discourse for recall and discussion
- b. Listening to lyric poetry
- c. Listening to drama
- d. Keeping a log of TV newscasting listened to

TOOLS FOR TEACHING THE SLOWER-LEARNER IN THE JUNIOR HIGH SCHOOL

A number of audio-visual materials are available to aid the Hardin Junior High School teacher in his classroom presentation. Tape recorders, record players, overhead, filmstrip, and film projectors may be reserved by the teacher for use in enriching the student's learning experience. Records, filmstrips, and reference books suitable for the junior high may be obtained from both the Hardin Library and the Audrain County Library. Teachers are encouraged to utilize both libraries.

Approximately three SRA reading labs applicable to the slower-learner may be used for program enrichment. A control reading program will also be available for the reading classes.

TOOLS FOR TEACHING THE SLOWER-LEARNER IN THE SENIOR HIGH SCHOOL

The basic texts assigned to slower-learner classes in the high school are the Harcourt Brace Companion series Adventures for Today (9th), Adventures in Living (10th), and Adventures for Americans (11th). These texts range from 4th to 9th grade level in reading difficulty but are carefully chosen for high school social interest. Each book is thematically organized and has an excellent manual which supplies many suggestions for supplementary aids. In fact, each manual is also a very fine text on teaching English to the slower-learner by the unit method.

There are also available in each year, for supplementary use with slower-learners the Scott Foresman Galaxy series Vanguard (9th), Perspectives (10th), and Accent (11th). These texts are standard texts in the average (3's) classes. They are used most effectively according to their manual directions. Vanguard is accompanied by Tactics I, a programmed reading skills course with individual lesson sheets. Tactics II accompanies Perspectives. Tactics III should be published some time this year to go with Accent. The Galaxy programs may be used with better students among the slower-learners or with those who need reinforcement in a particular reading skill. These materials should be used only as thematic unit supplement in reading or listening, since they are usually too difficult for many slower-learners in the 2's classes. Additional supplementary sets of literature texts are Prose and Poetry Journeys for the 9th grade and Prose and Poetry Adventures for the 10th grade.

Another reading-centered set of unit materials available in each year is the Scholastic units. These are thematic libraries of pocketbooks with programmed lessons outlined in manuals of instruction. Available to the 9th grade are Moments of Decision; to the 10th grade, Personal Code and Survival; and to the 11th grade, Success. The sets represent an attempt to furnish materials for differentiation of instruction and are usually most useful in the latter half of the year when differences within the class begin to widen, as some slower-learners progress and some do not. However, the Scholastic units cannot be effectively used without their manuals. They may be substituted for one of the thematic units in the Companion series. Certainly they should not be regarded merely as a supplement to library resources for free-reading books. Since pocketbooks are especially attractive to youngsters and very portable, the teacher will need to use the pocket cards in each book to keep the books from being carried off!

In mechanics and composition for the slower-learner, students use Our English Language, First Course, in 9th grade; Building Better English 9 in the 10th grade; and Enjoying English 11 and Practical English, a weekly

Scholastic publication in the 11th grade. The teacher will possibly wish to use these texts mainly as resources. They represent language principles as clearly and simply as possible and offer some drills which can help this type of student. It is perhaps best to omit in direct teaching, chapters in the 9th and 10th grade books dealing with the traditional grammar of the complex sentence and with diagramming as a system because of the limitations of the student who is weak in the ability to abstract and to transfer learning. Usually such students do not write subordinate clauses very often. However, when a student occasionally does and asks help in placing or punctuating it, materials from these chapters can be used for individual help. It is important to remember that grammar and mechanics are not subjects to be taught but skills which are gradually developed throughout the year in oral and written composition. Teaching about language is not a substitute for teaching the use of language. The teacher should not feel pressed to "cover the book" whether actual skills in use develop or not.

In addition to these language handbooks there are available the SRA Writing Skills Laboratories, Part I: Narration, Part II: Description, and Part III: Exposition. Parts I and II are suitable for 9th and 10th grades and Part III for 11th grade. The Writing Skills Laboratories were developed for junior high school use, but they serve the slower-learner well because they are developmental. The teacher will find that the skills developed are sequential and perhaps a little more carefully articulated than are the writing skills in a general English grammar and mechanics textbook. It is well to remember that the Writing Skills Laboratories are programs rather than lesson leaflets only. Best results may come from using the materials in their planned order.

An important tool in teaching English at the high school is the pupil's individual theme file folder. Each English classroom has a cabinet to accommodate these student files which contain the pupil's accumulated SRA Reading Record tests for each year, his graph of reading progress, and his Purdue English tests (grammar and mechanics), as well as his rewritten themes, unit writings, and other important assignments for the year. Except with seniors, the file is put in order in May and remains in the cabinet until September when it is turned over to the pupil's new teacher for perusal. This routine perhaps provides for some continuity in instruction. The standard tests are then transferred to the new folder for the coming year, and the pupil may take his old file home. As well as teaching good study habits, the files provide data for the yearly parent conferences and for the guidance counselors.

Since most slower-learners are 3 - 5 years retarded in reading level, practice with the Tachist-O-Flasher filmstrips will help build basic sight vocabulary, help the teacher to diagnose reading difficulties that are symptoms of visual problems, and improve speed, concentration and comprehension. These materials are not unit-related thematically, but representing them as an aid and a game for 15 - 20 minutes once or twice a week will nudge the complacent students and give earnest strivers a gratifying sense of possible achievement. For the student of genuinely low ability or visual handicap, the teacher will avoid any stress on this activity which might give rise to anxiety or deepen the sense of frustration. The tapes and machines may be secured through the reading teacher (Room 201) and the librarian. Teachers will wish to read the manual, box-index of filmstrips, and preview spools for their vocabulary level and suitability.

It is hoped that interested teachers of slower-learners will experiment with making tapes suitable for use in the language laboratory. The high school also has facilities for making transparencies for the overhead projector.

SAMPLE UNIT PLANS: A YEAR'S PROGRAM IN ORAL COMMUNICATION FOR SEVENTH GRADE

Since the slower-learner is more successful in speaking than in writing, and since people talk much more than they write, emphasis in the seventh and eighth grade is placed on oral communication. The lessons in speaking should be applicable to the daily life of the student.

Text: The MacMillan English Series G7

Understandings to be Developed in 7th Grade Instruction:

1. To speak clearly and effectively
2. To develop self-confidence in speaking
3. To be able to limit the subject of the speech to a specific topic
4. To listen for content
5. To listen attentively and courteously

Section Three: Using English in Speaking and Listening

Chapter 10: "Conversation and Discussion", pp. 179 - 205

Activities:

Part 1: Making Introductions

Teacher asks students to name situations in which making an introduction would be necessary. A discussion of correct ways to make and respond to introductions follows. Type situations for introductions on slips of paper and distribute to class. Each student will receive a different situation. Allow the student to choose his own partner to demonstrate his introduction. Allow students to introduce outside speakers to the class during the year. One student may sometimes present another to a school group. The chairman of a discussion panel, for instance, may remind his classmates of some pertinent qualification of the next speaker. Teacher should be alert for any opportunity available for the student to make an introduction.

Part 2: Participating in a Conversation

Students in the seventh grade will be most interested in participating naturally and intelligently in conversation. A few talks will give all a chance to evaluate their oral skill. Typical topics for profitable conversation are:

A bit of current news from a magazine or newspaper
An advertisement, fetching or questionable
A question--any question which is real and earnest
A school interest or activity
A local incident
A well-known character in fiction or history
The plot of a story read by the class
Reasons for the popularity of spy stories and movies
What to do in an emergency (any emergency of interest)

Arrangement of desks, etc., can help create an informal atmosphere and encourage spontaneity in the students. Small groups may be formed according to the interests of individual students. Each group should have a fairly definite subject to discuss. Before the first conversation, there may be a class discussion of the characteristics of good conversation: alertness of each speaker and listener, tactfulness, courtesy, attempting to make real contributions, avoidance of showing off or talking too much, avoidance of interrupting, the asking of leading questions, and so on.

Teacher should move from group to group guiding the conversation when necessary and giving the teacher an opportunity to evaluate individual performances. The shy, retiring individual may be gently prodded by the teacher. A particularly successful conversation may be tape recorded and later played to the class. Praise and constructive criticism of this conversation should help the class to discover a few techniques used in conversing.

Part 3: Telephoning

Before practicing the correct way to make a telephone call, each student should be familiar with the telephone directory. If possible, give a directory to each student and carefully explain the main sections of the directory. Ask the students to try to discover all the information available in it. As students discover this information, list it on the board. When the students have completed their list of information to be discovered, ask a series of prepared questions (eg., individuals' addresses, phone numbers, etc.). Challenge each student to be the first to discover the answer in his telephone directory.

The class discusses both correct and incorrect ways to make telephone calls. The teacher must be certain that the students realize which telephone calls are correct and which are incorrect. Allow each student to choose a partner and give each group a few minutes to prepare its conversation. Using the dummy telephone, allow each group to demonstrate the correct way to make a telephone call. Tape record the students' conversations and allow them to praise or criticize their own performance. Discuss long distance calls with the students, emphasizing direct distance dialing. Allow students to demonstrate placing a long distance telephone call on the dummy telephone. Have a few out-of-town telephone directories available for students to examine.

Part 4: Contributing to a Discussion

The principles underlying good conversation are also basic to good discussions. A satisfactory discussion requires progress toward a recognized goal and involves contributions of all, or nearly all, the members of the group. The topic of discussion should usually be phrased as a problem to be solved. Perhaps no unquestionable solution exists, but at least tentative conclusions may often be drawn. Expect each member of the class to contribute something to the discussion. If the teacher remembers the particular strong points of each student, he may occasionally supply a lead or a question that will bring in some of the silent ones. Announce the topic of discussion in advance to give each student sufficient time to think about his own ideas on the subject. Tape record the discussion and allow students to praise or criticize their own work.

Chapter 11: "Speaking and Listening", pp. 206 - 224

Part 1: Parliamentary Procedures

Discuss the fundamental principles of parliamentary procedure in the classroom. Appoint a temporary chairman and have the class illustrate the correct parliamentary procedures. Ask class to name instances when they have participated in a meeting conducted by parliamentary procedure outside of the classroom.

Part 2: Announcements

Type different situations for announcements (eg., change in class schedule, party next Friday, need for volunteer work, etc.) on slips of paper and give each student a different situation.

Allow class time for students to prepare a brief announcement. Emphasize that all necessary information be included. Discuss posture, articulation, and projection carefully before they deliver their announcements. Tape record all announcements and allow class to discuss the good and bad points of each. It is desirable to have committees in charge of bulletin boards, special occasions, etc. With such committees, the need for announcements often appears. Homeroom and assembly programs also frequently necessitate announcements. Allow students to make these and other announcements whenever possible during the year to give them necessary practice.

Part 3: Giving a Good Talk

Each student, especially the slower-learner, will have serious difficulty in selecting a suitable topic for his talk. He is likely to choose a big subject, fail to narrow it, take notes on an encyclopedia article, and for his talk, simply summarize what the encyclopedia says. With teacher guidance, the same student will cut the subject down to workable size, consult more than one source, and employ his own plan of organization for the material. Allow each student to give a short talk on something that interests him. A short book report may be the topic for the talk. Encourage the student to give a report on a book he enjoyed. He should try to convince other students to read the book. Avoid having too many reports given on the same day.

Emphasize the mechanical part of the talk--speaking clearly, looking at the listeners, and having good posture--before the student delivers his talk. Discourage students from memorizing their talks. Do not expect the talk to be longer than two or three minutes. If possible, tape the talk privately first and allow the student to see his own mistakes. This practice will help the student's confidence when he finally faces the class. Tape the talk again when it is delivered to the class. Allow the student to praise or criticize his own performance as heard on the tape. Ask members of the class for constructive criticism of the student's poise before the audience.

Part 4: Effective Listening

Discuss the characteristics of a good listener. Class may list standards for listeners such as:

Have desks clear
Sit in comfortable position with eyes on the speaker
Show by expressive faces that you are "with" the speaker
Be patient if the speaker has difficulty
Be able to offer intelligent criticisms
If the final bell rings, do not interrupt the speaker

A volunteer committee may construct a poster naming and illustrating the qualities of a good listener. The students may want to periodically refer to this list.

Before listening to a speech or report, teacher should suggest that the students listen for something in particular. Writing a listening guide on the blackboard for all students to follow will greatly increase the intensity of listening. A short quiz may be given after the speech or report to allow the student to evaluate his own listening.

If the students have difficulty following instructions, the teacher may give oral instruction on a number of useful topics--how to open a new book, how to check a book out of the library, how to take notes on a 3 x 5 card, etc. After completing each set of instructions, have the students do what was just explained. Have each student give instructions for accomplishing some task that could be done quickly in the classroom, and other students carry out the instructions.

Chapter 12: "Reading Aloud and Telling Stories", pp. 229 - 242

Part 1: Reading Expressively to the Class

Choose a record that has a poem read expressively. Play the record to the class asking them to note the feeling and liveliness in the reading. Read suitable excerpts from novels and poems to the class. Choose one article and read it to the class without expression. Then repeat the reading of the article only this time use the proper expression. Help the students find interesting passages to read. If there is dialogue, allow the students to work together on it. Tape the readings privately. After the student has sufficiently mastered the reading, have him read it for the enjoyment of the class.

Choose suitable one act plays for the class and allow students to choose a part. Divide into the necessary groups and rehearse the plays. If possible, tape each group's play before the final presentation and allow the group to improve its own presentation. Allow class time for each group to present its play.

Part 2: Choral Reading

Students will enjoy reading poetry together if they are carefully directed. Class will choose poem suitable for choral reading and each student will read it silently. Discuss the moods, ideas, etc. contained in the poem. Be certain that the students understand not only the poems as a whole, but every word in the poem. Allow sufficient class time for practice in reading the poem together. Tape record a few of the practices. Students will be able to hear both the good and the bad qualities of their reading. When the class has sufficiently mastered the choral reading of a poem, arrange to have the students present their reading to another class.

Part 3: Telling a Story

Discuss the characteristics of effective story telling.
Have students suggest a few things to be avoided in telling a story. These suggestions might include:

Unnecessary "see's" and "you know's"
Irrelevant statements
Relation of events in an illogical order
Laughing before the listeners know what is funny
Leaving out important details

Encourage students to look for pointed anecdotes, to relate to the class stories or parts of stories that they have found interesting, and bring into the class discussion any pertinent material they have discovered.
Have each student prepare some interesting story for the class. Ask students to practice telling their story to friends and relatives before delivering it to the class. When the students tell their stories, conduct the classes as informally as possible.

SAMPLE UNIT PLANS: A YEAR'S PROGRAM IN ORAL COMMUNICATION FOR EIGHTH GRADE

Text: The MacMillan English Series G8

Understandings to be Developed in 8th Grade Instruction:

1. To use speaking as an effective tool for communication
2. To develop poise before an audience
3. To use logical sequence and organization in speaking
4. To listen for understanding and appreciation

Section Three: Effective Speaking

Chapter 8: "Talking With People", pp. 185 - 194

Activities:

Part 1: Introducing People

An appropriate exercise for the formal introduction is to have a student introduce someone to the class. Have each student write his or her name on a slip of paper. The papers are then put in a bag from which every student draws name of someone to introduce to the class. Each student is given a few minutes to acquaint himself with the interests and experiences of the other student. One minute is allowed for the actual introduction.

A practical application of the informal introduction is to have the material related to the experience of the student. Have each student write on a slip of paper a situation which involved an introduction, preferably an experience he has had within the last year. The papers are then traded between classmates and the introductions dramatized.

When errors or mistakes are merely pointed out to the student by the teacher, the student often fails to comprehend them. One method of facilitating the student's creativity and value judgment is a bulletin board display. Have the student bring pictures, photographs, or cartoons from magazines and newspapers which show people introducing or greeting other people. Let the class make up humorous captions indicating some of the mistakes and wrong ways to introduce people.

Part 2: How to Begin a Conversation

Practice in giving and responding to conversational leads could be enhanced by holding a contest between students. Let a student select a classmate with whom to carry on a short conversation, while the rest of the class evaluates their conversation according to the "Guides for Beginning Conversations" in the textbook.

Divide the class into teams with each team having a host or hostess. Allow 15 minutes for conversation between members. Tape record the conversation and play it back to the class. Let the class evaluate the conversation with reference to choice of topics, personal courtesy, and group participation. Keep a class record of the suggestions for improvement. After each team has had their turn, let the students compile their suggestions into a code for good conversations.

Part 3: Interviewing People

Since the slower-learner is occupationally orientated, the job interview is a realistic and interesting educational experience. Take the class on a field trip to the employment office. Ask the manager to explain the functions and operations of the organization and to go through a typical interview with the students.

Let the students suggest and act out interview situations for different jobs.

Have the students select several jobs in which they are interested. See if applications for these positions are available and can be secured. Using the applications as a criteria, have the class make a list of typical questions asked by the interviewer and interviewee. Then set the class up as an imaginary company interviewing applicants. Let them design their own application blank and personal evaluation sheet.

Part 4: Reporting on an Interview

Have the students clip interviews from the newspapers and bring them to class for a bulletin board display. Each student will make a brief report to the class on the interview he has brought. This report should rely on the guides in the textbook and the class compiled list of interview techniques.

Have each student select a radio or television program which features interviews. Allow each student to report his personal evaluation of the program to the class, using the information he has gathered.

Part 5: Giving Directions

With a map of the city of Mexico, pinpoint all the major points of interest--the public library, the newspaper office, etc. Then divide the class into teams of two with one student naming a point of interest and the other student giving oral directions to that point. The route of the directions could be traced on the map by a third student.

As an extra or out-of-class assignment the teacher could arrange and supervise a scavenger hunt. A committee of students would hide an object on the school grounds and then devise different sets of directions to the object. The rest of the class would divide into teams to receive their directions and begin the search. The activity would conclude with a class discussion evaluating the directions and the procedures used in following them.

Chapter 9: "Speaking and Listening", pp. 197 - 211

Part 1: Make the Most of Your Voice

An exercise to illustrate the fact a person's voice is an expression of his personality is to have the students close their eyes while the teacher selects one student to say a few words or read a paragraph. Then have the class open their eyes and write on a piece of paper who they thought the speaker was and what identifying characteristics made them select that person.

Individual student talent may also be utilized in this type of activity. Have students give imitations of well-known performers or personalities. The rest of the class participates in the "guess who" portion of this activity. A discussion concerning distinctive voice qualities will naturally follow.

Play the record "Casey at the Bat" for the class. Encourage students to listen for differences in the speaker's use of volume--loud, soft, moderate.

Tape record examples of high pitched, low pitched, and monotone voices. Play the tape to the class. Then hold a class discussion on why the different voices were not pleasing to listen to and why the listener eventually lost interest.

Have the students invent sentences or exercises in which they intentionally raise or lower their voices. For example:

1. Lowering the pitch: Here
   comes
   the
   teacher.

   gone.
   had
   you
   thought

2. Raising the pitch: I

3. Lowering and raising the pitch: How game?
   many to the
   of you go
   would to
   like

4. Varying the pitch:
   you
   like like
   I you I I I you
   like like
   you

Play a record of Poe's Prose Tales to the class. Have the students listen for differences in pitch when the reader emphasizes exciting or frightening parts. Have students relate this to instances when they have been scared and their voice "cracked" or changed. Then let the students make up oral sentences expressing these moods: anger, excitement, fear, disappointment.

As a self-demonstration technique, bring a full length mirror to class so that students may watch themselves speak. Have them view themselves as they normally speak, then in an exaggerated manner, and finally speaking as correctly as possible. Let each student write his own tongue twister to use with this activity.

Part 2: Be Poised As You Speak

An effective part of speaking is the speaker's behavior. To emphasize this to the class bring a television and have the students evaluate a program. Their evaluation should be concerned with their reactions to the speaker's use of gestures, facial expressions, and physical movements.

Let the students write, direct, and produce their own pantomime skit. Arrange with another teacher a time when the students might present their skit to a different class. Have the students note carefully the reactions of the other class.

Part 3: Plan Talks Carefully

Take the students to the school library, explain its functions and the materials available. Then help each student select a subject which interests him. Help him limit his subject and collect material from magazines, newspapers, and books to illustrate a talk.

Have the students bring their next assigned report from another subject into English class. Using their English guides for writing and preparing talks, help them develop their topic. Give them the opportunity to present their report before the class.

Part 4: Give Your Talk

Have the class collectively formulate a speech scorecard to use in evaluating individual talks. Then let each student privately tape record his talk and play it back, checking his good qualities and faults on his scorecard.

Let each student give a talk before the class.

Part 5: Listen Attentively

Have each student prepare a short quiz over the content of his talk. Let him give it to the class to see if they are good listeners. Another variation of this activity is to have a question - answer session. Each student writes several questions over the talk and then orally quizzes his classmates.

Have the students make a list of all the listening experiences they have in a typical day. Hold a class discussion on the similar and unique experiences the students had.

Take the class on a walk around the school grounds. Have them listen for sounds and make an identification list.

To encourage and develop the art of listening, have the students play the game, "In Grandma's Attic". Game instructions: One student starts the game by saying, "In Grandma's attic, there was an apron," the next student repeats the sentence and adds an item. Each succeeding student repeats the items in proper order and adds an item of his own.

Have each student listen to a newscast and make a list of "loaded" words for a bulletin board display. Hold a class discussion on the effectiveness of these words and the students' reactions to them.

Have each student prepare an inventory of his own listening habits. Compare the inventories in class.

A DISCUSSION OF THE TEACHING OF READING IN 7TH AND 8TH GRADES

Since the Hardin Book List to be found in the appendix of this guide contains all the reading suitable for the slower-learner and since these texts are used by all teachers in rotation, it is not possible to write units for every text and teacher. However, a review of the basic methods of teaching reading may be helpful for the teacher.

The following suggestions are given for increasing efficiency in reading for the slower-learner in the junior high school:

Study Each Student and Determine His Needs in Reading.

All slower-learners do not read alike. Each student should be studied individually so that the teacher may determine his needs in reading. Appropriate instruction for each student may be given only after the needs and difficulties of the student have been determined.

Develop in Each Student a Desire for Recreational or Leisure-Time Reading.

This is usually lacking in a slower-learner who has had to read books that were difficult for him. Suggestions for developing this ability are presented here:

1. Discuss books, where to find them, and some of the fascinating information which they contain.
2. Abolish the book report method. Allow the student to read without requiring him to account for what he reads. Book reports destroy interest in reading.
3. Aid the student in selecting interesting books that are easy for him to read. Stories and classics with a reduced vocabulary are designed especially for this type of student.
4. Motivate reading along the lines of the student's interest through projects or units of work. For junior high students, activity method has proven concrete and effective.

Develop in the Student Effective, Rapid, and Efficient Methods of Reading.

This may be done in the following ways:

1. Study the reading habits of the student and give exercises which will correct poor reading habits.
2. Give the student special exercises in speed and comprehension, and aid the student in transferring these habits to leisure-time reading.

Develop in the Student the Ability to Read Efficiently in Various Fields.

Some students read efficiently along one line, but are inefficient in other fields of reading. The reading course should include guidance in the following:

1. The ability to locate information rapidly, by skimming over irrelevant details and noting the main points of a section.
2. The ability to think about or question critically that which is being read.
3. The ability to remember what has been read and to organize the materials into a condensed logical unit.

Develop in the Student the Ability To Increase His Meaningful Vocabulary, and To Increase Gradually His Understanding of More Difficult Materials.

This may be encouraged in the following ways:

1. Increase the student's speaking and reading vocabulary through experiences and units of experience. New terms may be discussed and evaluated in class. The concreteness of an activity aids new terms, phrases, and selections in becoming meaningful to a student.
2. Teach the student to look up words in the dictionary, to derive meanings from the context, and to analyze words from root words, suffixes, prefixes, and the like.
3. Encourage the student to ask questions about various selections read.

Develop in the Student the Ability To Appreciate Good Literature.

Although many slower-learners may begin by reading comic books, etc., the teacher should not suppress such reading at first, but should try to aid the student in appreciating good literature. If this is carefully executed, many students soon substitute better literature for the comic books. Careful selection of good literature within the reading ability of the student aids considerably in elevating his reading tastes. Reading and group discussions of classics serve as an introduction to good literature.

Develop in the Student Efficient Methods of Study.

Students who do much leisure-time reading sometimes do not learn to study effectively. Such students should be guided in organizing materials, in noting essential details, and in reproducing the ideas which they have read. This should be done, however, in connection with study reading and not with leisure-time reading.

Develop in the Student the Efficient Habits of Reading by Giving Remedial Instruction When Necessary.

Students in the junior high school who have not been taught to read adequately should be given remedial instruction. The most common difficulties which may be determined by tests and by observation are: (1) low rate of reading but high in comprehension, (2) low in comprehension but high in rate of reading, and (3) low in all phases of reading. The remedial measures for each of these difficulties may be found in many of the books on remedial reading. Suggestions for correcting the various difficulties are given here:

1. For students low in rate of reading but high in comprehension.
   a. Stimulate recreational reading.
   b. Curtail oral reading.
   c. Give exercises in speed of reading and graph the scores so that the student will see his own progress.
   d. Give exercises in the use of context clues by omitting non-essential words in passages so that the student will learn to infer certain words from the passage.
   e. Encourage the student to read simple books within his abilities and interests.
2. For students who are low in comprehension and high in rate of reading. These students are usually rapid inaccurate readers.
   a. Stress accuracy in reading by giving exercises for accuracy.
   b. Stress accuracy through oral reading.
   c. Increase vocabulary and comprehension by word study and the use of the dictionary.
   d. Use adequate work-type materials.
   e. In some cases, use artificial methods of decreasing the eye span. Point to reading material with the finger, cover the lines with a card, or use any other device which will decrease the rate of reading to harmonize with the rate of comprehension.

3. For students who are low in all phases of reading. These students usually have difficulties in word-recognition which decrease their rate of reading and affect their comprehension.
   a. Give the student an adequate method of word recognition.
   b. Give oral reading in the beginning stages to enable diagnosis of the difficulty and correction of the errors.
   c. Utilize work-type materials which will increase word-recognition, speed, and comprehension.

The teacher should remember that reading cannot be thought of as a subject separate from other school subjects. Reading has no subject matter that is peculiar to itself. Reading instruction provides for the improvement of the basic reading habits, skills, and techniques that are essential to sucessful learning in all curricular subjects. A satisfactory program for reading instruction in the junior high school should be effected by means of the daily supervised reading period and by means of activities requiring the student to read extensively in the classroom, in the library, and in the home.

The materials needed for such a program would include:

1. The basic set of readers to be used in the appropriate activities.
2. Additional skill-building procedures provided by the teacher via blackboard directions or mimeographed assignment sheets. Ideally these would include practice in such comprehension skills as recognizing the general significance of a selection, finding the central thought, recognizing words and abstracting their various meanings, reading for details, making inferences from what is read, and evaluating ideas acquired through reading.
3. Current event materials.
4. Library books with a wide range of difficulty.
5. Dictionaries--one per child, if possible.
6. Books of poetry, choral reading selections, recordings of poems and stories.
7. A good set of encyclopedias and other reference books.
8. Subscriptions to at least three different magazines suited for the junior high student.

9TH GRADE

MAJOR THEMES	UNDERSTANDINGS TO BE DEVELOPED
1. "Conflict"	1. Conflict is normal and makes life interesting. 2. We grow by solving our conflicts. 3. Conflict can be mental or physical. 4. Conflict only results in violence when people are impatient, confused, or selfishly evil. 5. Conflict is resolved by empathy and arbitration. 6. Unresolved conflicts lead to trouble for the individual or society.
2. "Understanding People"	1. Most misunderstanding comes from fear, prejudice, unhappiness, and inability to communicate. 2. We live in our own worlds to a degree. 3. Older people are hard to understand because they live in yesterday's world. 4. To understand someone is to forgive him and accept him. 5. Teenagers need to understand how responsibility and authority fit together. 6. People who are intolerant of other races and religions usually do not understand these. 7. What is different from us is not necessarily a threat. 8. It is normal to want popularity but not at the cost of loss of integrity.
3. "Teamwork"	1. It takes cooperation, responsibility, and persistence to hold a job. 2. An important English skill for work is tact in dealing with workers or employers. 3. "No man is an island". 4. Everyone is good at something. 5. You can't work together well unless you can talk to each other successfully.
4. "All in the Day's Work"	1. A job helps a boy to feel he is achieving and belongs. He feels worthwhile and important. 2. The job that pays a living wage is necessary and worth training for. 3. A good job should have a future. 4. It is important to know what different careers will expect of you and do for you. 5. Girls need job skills that they can best use after marriage, if necessary. 6. Part of a man's success is his ability to set up a reasonable set of financial values for himself and his family.
5. "Growing Up"	1. Physically and socially, people develop at different rates. 2. Everyone wants to be popular but should not become a phony to secure group approval. 3. Be as reasonable with parents as you expect them to be with you. 4. The law is a protection as well as a control. 5. Self-control and self-direction are the marks of maturity.

6. Not all grownups can be counted on to be mature.
7. The mature person tries to understand and help the immature person.

6. "Drawn from Life"

1. Truth is stranger than fiction.
2. It is natural to want a hero.
3. We learn to live by choosing persons we admire and by thinking and acting as they do.
4. From biography we learn about people more exciting or more mature than we may be fortunate enough to meet.
5. Biography is a way of meeting people from different races, religions, lands and cultures.

7. "Widening Horizons"

1. Other nations, too, are proud of their national heritage.
2. Because foreigners speak a different language and have different ways, they are not necessarily a threat to our culture.
3. All problems are not solved in the present or the future. Those solved in the past made our today what it is.
4. "We are pygmies carried on the shoulders of a giant"--Time.
5. When we see how old the world is and how short man's history is, we learn patience.

SAMPLE UNIT PLANS: 9TH GRADE

Texts: Adventures for Today, Harcourt Brace
Our English Language, American Book Company
Basic Writing Skills Laboratory: Narration, SRA
Instant Word Filmstrips, Tachisto-Filmstrips, Learning Through Seeing, Inc.
Vanguard, Scott Foresman Co.
Prose and Poetry Journeys, Singer Co.
Reading Round Up, D. C. Heath Co.

Two copies of the following unit contract may be given to the students. It is a work plan to show them the continuity of assignments. One copy is to be kept in the student's file; another may be used as a work sheet in his notebook. The teacher may wish to cut the "Projects" section of this work sheet into weekly assignment sections, since the projects are keyed to the required (starred) stories, and issue them after the two stories for the week have been read. This tends to control a tendency of youngsters to concentrate on free choice work to the detriment of required:

"Conflict"

Do you and your little brother fight? Has this war been going on for a long time? Perhaps you have a feud with a bossy older sister, or you argue with your parents. Do you tell the counselor that you "just can't get along with old Miss So-and-So, the geography teacher?"

Perhaps you are really happiest when you are bucking the line in football or dribbling madly to outwit the other team in basketball.

Maybe you feel you have to earn money for clothes, or to stay in school, or to help the family, and you have a hard time to get along with the boss.

Possibly you have trouble with yourself--you like people, really, but you don't seem to be able to act that way--at least, other folks don't take things the way you mean them.

The word for all this is "Conflict". We are going to read about conflicts that are exciting and conflicts that are headaches.

Conflicts seem to keep life interesting. They can be physical or mental--winning a fight or figuring out a problem. When we succeed with either, we are ready to take on something bigger. It's a cinch, conflict is not boring.

Races, religions, and nations have conflicts, also. People don't understand each other. When you get mad because Joe Doakes doesn't like you, and you beat him up, chances are he's your enemy for life. Wouldn't it be better to work out your problem without violence? Can't it usually be done if both sides are not pigheaded?

Isn't this true of races, religions, and nations, too? Conflicts require faith and patience of all of us.

Our Work Plan

1. Because we are using many texts, all assigned reading will be done in class.
2. Every time you read a selection, you write a good, correct, complete, and interesting sentence summarizing the point of the story on a file card or sheet of notebook paper. The point of the story will usually be the outcome of the conflict of the story. These are precis sentences. I will show you how to write them.
3. Your homework for English will be the projects you choose to do. We will have Project Day every two or three weeks and see or hear everyone's project.
4. You must read all the selections that have a star * before them on the reading list. These are interesting for all of us. You may choose as many as you like and want to precis from the others.
5. Your grade will depend on how many selections you read, how good your precis sentences are (no errors!) and the care and interest with which you prepare your project.
6. All your work must be neat, in ink, and kept carefully in your classroom file until the close of the unit when you bind it all into a booklet.

The Books We Will Use

The books will be kept in the classroom on the table or in the shelves. Since we will use many different ones, you need never be without a book. If you cannot immediately get the one you want, read another selection in another text. These books may not be taken from the classroom.

The Reading List

Adventures for Today

* 1. "Glory in Bridgeville"
* 2. "The End of the Rope"
* 3. "A Shipment of Mute Fate"
* 4. "Sunday Afternoon"
* 5. "The End of the Trail"
* 6. "Kon Tiki"
* 7. "Swimmers"
* 8. "Archerfish"

Prose and Poetry Journeys

1. "The Call of the Wild"
2. "Clara Barton"
3. "Shirt Tail Boy"
4. "The Seige of Boonesborough"
5. "Courtship of Miles Standish"
6. "Master Race"
7. "Pilot's Choice"
8. "Pied Piper of Hamelin"
9. "Rip Van Winkle"

Vanguard

1. "The Cremation of Sam McGee"
2. "Diamond of Alaska"
3. "Peril"
4. "The Wuthless Dog"
5. "Roll a Rock Down"
6. "How Obie Won His Medal"
7. "Facing Danger"
8. "The Only Way to Win"
9. "To James"
10. "Casey at the Bat"
11. "Flashing Spikes"
12. "Who Needs Amy Hoffer?"
13. "Look Out for John Tucker"
14. "My Father Doesn't Like Me"
15. "Do You Fear the Force of the Wind?"
16. "High Flight"
17. "Callie of Crooked Creek"

Reading Round Up

1. "Forward Pass"
2. "Vertical Adventure"
3. "Disaster Island"
4. "Skates for a Date"
5. "The Cutter's Race"
6. "The Devil in the Sand"
7. "Lone Dog"
8. "Moti Guj - Mutineer"
9. "Sea Fever"
10. "Man Overboard"
11. "Kon Tiki Reaches the South Sea Islands"
12. "The Man Without a Country"
13. "Buffalo Bill"
14. "It Is Not an Easy Thing"
15. "The Wreck of the Hesperus"
16. "The Highwayman"
17. "Stopping by the Woods on a Winter Evening"
18. "The Legend of Sleepy Hollow"

Books from the Library you may check out and read as Special Projects:

Collective Biography

920R Great American Negroes, Ben Richardson
920S All Around the Land, Gladys R. Saxon

Biography

921B724 Fighting Frontiersman: Life of Daniel Boone, John Bakeless
Daniel Boone, John Mason Brown
Daniel Boone, Wilderness Scout, Stewart Edward White
921C321 Kit Carson, Frank L. Beals
921C331 The Story of George Washington Carver, Arna Bontemps
Dr. George Washington Carver, Graham and Lipscomb

(List to be completed at will from Easy Reading in Our High School Library, see Appendix)

Projects

(Choose 4. One must be written, one oral and 2 drawing)

1. Make a poster of a picture clipped from a magazine which you think reveals a conflict with which you are familiar. Write a brief paragraph telling the story or discussing the conflict.
2. With a partner, make a tape on which you discuss a conflict of opinion on one of the following: (a) college students should not be exempt from the draft, (b) the age for driver's license should be raised to 18, (c) soldiers under 21 should be allowed to vote.
3. With a partner, make a tape on which you discuss a conflict of opinion on one of the following: (a) 9th grade girls should not date senior boys, (b) 9th grade girls should go steady, (c) 9th graders should be in at 9:00 p.m. on week nights.
4. Write a paragraph on one of the following in connection with "Glory in Bridgeville": (a) Shane (was, was not) to blame for happenings to Billy, (b) Money (is, is not) one of the most important values in life, (c) A swelled-head (can, cannot) be deflated.
5. Make a tape of the dialogue between Nicholas and Gonthier with a partner. Show by the inflections of your voice that Nicholas has Gonthier in his power and then releases him. Show also what conflict within himself Gonthier has resolved.
6. Take part in acting out "A Shipment of Mute Fate" before the class.
7. How does "Mute Fate" show that all creatures in this world must fight to survive? Answer in a written paragraph.
8. For the class, discuss with a partner whether TV actors pay heed to the ideas discussed in Acting Tips (mimeo to be handed class in connection with the study of the play). Be sure to give specific examples of actors and shows you watch.
9. Write a paragraph discussing whether or not you are a mature person, according to the mimeoed list of the characteristics of a mature person.
10. Make a map showing the Snake River and the Yosemite.
11. Choose one of the following and compare in a paragraph: (a) Billy and the character in "End of the Trail" you think most resembles him, (b) the mothers in both stories.
12. With a partner, make a bulletin board of views of the Snake River Country.
13. Make a map of the Kon Tiki voyage.
14. Make a sketch of the Kon Tiki raft or build one.
15. Summarize in writing an article on the curious monuments of Easter Island or on the Inca ruins of Peru.
16. Explain in a paragraph why it is desirable for a young person to make a careful analysis of his own strengths and weaknesses in all areas of living. Will both overestimation of oneself or underestimation both lead to unhappiness? How?
17. Make a simplified diagram of a submarine from an encyclopedia on a ditto stencil so that we can all have a copy as we read "Archerfish". Label parts.
18. Make a map of the Pacific area where "Archerfish" takes place. Locate famous battles of World War II on this map.
19. Give an oral report on a book from the library list.
20. Any student who thinks up a project on his own and gets it approved by the teacher will receive double credit points for its completion.

The Teacher's Plans for "Conflict", 9th Grade

A Foreword on Classroom Management for Unit Teaching

It is understood that certain routines to take care of direct instruction in vocabulary, writing, testing and drills are to be set up for the first 10 - 15 minutes of each period, slightly longer when necessary.

The routines should be habitual modes of operation. Setting them up may take the first two or three weeks of school. Specific skills need not be rigidly scheduled on certain fixed days, but slower-learners respond to regularity and feel more secure. The teacher should see that routines are used as needed to keep students working efficiently, but they should not be allowed to lengthen and dominate the hour.

With slower-learners, unit content may not be covered unless the teacher takes safeguards against dawdling. He should take time first of all to teach the student how to pick up his chair and move quietly and promptly into the various groupings for individualized work. Students used to crowded small classrooms may not at first know how to use mobility well. How to move into a large conversation circle or into the fairly permanent small ones for theme-reading or buzz groups and back again into row position will need to be taught. No more than one maneuver should be attempted in an hour.

Other things to be learned may be how to move quietly at will about the classroom without required permission to use dictionaries, pencil sharpeners, files, and supplementary books. It is very important to establish the idea that while talking in the process of group work is expected, uncontrolled or personal conversation or peripheral discussions when the group is in session are forbidden because they hinder progress in learning. Establishing the mutual responsibility behind this type of discipline is active training in democratic behavior.

It is a good idea to determine the dynamics of the group and assign students who are anxious for leadership or approval to certain routine jobs, helping them to get the training to do the work well. Some of these are tape recorder, movie and filmstrip operators, student librarians for supplementary books, distributors and collectors of files and papers, and chairmen of bulletin board display committees.

The teacher should arrange the tables or shelves of books, maps or displays, and bulletin boards so that all are readily accessible. He may prefer to place his desk at the rear of the room. In the long run and in a rather subtle way, this usually proves the better command post! During instruction, he will want to move about among the students.

The unit classroom should be a place of quiet, purposeful activity where pupils share responsibility for morale and are proud of their results. Such classroom management is in itself the teaching of democratic communication.

Often these slower students adapt well to the security of such a classroom but need reassurance and help in new situations, such as library browsing. It is worthwhile for them and very important for the undisturbed work of more advanced classes that they be taught quiet routines for the library also. The teacher will need to move about among them in the library, directing their work at all times.

Theory of the Extensive Reading Unit

This unit is based on extensive rather than intensive reading, although eight common readings are intensively taught according to the suggestions in the manual. On the theory that the slower-learner will choose his own level of reading material if given a choice and will find materials that interest him from which he will, therefore, learn more readily, 52 stories, poems, articles, and plays have been listed. The teacher should set a minimum of required work, possibly only the Companion selections, but by all means should stimulate the reading of a great deal more, especially by the abler students.

Motivating the Slower-Learner to Read

If the teacher can help the student to find a field of interest, he can then suggest choices, perhaps even beyond the listings in the unit. This dialogue between teacher and pupil is perhaps as effective in getting the pupil to read as all the analysis and drill in teaching the mechanics of reading, with or without machine aids.

Integrating Reading, Writing, and Language Instructions: Writing the Precis

Perhaps 8 - 10 extra stories or poems will be sufficient for a maximum. The teacher will soon know what is possible for his group to cover even when, for them, they work briskly. It is important that the precis be written carefully under supervision, that the student develop confidence in his ability to compose worthwhile thoughts, and that the merit of his sentences be recognized by his classmates. Small reasonable deadlines should be set up frequently to prevent either writing or recopying tasks from swamping the slower student.

When the student has read a selection, placed his written precis in the in-basket for approval, he is free to read another story. Of course, as the teacher moves about the classroom during the reading and writing, he will help with the phrasing of many of the sentences. This in itself is functional teaching of vocabulary, as well as the teaching of grammar, usage, capitalization, and punctuation. Moreover, through the teacher's continual use of terms (noun, verb, modifier, subject, and predicate), the student begins to see in practice in his own work what these grammatical concepts are and how they function. Spelling also is scrutinized. The teacher soon becomes aware of a pupil's pattern of spelling disabilities and can offer correction and drill where it is needed on an individual or small group basis.

To facilitate discussion of how to write a good precis sentence, type up the first set received on a transparency and use the overhead projector. The projector is a better device than the board for inducing attention and concentration. Space should be left on the transparency for grease pencil alteration and correction. Letting students participate occasionally in this grease penciling is a good motor activity.

The Precis as a Way of Teaching Grammar and Vocabulary

Since the precis is a device for teaching both grammar and reading comprehension, no pupil should be allowed to churn out superficial sentences to "get done with the job", nor to feel that quantity rather than quality will get him a grade.

The teacher will find all that most slower-learners can do at first is repeat the story. Since this is difficult to do in one sentence, meaningless patterns of "This is a story about----" appear. The teacher then tries to get the student to convert his sentence into a statement of the most important happening and who was involved, stated directly.

"Billy thought he was a hot ball player, but he had a swelled head" is a statement within the capacities of the slower-learner. It is also a compound complex sentence and illustrates an important comma rule. It is the point of the story--in brief.

Once such a precis has been put on the board or on the overhead, many slower-learners will copy it without alteration and hand it in as their own. Hence the teacher may, using it for a pattern demonstrate how, by changing nouns and modifiers, the same essential thought can be stated in different words, depending on to whom the statement is to be made.

The teacher may point out that while "Billy thought he was a hot ball player, but he had a swelled head" is colloquial enough for the locker room, "Billy thought he was a fine (excellent, superior) ball player, but he was conceited (overbearing, wrong, vain)" is perhaps better for more formal usage in the classroom or the written report. Such group exercises can encourage vocabulary growth and develop some understanding of the levels of usage.

The teacher who has several students who may be transferred to average classes at semester or year's end may wish to know what command of grammar rules these students actually are securing. Very simple tests on parts of speech or parts of the sentence (see appendix) may be given as diagnostics to these students at the beginning of the year, again at quarter's end, and at semester end. Such testing should be done only on a small group basis. Slower-learners of genuinely limited ability need not be included. In no way should the whole class get the idea that knowledge of this sort is a criteria for passing. Grades are determined by reading, writing and oral language progress in use.

Scheduling Direct Teaching at the Beginning of Each Period

The automatic routines spoken of under Classroom Management have to do with alloting time for regular vocabulary work in connection with reading, brief spelling tests of words commonly misspelled in students' themes (including also perhaps the Columbia-Thorndike list. See appendix), drills from Our English Language on nouns, verbs, modifiers, subject and predicate, the Tachisto-Flasher Instant Word filmstrips drills, and reading comprehension tests. Because the interest span of slower-learners is short, these lessons must be condensed and purposeful.

A Possible Schedule for Unit Work: Budgeting Time for the Week and the Year

	Monday	Tuesday	Wednesday	Thursday	Friday
10-15 Minutes	1.Tachisto-Flasher or 2.Reading Improvement Program from Adventures for Today	1.Teaching of the story a.Set problem b.Read silently c.Solve problem (See manual) 2.Vocabulary sheets 3.Precis work	1.Mechanics drills from Our English Language or SRA Writing Skills Laboratories (See manual)	1.Teaching of story a.Set problem b.Read silently c.Solve problem (See manual) 2.Vocabulary sheets 3.Precis work	1.Tachisto-Flasher or 2.Reading Improvement Program lessons from Adventures for Today
35-40 Minutes	Free choice reading and study time.		Completion of precis work		Free choice reading and study time. Completion of precis for the week.

The preceding schedule represents a possible time division for the week. It will be seen immediately that no time is specifically allotted for seeing films, listening to records or oral reading, or for Project Days. The purpose of these unit plans is to set forth arrangements for effectively organizing available teaching materials. More is necessarily represented here than any one teacher can use or would wish to with any one class, particularly a genuinely slow one.

Enrichment activities such as films (see manual), listening experiences to develop appreciations, and Project Days when creative work is displayed are vital and should be planned at least once every two weeks. The teacher may find it necessary to teach only one story on alternate weeks, thus relieving the press of routine work for the students and avoiding monotony.

Adventures for Today lists seven units and 67 selections. It is not necessary that all stories be taught in the 36 weeks of school. However, before any are omitted, it is a good idea to consult the manual and make sure that the story left out is not key material in the sequence of reading skills instruction. Some poems are very short and can be taught together; other selections are lengthy and will probably require the full periods both Tuesday and Thursday.

If a choice has to be made, it is, of course, better to cover all units, carefully abbreviated if need be, rather than to teach all selections. The understandings from the units can be just as productive of changes of behavior as the steps in English skills. To be sure, skills and understandings are obviously interrelated and interdependent in producing growth toward maturity of personality. The unit titles should not be regarded as mere ornamental labels for groupings of subject material.

Eliminating Time Consuming and Non-Creative Copy Work for the Student

It is suggested that the teacher issue dittoed vocabulary sheets weekly. These may contain the words for two selections at a time. A possible format follows:

Name _____

Class _____

Date _____

"Glory in Bridgeville"

New Words	Contextual Definition	Dictionary Definition
flaking	_____	
warp	_____	
brisk	_____	
hedging	_____	
outbid	_____	
legal	_____	
earshot	_____	
nervous	_____	
represent	_____	_____
glittering	_____	
snuffle	_____	
anxiety	_____	
contracts	_____	_____

guardian	_____	_____
apologize	_____	
hoodlum	_____	_____
famous	_____	

1. Sentence containing one word whose meaning is solved by contextual clues:
   a. The phrase as it appears in the story: "hedging a little to smooth a corner."
   b. Student sentence using hedging: _____
   _____

2. Sentence containing one word whose meaning is solved by contextual clues:
   a. Phrase as it appears in the story: "with the boy out of earshot in the next room"
   b. Student sentence using earshot: _____
   _____

"The End of the Rope"

New Words	Contextual Definition	Dictionary Definition
flank	_____	
adapted	_____	
rhythmical	_____	
tourist	_____	
novice	_____	
crucified	_____	_____
lust	_____	_____
incidents	_____	
nursed	_____	
client	_____	
offensive	_____	_____
reattach	_____	
man	_____	

1. Sentence containing one word whose meaning is solved by contextual clues:
   a. The phrase in the story: "climbed the sheer flank of the giant cliff".
   b. Student sentence: _____
   _____

2. Sentence containing one word whose meaning is solved by contextual clues:
   a. The phrase in the story: "You come and join me here, and I'll reattach the rope."
   b. Student sentence: _____
   _____

It will be seen in this vocabulary plan that all the key words of a story are placed before a student before he reads it but are not taught. Discussing the words after the student has read the story is a great part of discussing the story. Prior to the class' reading the story, the teacher may simply read the words aloud pronouncing them carefully. Oftentimes the word itself is familiar enough to the student--he has only been baffled by its configuration in print.

To explain each word carefully to the student before reading is to remove some of the problem-solving experience from the task of reading and to teach in advance of the student's recognition of need. By watching eye-sweeps and degree of concentration, the teacher can quickly tell which students are bogged down and need the whispered synonym as a lift over the hurdle.

After the students have read, the teacher may put the words on the board and write down the contextual interpretations suggested by the class. The students may then fill in their papers. The teacher should be sure that each student has a correct answer, although he should be encouraged to phrase it in the way that is most meaningful to him. In this way the difficulty with dictionary definition only is avoided; too often the slower-learner is as baffled by the dictionary explanation as he is by the word itself.

Use of Dictionary Study

Certainly, however, one of the reading tools most needed by the student is the dictionary. The teacher will observe that in each of the stories on the model vocabulary sheets, the words chosen for dictionary definition are those most likely to be of use in social context as well as in reading the story. The teacher may choose better words, perhaps, than those given in the sample. He may also, as the year goes along, wish to specify other items than contextual use under vocabulary study--such methods of word attack as syllabrication, prefixes and suffixes and roots, phonetic spelling as pronunciation clues (see glossary), adopted foreign words, etc.

In whatever way the teacher wishes to arrange the content of these dittoed vocabulary sheets, they furnish a continuous pattern for handling vocabulary which takes the burden of much routine copywork away from the slower-learner and allows him to cover more reading material.

Vocabulary Study and Spelling

The teacher will wish to give spelling tests over some of these words occasionally. As the year develops, he will use the Tachisto-Flasher and the Instant Word filmstrips as well as the Controlled Reader machine to aid word attack. These are a little more dramatic perhaps than the Self-Improvement Program in Reading. This carefully articulated program of reading skills found in Adventures for Today, p. 542, contains excellent sequential lesson plans and tests (with answers). The section for vocabulary and spelling rules in practice contains daily lessons that are ideal for 10 - 15 minute reading instruction.

The teacher may wish to test students occasionally on more important words from the vocabulary sheets. However, the best proof of spelling proficiency is the use of the new words correctly in precis and paragraph writing. Some of this use may be voluntary. In helping students write, the teacher is in a position to suggest their use and to help with whatever problems their spelling presents.

Method in Developing Class Discussion

The manual for Adventures for Today makes some very good suggestions for stimulating thought and discussion. It suggests a number of films appropriate for the unit and helpful in developing unit understandings. The teacher will want to preview the film, of course, and then pre-teach and post-teach it. Sometimes slower-learners get a great deal more from a film if they know what they are to look for. If a film is too middle or upper-class in its appeal, it may not be suitable for producing attitudes and ideas as the teacher wishes.

Another stimulation device provided by the manual is its setting-up of a problem in the students' minds before they read the story. Sometimes this is done by placing a controversial statement on the board for consideration or by the acting out of a provocation situation. The problem is always allied to the theme of the story, but it asks the students to make an application of the problem to their own life experience. Reading the story then helps them to clarify half-formed thoughts and reach personal understandings as well as comprehension of the story. The manual also suggests routines of questioning and discussion likely to be productive of better logic in student thinking. Bulletin boards are suggested repeatedly as a means by which problems can be set before students.

The understandings which the teacher has set for his aims in each selection should be goals only. The students should formulate their own understandings. Drawing these from slower-learners requires tact, classroom control, and skill in permissive questioning. Occasionally the teacher may suggest one when it will seem to help the students articulate their thinking. At every turn, the slower-learner will need teacher help in expressing himself. Perhaps the more productive help in the long run is, however, the supportive. These students are less likely than most to accept and internalize values that are merely superimposed by middle class teachers. The pleasant atmosphere of the classroom and the resolution of any interpersonal conflicts and tensions among students themselves will also help freedom of expression.

Conclusion

Many other reading and writing skills are to be taught in subsequent units. "Conflict" has been useful chiefly to illustrate an approach to the student himself and to teaching the first skills in reading and writing--contextual word attack and vocabulary, simple literacy in spoken and written English through the concepts of subject and predication.

Much more work remains to be done throughout the year on all the skills discussed in the Point of View in English and in the section on Sequential Skills. It is hoped the teacher will write units which incorporate the skills with the thematic subject material. He is fortunate that he has a wealth of textual material, most of which correlates amazingly. No one manual, however, does the job tailored to the particular class at hand. Used in careful conjunction to give substance and resource to teaching, they are invaluable.

10TH GRADE

MAJOR THEMES	UNDERSTANDINGS TO BE DEVELOPED
1. "Choices and Challenges"	1. A person should have tolerant attitudes toward other nationalities, races or groups. 2. A person should realize that his own decisions affect not only his own life, but also the lives of others. 3. A person should form his own opinions instead of accepting the opinions of others without thinking.
2. "Family Ways"	1. Students should try to understand and appreciate their parents. 2. Students should see that they have responsibilities toward their homes and the members of their families.
3. "To Each His Own"	1. Each person is a unique individual. 2. Each person must choose his own way of life from the choices before him. 3. Each person has value and we should appreciate that fact. 4. Many of the achievers in this world are people who have dared to be different.
4. "Action and Romance"	1. Skill and imagination can take readers into the worlds writers create. 2. It takes courage to do what you want to instead of following the crowd. 3. In a difficult situation a person often finds courage that he may not have realized he had.
5. "Exploring Careers"	1. A person should choose a career early in life and then work toward it. 2. A high school education is becoming a necessity for a good job.
6. "Men and Science"	1. English and other subjects (such as science) are related. 2. A person needs to know about advances in science to keep up with the changing world.
7. "Measuring Up"	1. A mature person works for future goals, not just immediate satisfactions. 2. A mature person seeks to know himself--his powers, his limitations, and his ability to control his reaction to various situations. 3. A mature person sees with his own eyes, thinks with his own brain, and creates his own sense of values. 4. A mature person accepts with grace those things in life that can't be changed; he does not expect that he, unlike the rest of the world, will go through life untouched by trouble. 5. A mature person has an interest in other people and cooperates with them.

SAMPLE UNIT PLANS: 10TH GRADE

The following sample plan is suggested for use with the 10th grade slower-learner. Since general objectives and goals have been stated earlier in this guide, they will not be included here and only the materials, methods, and activities for the unit are explained. The unit is based on the Choices and Challenges that 10th graders face and see in the world around them. The first two pages should be mimeographed and handed out to the students. The remaining pages are lesson plans for the teacher only.

Choices and Challenges

Our lives are filled with choices and challenges. As we become more mature, we must make more and more of our own decisions. We decide what to wear and how to act. We decide how much education to get and what job we want. We are challenged by a world that is full of change and sometimes empty of peace and understanding. The decisions we make about ourselves and our world will affect our lives in some way and, therefore, should be made carefully. Reading about the decisions others have made will help us understand how to make our own decisions. In addition, it will give us an opportunity to read and enjoy some stories and poems of action, of young people's problems, and of the challenges of understanding our fellow man.

During our study of "Choices and Challenges", we will have many different assignments. You will turn in each written assignment for checking as it is completed. After the paper has been returned, you will correct any errors that it may have had and place it in your folder. At the end of our unit, you will turn in all of your work (except your vocabulary words which will be kept in a separate notebook) in a carefully organized notebook with a table of contents and an attractive cover that you have decorated in some way to go along with the unit title. The exact date that your completed notebook is due will be announced in time for you to make sure that all your work is completed. Most of your work will be done in class; your homework will be the project that you choose to do. A list of the projects is given on the next page. You should select one project from the list. You may do extra projects for extra credit if you have time. You will have an opportunity to tell the class about your project--what you have read or done--on Project Day. This unit will be a Challenge. I hope you will make the Choice to do your best.

Projects

1. Select three colorful pictures from magazines. Paste each picture on a separate piece of paper and write two or three sentences below each picture describing it.
2. Find two poems (from the books on the reading table) that deal with decisions and challenges. Write the title and author of the poem on your paper and, for each poem, write one sentence telling the idea of the poem. Draw a picture to illustrate each poem or find an appropriate one from a magazine to attach to your sentence. On Project Day you will read one poem aloud, show us the picture to accompany it, and read your sentence about the poem.

3. Read one of the stories listed below (the books are on the reading table) and write down what important decision was made and how the decision affected the person's life. Use the table of contents in the books to find the story.
   "The Long Shot" by John Harris, Perspectives
   "The Man Without a Country" by Edward Everett Hale, Prose and Poetry Adventures
   "The Devil in the Sand" by Jan Juta, Reading Roundup
4. Clip five or six newspaper articles that agree or disagree with the statement, "The decisions a person makes are his own business and no one else's concern." Fasten the clippings neatly to tl page and write a sentence or two stating how this clipping agrees or disagrees with the statement.
5. Make two original drawings of scenes from the stories and poems we have read (the fight between Marty and the new kid, or the two roads in the wood, for example). Beneath each picture write a line or two from the story that explains your drawing.

Teacher's Plans

This unit offers many opportunities for observing, thinking, reading, writing, speaking, and listening activities. The skills are not to be taught separately, but as a part of the whole thematic unit. The activities listed here are not the only ones, nor perhaps the best ones, which can be used to develop the skills of communication when dealing with "Choices and Challenges", but they illustrate the way a unit can be developed.

Preparations for the Unit Study

A. The teacher will need to have a reading table on which she has placed books which contain short stories for Project 3 and poems for Project 2.
B. The teacher should locate more short stories for Project 3 from some of the collections of short stories in the library.
C. An attractive bulletin board (to which the students could add material) would be good to stimulate interest in the unit.
D. Old magazines and newspapers would be useful for several projects. The teacher can check with the library to see if they can provide any, or bring some from home.
E. The suggestion for a vocabulary notebook below indicates that the student is to keep a notebook for his words during the year. The first time vocabulary words are studied, the procedure should be explained. The student should have at least two sections in his notebook, one for assigned words and one for the words he selects. Each entry should contain (1) the word, (2) the pronunciation, (3) the definition, (4) the context sentence, and (5) a sentence written by the student which uses the word correctly. (An alternate plan for vocabulary work may be found in the 9th grade unit and could be used in place of the notebook suggestion).
F. Any student who finishes an assignment before the others should spend his time working on a project.

Introducing the Unit to the Students

A. To show that students do make many choices, ask them to name some of the choices they had to make today. They will see that some of the choices were not entirely their own (for many of them the choice of coming to school was not theirs), but choices of how to dress and how to act or what friends to have are largely theirs.

B. Read aloud the unit introduction on page 1 and look through the unit with the students, telling them a little about a few of the selections to get their interest in what they will be reading.
C. Pass out the unit sheets and spend a few minutes going over them. Answer any questions students may have over the work.
D. Write this statement on the board, "The decisions a person makes are his own business and no one else's concern." Let students discuss this statement pointing out examples that prove their ideas. Be sure that students respect each other's opinions and that they listen courteously to the other fellow.

Pilot's Choice

Prepare for Reading

A. Ask students to decide whether Brady's decision affected anyone besides himself.
B. Read the headnote and direct students to find out what Brady decided to do and why it was so important for him to make the right decision. (Write these questions on the board)

Read the Story Silently

Discuss the Story

A. Begin with the questions asked before reading.
B. The questions in the teacher's manual and at the end of the story form the basis for the discussion.

Vocabulary

A. Explain how words will be put in vocabulary notebooks.
B. To be meaningful, words must be drawn from reading material and thoroughly understood before being used in student sentences.
C. Let students try to get meanings from context and check their guesses with the dictionary.
D. Use these words: squall 2b, 1; atoll 2b, 4
The first number is the page, the letter indicates which column ("a" for first column, "b" for second column), and the last number indicates the paragraph.
E. Have students put entries on board and have several student sentences read.

Author's Craft

A. Read aloud to class.
B. List other vivid verbs and words of color found in the story. Use this activity to lead into the use of the SRA Writing Skills Laboratory.

Lesson I of SRA Writing Skills: Description

Introducing the Materials

A. After reading the teacher's manual and examining the materials, explain the program to the class.
B. Students do not write in Writer's Notebook. Answer sheets for the tests could be made on ditto if the teacher wished.

Using Lesson I

A. The first lesson should be read aloud and explained carefully.
B. Lesson I should probably be adapted so that students have an opportunity to write at least a short descriptive paragraph.

C. After the teacher checks over these paragraphs of description, students should rewrite their papers, correcting any errors. Here the teacher can begin to see what mechanical errors will need special attention throughout the year.
D. Tape recording these first short descriptions would be a good way for students to get speaking experience and would be a good time to introduce the use of the tape recorder in class.

Road Not Taken

A. Listen to a recording of Frost reading his poem. (Record available from school library or Audrain Library)
B. Have class visualize setting, perhaps by having someone draw a diagram of two roads diverging.
C. "Diverged" would be a good word to put in vocabulary notebooks.
D. Using questions on page 7, discuss the meaning of the poem.
E. Let students try to guess, from the short sketch of the author's life on the next page, what time in Frost's life this poem might be describing.
F. Share with the students the information on page 12 of the guidebook which tells about whom Frost was writing.
G. Explain how to write a precis sentence and then have students write a precis sentence of "The Road Not Taken."
H. Return precis sentences to students for corrections and filing.

Project Work Day

One class period fairly early in the unit should be set aside for students to get started on their projects. The teacher should work with individuals on this day. Perhaps half a period would be enough to get students started.

Bad Influence

Prepare for Reading

A. Begin with discussion suggested in teacher's manual. ("Many people wear masks the year round." What kind of masks? Can you always tell what a person is like by the way he acts? Give some examples)
B. Read the headnote aloud. Ask students to read to find reasons why Christine acted as she did.

Read the Story

Test Reading Comprehension

A. Give the reading comprehension test on page 3 of the Reading Tests to accompany Adventures in Living. Questions 1 - 10 deal with this story and should be typed in ditto. This test will give students an opportunity to see how carefully they are reading. Tests should be checked in class.
B. Let students find references in the story to support their answers to the questions.

Discuss the Story

A. Lead students to see why Christine acted as she did.
B. Questions on page 16 of the text and page 14 of the teacher's manual offer material for discussion.

Vocabulary

A. Add "Sophisticated" to notebooks (9a, 13)
B. Use "The Greeks Had a Word for It" on page 16 to help explain the word.

Expressing Ideas on Paper

A. List topics on page 14 of the teacher's manual on the board for students to select from.
B. Show students how to give specific details to develop the topic they chose.
C. After themes have been rewritten to correct errors, divide the class into four or five groups and have them read each other's themes. Have each group select the best theme to read to the class.
D. Add several of the themes to bulletin board display.

Barter

A. Put the word "barter" in vocabulary notebooks and make sure students understand its meaning before the poem is read.
B. Use the headnote above the poem for a listening guide.
C. Ask a student in advance to be prepared to read the poem to the class.
D. Questions on pages 14 and 15 used in a discussion will help bring out the meaning of the poem.

Stopover in Queretaro

Introduce the Selection

A. Tell the names of the country and the large city nearby where this story took place.
B. Use a map to locate these places.
C. Use the headnote to introduce the story.

Read the Story

A. Use this selection as a timed reading. The teacher can write the time elapsed on the board every 30 seconds, such as 5 minutes and 30 seconds, then 6 minutes, 0 seconds, etc. until everyone has finished reading and recorded his time from the board.
B. To find out how many words per minute a student is reading, he should divide the number of words in the story (found on page 178 of the teacher's manual) by the time it took him to read the selection. Students will need help with this!
C. The teacher should devise a ten point comprehension test over the story to be given as soon as the story has been read.
D. Simple charts to record reading rate and comprehension score could be made by students under teacher direction to keep track of these scores throughout the year.

Discuss the Story

A. One of the main understandings from this unit should be that students should respect races other than their own. The discussion should help students see how we often stereotype certain groups before we know anything about them.
B. Use the questions on page 16 of the teacher's manual to help see what Mr. Beim's problem was.
C. Look at the sketch of the author's life on page 21. Did the story really happen? Can you tell by the story whether it is true or not? Point out that the use of the first person ("I") doesn't always mean it is true.

Vocabulary Words

A. competent 20a, 2
B. sparsely 23b, 3

Writing Activities

A. Write a few sentences of description of one of the places mentioned in this story. (For example, the orphanage, or the town)
B. Use the story to help get ideas for the description, but do not copy any sentences from the book.
C. Read some of the descriptions to the class without naming the place being described. A good description will make a clear picture even without naming the place being described.

The Decision

This story is found on page 315 of Perspectives and is to be read by the teacher mainly as a listening activity for the students.

Listening Guide. Put this listening guide on the board and go over it with the students, helping them see what to listen for.

1. What was the life-and-death decision that Mr. Bagley had to make?
2. When did he know whether he had made the right decision or the wrong one?
3. Why didn't he let his boy know how he felt about the decision he had made?
4. Why was the action he took better than doing nothing?

Put the names of the characters on the board and pronounce each one.

John Bagley--father
Myra Bagley--mother
Kit Bagley--their son

Read the Story to the Class

Discuss the Story

Use the questions in the listening guide to discuss the story briefly.

Write about the Story

A. Have students write a paragraph telling the story. Stress the need to have time order correct.
B. Chapter 6 "Making a Summary" from Building Better English has some helpful suggestions for summarizing that the teacher may want the students to study before writing their summaries.
C. Return papers to students for rewriting, explaining a few of their common mechanical errors on the board or picking out specific pages in the mechanics text to help students understand their errors.
D. Read aloud some good paragraphs and put others on the bulletin board.

The New Kid

Prepare for Reading

A. Read the headnote.
B. Emphasize that students are reading to find out why Marty behaves as he does.

Read the Selection Silently

Discuss the Selection

A. Ask students if they were able to figure out why Marty acted as he did.
B. If students have trouble answering this at first, questions 2 - 8 on page 37 of the text will work gradually into that question.
C. Guide the discussion into consideration of what kind of choices Marty will make in the future. Lead them to see that one decision affects another.
D. See if students can extend the way Marty acts to apply to the way nations act. Don't nations sometimes bully each other or try to "get even on you"?

Vocabulary

A. Question 1 on page 37 is good to help students see that authors not only choose words carefully, but also write sentences in particular ways or order to get across their meanings.
B. The word "smudging" (29a, 3) would be a good one for notebooks because the meaning can be found by looking at the context. It is a word most students will know, once they have been able to pronounce it correctly.
C. Note expressions that the boys use which are a little different from the ones we would use--"I'll get even on you" instead of "I'll get even with you." Try to find others in the stories and then let students name some others they may have noticed while visiting or living in other states.

Primer Lesson

A. Read the headnote. Get students to volunteer experiences when they spoke first and thought later.
B. Read the poem to the students.
C. Before further discussion, let each student write a precis sentence of the poem. Point out that they will have a chance to revise this sentence if necessary after the class discusses the poem.
D. Discuss the word "proud" as used in the poem.
E. Use questions on page 25 "Understanding the Poem", to help students get the meaning of the poem.
F. Write a second precis sentence trying to get the meaning more exact than you did on the first one.
G. Take a moment to mention the author and read the paragraph about him.

The Man He Killed

Prepare for Reading

A. Begin by calling attention to "Punctuation in Poetry" and explaining a little about how to read poetry effectively.
B. Look next at the picture on page 28 and see if students can determine the mood and perhaps what the poem is about.
C. Read the headnote of the poem aloud and then have students read the poem aloud.

Interprete the Poem

A. Ask for explanation of words or terms in footnotes and any unusual phrases.
B. Look at the questions on page 38 to get the meaning of the poem.
C. Have several students read the poem aloud trying to observe punctuation carefully and to get the meaning across.

Project Day

Each student should be given opportunity to show the class the project

he has been working on. Students must respect each other's work, and it is the teacher's responsibility to find something complimentary to say about the student's work, even though the project may not be particularly well done. This day should help students gain confidence in their own abilities.

The Blue Cup

Prepare for Reading

A. Use the teacher's manual, page 19 and the headnote on page 39 to get students interested in the story.
B. Ask students to try to see ways that Jessie and Mrs. Mitchell are alike and ways they are different.

Read the Selection

Discuss the Selection

A. Discuss the way the two women are alike and the ways they are different.
B. Use the questions on page 51 for further discussion.
C. What change did Jessie's confession to Mrs. Mitchell make in her life?
D. Try to bring out why each character acted as she did.
E. Talk about the choices Jessie made about Dave. Were they wise ones? How would things have been different if she had made another choice?
F. Talk about the other choice Mrs. Mitchell had about the cup? How would this have changed things?
G. Relate this story to the statement discussed at the first of the unit--"The decisions a person makes are his own business and no one else's concern."

Word Study

A. "The Beauty of Words" should be done together in class with dictionaries close by.
B. Words for the vocabulary notebooks: iridescent 42b, 4; insurmountable 43a, 5. (Insurmountable is a good word to use in reviewing prefixes and suffixes)

Unit Review

Writing a Character Sketch

Let students choose any character from the unit and write a one paragraph sketch of that person. Use parts of the chapter "Writing Paragraphs of Description" from Building Better English to help students understand how to write a character sketch. Corrected papers could be read to the class by the teacher or tape recorded by the students. Some papers should be put on the bulletin board.

Talking It Over

Divide the class into four groups to discuss questions 1 - 4 in Talking It Over. Have each group elect a recorder who will write down and tell the class what the group had to say about its question. All groups should consider question 5.

Reviewing the Reading Selections

Have students close their books and name (teacher lists them on the blackboard) as many selections as they can remember by name. As a selection is named, have someone tell what decision or challenge was presented in it. Other suggestions for reviewing the selection are found on page 21 of the manual.

Unit Test

The unit test in the Reading Tests is good to check on reading and understanding of selections. Short "What-do-you-think" questions and vocabulary items could be added to the test.

11TH GRADE

MAJOR THEMES	UNDERSTANDINGS TO BE DEVELOPED
1. "Adventure"	1. Through reading we can share vicariously in the adventures others experience. 2. A person with an adventurous attitude toward life can make everyday occurrences seem like exciting events.
2. "Americans Worth Remembering"	1. Greatness does not depend on wealth or social position. 2. Greatness requires hard work, service to others, and self-denial. 3. Both fact and fiction can present memorable characters from whose lives we can learn much. 4. A job in which a person does his best and seeks to serve his fellow man will be the most satisfying. 5. There is a relationship between American history and American literature.
3. "Moments of Decision"	1. Students have some important decisions to make very soon in their lives. 2. A mature person makes a decision only after he has considered all sides of the question. 3. The decisions a person makes now have an effect on him throughout life.
4. "The Lively Arts"	1. It is natural to admire and identify with a favorite movie or TV personality. 2. A person needs a method of evaluating the many TV shows and movies available today so that he can select the ones he will enjoy and find worthwhile. 3. Serious performers display great strength of character. 4. The world of performers as seen in some popular magazines is different from the report of that world given by some of the performers themselves.
5. "Science"	1. Scientists are much like detectives in their efforts to solve some of the world's greatest mysteries. 2. Scientists are dedicated people who must have great patience, determination, and often physical endurance. 3. Scientific writing seeks to be factual and objective. 4. Science can help us move toward the better world often dreamed about.
6. "Great Moments in Sports"	1. Excellent reading materials about sports can be found in some sports periodicals, in biographies, and in other books. 2. The courage and determination which students exhibit in sports can be usefully applied to other areas of their lives. 3. Reading exciting sports stories can provide some of the same thrills as watching or participating in the sport.

SAMPLE UNIT PLANS: 11TH GRADE

The junior text, Adventures for Americans, is divided into a section of thematic units dealing with problems and situations important to the student and a section of topical units which is a chronological study of American literature. Since the slower-learner will probably respond better to the thematic organization, the teacher may want to use the alternate plan of organization suggested by the teacher's manual in which the selections from Part II are used as supplementary reading for the thematic units suggested in Part I. This plan has the advantage of acquainting the student with American writers and their work, while maintaining high interest in a thematic unit that naturally interests students. Besides the textbook, Adventures for Americans, the teacher can use Enjoying English II, Accent: USA, and the SRA writing unit, Part III: Exposition in her unit plans.

The thematic unit which follows is built around the second unit of the textbook, "Americans Worth Remembering." The junior students who will be studying this unit will be concerned about their places in life and whether they will be able to do anything worth remembering. They need to realize that they can choose interesting, respectable jobs and become useful, contributing citizens without a college education (something that almost all of them would find difficult to attain). The reading selections in the text will provide opportunities to read about memorable people who are noteworthy because they were courageous and did what they felt was right, not because they were rich or highly intelligent. To give the students a sense of being able to accomplish something worthwhile, this unit will provide opportunities for students to find the jobs or careers that will help them make places in the world for themselves. Since many of the boys will join the armed forces or be drafted shortly after graduation from high school, many of them will need to find out what training they can receive in a branch of the service. The unit includes experiences with some of the communications skills students will be likely to need on their jobs.

The first part of the unit is to be mimeographed and handed out to the students as their work guide throughout the unit study. The remaining pages are suggestions and explanations to the teacher.

"Americans Worth Remembering"

Who is the American you remember and admire above all others? Is it a famous political figure like a president, or could it be a famous general? Would you think first of an author whose books you enjoyed or maybe of a scientist who contributed a great deal to mankind? Perhaps you think of a person living now--a famous sports figure or an especially good television personality. Maybe you especially respect a neighbor or someone else right here in your own home town.

Why is this person worth remembering? Is it because of something he (or she) did or the kind of person he was, or both? As you read about some Americans worth remembering, you will be discovering some answers to these questions. You will also be asking yourself some things that you have already begun to think about now that you are nearing your senior year in high school: What am I going to be doing with my life? How can I become a person worth remembering?

While we read about some memorable Americans, we will also be trying to find out about some of the jobs, careers, or branches of the armed services that will help you find your place in life and give you an opportunity to become an "American worth remembering."

Our Unit Plan

You will be working both in groups and on your own. With careful use of your class time, you will have time to complete most of your work in class, although you will probably need to spend some time outside of class reading the biography you select. Generally speaking, activities in this unit will be divided into these four areas:

1. Class readings. As a class you will read the starred (*) stories and poems on the reading list. Daily assignments will be given by the teacher as you come to each selection.
2. Individual readings.
   a. You will select at least two additional selections from the reading list for individual reading. You may read additional stories for extra credit, if you have time. For each story you read, you will write a well-constructed paragraph telling why this person was an American worth remembering. We will review how to write paragraphs in class before you start on this activity.
   b. From the library you will select a book of biography about a person you admire or a person who is pursuing a career or job you are interested in. After reading your book, you will report orally on your book to the class. The teacher will help you find a book, if you choose.
3. Group projects. The class will be divided into five groups, each of which will select a project to work on together. The suggested projects are listed below. If your group prefers, you may make up your own project, have the teacher approve it, and then complete it. Work on projects will be done in class.
4. Job survey.
   a. How to get a job. Here we will write letters of application, answer newspaper advertisements for jobs, practice telephoning for interview appointments, conduct job interviews, and fill out application forms.
   b. A survey of a job, career, or branch of service you are interested in. A study sheet suggesting some things you might find out about your job will be given to you when we begin to work on this survey.

Each written assignment is to be turned in as it is completed. After your paper has been checked, it will be returned to you for rewriting. When you have corrected your errors, your paper should be placed in your folder. Your job survey will be made into a booklet and then made available for other class members to look at.

Reading List

Adventures for Americans

*Salt of the Earth
The Iron Lady
Sam Houston: Lone Star
John Colter's Race for Life
*Portrait of a Leader
*Corporal Hardy
*Lucinda Matlock
The First Day
Will Rogers
On the Road

Accent: USA

Tomorrow Will Be Better
*The Secret Life of Walter Mitty
The Flight

Projects

1. Put on the play "Printer's Measure" which deals with the problem of automation in our society for the class.
2. Record a panel discussion for playback to the class about this topic:
   Does a person need a high school education to be successful (both financially and socially)? Provide information on both sides of the question before you come to a conclusion.
3. Make a bulletin board display in which you include pictures or drawings of some Americans worth remembering. Beneath each picture you should tell why each person is important. Make your display colorful and interesting. Members of the committee will have an opportunity to tell the class something about each person on the board and why he was selected.
4. Make a map of the United States on which you mark, for each state, an important American from that state. Tell briefly what he contributed to the world. Make an attractive display of your map on poster paper and be prepared to tell the class about some of the people you included. Try to include people from many fields.
5. Conduct a demonstration on the way to hold a job interview. You may wish to show both the right way and the wrong way to act during an interview. Offer suggestions to the class on making good impressions during the interview.

Teacher's Plans

Classroom Procedures

As the teacher introduces the unit to the class, she should set down a few rules and standards for the class. In working in groups the students must realize the need to work quietly without unnecessary noise or irrelevant conversation. Slower-learners do not usually have enough self-discipline to keep themselves working on assignments without the occasional reminder of the teacher. As the teacher walks among the students, helping them with their work, she can encourage them to do their work more effectively by speaking individually to them than by lecturing them from the front of the room to behave themselves.

Slower-learners need the discipline of frequent deadlines so that they do not get behind in their work. Perhaps a good policy to follow would be that a student may not start a new assignment until he has rewritten and placed his current assignment in his folder.

The teacher who finds that he has less time to complete the unit than he planned or needs will probably want to leave out some of the selections or activities rather than rush through all of them in an effort to "cover the material." Rushing through the activities will not allow students to improve their skills in communication nor allow them to make any real decisions about their jobs or careers.

Because the slower-learner's attention span is short, the teacher will want to have varied activities in a particular class period so that a period is divided into several shorter blocks of time. A sample period might include 15 minutes of class discussion of a story from the reading list, 10 or 15 minutes of vocabulary study and 15 - 20 minutes of group project work or individual reading.

Vocabulary Study

A vocabulary program should be started with the reading of the first selection. Exercises one and two of the "Self-Improvement Program in Reading", found in the back of the text, deal with key words in sentences and paragraphs and would make a good beginning activity. The teacher could then select from the class reading selections some key words for study. The teacher's manual will suggest some key words and the paragraph "A Word to Remember" at the end of each selection will offer others. Some systematic method of word study should be devised so that the discussion of key words in the story becomes an important part of discussing the story. One such plan can be found in the 9th grade lesson plans or the teacher can make up her own plan suited to the needs of juniors.

Suggestions for the Unit Activities

Since a thematic unit attempts to include some experiences with each of the six English skills, some suggestions on how to include these skills in this unit might be helpful. These are only suggestions and the teacher may find other activities which are more suitable to his class and his aims for them. The teacher's manual will also offer other helpful suggestions.

Class Readings

Salt of the Earth. An introduction to how to find information on jobs could be worked in here by having students browse in the library to find information about army nurses (or medics and male army nurses for the boys). Here they could get acquainted with the sources they will use in their job surveys and later in reports for other classes.

Portrait of a Leader. This selection will be good to illustrate the type of writing the class will be expected to do for the individual readings. This would be a good place to review how to write a paragraph with emphasis on the need to stick to the subject. This is the place to begin to eliminate the grammatical and spelling errors which occur too frequently in the slower-learner's work. The mechanics text, Enjoying English II will be helpful here, and the SRA writing program could be worked in with the paragraph writing activities.

The Secret Life of Walter Mitty. This selection makes a good one for listening, when the teacher reads the story aloud while the students follow along in their books. This selection gives students a view of a person who did not accomplish the things in life he wanted to and perhaps leads them to see that their lives will be happier if they can carry out some of their dreams for themselves.

Lucinda Matlock. This poem provides opportunity for students to hear and interprete a poem which tells a story in a few words and does not seem "sissy" to the boys, an objection they often raise about poetry.

Corporal Hardy. This story is a good selection in which to emphasize the relationship between American history and American literature. It is also a good one in which to review time-order sequence in reading, since the selection contains a flashback. Since this short story is usually well-liked by the students and can be read at a faster-than-usual speed, this might be the place to include Lesson 13 on improving reading rate from the reading program in the back of the text. Library reports on the Civil War battle mentioned in the story could give some students needed experience in writing library reports.

Individual Readings

The paragraphs written about the individual stories read will probably need some attention. Students will probably just tell the story at first until they understand that they are only to tell why the person in the story is an American worth remembering. The overhead projector would be helpful here with the teacher showing both a well-written paragraph and one that does not stick to the subject. A third paragraph for student revision could be projected on the screen. Study sheets on particular grammatical errors or pages from Practical English would be helpful for individual attention to grammatical errors in student paragraphs.

The easy-reading book list will suggest some easier biographies for the slower-learner. The teacher could check out some of these to bring to the classroom to stimulate interest in reading biographies. Reports on the biographies should be informal with the class taking a period to tell each other something about the subjects of their books and how they became successful or famous.

Group Projects

The teacher may find that the groups will work together more successfully if she selects the students for each group, trying to distribute strong and weak members of the class among the groups, rather than allowing the class to group as they choose. A group of about five students will be large enough to handle the work of one of the projects and small enough to allow everyone in the group to participate. Each group may want to elect a chairman and a secretary to help the group work better together. Of course the teacher will want to spend part of the time alloted for group projects sitting in with various groups helping them select and then carry out their project. Although class reports on projects would be more interesting if each group had a different project, two groups should still be allowed to do the same project if it is the one they are interested in. The teacher should encourage the group to think up good projects of its own.

Job Survey

The last section of this unit can best be developed upon the basic understandings of the first part that we admire and remember a person for the courageous things he has done in his lifetime, or the kind, unselfish way he has treated his fellow man. When he has lived this way, he has found his place in the world. Slower-learners are aware of the need to find a place for themselves in the world and yet afraid that it will not be easy. They often settle for lesser jobs than they would be capable of getting if they had better training.

In this job survey students will have two major areas of concern: practicing some practical skills in job-getting, and finding out about a job that interests them.

The chapter on letter writing in Enjoying English II will be helpful for letter writing activities. Students who have studied letters of application in another course, such as Business English, can perhaps give reports to the class about writing business letters. Neatness and accuracy are of utmost concern here. This would be an opportunity to learn more about the classified ads of the newspaper, as each student searches the ads of a large paper for the kind of job he would be interested in, and then writes a letter inquiring about it.

To get practice in using the telephone efficiently, the class could write and read aloud dialogues in which the student arranged for an interview with a prospective employer.

The group project on job interview could be used effectively here. After the demonstration by the group, the other class members could then write short dialogues of job interviews themselves and present them to the class.

The preparation of a Job Survey provides opportunities for the student to use library skills that he will later find particularly helpful in classes where he is expected to make longer reports. This survey is not intended to be a research paper. In order that the student not be faced with the difficult task of organizing a great deal of information into a long paper, it is suggested that the student use the worksheet below to gather information about his job. Then he could write each section on a separate piece of paper and bind his pages into a booklet as suggested in the student's unit plan.

The teacher will need to spend a class period sometime during the unit reviewing with the students library procedures and materials. The librarian could be enlisted to tell about the use of the vertical file, occupational handbooks, and special reference books useful to them. Slower-learners must learn that the library is a place for study and quiet. Unnecessary talking and disrupting must be eliminated, for other classes will be using the library, too. The teacher will find that the students will work more consistently and be less disruptive if she walks among them and offers help when needed.

The students will also find the counselors helpful in providing information about jobs. Perhaps individual appointments (or small group appointments) could be set up with the counselors to give students a chance to obtain personal help in choosing a career.

Students should be encouraged to write letters to training schools, or recruitment offices of the armed forces, to get more information.

Work Sheet for Job Surveys

(When the teacher types this worksheet for the students' use, he should leave plenty of space for the student to make note of the information he finds about the area.)

Type of Job

Formal Education (How many years of school do you need?)

Special Training (What kind do you need and where can you get it?)

Responsibilities of the Job (What, exactly, will you have to do on the job?)

Salary (How much will the job pay at first? What opportunities are there for an increase in salary?)

Availability of the Job (How many people are needed for this job? In what parts of the country would you find this job? Will this job still be available in 10 years or will automation have taken it away?)

Opportunities for Advancement (Will your job always be the same? Can you move up to a high position?)

You and This Job (Why are you interested in this job? How can it make you feel that you are a success and that you have done something worthwhile?)

Testing

Juniors will, of course, be facing all types of tests in their subjects at school. Many slower-learners fail tests or do poorly on them because they do not read the questions correctly or understand what kind of answer is required. Here is an opportunity for the teacher to offer help in a reading skill that is badly needed. The teacher might secure a copy of a test that students have already taken in another class and help them understand what the questions are asking. An activity more directly related to this unit would be the group study of the kind of test the teacher plans for this unit. The teacher could give the students sample questions and the students, in groups, could decide how the question would be answered (by a sentence, a paragraph, one word, etc.) as well as what information the answer should include. Sample answers could be read aloud, with the students deciding which answer really sticks to the subject of the question.

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Pooley, Robert C., Teaching English Usage, Appleton-Century-Crofts, New York, 1946

Sauer, Edwin H., English in the Secondary School, Holt, Rinehart and Winston, Inc., New York, 1961

Taba, Hilda, Curriculum Development, Theory and Practice, Harcourt Brace and World, Inc., New York, 1962

The Way Teaching Is, Report on Seminar on Teaching, ASCD, Washington, D. C., 1966

ENGLISH TEXTBOOKS - HARDIN JUNIOR HIGH

7th Grade

Low Groups - Reading -
- Adventures Now and Then, American Book Company
- Reading with Purpose, American Book Company
- Finding the Way, Allyn and Bacon
- People and Progress, Scott Foresman
- Adventures for You, Harcourt Brace
- SRA Reading Lab 11a

Grammar -
- Macmillan English Series, Macmillan Company

Average Groups - Reading -
- Discovery through Reading, Ginn
- New Horizons, Laidlaw
- SRA Reading Lab 11a
- Parades, Scott Foresman

Grammar -
- Macmillan English Series, Macmillan Company

High Groups - Reading -
- Wide, Wide World in Literature, Scott Foresman
- More Parades, Scott Foresman
- Worlds of Adventure, American Book Company

Grammar -
- Macmillan English Series, Macmillan Company

8th Grade

Low Groups - Reading -
- Teen Age Tales
- Adventures for Reading, Harcourt Brace
- SRA Reading Lab 11la

Grammar -
- Macmillan English Series, Macmillan Company
- The English Language, Harcourt Brace

Average Groups - Reading -
- Panoramas, Scott Foresman
- Exploration through Reading, Ginn
- SRA Reading Lab 11la
- New Horizons, Laidlaw

Grammar -
- Macmillan English Series, Macmillan Company

High Groups - Reading -
- Reading Round Up, Heath
- All Around America, Scott Foresman
- More Panoramas, Scott Foresman

Grammar -
- Macmillan English Series, Macmillan Company
- Composition Model and Exercises, Harcourt Brace
- Walsh Plain English Handbook

ENGLISH TEXTBOOKS - MEXICO HIGH SCHOOL

9th Grade

2 Groups

- Standard text - Adventures For Today, Harcourt Brace
- Supplementary - Vanguard, Scott Foresman
  Prose and Poetry Journeys, Singer
  Good Times Through Literature, Scott Foresman
- Mechanics text - Our English Language, American
  Writing Skills Laboratory: Part 1 Narration
  Part 2 Description
- Supplementary - Scope, Scholastic Magazine
  (Supplementary materials for 3's may be used when applicable)

3 Groups

- Standard text - Vanguard, Scott Foresman
  Tactics I, Scott Foresman
- Supplementary - Good Times Through Literature, Scott Foresman
  Pleasure in Literature, Harcourt Brace
  Adventures in Reading, Harcourt Brace (Laureate)
  Words from the Myths, Houghton Mifflin
  Four Famous Adventures, Harcourt Brace
  Four Novels for Adventure, Harcourt Brace
  This Singing World
  Moments of Decision, Scholastic Unit
- Mechanics text - Enjoying English 9, Singer
  Progress Tests in English Grammar and Usage, Singer (not to be torn out of booklets)
- Supplementary - The English Language 9, Harcourt Brace-15 copies
  Discovering Your Language, Holt, Rinehart

4 Groups

- Standard text - Outlooks in Literature, Scott Foresman
- Supplementary - Prose and Poetry of the World, Singer
  Adventures in Reading, Harcourt Brace (Laureate)
  People in Literature, Harcourt Brace-15 copies
  This Singing World
  Poems for Modern Youth, Houghton Mifflin
  Four Famous Adventures, Harcourt Brace
  Four Novels for Adventure, Harcourt Brace
  Words from the Myths, Houghton Mifflin
  The Compact Homer: Iliad and Odyssey
  Romeo and Juliet, Ginn
  Midsummer Night's Dream, Ginn
  Cavalcade, Scholastic (35 copies monthly)
  Library resources
- Mechanics text - Guide to Modern English 9, Scott Foresman
- Supplementary - SRA - Teaching English Composition (transparencies for overhead projector)
  Discovering Your Language, Holt, Rinehart

10th Grade

2 Groups

- Standard text - Adventures In Living, Harcourt Brace
- Supplementary - Prose and Poetry Adventures, Singer
  Reading Round Up, Heath
  Reading Is Riches
  Reading Is Fun
  Workers and Wonders
- Mechanics text - Building Better English, Row Peterson
  Writing Skills Laboratory: Part 3 Exposition
- Supplementary - Scope, Scholastic (30 copies weekly)
  (See Curriculum Guide for Slower Students for composition materials)
  (Supplementary materials for 3's may be used when applicable)

3 Groups

- Standard text - Perspectives, Scott Foresman
  Tactics II, Scott Foresman
- Supplementary - Interesting Friends, Rand McNally
  Exploring Life through Literature, Scott Foresman
  This Singing World
  Prose and Poetry of the World, Singer
  Poems for Modern Youth, Houghton Mifflin
  A Variety of Short Plays, Schweitzer
  Four Novels for Appreciation, Harcourt Brace
  5 World Biographies, Harcourt Brace
  Courage, Scholastic Unit
  Personal Code, Scholastic Unit
- Mechanics text - Enjoying English 10, Singer
- Supplementary - English in Action, Heath

4 Groups

- Standard text - Adventures in Appreciation, Harcourt Brace (Laureate)
- Supplementary - Exploring Life Through Literature, Scott Foresman
  Interesting Friends, Rand McNally
  Prose and Poetry of the World, Singer
  Poems for Modern Youth, Houghton Mifflin
  Merchant of Venice, Ginn
  This Singing World
  Four Novels for Appreciation, Harcourt Brace
  5 World Biographies, Harcourt Brace
  A Variety of Short Plays, Schweitzer
  Cavalcade, (35 copies monthly)
- Mechanics text - Guide to Modern English 10, Scott Foresman
  SRA - Teaching English Composition (overhead projector transparencies)

5 Groups

- Standard text - Adventures in Appreciation, Harcourt Brace (Laureate)
  Exploring Life Through Literature, Scott Foresman
- Supplementary - Interesting Friends, Rand McNally
  Oedipus the King, Sophocles
  Merchant of Venice, Ginn
  Prose and Poetry of the World, Singer
  Julius Caesar (unabridged) Ginn

This Singing World
Poems for Modern Youth, Houghton Mifflin
Four Novels for Appreciation, Harcourt Brace
5 World Biographies, Harcourt Brace
Cavalcade (35 copies monthly)

Mechanics text - Guide to Modern English 10, Scott Foresman
SRA - Teaching English Composition
(overhead projector transparencies)

11th Grade

2 Groups - Standard text - Adventures for Americans, Harcourt Brace
Supplementary - (Supplementary materials for 3's may be used when applicable)

Mechanics text - Enjoying English II (to be ordered)
Supplementary - (See Curriculum Guide for Slower Students for composition materials)
Practical English (30 copies weekly)

3 Groups - Standard text - Accent: USA, Scott Foresman
Tactics III, Scott Foresman (to be bought later)

Supplementary - Literature in America, Rand McNally
Adventures in American Literature, Harcourt Brace,
Four American Novels, Harcourt Brace.
A World of American Literature, American
Poems for Modern Youth, Houghton Mifflin
4 American Biographies, Harcourt Brace
Success, Scholastic Unit

Mechanics text - Enjoying English II, Singer
Supplementary - Practical English (35 copies monthly)

4 and
5 Groups - Standard text - Adventures in American Literature, Harcourt Brace (Laureate)

Supplementary - Literature in America, Rand McNally
4 American Biographies, Harcourt Brace
U. S. in Literature, Scott Foresman
America Through Literature, Harcourt Brace
Huckleberry Finn, Twain
Four American Novels, Harcourt Brace
Poems for Modern Youth, Houghton Mifflin
Macbeth (unabridged) Ginn
Cavalcade, Scholastic magazine (35 copies monthly)
Library resources, particularly:

Saturday Review	Time
Harpers	Newsweek
Atlantic	N. Y. Times Book Review
English Journal	

Standard books of literary history and criticism.
Subject matter bibliographies from mimeo resource file.

Mechanics text - Guide to Modern English - Upper Years, Scott Foresman
SRA - Teaching English Composition
(transparencies for overhead projector)

12th Grade

3 Groups - Standard text - Adventures in English Literature, Harcourt Brace, (Olympic)

Supplementary - This England, Rand McNally
Four English Novels, Harcourt Brace
Four English Biographies, Harcourt Brace
Poems for Modern Youth, Houghton Miffiin
Cavalcade, Scholastic (35 copies monthly)

Mechanics text - Enjoying English 12, Singer

Supplementary - Guide to Modern English, Corbin-Parrin

4 and
5 Groups - Standard text - England in Literature, Scott Foresman

Supplementary - Adventures in English Literature, Harcourt Brace, (Laureate)

This England, Rand McNally
Four English Novels, Harcourt Brace
Four English Biographies, Harcourt Brace
Poems for Modern Youth, Houghton Mifflin
Cavalcade, Scholastic (35 copies monthly)
Hamlet (unabridged) Ginn
Henry V, Ginn
Library Resources:

Saturday Review	English Journal
Harpers	Time
Atlantic Monthly	Newsweek
	New York Times Book Review

Pocket Books
Audrain Library resources
Standard books of literary history and criticism
Subject matter bibliographies from mimeo resource file
SRA - Teaching English Composition
(overhead projector transparencies)

Mechanics text - Guide to Modern English 12, Scott Foresman

STANDARD MIMEO FILE - ENGLISH DEPARTMENT

Forms suitable for any classes in all years:

1. Grammar test - parts of speech
2. Diagnostic answer sheet for parts of speech test
3. Grammar test - parts of the sentence
4. Diagnostic answer sheet for parts of sentence test
5. Grammar test - kinds of sentences
6. Diagnostic answer sheet for kinds of sentences test
7. Mexico High School library diagram of floor plan.
8. One sheet survey of punctuation rules.
9. Instructions for writing a research paper.
10. A bibliography of library myths and folktales.
11. A bibliography of world literature in our library.
12. A bibliography of short stories available in our library.
13. Requisites for a good book review.
14. Spelling list - National Curriculum Associates - Most Frequently Misspelled Words in the Writing of 14,643 Children in 199 Schools.
15. Bibliography of background materials on literature of Northern Europe and Britain.
16. Large outline map of Greek World - 4 sheets that fit together. Suitable for making of picture maps for mythology or study of Iliad and Odyssey.
17. Study outline - A Short History of Literature, simple for use with 9th grade or average groups.
18. Punctuation of subordinate clauses - work sheet.
19. Reporting on a novel.
20. The Novel Outline
21. The book report brief card.
22. The six-point book report sheet.

Forms suitable for 4 and 5 classes in freshman and sophomore years:

1. Six-point reading list
2. Six-point book report sheet
3. The Novel Outline
4. Precis Paragraph Writing
5. A Short History of Our Literature outline.
6. How to Write a Research Paper
7. Romeo and Juliet study outline.
8. Julius Caesar study outline.
9. Books Every College Bound Student Should Read.
10. Outstanding Fiction for College-Bound Students.
11. Reading lists - Middle Ages
12. World Art
13. World Literature and Music
14. A checklist of World Composers and Musicians.
15. List of composers, authors (World Lit., Art, Music)
16. Age of Renaissance and Reformation bibliography
17. Russian literature bibliography.

S O C I A L S T U D I E S

C O M M I T T E E:

Betty Baker - Chairman

James DuBus

John L. Mulyar

TABLE OF CONTENTS FOR THE SOCIAL STUDIES

OVERVIEW FOR THE SOCIAL STUDIES FOR THE SLOWER-LEARNER

The social studies deal with people and how they live as a group. Man's behavior is affected by his understandings of how his society works. As social studies teachers, we must provide the slower-learner with patterns of behavior that will enable him to become a more intelligent, useful and committed individual. These values basic to the establishment of acceptable patterns of behavior are:

1. That each person possesses equal rights and liberties accompanied by responsibilities.
2. That each person has maximum freedom and equality of opportunity to develop his desires consistent with his capacity and the general welfare.
3. That individual and group rights must be exercised in ways that do not interfere with the rights of others, endanger the general welfare, or threaten national security.
4. That each person must be willing to act on the basis of reasoned conclusions and judgments not on self-interest or group or class loyalty.
5. That the will of the majority should govern and that the right and the opinions of the minority should be respected and protected.
6. That government is based upon laws not upon men.
7. That people have the right, by lawful means, to change their government.
8. That problems between nations must be solved by peaceful means and that collective security can best be achieved within an organization of national states.
9. That each person should have a reasoned devotion to his American heritage and a commitment to perpetuate the ideals of American life.

The values for behavior patterns are necessary for society's demands, including the vocational demands on the individual. The need for understanding the values of society and the community is essential to supporting oneself economically. Many of the school experiences should provide the necessary and appropriate activities to prepare the slower-learner, upon completion of his education, to be ready to take an independent place in the community and be an asset to that community. A slower-learner should prove to be a satisfactory worker who can work effectively in a number of occupational settings. He should have acquired the social skills of "getting along" with fellow employees, families, neighbors, and the community. Handling money, spending it wisely, and budgeting it, all play a part in the social studies education of the slower-learner.

Social studies cannot provide educationally deprived children with jobs, decent housing, or social competence. Social studies can produce adults who possess the skills to compete for jobs, it can produce adults who are willing to say that they suffer from ghettoes directly or as spectators, and it can help build among its charges decent attitudes toward people who are different.

Social studies can create conditions in the school environment that will help the slower-learner along the way toward dignity and self-appreciation. Our schools can do these things now because for the first time in our history, America has given its blessings to such a monumental undertaking. In America today, change is everywhere. We are moving faster now than ever before in the direction of recognizing fundamental and basic problems in the construction of a new and vital American Society that is truly democratic.

The social studies in the Mexico System has the peculiar distinction of being the only area in which the students in grades 7 - 12 are enrolled in at least one social studies course. This creates both challenges and problems for the social studies. First, the social studies curriculum must be flexible, meeting the needs of <u>all</u> students. Second, it must be <u>worthy</u> of the distinction. One of the problems that must be mentioned is that many students take a negative attitude toward any required course. Often times this is a more acute problem with the slower-learner. He is there because he <u>must</u> be, not because he <u>wants</u> to be.

RATIONALE FOR TEACHING THE SOCIAL STUDIES TO SLOWER-LEARNERS

CHARACTERISTICS OF THE SLOWER-LEARNER AT EACH GRADE LEVEL

The following descriptions are provided to assist the teacher of the slower-learner to understand some of the problems she may face in dealing with each individual. These descriptions are not intended to be either conclusive or inclusive nor are they scientifically proven. They are derived from a consensus of teachers who have taught at these various levels.

7th Grader

1. The social studies becomes a distinct discipline for the student.
2. He is beginning to grow up.
3. His reading disability may be a greater handicap than ever before.
4. He faces the departmentalization of the curriculum for the first time in his school career in the Mexico schools.
5. His curiosity is at its height.
6. He possesses violent likes and dislikes and is completely frank.
7. His behavior fluctuates between childhood and adolescence.
8. He has abundant physical energy.
9. He will either completely accept or reject a teacher, but this can change from day to day.
10. He is submissive at the beginning of the year, but he may become aggressive before the end of the year.
11. Most students at this level have short memory spans.

8th Grader

1. He is rapidly maturing emotionally, socially and physically.
2. His group participation and awareness of the need for cooperation are decidedly more noticeable.
3. He is more familiar with the material offered in the social studies at this level and may show a high interest initially.
4. He is in need of special training in study skills necessary for a successful school life.
5. He is no longer considered a terminal student.
6. He may begin to relate himself to the social studies especially the study of government.
7. Personal hygiene is often ignored.

9th Grader

1. He often reaches his maximum educational level at this grade.
2. Most of these students reach their full adolescence during this year.
3. He begins to question the teacher and the classroom activities. His questions may be completely irrelevant and a source of annoyance to the teacher.
4. There is an increasing number of potential drop-outs because of limited academic ability.
5. There is a noticeable slackening or moderating of supervision in the home, and the student's activities are no longer family centered, but they are centered in peer groups and/or school.
6. Personal hygiene is still a problem.

10th Grader

1. The greatest number of drop-outs occur at this grade level.
2. His interest in a vocation is narrowing to a general area.
3. Both the student and his parents still may have greater aspirations for college, etc., than his ability warrants.
4. He prefers to come to class without books, notebooks, pencils, etc. He doesn't want to be bothered.
5. He likes or enjoys the personal involvement in the social studies. The personal interest story appeals to him.
6. Current events become more meaningful to him.
7. He begins to pay attention to personal hygiene.

11th Grader

1. School supervised work programs involve many of these students.
2. Interest may be divided between work and school.
3. Individual students have problems of chronic absenteeism due to supposed illnesses and/or home problems.
4. He may experience a period of complete disorganization during the school term for which there is no obvious reason.
5. He resents authority--nobody can tell him anything that he doesn't already know.
6. His limited academic ability seriously begins to bother him. He wonders, "What am I going to do?"
7. Engagements among the girls are frequent.
8. The student considers himself a young adult, and the teacher must be with him not above him.
9. A greater variety of vocational subjects draws this student away from academic areas where he has sometimes experienced failure.
10. He is interested in obtaining information that he can apply immediately to his life situation--consumer buying, taxes, draft laws, etc.

12th Grader

1. He knows he doesn't know and will ask questions.
2. He can see the end in sight--the diploma--and is less willing to give up.
3. He is more easily disciplined.
4. He will seek out the services of the school that will help him to make a vocational choice.
5. He becomes more selective in participating in those school and community activities which he considers important and necessary as opposed to those which are less desirable or unnecessary from his viewpoint.
6. He is concerned about his military obligations.
7. A few students still harbor illusions about their ability to succeed in college.
8. He is aware of the practical side of the social studies programs because of his increasing contacts with social, political and economic situations.

MOTIVATION FOR THE SLOWER-LEARNER

Motivation in a classroom of slower-learners rests primarily with the teacher. Research and common sense tell us that the most effective way to motivate is to be the "best teacher" possible. A pamphlet entitled Motivation, published by The Economic Press describes the "best teacher" as one who:

--is friendly
--is understanding and considerate
--likes young people
--is fair, just and tolerant
--recognizes, appreciates and rewards effort
--knows his subject, how to teach it and how to make it interesting
--plans and organizes his work
--is businesslike and exacting
--maintains good discipline and classroom control
--is enthusiastic about his subject and his work
--is himself well motivated

CLASS SIZE

The social studies classes in the Mexico system are generally over-sized, and it is obvious that this is a severe handicap in doing an effective job of teaching the slower-learner. It is recommended that these class numbers be brought to 20 students and certainly not more than 25.

One of the most effective ways of approaching or motivating the slower-learner in social studies is to personally involve him in the classroom activities. The shy, uncooperative and unenthusiastic student must have the personal attention of the teacher, and the teacher must have time for this contact.

EVALUATION OF THE SLOWER-LEARNER IN THE SOCIAL STUDIES

The process of evaluation of the slower-learner ultimately involves the exercise of judgment and is therefore basically subjective. While various objective or semi-objective devices may be employed in evaluating the slower-learner, the teacher must consider such devices only as guides if evaluation is to be meaningful.

In evaluating we attempt to answer such questions as "What kind of learning have students achieved?" - "How well have they learned?" - and "How has his learning affected behavior?" The answers to these questions indicate the growth of the student.

Evaluation of slower-learners is very different from that of an average or advanced learner, and the teacher must adjust his evaluation process to these students. Procedures for evaluation of growth in the various areas should not rely entirely on the traditional evaluation techniques. One might correctly say that no one evaluative device has superiority over another, but particular procedures are selected and used because they will yield more information about the slower-learner than another would. Evaluation of social studies learning, especially with the slower-learner with his limited academic ability, needs to be done not only during social studies periods, but at times when the teacher is able to observe examples of improved student behavior.

Tests for slower-learners must be at the appropriate reading level so that adequate comprehension of the test is obtained. A student's difficulty in reading may very well make the difference between success or failure on tests. Therefore, it is the responsibility of the teacher to provide testing procedures that take into account the educational shortcomings of the slower-learner in his classroom.

The slower-learner has been encouraged to analyze, generalize, summarize, or otherwise evaluate and use social studies material. Tests should be a part of the classroom activities of the behavior-oriented social studies course. When an evaluation, such as the objective-type test, demands no more of the slower-learner than a simple, unstructured recall experience, the teacher is failing to offer added practice in "thinking about" the subject by not making the test a part of the learning process. When the objective test is used almost exclusively, it should be extended and expanded to include the richer part of the students' learning experience.

Slower-learners, for the most part, are able to reflect most of the desired changes in levels of understandings, values, and skills through the use of a simple essay-type, teacher-made test. A test for this achievement-level group must be relatively short and related to the subject in a concrete manner. This type of test may provide for a greater number of responses, not necessarily demanding a right or wrong answer, but good judgment on the part of the student.

THE DEVELOPMENT OF SKILLS AND THE SLOWER-LEARNER

Helping the slower-learner to develop and use skills is one of the central purposes of our instruction. A sequential plan for skill development is included in this guide to aid the teacher to plan an effective teaching program. Two things should be kept in mind. First, it is possible to set down a plan for skill development, but it is not possible to say exactly where a skill should be introduced. The teacher of the slower-learner may assume that his students have been exposed to many of these skills by the time they enter the seventh grade, but this exposure does not mean that they can apply the skills. Much effort must be spent in developing skills systematically, maintaining them and extending their use. This means simply that the teacher must accept the level of skill development where he finds it and not proceed until the use of the skill has been improved. Second, the successful development of the use of skills should be very personal; that is, each student must be assisted individually. No attempt to teach a skill should be made until the student understands the basic use or purpose for it. This will involve a great deal of teacher-time.

The following plan includes first, those skills which are a shared responsibility of the social studies with other areas such as the language arts and second, those skills which are the major responsibility of the social studies. An attempt has been made to suggest where certain skills should be introduced to the slower-learner, but the individual teacher should use his own judgment in dealing with a particular class and/or individual. Some skills have been purposefully omitted because in the judgment of the committee these cannot be profitably taught to the slower-learner.

This plan has been developed from materials supplied by the National Council for the Social Studies.

PART ONE: SKILLS WHICH ARE A DEFINITE BUT SHARED RESPONSIBILITY OF THE SOCIAL STUDIES

	7-8	9-10	11-12
I. Locating Information			
A. Work with books			
1. Use of table of contents and index	X		
2. Distinguish between fact and fiction	X		
3. Choose a book for appropriate purpose	X		
4. Use of such reference books as World Almanac, Reader's Guide, or Statesman's Yearbook		X	
B. Use of the dictionary			
1. Learn correct pronunciation of a word	X		
2. Understand syllabication	X		
3. Choose the appropriate meaning of the word for the context in which it is used	X		
C. Reading the newspaper			
1. Selecting the important news item	X		
2. Learn about the sections of the newspaper		X	
3. Recognition of the different purposes and coverage of different newspapers and magazines			X
D. Gather facts from field trips and interviews			
1. Identify the purpose	X		
2. Plan procedures to be followed, questions to be asked and things to be looked for	X		
3. Express appreciation for courtesies	X		
II. Organizing Information			
A. Select the main idea and supporting facts	X		
B. Take meaningful notes on material read	X		
C. Arrange events and facts in sequence	X		
D. Make simple outline of material read	X		
III. Evaluating Information			
A. Distinguish fact from opinion	X		
B. Consider which source of information is more acceptable and why		X	
C. Examine material for consistency, reasonableness, and freedom from bias			X
D. Recognize propaganda and its purposes in a given context			X
E. Reach tentative conclusions			X

	7-8	9-10	11-12
IV. Acquiring Information Through Reading			
A. Read to find answers to questions	X		
B. Make use of heading, topic sentences and summary sentences	X		
C. Make use of italics and footnotes		X	
V. Communicating Orally and in Writing			
A. Speaking			
1. Talk in sentences	X		
2. Keep to the point	X		
3. Respect limitation of time and rights of others	X		
B. Writing			
1. Collect and organize information around clearly defined topic	X		
2. Avoid copying	X		
3. Include a bibliography to show source of information			X
4. Proof-read and revise	X		
VI. Interpreting Pictures, Charts, Graphs and Tables			
A. Interpreting pictures			
1. Recognizing a picture as a source of information	X		
2. Using the material as a basis for drawing conclusions	X		
B. Interpreting cartoons			
1. Recognize that the cartoon expresses a point of view	X		
2. Note common symbols in a cartoon	X		
C. Studying charts and graphs			
1. Recognizing the objectives	X		
2. Understand the significance of the title	X		
D. Construct simple graphs, charts or cartoons	X		
VII. Working with Others			
A. Respect rights and opinions of others	X		
B. Understand the need for rules and the necessity for observing them	X		
C. Accept the role of leader, or the follower, as the situation requires	X		

PART TWO: SKILLS WHICH ARE A MAJOR RESPONSIBILITY OF THE SOCIAL STUDIES

	7-8	9-10	11-12
I. Reading Social Studies Materials			
A. Understand an increasing number of social studies terms	X		
B. Learn abbreviations commonly used in social studies materials	X		
II. Applying Problem-solving and Critical-thinking to economic and social issues			
A. Recognize that a problem exists	X		
B. Define the problem for study	X		
C. Review known information about the problem	X		
D. Plan how to study the problem	X		
E. Locate, gather and organize information	X		
F. Interpret and evaluate information		X	
G. Summarize and draw tentative conclusions		X	
H. Recognize the need to change conclusions when new information warrants change		X	
III. Interpreting Maps and Globes			
A. Orient the map and note directions			
1. Use cardinal directions (north, east, etc.) and intermediate directions (northeast, southeast, etc.) in working with maps	X		
2. Understand the use of the map projection	X		
3. Orient desk outline maps and textbook maps with wall maps and globes	X		
B. Locate places on maps and globes			
1. Recognize land and water masses on a globe and on a variety of maps--physical-political, desk maps, etc.	X		
2. Identify on a globe and on a map of the world, the equator, tropics, circles, continents, oceans, large islands	X		
3. Use a highway map for locating places by number-and-key system; plan a trip using distance, direction and locations	X		
4. Relate low latitudes to the equator and high latitudes to the polar areas	X		
5. Use longitude and latitude in locating places on wall maps	X		
6. Understand the reason for the International Date Line		X	

	7-8	9-10	11-12
7. Recognize location of major cities of the world with respect to their physical setting	X		
8. Trace routes of travel by different means of transportation	X		
9. Learn to make simple sketch maps to show locations	X		
C. Use scale and compute distances			
1. Make simple large-scale maps of familiar area, such as neighborhood or community	X		
2. Determine distance on a map by using a scale of miles	X		
3. Compare maps of different size of the same area	X		
D. Interpret map symbols and visualize what they represent			
1. Understand that real objects can be represented by pictures or symbols on a map	X		
2. Learn to use legends on different kinds of maps		X	
3. Study color contour and visual relief maps and visualize the nature of the areas shown		X	
4. Interpret dots, lines, colors and other symbols	X		
5. Use all parts of a world atlas		X	
E. Compare maps and draw inferences		X	
1. Recognize that there are many kinds of maps for many uses, and learn to choose the best map for the purpose at hand			
2. Understand the differences in different map projections and recognize the distortions involved		X	
3. Use maps and globes to explain the geographic setting of historical and current events	X		
IV. Understanding Time and Chronology			
A. Develop an understanding of the time system and the calendar			
1. Associate the seasons with particular months in both northern and southern hemispheres	X		
2. Understand the relation between rotation of the earth and day and night	X		
3. Understand the system of time zones as related to the rotation of the earth	X		

	7-8	9-10	11-12
4. Understand the relation between the earth's revolution around the sun and a calendar year	X		
. Use the vocabulary of definite and indefinite time expressions	X		
a. Use such definite time concepts as second, minute, yesterday, decade			
b. Use such indefinite time concepts as past, future, long ago, before			
c. Learn to translate dates into centuries	X		
B. Develop an understanding of events as part of a chronological series of events and an understanding of the differences in duration of various periods of time			
1. Learn to figure the length of time between two given dates	X		
2. Understand differences in duration of various historical periods	X		
3. Understand and make simple time lines	X		
4. Learn to relate the past to the present in the study of change and continuity in human affairs	X		

COURSE CONTENT FOR THE SLOWER-LEARNER IN THE SOCIAL STUDIES

The course content for the slower-learner in the social studies in the Mexico schools is outlined in the following pages. This committee has taken these recommendations from the basic textbooks that have been selected for each grade level. It is expected that the classroom teacher will supplement the basic text with a variety of materials selected principally from the libraries in their respective schools.

7th Grade - Old World Background

Basic Textbooks: Our Beginnings in the Old World, Eibling, King, and Harlow

Our Country's Story, Eibling, King, and Harlow (Laidlaw)

Units:

I. Early Civilization
II. The Story of Greece
III. Life Among the Romans
IV. Europe in the Middle Ages
V. Early England
VI. The Beginnings of Other Nations
VII. The Growth of Towns and Trade
VIII. A Great Awakening
IX. Discovery and Exploration of the New World
X. Colonization of America to 1750

Regular study of current events from Young Citizen or Junior Review

8th Grade - American History

Basic Textbook: Our United States, Eibling, King, and Harlow (Laidlaw)

Units:

I. The Beginnings of the New Nation (Include a brief study of the U. S. Constitution beginning in 1967-68 term)
II. Growth of the New Nation (Include a brief study of Missouri and its Constitution)
III. The Great Crisis
IV. Industrialization of America
V. America Becomes a World Power
VI. Americans Plan for the Future

Regular study of current events from Junior Review or The Young Citizen

9th Grade - World Geography

Basic Textbook: Exploring a Changing World, Melvin Schwartz and John O'Connor (Globe Book Co.)

Units:

I. The Earth
II. Anglo-America
III. Latin America
IV. Western Europe
V. The Soviet Union
VI. North Africa and the Middle East
VII. Africa, South of the Sahara
VIII. The Far East
IX. The Pacific World

10th Grade - World History

Basic Textbook: World History, Jack Abramowitz (from Follett Basic Learnings Program)

Units:

I. The Ancient World and the Middle Ages
II. From the Middle Ages to Modern Times
III. The Rise of Democracy
IV. The Industrial Revolution
V. The French Revolution and Napoleon
VI. The Expansion of Democracy
VII. Nationalism and Imperialism
VIII. From World War I to World War II
IX. The World Since 1945

11th Grade - American History

Basic Textbook: The Adventures of the American People, Graff and Kraut (Rand McNally Co.)

Units:

I. Europe Transplanted
II. Making a New Nation
III. The Challenge of Sectionalism
IV. Testing the Federal Union
V. Creating Industrial Strength
VI. Imperial America
VII. The Quest for Security

Current Events from The Weekly News Review

12th Grade - Contemporary Issues

Economics: (Taught either first or second semester)

Basic Textbook: Economics for Our Times, Smith, A. (Webster)

Introduction: Why Study Economics?

Units:

I. Consumption of Goods
II. Exchange--Supply and Demand
III. Production
IV. Money, Credit, and Banking
V. Government and the Economy
VI. International Trade
VII. Major Economic Problems

Political Science: (Taught either first or second semester)

Basic Textbook: Our Living Government, Haefner, Bruce, and Carr (Scott Foresman)

Units:

I. Understanding our Government
II. Congress
III. Executive Department
IV. Judicial Department (Federal Constitution)
V. State Governments (Missouri Constitution)
VI. Study of Communism

Current events taught throughout the year using newspapers, magazines, and pamphlets.

Newspapers: N. Y. Times, St. Louis Post Dispatch, Wall Street Journal

Magazines: Time, Newsweek, U. S. News and World Report

APPLYING THE BEHAVIOR-ORIENTED OBJECTIVES OF THE SOCIAL STUDIES TO CONTENT FOR THE SLOWER-LEARNER

As far as the slower-learner is concerned, the teacher should be aware that the content of the social studies must be selected in such a way that it leads to behavior-oriented goals. The slower-learner is confronted, knowingly or unknowingly, with the task of finding his place in society. The social studies should provide ways in which the slower-learner may acquire understandings, experiences, attitudes, and skills to enable him to discover those major concepts that will help him function as an effective citizen in his community, state and world.

The behavior-oriented functions of the social studies are concerned with helping the individual realize the structure of his society and his place in it. This might best be achieved by analyzing the basic functions of society; the institutions developed to carry out those functions; and the complicated system of norms, values, and sanctions which conditions behavior.

It is generally believed that the basic functions that every society must perform are:

1. Preserving the species-the family and its cumulative heritage
2. Orienting man into society--education of the young to social values
3. Producing, distributing, consuming goods and services--economic institutions
4. Preserving law and order--government
5. Giving meaning to life--religion or belief system

How these functions are provided vary from place to place throughout the world. Therefore, we believe that good social studies programs entail a thorough analysis of the interaction that occurs between the individual and the society of which he is a part. It is through interaction that man developed systematic patterns leading to the satisfaction of needs and wants. These patterns become institutions with a specific set of behaviors which serve to guide the individual as he interacts within the framework of institutional responsibility.

In order for the individual to understand the institutions and their functions it is necessary that he should be encouraged to analyze them in a systematic manner. For example, each institution should be examined with reference to the following:

1. structures
2. functions
3. patterns
4. processes

The first institution to be recognized is the family. Each of the many different types of family organization performs special functions in its society and establishes norms, patterns of behavior, values, etc. To transmit these patterns systems of education are created. These systems may be family, state or church oriented, but they each serve the purpose of transmitting the knowledge and culture of one generation to the next. The exchange of goods and services promotes specialization and growth, and the result is a system for trade. The need for preserving order among men leads to the development of government as an institution. At this point there evolves a search for a deeper meaning and understanding to life. Religions or belief systems have been developed.

Man, in his development, sets up certain "rules for the game", and these we call values, sanctions, norms and roles. It follows then that there must be a system to enforce these. Systems emerge as institutions--the families, schools, economic organizations, governments and religions. The inter-relation is immediately apparent because these institutions now invoke these values, norms, sanctions and roles. The obligation of the social studies teacher is to help the student accept these and adjust to them.

The social studies teacher recognizes that problems arise when there is a breakdown in one or several of these institutions. In problem-centered courses the student must be aware of the source of the problem being studied.

We strongly urge each teacher to apply this structural design to his teaching units. The student should be taught and re-taught this design until he is thoroughly familiar with it and can apply it without hesitation to any unit of study that he undertakes in this area.

This design can be used, of course, with all students, but it is particularly applicable for the slower-learner. He needs a pattern for learning in which he feels secure and in which he has confidence. He can, then, apply this pattern to himself and to his own changing society. It should give him a basis for judgments and decisions that are rational and wise.

We will suggest on the following pages how this design may be applied to units of study in each of the disciplines--American history, world history, geography, sociology, economics, political science, etc.

APPLYING THE BEHAVIOR-ORIENTED OBJECTIVES OF SOCIAL STUDIES TO THE CONTENT OF THE 7TH AND 10TH GRADE WORLD HISTORY FOR SLOWER-LEARNERS

	Structural Design				
Unit	Perpetuating Man	Socializing Man	Distributing Goods	Preserving Order	Meaning for Life
Man's Beginning	(1) Family is the basic unit in the beginning (2) Man begins to recognize the influence of geography on his existence (3)	(1) Family provided the education to establish values (2) Languages came into use for communicating (3)	(1) Beginnings of an economic system based on barter (2) Man becomes a producer of goods (3) Man begins to form tools and weapons from metals (4)	(1) Man begins to move into communities for greater protection for himself and his family (2) Man learned the importance of cooperation (3) Communal living demanded rules, customs, mores, etc. (4)	(1) Religion based on nature worship, superstition, and fear (2)

Identification

1. VALUES - What is important to the group?
2. NORMS - What are the prescribed or expected behaviors? What are the forbidden behaviors?
3. SANCTIONS-What are the rewards and punishments in the group?
4. ROLES - What are the achieved and/or ascribed behavior patterns?

The mode of inquiry should follow these basic questions which reveal the norms, sanctions, values and roles of each institution.

1. What values were established by ancient man? (VALUES)
2. What was the expected behavior pattern for ancient man? (NORMS)
3. What were ancient man's rewards and punishments? (SANCTIONS)
4. What role did the individual play in ancient times? (ROLES)

APPLYING THE BEHAVIOR-ORIENTED OBJECTIVES OF SOCIAL STUDIES TO THE CONTENT OF THE 7TH AND 10TH GRADE WORLD HISTORY FOR SLOWER-LEARNERS

	Structural Design				
Unit	Perpetuating Man	Socializing Man	Distributing Goods	Preserving Order	Meaning for Life
Europe in the Middle Ages	(1) Man exchanged freedom for safety (2) The family dependent on the lord, showed little creativity or interest in their culture or heritage (3)	(1) Preservation of learning was left to the church (2) Education reserved for the privileged few and the church men (3)	(1) Because of the isolation of the communities brought about by the feudal system, trade virtually ceased (2) The self-sufficiency of manor life discouraged trade and communications (3)	(1) Feudalism developed as the need for protection arose at a time when civilization was at a low ebb (2) When feudal system no longer met the needs of people it was abandoned (3) National states evolved out of feudal times (4)	(1) The Christian church was formally organized at this time (2) Church took the place of organized government (3) Church provided a universal language (4)

Mode of Inquiry:

1. What new value system came about during this period? (VALUES)
2. What characterized the behavior of the people? (NORMS)
3. How did the church control behavior? (SANCTIONS)
4. What class systems developed? What specific role was assigned to each class? Nobility? Serf? (ROLES)

APPLYING THE BEHAVIOR-ORIENTED OBJECTIVES OF SOCIAL STUDIES TO THE CONTENT OF THE 8TH AND 11TH GRADE AMERICAN HISTORY FOR SLOWER-LEARNERS

	Structural Design				
Unit	Perpetuating Man	Socializing Man	Distributing Goods	Preserving Order	Meaning for Life
Moving Toward Independence	(1) Victory over France fortified the Anglo-Saxon way of life (2) American colonists resented infringement on their liberties (3) Families had important political, economic and social influence (4)	(1) Reinforcement of beliefs from political philosophies of the time (Locke, Rousseau, etc.) (2) Use of propaganda devices--pamphlets, letters, etc. (3) Demonstrations used to gain support for the Revolution (4)	(1) Reactions against mercantilism (2) Interruption of traditional trade patterns (3) Taxation used by England to regulate trade (4) Realization by colonists that economic self-sufficiency was possible (5)	(1) Open defiance to objectional laws acceptable (2) Emergence of strong national leaders (3) Insistance that colonists be allowed to make their own laws (4) Resentment toward British enforcement officials (5)	(1) Dignity of the individual basic to the philosophy of the Revolution (2)

Identification

1. VALUES - What is important to the group?
2. NORMS - What are the prescribed or expected behaviors? What are the forbidden behaviors?
3. SANCTIONS - What are the rewards and punishments in the group?
4. ROLES - What are the achieved and/or ascribed behavior patterns?

The mode of inquiry should follow these basic questions which reveal the norms, values, sanctions, and roles of each institution.

1. What did the colonists expect to achieve by the Revolution? (VALUES)
2. During the Pre-Revolution period, why were tarring and feathering, hanging in effigy, etc. frequent? (SANCTIONS)
3. Describe the "patriotic" colonist. (NORMS)
4. What kind of men became the leaders? (ROLES)

APPLYING THE BEHAVIOR-ORIENTED OBJECTIVES OF SOCIAL STUDIES TO THE CONTENT OF THE 8TH AND 11TH GRADE AMERICAN HISTORY FOR SLOWER-LEARNERS

	Structural Design				
Unit	Perpetuating Man	Socializing Man	Distributing Goods	Preserving Order	Meaning for Life
America Becomes a World Power	(1) Medical discoveries permit man fuller and more productive life (2) Self-sufficiency of family gives way to dependence on services and goods from the outside community (3) Shifting of traditional family responsibilities to other institutions (4)	(1) More leisure time for cultural development (2) Broadening of the middle class (3) Public education firmly established (4) Americanization of alien cultures (5) Transportation and communication cause greater conformity (6) American way of life becomes a reality (7)	(1) Desire for new markets (2) Reinforcement of the free enterprise system (3) Threats from other economic systems (4) Technology causes shift in occupational patterns (5) Growth of labor movements (6)	(1) Interest in extending democracy to other lands (2) Growth of social welfare work (3) Extension of political rights (4) Centralization of government (5) Man resorts to war to deal with involved world problems (6)	(1) Concern for the rights of the individual (2) Materialistic philosophy (3)

Mode of Inquiry:

1. What changes in values occurred in this period? (VALUES)
2. In what ways did these change society? Immigration? Urbanization? Technology? (NORMS)
3. What are the rewards and punishments for men and for nations? (SANCTIONS)
4. What new roles did man play in this period? (ROLES)

APPLYING THE BEHAVIOR-ORIENTED OBJECTIVES OF SOCIAL STUDIES TO THE CONTENT OF THE 9TH GRADE WORLD GEOGRAPHY CLASS

	Structural Design				
Unit	Perpetuating Man	Socializing Man	Distributing Goods	Preserving Order	Meaning for Life
Latin America	(1) Family relations very strong (2) Rapid population growth (3) Mixing of races common (4)	(1) Traditional values handed down from one generation to another (2) Roles are emphasized and strictly adhered to (3) Language poses no great problem (4) Formal education is limited (5)	(1) Wealth unevenly distributed (2) Climatic influences (a)Manufacturing (b)Agriculture (c)Ways of working (3) Local market provides basic needs for most people (4) Economic activities generally in the coastal areas because of terrain (5) One-crop economy (6)	(1) Land distribution major problem (2) Lack of stable government (3) Wealth based on ownership of land (4) Wide gulf between rich and poor (5)	(1) Common religious background (2) Church has predominated (3)

Identification

1. VALUES - What is important to the group?
2. NORMS - What are the prescribed or expected behaviors? What are the forbidden behaviors?
3. SANCTIONS -What are the rewards and punishments in the group?
4. ROLES - What are the achieved and/or ascribed behavior patterns?

The mode of inquiry should follow these basic questions which reveal the norms, sanctions, values, and roles of each institution.

1. What has been the origin of the value system? (VALUES)
2. What part does tradition play in the establishment of norms? (NORMS)
3. What forces holds society together? (SANCTIONS)
4. What roles do the various members of the family fulfill? (ROLES)

APPLYING THE BEHAVIOR-ORIENTED OBJECTIVES OF SOCIAL STUDIES TO THE CONTENT OF THE 12TH GRADE CONTEMPORARY ISSUES CLASS (ECONOMICS)

	Structural Design				
Unit	Perpetuating Man	Socializing Man	Distributing Goods	Preserving Order	Meaning for Life
Other Economic Systems (Totalitarian)	(1) Man's primary function to serve state (2) Family is secondary to the state (3)	(1) Education slanted to meet the needs of the state (2) Technological training emphasized (3)	(1) Incentive based on system of rewards and punishments (2) State determines use of resources to satisfy wants (3) Production of capital goods is main goal (4) Trade controlled by the state (5)	(1) Government sets goals for economic activity (2) Dictatorship of single political party (3) No individual rights (4)	(1) Religion discouraged (2) State supplants God (3)

Identification

1. VALUES - What is important to the group?
2. NORMS - What are the prescribed or expected behaviors? What are the forbidden behaviors?
3. SANCTIONS - What are the rewards and punishments in the group?
4. ROLES - What are the achieved and/or ascribed behavior patterns?

The mode of inquiry should follow these basic questions which reveal the norms, sanctions, values, and roles of each institution.

1. How does the value system differ from democratic societies? (VALUES)
2. What is the expected behavior of the individual in the totalitarian society? (NORMS)
3. Why does the system of rewards and punishments play such an important part? (SANCTIONS)
4. Compare the role of a worker in a totalitarian society with one in a democratic society. (ROLES)

GENERAL METHODS FOR TEACHING SLOWER-LEARNERS IN THE SOCIAL STUDIES

Even though every effort is made to achieve proper grouping in the scheduling of classes for the slower-learner in the social studies, there still exists the fact that there will be individual differences within the classroom. A teacher should realize that there will be in the so-called homogeneous class a wide difference in reading, in thinking ability, in backgrounds, in maturity, in perception, and in interests.

In order to prepare himself for teaching slower-learners, the teacher should first evaluate his own attitudes toward low-ability groups. Many teachers are "sold" on the ideas of democracy and equality for all, but they hesitate at the prospect of teaching slower-learners. A teacher must strive to believe that all students are worthy of help and that each student will eventually be a contributor to society no matter what his contribution will be.

Knowing as much as possible about the pupil is vital to successful teaching. Above all, the teacher of the slower-learner should be sensitive to the various needs and interests of the adolescents in his classroom. Furthermore, the teacher should know as far as possible the conditions under which pupils of this kind learn best.

Finally, the teacher of the slower-learner needs to be aware of the methods and materials that are the most conducive to growth for all boys and girls. Even though most methods can be used with the so-called gifted and the so-called slower-learner, each method needs to be adapted to the slower-learner to obtain maximum results.

Leonard S. Kenworthy in his Guide to Social Studies Teaching, gives the following general methods for slower-learners:

Method	Variations for Slower-learners
1. Questioning	More review and clinching questions. Some why and how questions but at an easier level of comprehension.
2. Group or committee work	Considerable committee work since it provides for a variety of reading materials and the use of non-reading resources.
3. Supervised study and open textbook lessons	A great deal of use of these methods. These students need all the help possible in learning skills. Some use can be made of the time for individual help or group help by the teacher. These pupils also need help in learning to read.
4. Use of several textbooks and differentiated reading.	A common basal textbook is better when an entire class is slower-learners.
5. Individual reports	Excellent if total class is slower-learners. (Reports should be short and care taken not to allow student to read report verbatim.)

6. Art work, construction, and related activities	As much as possible to encourage individual abilities and interests.
7. Films, filmstrips, and other audio-visual resources	Wide use to promote learning through eyes and ears. Also construction (by students) of visualizations.
8. Service and action projects	Limited use of projects. Some pupils can be leaders if the project is not too involved.
9. Panels	Participation in panels. Leadership is usually available.
10. Individual and group conferences	Very important.
11. Students helping other students	Very little opportunity for these students to help others. Sometimes, however, in homogeneous classes there will be those who are capable of helping others. The slower student should have some choice in selecting the person who will help him.
12. Summarizing activities	Some use of this method by slower-learner. Reviews at the beginning of class of previous work.
13. Use of magazines and journals	Important to learn how to use adult sources. Use of easier material such as Life or Look.
14. Use of paperbacks	The use of these books dependent on careful selection for pupils' reading and comprehension abilities.

Some additional comments on questioning:

The phrasing of questions for a class of slower-learners is most important if the teacher is to get the responses he is anticipating. The three types of questions that should be emphasized are the "situation", "thought", and "observation".

Possibly the most effective use can be made of the situation question because this encourages the student to develop the concept of empathy as he learns to "put himself in the other fellow's shoes". The thought question is usually a "why" question and requires several parts for a complete answer. This increases the opportunities for students to make contributions toward answers during the class period. Questions to encourage observation are necessary when using visuals. "What do you see?" is a typical question.

When using questions with the slower-learner, it is advisable to:

1. Wait longer for replies.
2. Do not permit same students to answer all of the questions.
3. Accept--do not reject--answers.
4. Be specific in phrasing questions--avoid "yes and no", "two questions in one", "giving the answer away in the question", etc.
5. Relate the questions directly to the experience of the students in the classroom.

6. Repeat the question in a different form, if possible.
7. Use follow-up questions to encourage more thought.

Kenworthy continues by making the following general statements concerning the slower-learner in homogeneous classes. He says that in homogeneous classes:

1. Never refer to the class in derogatory terms. Slow students know they are in a special class and do not like to be reminded of this fact.
2. Don't vary routines too much. These pupils gain a sense of much-needed security from knowing what to do and when to do it. They don't adapt easily or quickly to changes.
3. Their attention span is short. You may need to plan at least two types of activities for a period. For example, have a fifteen minute discussion and fifteen minutes of written work. Then have the class go over the material they have written, or start on the next day's lesson.
4. Adjust the curriculum as much as possible to meet needs and interests. Much of what is taught to brighter students has little or no relevance to slower-learners.
5. Simplify your vocabulary. Write on the board words that you plan to use during the period--or write them as you use them.
6. Do a great deal of open textbook and supervised study types of teaching.
7. Visualize. Use the blackboard, use pictures, read filmstrips, use films.
8. Find as many simple reading materials as possible. But try to avoid the use of materials that are written for "babies". Students resent such materials deeply.
9. Relate whatever you do as much as possible to their lives.
10. Help them to see the gains they have made. From time to time list on the blackboard what you plan to do and check off the items as you accomplish them, commenting on the achievement of the group.
11. Use a great many hand activities. Slower-learners often learn in this way, and throughout their lives they may be hand workers.
12. Make your assignments brief and clear. Explain the assignments more carefully than you would for a brighter group.
13. Occasionally read aloud to them.
14. Use filmstrips a great deal for two reasons: (1) because slower-learners learn better from pictures, and (2) because the reading aloud of filmstrip captions will help with reading problems.
15. Repeat. Do some drill work, too. Most slower-learners will not learn the first time, or the second, or even the third. But many will learn eventually.
16. Find everything you can do to praise and be sincere in your comments. These pupils may have little praise at home or at school.

Teaching Current Events or World Problems to Slower-Learners

A study of current problems should begin with the interests and needs of the slower-learner. These are not easily determined. The need of the slower-learner is probably more social than individual--the necessity that citizens of a democracy be as well informed as possible about important issues. Because the need is not generally recognized by pupils, it is sometimes difficult to find the different interests upon which to construct the unit of study. We should bear in mind that the slower-learner must identify with the problem and/or be a part of it if the learning is to be meaningful.

A current events program should not be a separate study in itself, but rather an integral part of the daily lesson. Involving current events with the slower-learner's daily lesson makes both elements more valuable to him.

Suggested devices for stimulating interest. Possibly one of the following approaches will reach some pupils or will give the teacher an idea for a development along the lines of the student's own interest.

1. The lives of other people. One of the quickest ways to interest pupils in this approach is through one of the Current Events, Junior Review, etc., articles about a famous person. One of these can be a springboard for investigation of a culture very different from that of the student.
2. Headlines. Take an important headline about which everybody is talking, especially one on which pupils have arrived at emotional conclusions, and encourage discussion. It will soon become evident that opinions have been formed on shaky foundations. Pursuit of truth can be encouraged.
3. A poll. This is closely related to the headline approach, but it has the added appeal of action for the class. It offers opportunity, too, to study poll taking and the formation of public opinion. Once the poll has been taken and the replies tabulated, the questions of who is right and what the facts really are should lead to a serious study of the background of the controversy.
4. "Big words". These slower-learners are interested in the "mumbo jumbo" of education. In most of their subjects they like to use big words, especially words which can be used in their social circles. Interest in words, such as capitalism, socialism, democracy, communism, cold war, mobilization, imperialism, etc. can be developed through the inquiring reporter device--ask five people the meaning of the words. A study of the different answers usually arouses enough interest to go on.
5. The story approach. The story of Hiroshima, read to the class, might spur interest in the atomic age and changes it has brought and may bring to our age. Where reading ability is too low to use a book, the teacher can develop interest through a story-telling period.

Vocabulary problems in studying current events. Because the study of world problems demands the use of a specialized vocabulary, vocabulary growth should be a major aim of the class. Important sources of information as the radio and television are closed to most of the slower-learners because their vocabularies are so very limited. Even when they insist they know the meaning of a word, it is well to check up.

A device for building vocabulary which seems to have won great interest is that which turns the teaching of the meaning of words over to a committee of students. As words are located and listed, they are turned over to a group which looks them up and plans ways to teach them to the class. A glossary is kept by each pupil.

The development of attitudes. As important as vocabulary are attitudes which are to be developed in good citizens in their search for truth. Full discussions of the meaning of fact and theory and the value of sources from which we draw information would be a great help in forming desirable attitudes. These ideas then could be applied to the study of each modern problem as it arises.

Self-Appraisal for the Teacher

Evaluation of teaching methods, procedures, contents, etc., is necessary at regular intervals for the teacher of the slower-learner. These evaluations will undoubtedly result in changes in plans as the teacher sees his successes and failures. It is not uncommon for the teacher of the slower-learner to abandon seemingly well-laid plans several times during the term as he searches for the best techniques for teaching this student.

Here are some questions the teacher may use in his evaluation of units that he has taught:

1. Were the aims or objectives which you planned for in this unit achieved?
2. How much planning between students and teachers took place?
3. What sources of information (textbooks, references, newspapers, films, etc.) were used?
4. How successful were the evaluation devices which you used?
5. What special signs of interest did the students show in the study?
6. Did the students show objectivity in studying people of other lands and other cultures?
7. Did the students learn to respect the opinion of others?
8. How successful were the students in weighing evidence, organizing materials and coming to generalizations?
9. What behavioral changes could be observed as a result of this study?
10. What social studies skill or skills were emphasized in this unit?
11. How much time was spent on the study of this unit? Enough? Not enough? Too much?
12. Did the material presented relate directly to the interests and/or the experience of the student?

As important as the evaluation of the units taught is a self-appraisal for the teacher. Dr. Ruth Strang prepared the following analysis for her book, The Role of The Teacher in Personnel Work.

1. Does every student in my classes have work so suited to his abilities and needs that he can succeed with reasonable effort? Do I help students to learn from their failures?
2. Is my room free from an intensely competitive atmosphere? Do I help students to get recognition for the use of their abilities?
3. Do my students feel free to express their feelings about school, thus avoiding tension and a clash of wills that might divert their energy from study?
4. Do I really like the boys and girls in my classes? Do I realize that much of the behavior that makes teaching difficult represents a student's attempt to find a way out of difficulty?
5. Do I treat my students with as much courteous consideration as I show my friends and fellow teachers?
6. Do I respect each individual's personality and have faith in the realization of his best potentialities?
7. Do I provide group experiences in which students develop a sense of responsibility for group enterprises and get satisfaction from the success of others?
8. Do I stimulate students to discover and evaluate their own abilities, strengths, and weaknesses and to meet difficulty or criticism in a constructive way?
9. Do I arouse student's interests in my subject and acquaint them with its cultural and vocational value?
10. Do I cooperate with the student's guidance counselor and other teachers.
11. Do I avoid labeling a student or making a generalization about him on the basis of a single incident or limited observation?
12. Do I try to understand him rather than judge him?

Bibliographies for Individual Courses

The preparation of bibliographies for individual courses is not practical at this time since the librarians are still receiving book orders daily. They assure us that as soon as possible they will prepare lists of books and records for the slower-learner. (A list which was compiled in 1964-1965 is now available in the high school library.)

Teachers who are interested in bibliographies for their own courses will be interested in the following sources.

For Old World Backgrounds and World History courses:

1. Supplementary Books and Visual Aids listed on pages 32-34 of the teacher's guide for World History Lessons by Jack Abramowitz in the Follett Basic Learnings Program
2. World History Book List for High School: A Selection for Supplementary Reading, Washington, National Council for the Social Studies, 1958

For American History courses:

1. Supplementary Books and Visual Aids listed on pages 31-33 of the teacher's guide for American History Lessons by Jack Abramowitz in the Follett Basic Learnings Program
2. Bibliographies listed at the ends of each unit in Schwartz and O'Connor, Exploring American History, Globe Book Company (a textbook especially written for the slower-learner in high school).

For World Geography courses:

1. Book lists at the ends of each unit in Exploring a Changing World by Schwartz and O'Connor, Globe Book Company (a textbook which will be used by the 9th grade in 1966-67)

For Contemporary Issues courses:

1. Bibliography in Economics by Goodman and Harris (annotated)

For the latest listings of materials for teaching the slower-learner, the teacher should see Social Education, the monthly magazine of the National Council for the Social Studies and Journal of Geography published monthly by A. J. Nystrom and Co.

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Johnson, G. Orville Education for the Slow Learners, Prentice-Hall, Inc., 1963, Englewood Cliffs, New Jersey.

Kenworthy, Leonard S. Guide to Social Studies Teaching, Wadsworth Pub. Co., 1962, Belmont, California.

McLendon, Jonathon C. Social Studies in the Secondary School, Macmillan, 1965, New York.

Riessman, Frank The Culturally Deprived Child, Harper and Brothers, 1962, New York.

How To Do It Series, National Council for the Social Studies, Nos. 1-22.

(All of these materials are available in the Mexico Public School System. Teachers of slower-learners are encouraged to use them.)

S C I E N C E C O M M I T T E E:

Mary E. Baker - Chairman

Maxine Edwards

Ruth Lauderdale

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TABLE OF CONTENTS FOR SCIENCE

POINT OF VIEW FOR TEACHING SCIENCE TO THE SLOWER-LEARNER

Creating interest in science is the first task of all science teachers, especially the teacher of the slower-learner. The student should discover the enjoyment of learning science, instead of disliking (perhaps hating) or fearing science. The classroom should have the appearance of a science learning center--having things to do and learn about. The arrangement of the room should be different from the typical classroom so the student will feel that he is in an environment quite new, and this may change his mental attitude so he will be more receptive to learning.

It is imperative that this student understand some of the ways in which science has contributed to our standard of living and to the culture of our society. He should be at ease in the world of science and realize that he is a user of the products made possible by science. The slower-learner has a longing to know about himself and his surroundings, but he needs assistance in learning how to satisfy his curiosity which he is unwilling or unable to do alone. This student should be given the opportunity to ask questions, and the teacher must supply the answers, or direct him to a source for a probable answer, or explain to him why many questions in science cannot be answered. He should be told there are many things concerning science that his teacher does not understand. The student's wonder and curiosity about his surroundings should be directed into a quest for concepts that will give him satisfaction and security.

The slower-learner needs and deserves a program which explores basic concepts in science, rather than learning an array of facts that may seem unrelated to his situation. However, in order to promote conceptual thinking, the gathering and presentation of some facts are necessary. With this student much help must be given in organizing these facts into a pattern which he can comprehend. Because of his level of perception and retention, a variety of schemes will have to be used and perhaps repeated many times in order to lead him in the direction of conceptual thinking. This can best be accomplished through a laboratory oriented science class in which the student has the opportunity to find and select facts and get ideas which will link his curiosity with action. Any student, and especially this student, will learn faster and retain more by actually seeing and doing things for himself, rather than reading or being told about them. The investigatory approach found in the laboratory may well be the match that sets off the spark of imagination in the slower-learner. These experiences give him the opportunity to move around and to observe things he has never seen, or to see the things he knows in a new perspective. The laboratory allows him to use his senses while learning, and, in so doing, he may stumble upon a concept. In the laboratory he will find some problems that seem to have no solution at the time, and the student may learn at this point to keep his mind receptive to further information.

The slower-learner gains much pleasure and satisfaction from sharing his ideas and possessions with his class. The teacher should capitalize upon this contribution and incorporate it into a learning situation. At the same time the student should be encouraged to respect the rights of others to express opinions.

The teacher must realize that limited comprehension and low ability in reading will dictate the level of activities and experiences to be planned for the slower-learner. He will not be pushed and must be led at a pace comparable to his intellectual ability. Since this student has a short interest span, many forms of activities should be incorporated into the teaching situation; namely, use of films, small group projects, working sheets, etc., in addition to the laboratory. In planning the course of learning for this student, there should be no attempt made to stay within a rigid time schedule during the class period. The use of learning materials should be made flexible, and the teacher should feel free to add or delete these materials, including subject matter, in order to adapt the teaching situation to the needs of the class.

The teacher should be the guide and the classroom a place in which to clarify, and more emphasis should be given to the achievement of ideas and functional activities and less to academic testing of facts, grading, or to the completion of the textbook.

RATIONALE FOR SEVENTH GRADE LIFE SCIENCE

Life Science is the first concentrated study of science for the seventh grade student. For some it will be an introduction to high school biology, but for many of the slower-learners, it will be the last study of the biological sciences.

The composite of these slower-learners would be a student who, because of his rapidly growing body, has poor coordination. Books falling, chairs sliding, and students tripping are a weekly (sometimes daily) occurrence. There is much poking and prodding between students. The teacher has to accept the fact that this age group cannot sit quietly. Even when the students are deep in study, there is constant motion in the room. The seventh grader likes to "feel" adult and sometimes behaves in an adult manner but a few minutes later may act like a five year old. The slower-learner gets much satisfaction from helping the teacher with routine jobs such as watering flowers, cleaning the lab, caring for fish, etc.

Although he needs training in self-direction, the slower-learner prefers authority and direction. He likes action rather than introspection. This student comes to life science with an eagerness to learn but is more easily motivated to tangible and immediate goals than to future ones. The slower-learner has strong likes and dislikes--including his opinion of the teacher. He will not give respect to the teacher upon demand, but will happily do so if he feels that the respect has been earned. The first problem of everyone, including the slower-learner, is to be loved, to be accepted, and to feel secure. Often he has been unable to fulfill these needs in a socially acceptable manner. If the teacher helps the student to achieve love, acceptance and security, he has a springboard from which he can launch the student into a greater depth of learning.

Often the teacher tends to provide facts too quickly for the slower-learner to fully comprehend. If the teacher asserts the concepts rather than letting the student form his own, the student will verbalize concepts without any genuine understanding. The slower-learner does, though, need help in organizing his th' king. Concepts in science are not absorbed automatically on exposure. They become real only as a result of many experiences.

The student needs to learn to use his own intuition, instead of relying on someone or something outside himself. Einstein said that imagination is more important than knowledge. If the student is taught to be imaginative, it will increase his creativity. The student needs to be allowed to make (harmless) mistakes in planning, and he will then see the results of such errors and develop a better understanding of how plans are made and used.

The slower-learner has difficulty increasing his vocabulary. Many of the science words describe but do not explain. They are useful words if they are fully understood, but the mere parroting of words is meaningless. The expected vocabulary growth should be in keeping with the students needs--why burden him with "clavicle" when "collar bone" is very descriptive and usable.

The life science course is of no value unless it alters the behavior of the student. Some of the specific tasks or abilities which should be sought are:

To classify a set of objects and state the basis of the classification. (organize)
To distinguish between an observation and an inference.
To construct a graph from a table of data.
When given some data, state a prediction or form a hypothesis.
To be able to locate needed information.
To be able to use the metric system.
To design and carry out an experiment.
Describe an object clearly so that another person can draw a picture of the object.
To write a concise summary of an experiment or lab exercise in 150 words or less.
To be able to express himself before a group.
To show respect for natural beauty.

In evaluating the student, each test question should require the student to demonstrate a specific behavior, not the mere regurgitation of specific facts. At least some of the testing should be done verbally so the student's reading disability will not be a factor in the evaluation. In grading, credit should be given for the amount of effort put forth by the student--sometimes giving credit for the completion of an assignment and not for the accuracy. The way the student carries on his lab work should be considered as much as his final results.

The slower-learner needs more individual attention than other students; therefore, the class size should be not more than 20 to 25. The laboratory oriented course also demands that the class size be kept rather small.

COURSE CONTENT FOR LIFE SCIENCE

Life Science has few major themes running through all topics. An attempt has been made to list these. The concepts to be developed within each theme are given as sub-headings.

1. Living things have similarities and differences.
   a. All of the different plants and animals have much in common.
   b. All living things are energy systems.
   c. All living things are composed of protoplasm, organized into cells that are chemically very similar.
2. Structure and function are related.
   a. The structures in the body mature at the same rate that the functions of the body mature.
   b. Structures which are not used tend to become less functional.
3. The organism inter-relates with its environment.
   a. Living things and their environment are interdependent.
   b. The environment determines the types of plants and animals which will survive in a community.
   c. Plant and animal populations tend to remain in balance unless there is a change in the interaction of species and the environmental factors within the ecological community.
   d. All living things, including man, depend upon their environment for matter and energy to carry on their life processes.
   e. Matter and energy are parts of every environment and every living and non-living thing.
   f. The green plant captures the sun's energy and makes it usable by other living things.
   g. Plants and animals are adapted by structure and function to live in special environments.
   h. Matter and energy change in form during nutrition and respiration.
   i. The kind of experience in which the young are involved help to determine the individual characteristics that appear in later life.
4. Life forms change but life goes on.
   a. Plants and animals adapt to a variety of environmental conditions.
   b. Both plants and animals show a progression from simple one-celled organisms to multi-celled organisms.
   c. Living species in order to survive have to adapt to changing conditions.
   d. Heredity determines the limits to which an animal can develop. The environment determines the extent to which the organism progresses toward these limits.
   e. Man is a product of his heredity and his environment.
5. Behavior is conditioned by needs.
   a. Each species reacts to its environment in its own behaviorial pattern; a pattern may range from an inborn inherited response to a complex combination of inborn automatic acts and learned responses.
   b. Seasonal cycles affect living things.
   c. Man is an intelligent energy system that uses science to discover new ideas and to improve his living.
   d. Man must understand his own needs in order to satisfy them.
6. Science is inquiry--there is a human awareness of the environment.
   a. Man is not only fitted to an environment but is able to modify his environment to fit his needs as an organism.

SUGGESTED PLANS FOR INTRODUCTORY UNIT LIFE SCIENCE

The first day and the first week of school is a critical period for the slower-learner. He comes to the confinement of the classroom from the freedom of the summer. He very quickly decides whether he is going to work with the teacher or against her (or simply ignore her). The teacher should start the year with a "bang". The student should, by the end of the first week, feel that science will be interesting and exciting but that he will have to put forth some effort to get the greatest satisfaction from science. On the first day there can be four different activities, each with its own purpose.

1. Since this will be a lab oriented course, the student must be able to follow instructions. The following quiz, labeled Life A-intro-1, can help the student to see the importance of following instructions. If he follows the instructions, even the slowest reader can finish within the time limit. If he does not follow instructions, it is almost impossible to do all of the assigned tasks in the allotted time.

2. The student should know what type of behavior is expected of him. The classroom conduct contract, handout sheet labeled Life A-intro-2, puts into black and white exactly what is expected of the student. Some of the items are general behavior patterns and some are for the convenience of the teacher. It also helps the student understand that the teacher has certain obligations also. The teacher and the student both sign it, and it is kept as the first page of the student's notebook. Space is left on the contract for the student to add any other things that he expects of the teacher. Both the teacher and the student must be sure to read and understand all terms of the contract before they sign.

3. To get the student started in observation and also to catch his interest, the teacher may do a <u>simple</u> experiment and after it is completed, have each student write what he has observed. A simple exercise is to prepare limewater and first bubble air through it and then blow the breath into it. This can be repeated near the end of school and an evaluation of the student's progress in recording of observations can be made.

4. Point five of the teacher's contract with the student stated that the teacher would try to know each student better. A questionaire may be given to the student to help the teacher learn more about the student. It is good for the teacher to have a file on each student in the room, and this can be the first information in the file. Handout sheet Life A-intro-3 may be used as the questionaire. If time runs short, the student may take this home and bring it back the next day.

Name_____

Life A-intro-1

Can You Follow Instructions?

Test Yourself: Time Limit-Three Minutes

Think you can follow instructions? Sure you can! But can you <u>really</u>?

Test yourself by following these instructions. Concentrate. Remember the time limit--three minutes.

1. First get a pencil and make yourself comfortable.

2. Read all the instructions before you write anything.

3. Write your full name on the line at the top of the page.

4. Underline every other word in the third instruction. Next draw four squares (free hand) within the box at the top of the page.

5. Put one period in the center of each of the four squares and draw a small circle around each of the four periods.

6. Now pick out all of the e's in the first instruction. Underline each e.

7. If you've gotten this far before time runs out, keep going. Connect all the periods in the box above with a line. Still with it.--Good! Good!

8. Now place your thumb on the boxed area above and outline your thumb in that area with your pencil. Shade the entire thumb outline area in the box with your pencil. Now carefully but quickly, study the box above. In one word, what does it look like to you? Write that one word on the line below.

   _____

9. Still following? Splendid. Now that you have read this far, do <u>only</u> the third instruction. Forget all the rest.

If you got to here in the three minutes, you probably followed the instructions. If you were trapped into performing the different orders, then you did not follow instructions, for the second instruction clearly stated that you "read all---before you write anything".

If you wrote nothing but your name at the top of this page, you deserve to be congratulated, for you have done better than most people. Unfortunately, many people find it difficult to perform a given task because they do not follow written instructions carefully. And they do not follow the instructions because they do not read them carefully enough to understand them completely.

In Life Science the success of your laboratory work will depend upon your ability to follow instructions. Lesson one for the year is: Follow instructions! You will hear this again!

Life A-intro-2

Classroom Conduct Contract

As the student I will:

1. come prepared with the tools of my job--my textbook, notebook with paper, pencil and/or pen, and other things for which the teacher will ask.

2. be in my assigned seat when the tardy bell rings. I will have my pencil sharpened, fresh paper and/or the assignment located and be ready for class to begin.

3. do my best. I will not be expected to get every paper done perfectly, but I will be expected to try.

4. use the things that I have learned in English class. I will try to write neatly, spell correctly and use grammar properly.

5. put my name, the period I have science and the date in the upper right hand corner of every paper that I hand in. All papers will be handed in flat. I WILL NOT FOLD MY PAPERS.

6. raise my hand and be called upon before speaking in class.

7. sit with good posture.

8. take good care of the furniture, books and equipment in the room.

9. behave properly in the lab. It is a place to work, not a place to "goof off".

_____

Student Signature

As the teacher I will:

1. be prepared for each day's lesson.

2. do my best. I will not do everything perfectly but I will keep trying.

3. be fair in my discipline and in the grading.

4. have a reason for every assignment. The student has the right to know and understand this reason.

5. try to know each student as an individual.

_____

Teacher Signature

Life A-intro-3

Name_____

Period_____

Date_____

Will you please fill out this questionaire for me so that I may learn to know you and be better able to help you with any school problems that you might have. It would take a long time to have a talk with each of you, so this will serve as a substitute.

Address_____Telephone_____ Age_____

Birthday_____ Where were you born?_____

Father's name_____ Occupation_____

Mother's name_____ Occupation_____

Number of Brothers_____ Number of Sisters_____

What subjects do you like best in school?_____Why?

If there are subjects that you do not like, what are they? And why?

Do you study at home?_____ About how many hours per day? _____

Where do you study at home?_____ Does anyone help you with your studies?_____

Are you interested in sports?_____ In what sports do you participate?

Do you hope to go to college?_____ What do you want to do after you finish high school or college?_____

Do you enjoy reading?_____ What type of books do you prefer?_____

About how many hours a day do you watch television? _____

How often do you attend movies? _____

What do you do to help at home?

If you had a whole day or week to do what you wanted, what would you do?

Day Two:

1. The film, "What is Science", from the University of Missouri Film Library, may be shown to help orient the student. The teacher should preview the film and prepare some questions which will be answered by the film. These questions should be given to the students before they see the film and following the film, a discussion of these questions, and any others that the students might raise, can take place.
2. Since the slower-learner may feel lost in a different building, and the new situation, and needs a slower explanation of the rules, it is a good idea to have a "one-room" fire drill before the regular first of school fire drill. These fire drill procedures, well-learned, may save a life and are also useful, with modifications, for going to assemblies, lunch and study trips.
3. Give handout sheet Life A-intro-4, "More Study in Less Time", to the students. Discuss this page with the students, stressing that at first it takes effort to study in this way but that it can become a habit and result in greater accomplishments.

Day Three:

1. Using the "More Study in Less Time" handout sheet, practice these techniques with the lead article in a weekly science paper. Guide their study.
2. Show the film "What is Biology", from the University of Missouri Film Library, using questions to guide the student's viewing of the film.

Day Four:

1. To help the student know exactly what is expected of him, a handout sheet such as Life A-intro-5, may be given and explained to the student. The reason for having the student keep the notebook is that it helps him learn to organize. The papers are also referred to later in the year. The quarter-project requires that the student organize his time and also gives him an opportunity to do at least some work in a science area of his choice. The current science reports require that the student do some reading in current periodicals. This is a habit which the student will, hopefully, keep. The grading system is flexible enough that every student who puts forth any effort can achieve a passing grade.
2. Now is the time to introduce the student to the lab. The three lab sheets, Life A-intro-6, may be given to the students. The teacher will need to read it aloud and have discussion. Samples of each piece of lab equipment should be at each lab station. The student can match each piece with its picture and name. After watching the teacher light the bunsen burner and alcohol lamp, each student should get the opportunity to light each of them. Also each student should practice measuring with the graduate cylinder. The teacher should be certain that each student does his part and understands all parts of this lab.

More Study in Less Time

1. Have a regular SCHEDULE for home study. In junior high school, you need to spend from one to two hours a day on school work at home.

2. Have a regular PLACE to study, equipped with pencils, pen, paper, dictionary and a good lamp.

3. WRITE down your assignments, with date due, in a regular place. If you aren't certain what the assignment means, ask the teacher.

4. Be clear about the PURPOSE of the assignment before you leave class. If you don't know, ask the teacher.

5. SKIM over any reading assignment rapidly before reading it closely. Don't read it first; just glance at the main headings and titles to get a general idea of what it is about and to help you relate the ideas to the main topic as you read the chapter closely later. This skimming should not take more than one or two minutes for a 5 page assignment.

6. Use the study AIDS in the book. Note the chapter and title, which will probably give you the main idea. If there are italicized words, read them with special care. Go over the questions and exercises at the end of the chapter; even if they aren't assigned, they will usually bring out the main ideas.

7. Pause after each paragraph or section of the book to see if you can RECALL the main ideas. If you cannot, reread the passage.

8. When doing an assignment, note any points on which you aren't clear and ask them in class at the beginning of the next period.

9. Look up new words in a DICTIONARY. After you have looked up a word, try to use it two or three times a day until you are sure of the word.

10. When you've finished an assignment, think back and try to recall the main IDEAS. This is a quick way to fix ideas in your mind and to show you where you need to reread.

11. Note and study all CORRECTIONS made to you in class and on your papers.

12. ORGANIZE your time. If you have a long term assignment, plan ahead.

13. Learn to make an OUTLINE. It is valuable for organizing ideas.

14. When you REVIEW for tests, use study aids, notes, etc. You don't need to reread all of the chapter or unit.

15. Be INTERESTED in your work. Find something in the work that interests you.

Taken and modified from "How To Live Through Junior High".

Life A-intro-5

Organization of Class Work-----Life Science

1. Notebook--each quarter this will be handed in and will include:
   a. assignment sheet--kept up-to-date
   b. study sheets and class notes in order
   c. experiment and demonstration write-ups
   d. reports done during the quarter
   e. tests

   The notebook will be graded on neatness and completeness. The fourth quarter notebook will include the papers for the complete year.
2. Quarter project--this will be a different project each quarter and will include:
   First quarter--insect collection
   Second quarter--library project and/or book report
   Third quarter--research paper
   Fourth quarter--research project of a three dimensional nature

   Details of how to do each of these projects will be given when it is time to start work on them.
3. Current Science Reports
   a. Each student will give two of these each quarter.
   b. They are oral reports lasting from 2 to 5 minutes.
   c. The original article must be in the teacher's hands during the report and the student may use notes or an outline. The report must not be read. It is a talk--not a reading!
   d. The grade will be based upon method of presentation, outline or notes and staying within the time limit.
4. In this class, from time to time, I will give you extra credit ideas. These extra projects can help your grade. If you do enough extra credit work, it can bring your grade up one letter. It is much desired, though, to be certain you have done your best on required work before trying extra credit. Please do not plan on extra credit work to bring your grade from an I to an E. It just cannot be done.
5. If the student is absent, he can make up work which has been missed. This is the student's responsibility, however. If you are absent, ask the teacher for the work that you have missed. This should then be done outside of regular class time.
6. Grades are based on the total number of points during the quarter. These points will include the following:
   Notebook--100 points
   Quarter project--200 points
   Current science reports--50 points each
   Tests--usually 100 points each and 4 or 5 given each quarter
   Class discussion or quizzes--based upon the preparation of the assignment
   Attitude and behavior--each student will have an automatic 100 points at the beginning of each quarter. Bad behavior will result in the loss of some or all of these points.
   Unit assignments and lab work will also add to the grade

Usually grades are in the following distribution:

% of total points	90 - 100 = E
	80 - 89 = S
	70 - 79 = M
	60 - 69 = I
	0 - 59 = F

Life A-intro-6

Working in the Laboratory

Introduction: Rules are as necessary in the laboratory as on the ball field. You must know laboratory rules and methods in order to work safely and successfully.

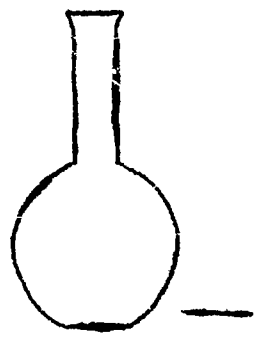
1. If you have the lab assignment before class, read it and be prepared. The entire laboratory time may be needed to do the work. Arrive at class ready to work. "Come prepared" is a necessary motto.

2. Safety rules must be followed at all times. Injury is less likely to occur in the laboratory if safety rules and directions are followed. When in doubt about anything, ask the teacher. Be careful and alert in the laboratory. Read instructions carefully and follow directions. Accurate results come from accurate work. Work which is not accurate is usually a waste of time and effort.

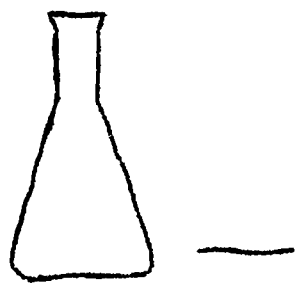
3. Laboratory equipment is expensive. Use good judgment and care when handling it. No playing around is ever permitted in the lab. One careless slip may mean injury or loss of expensive equipment. Arrange the lab supplies that you will need in an orderly manner. Orderliness and planning avoid confusion and wasted time. When you are finished, return the equipment to its proper place.

4. Leave the laboratory working area in order for the next class. If the glassware is dirty, wash it with soap and rinse it with clean water. Clean the sink after using it. Trash does not go in the sink. Trash belongs in waste containers. Wipe off the working area with a damp paper towel or a wet sponge when you finish.

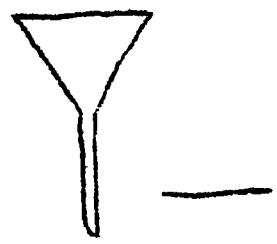
Learning Equipment: On your lab table, you will find several pieces of equipment. Each piece will have a letter marked on it with wax pencil. Below and on the next page, you will find pictures of lab equipment, with its name. Put the letter on the equipment in the blank space by each picture. You need to know the names of the different pieces so you can ask for what you need and so you can tell others what you have done in the lab.



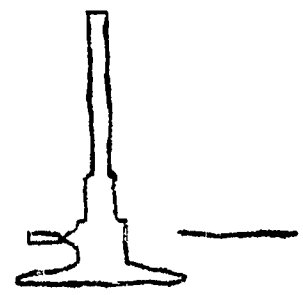
FLORENCE FLASK



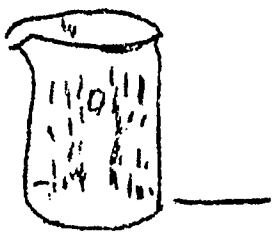
ERLENMEYER FLASK



FUNNEL

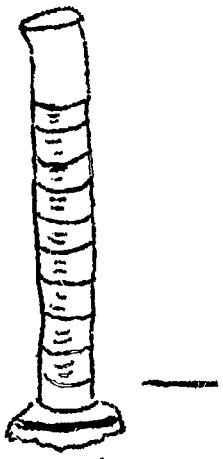


BUNSEN BURNER



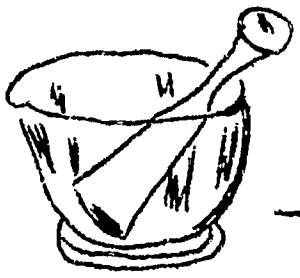
BEAKER

EVAPORATING DISH

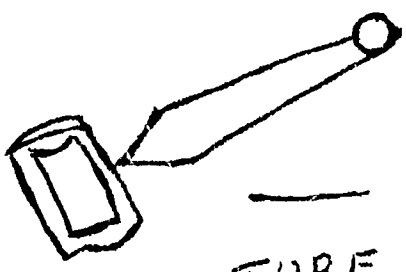


GRADUATE CYLINDER

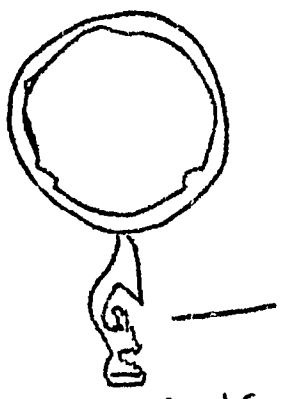
PETRI DISH AND COVER



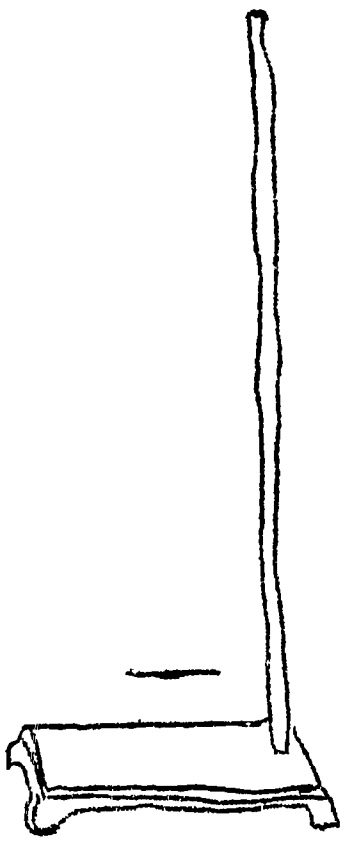
MORTAR AND PESTLE



TEST TUBE HOLDER



IRON RING SUPPORT



RING STAND

Safety Practices in the Laboratory:

These precautions and suggestions are for your own safety and that of your classmates. Study this sheet thoroughly and refer to it when in doubt as to procedure.

1. Report immediately to your teacher any accident, however small.
2. Observe all signs, labels, and other directions that say caution!
3. Ask for further instructions whenever you do not understand clearly what you are to do.
4. Do not handle laboratory equipment, materials, plants, or animals without permission.
5. Follow instructions for handling chemicals. DO NOT TASTE unless told to do so. Smell with caution--some chemicals will really "raise your hair".
6. Know where the first aid kit and the fire extinguisher are located. Know how to use the extinguisher.
7. BE CAREFUL when working with bunsen burners and alcohol lamps. Learn the proper method of lighting each.

Method for lighting bunsen burner

1. Light the match or use flint lighter.
2. Turn on burner--apply match.
3. Do not lean over burner--the flame may go high.
4. Turn off gas to put out flame--never blow it out.
5. If flame accidently goes out--turn off the gas.

Method for lighting alcohol lamp

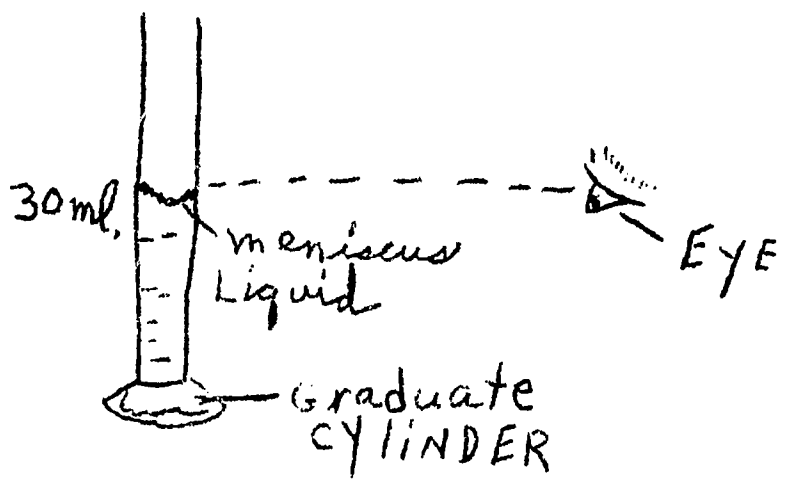
1. Remove cover.
2. Light the match.
3. Apply match to wick.
4. Blow on flame to put it out.
5. Put cover back on.

In the lab you must keep your hands away from your face. Never rub your eyes with your hands or place your fingers in your mouth. If you spill anything, tell the teacher and then clean it up with a damp sponge. If you spill an acid on your skin, wash it in plenty of running water and then tell the teacher.

Measuring with graduate cylinder:

Materials: 100 ml. graduate cylinder, medicine dropper and beaker with water.

Method: To measure 30 ml. of water, pour a little less than that amount from the beaker into the graduate cylinder. Then use a medicine dropper to drop water into the graduate cylinder until the bottom of the curved surface of water is at the 30 ml. mark. The surface of the water must be on the level with your eye for you to make an accurate measurement. This curved upper surface of a liquid is called a meniscus.



Recording Information: Before recording any information, always check twice to be sure you have made a correct reading. Write your information accurately. Do not try to remember results, but write it down. Information is of no value unless it can be used. Information that has been forgotten or that has been recorded wrong cannot be used. Record exactly what happens, not what you think should happen or what happened for the people across the table. Be sure to use the units of measure. The number 60 could be degrees, miles, meters or dollars. It does make a difference.

A little later you will be given more complete instructions for writing a lab report, but for now remember to record your results.

Day Five:

1. Distribute textbooks.

2. The following material about the metric system is modified from an article in The Science Teacher by Paul Westmeyer and Harleen McAda. The science student should be made to realize that the metric system is not only the universal language of science, but (with the exception of the United States and a few other countries) is rapidly becoming the accepted system for everyday measurements. It seems to be inevitable that eventually the U. S. will also have the system in widespread use. For the slower-learner, it is especially important that they learn this now. All the student needs to MEMORIZE are unit names and prefixes and basic relationships, such as that a centi-unit is ten times as large as a milli-unit.

Thus to teach the metric system, and not formulas for conversion, there are only two jobs to do--convince the student that this system is a useful one and then get him to learn the few names involved. This can be started with the following story:

Once upon a time there lived a tribe of primitive but intelligent people. These people were like cave men but very smart ones. These people, we will call them the Tonkas, had no system of measurement for the simple reason that they had no need for one. The complications of life like we have today in which we have to know "how much" and "how long" had not yet appeared in Tonkan civilization. Soon, however, progress reared its ugly head in the shape of a stranger named Iradom who came from a foreign land. Iradom explained to the people how they could trade what they had for what they needed. It didn't take long for one of the smart young men of the tribe to decide that the only way the system would work would be for them to find a way to measure the amounts of goods bought and sold. At first each person had his own ideas of how to measure. Each made up his own units of measurement. (At this point have each student to devise a unit of measure and tell you the width of his book in his own units.)

When students are asked to measure the book with their own units of measure (like a thumb, a little finger, hand or wrist), it takes only a moment for them to realize that they neglected to decide upon any fractional units. If you ask a boy how wide his book is, and he tells you two and a half hands, ask him how he knows that the fraction is one-half. When he says it looks like one-half, ask why he is bothering to make up a unit of measurement when he is really going to decide how long things are by looking at them. The point is not difficult to make, and soon each student is busy dividing his basic unit into fractional units.

Before this is carried on too long, bring it to their attention that they have plenty of units (one for each student) but they still cannot compare and describe things.

Continue the story: At this point our hero enters--awkward is his name. I will give you a standard unit of measure. On these pieces of graph paper that I am handing out, a unit of measure is marked off. This unit is "awkward". It is made of 13 of the smaller marks. You all have a standard unit and now you can measure your books and see if you agree. After comparing results have the students also measure the height and find the area. This should keep them busy for longer than you might want to allow. If so, stress the point that this unit is indeed awkward to handle.

Now the teacher can come to the rescue with a metric ruler. Here is a unit of length measurement which is both standard and convenient. It is called the centimeter and even better, it is divided into smaller units which are one tenth the length of the centimeter and can, therefore, be manipulated just by moving decimal points. Some practice can now be given in measuring and finding areas using the centimeter. Then using the meter stick, the teacher can show the students that 100 centimeters make up a meter.

3. With the introductory chapter of the book, have the students start reading orally. This helps the teacher spot reading difficulties. Be certain that within two or three days <u>every</u> student has a chance to read. It is a good idea to put an evaluation of the students' reading in his folder that you have prepared to be kept in the room. After a few weeks, the teacher should go to the student's file in the office and find the test results which are there. It is usually better to not do this until the teacher has made an unbiased personal evaluation of the student.

RATIONALE FOR SLOWER-LEARNERS IN EIGHTH GRADE EARTH SCIENCE

Rationale means a narrowed down point of view; refined to cover a smaller area. The following is a rationale for slower-learners in eighth grade earth science:

In general, junior high students like science and this includes the eighth grader who is a slower-learner. Some do dislike science and enter class announcing they "hate rocks." (They are often the very ones who bring pockets full of fossils and ice cream cartons of rocks later in the year.) And there are those who dislike school--they are presently using eye make-up or wearing drake-tail haircuts and may already be thinking about not going to school next year.

A large number of these students come to class unprepared: no book, (lost, at home, in locker) no paper or pencil; if he has a pencil it may need sharpening. Certain ones will be consistently low in attendance. Having to help at home and "not feeling well" may blanket a multitude of quasi-reasons.

Attention spans are short and a class period needs to be broken into several activities. Retention is poor. Frequent reviews, without their realizing it, will be necessary. Self-discipline is almost non-existent. This slower-learner cannot review alone and it is difficult for him to correct his own errors. Time has little meaning for him except, "is it time for the bell?" He does not do as well on long range assignments as immediate ones--he will delay, forget or lose the required work.

Clear and concise directions are required. He is eager to do exactly as his teacher desires, if he can just understand the teacher's directions. The slower-learner is surprisingly apt in laboratory activities if excellent directions are given. Some students will follow the laboratory procedure and arrive at the teacher-planned conclusion; some will surprise the teacher and find another conclusion--but he is thinking!

Lack of coordination continues to be one of his problems. His feet are too big and cause him to stumble, books fall off his desk, and he cannot sit still. The girls are more aware of the boys than the boys are of the girls. A current hair style may be more important than the current science assignment.

Participation is important to this student--he should be allowed to contribute to the discussion, relevant or irrelevant. He likes to feel that he has a part in planning activities; when to have lab, the feasibility of a certain field trip, even when to have a necessary test. He is delighted to help with laboratory preparation and clean-up, loves to distribute any necessary items and to run countless errands such as returning movies and film projectors.

The student likes to feel comfortable about the subject matter, the text, teacher and class procedure. Variety is welcome but there must be enough routine for security. Channel enthusiasm and use it in learning situations, presentation of facts and laboratory activities. Achievement of some kind must be provided and failures should be minimized or avoided if at all possible.

Science classes attempt to teach observations and reaching conclusions, but the basic skills involved are reading, comprehension and writing. Standards should be maintained, at the same time realizing that individuals will vary because of abilities. Rigid lists of accomplishments are undesirable. Evaluation should be a measure of more than a regurgitation of facts and should consider progress from a starting point, attitude and effort exerted. How far does the teacher go? Not to permissiveness, not to appeasement, not to vascillation, because there would be no class order at all. Gently but firmly hold to achievement.

The optium class ranges from fifteen to twenty students and presents an ideal group situation. Some students are not problems as individuals, but have not learned to work in and be a part of a group. This size class provides enough pupils to divide into several smaller units for projects, buzz sessions or committees. Yet the group is small enough for the teacher to be aware of each student so that he is not forced to earn attention. Each child may participate, or not participate, as he feels the desire. With a smaller group the teacher has time to observe these students as they work. He can be analytical as he works with a student who is having difficulties or he can be a source of security, quietly there and available.

COURSE CONTENT FOR THE SLOWER-LEARNER IN EIGHTH GRADE EARTH SCIENCE

The selection of materials for science classes is a huge undertaking and laden with challenge. Three basic decisions are involved, what to: 1. choose, 2. omit, 3. reserve and hope to have time to present. The setting up of themes can be a dependable aid or guide in deciding, i. e., will it help build toward the thought of science as inquiry? Following are themes that may be used for the slower-learner in eighth grade earth science:

1. Science is questioning. Observation and investigations are of prime importance; in fact, observation of nature is the basis of all knowledge in earth science.
2. Constant change. The earth is dynamic and changeable, nothing is static, nothing endures forever.
3. Energy movement or flow. The widespread change in earth materials is a result of the redistribution of energy; for example, volcanoes result from interior earth changes.
4. Environmental changes and adaptations. Living things must adapt or die; the goal is balance, living things can survive in an environment that meets their needs.
5. Conservation of mass and energy. All processes and changes that are observed on the earth obey all the laws of the physical universe.
6. Importance of materials and their relationship in space and time. The physical and chemical nature of materials must be understood, in relationship to each other and to space and time.
7. Uniformitarianism. The past can be explained satisfactorily if the present is understood.
8. Scale comprehension. Illustrations of natural phenomenon involve enlargement or reduction. Examples are mental images of roadcuts, map usage and the more abstract measurement of mass, distance, time and energy.
9. Prediction. The prediction of events, processes and relationships is the goal of many scientific quests.

10. History. Presentation of principles and concepts should mirror the historical evolvement and development of earth science.

Once the material is chosen and the teacher has the general themes in mind, the subsequent step is to decide on the understandings or concepts he hopes his students will acquire.

These understandings are my own and are an attempt to help a student realize the scope and embraciveness of earth science. This does not mean other branches of science are minimized, but instead, stresses the interdependence of life, physical and earth science.

Earth science is the beginning. The earth was here before life and provided the place and conditions for life to originate and survive--air to breathe, water for life, and soil as a food source. Shelter was present, not always absolutely necessary, but highly desirable; sometimes was the factor that determined life or death.

Later such socio-economic factors as tools resulted from rock and mineral discoveries. Transportation followed and then communication; all of them using materials and principles from earth science.

After man solved problems concerning necessities, he turned to cultural and esthetic areas. "Enjoying scenery" is truly an esthetic value. Recreational uses of nature and its phenomena are emotionally satisfying. Curiosities may be aroused and directed--perhaps not to solutions but to finer observance and appreciation. Nature has, since the beginning of time, inspired the origin of religions. The sun, moon, rain have all been worshiped. A majestic mountain, a glorious sunset or a much needed rain may contribute to a philosophy of our origin, life here and destiny.

SUGGESTED PROCEDURE FOR FIRST WEEK OF SCHOOL

First day. Do not give out texts. (Reason will be clear later.)

Field trip. Be very brief in explanation. "We are going on a short field trip. I will give you a few instructions." Distribute the following printed instructions. Read them aloud.

1. Stay in front of Richardson Hall, south and east side of Presser, stay away from physical education classes and tennis courts. Stay on the campus.
2. Look around you; this is an observation field trip.
3. You may separate into smaller groups and walk freely within the area. Listen for the whistle to return. Quietly re-enter the building, go to the classroom and wait for further instructions.
4. When pupils are seated and quiet, say, "Jot down everything you saw. Then take your notes and write them in sentences."

   Note: The students were not reminded to take notes on field trip because it was desired that this should be a "before" trip, (before instructions, before teacher tells them how, before reading text which has an excellent approach to observation.)

5. Read sentences aloud. There will be many different accounts, some very short. Some pupils will remember certain things when they hear another one read about it. Do not add to paper.

   Collect these papers and save them. They will not be very good.

Second day. Check out books. Now it is obvious why books were not checked out previously. The author is discussing observation and how to do it scientifically. Read aloud and discuss the first few pages.

Plan lab for the following day. The teacher must have this lab pre-planned before it is discussed with the class.

Third day. Laboratory investigation of observation. There are several good laboratory investigations attempting to sharpen observation. When these labs and accompanying discussions are completed, repeat the field trip of the first day.

This time, go prepared. Consolidate notes, rewrite and turn in. A lab sheet will be prepared for this field trip. Collect summary of field trip. Discuss. Compare to first efforts. Repeat at end of semester and again near end of second semester. Collect and compare papers. Note progress. Return all papers to students at end of school.

Name_____ _____
Section

Date_____ _____
Lab number

Science Investigations--Dissolving and Solutions

Purpose: What will dissolve fats?
Will all liquids dissolve a certain material?

Materials: water, test tubes, test tube racks, paper towels, butter, alcohol, carbon tetrachloride.

Procedure:
a. Place a small lump of butter in a test tube of cold water.
b. Place a small lump of butter in a test tube of hot water.
c. Place a small lump of butter in a test tube of alcohol.
d. Place a small lump of butter in a test tube of carbon tetrachloride.

Results and observations:

1. How many different liquids were used?_____

   List them._____

2. What happened to the butter in the cold water?_____

3. What happened to the butter in the hot water?_____

4. What was the result when the butter and alcohol were placed together?

   _____

5. Were there any certain things you noticed about the liquids?_____

   _____

6. How did the lump of butter react in the carbon tetrachloride?_____

   _____

7. Did you notice any differences in the way the butter reacted in the

   different liquids?_____ _____

Summary:

1. Is melting the same as dissolving?_____ Explain._____

   _____

2. Note to teacher: Here is the place to introduce the words: dissolve, soluble, insoluble, solvent and solution. Ask questions that will lead them to use these words.

3. Why do you think it is important to learn about dissolving materials?

   _____

Teacher Demonstration

Purpose: To demonstrate by pantomime that soil is made from rocks and that it is one of our basic necessities which is usually taken for granted.

Materials: Box of soil that is a good mixture of humus, clay and sand, a collection of rocks, pile of sand, plenty of water and a stack of paper towels.

Procedure: This demonstration requires a well-planned class period such as a short interesting lecture about the values and importance of earth science. While lecture is under way, proceed with activity:

a. The teacher runs hands through box of soil. Allow soil to cover hands, pick up by handfuls.
b. Be dramatic.
c. Add water and make a few mudpies. Be rather messy.
d. Show that clay is slippery.
e. Rub on glass to show the presence of sand or quartz.
f. Wash off with paper, continuing to be dramatic.
g. Dry with paper towel.

Class discussion and explanation:

1. What is the soil (you may have been calling it dirt) used for? There will be many answers: clay for bricks, sand for concrete, soil for food, rocks for roads.

2. Are soils different? Yes. Pursue until the "yes" is explained.

3. Is soil everywhere on this earth? Yes. Pursue the yes or no answer here with class explanation, deserts have sand and rocks which is the forerunner of soil, arctic areas have sufficient soil for some plants, the ocean sediment contains soil.

4. Where does soil come from? What is in it?

5. Is new soil being made today?

Summary:

1. How important is soil to us? Life, food, a place to live.....many more answers should be forthcoming.

Suggested Pupil Activity
(A Room Museum)

This classroom activity requires adequate shelf and storage space. There are two chief aims, each of paramount importance:

1. To arouse and maintain interest--some students will thrill to bring and share, others will gain by exposure to the objects.
2. To have an abundant supply of science objects in the room for students to observe, examine and use in demonstrations and investigations.

Ask for items that are related to the unit. Assign (or use volunteers) to be keepers of the museum; this will involve classifying, arranging, labeling and caring for the items. There will be the student who brings unsolicited objects and unrelated to the present unit. Reserve a shelf for these so they can be accepted and displayed also.

While the museum curators are busy with the museum, another group of pupils will be finding books in the library that supplement or enrich the museum display. A third group will prepare a bulletin board, still a part of the original unit.

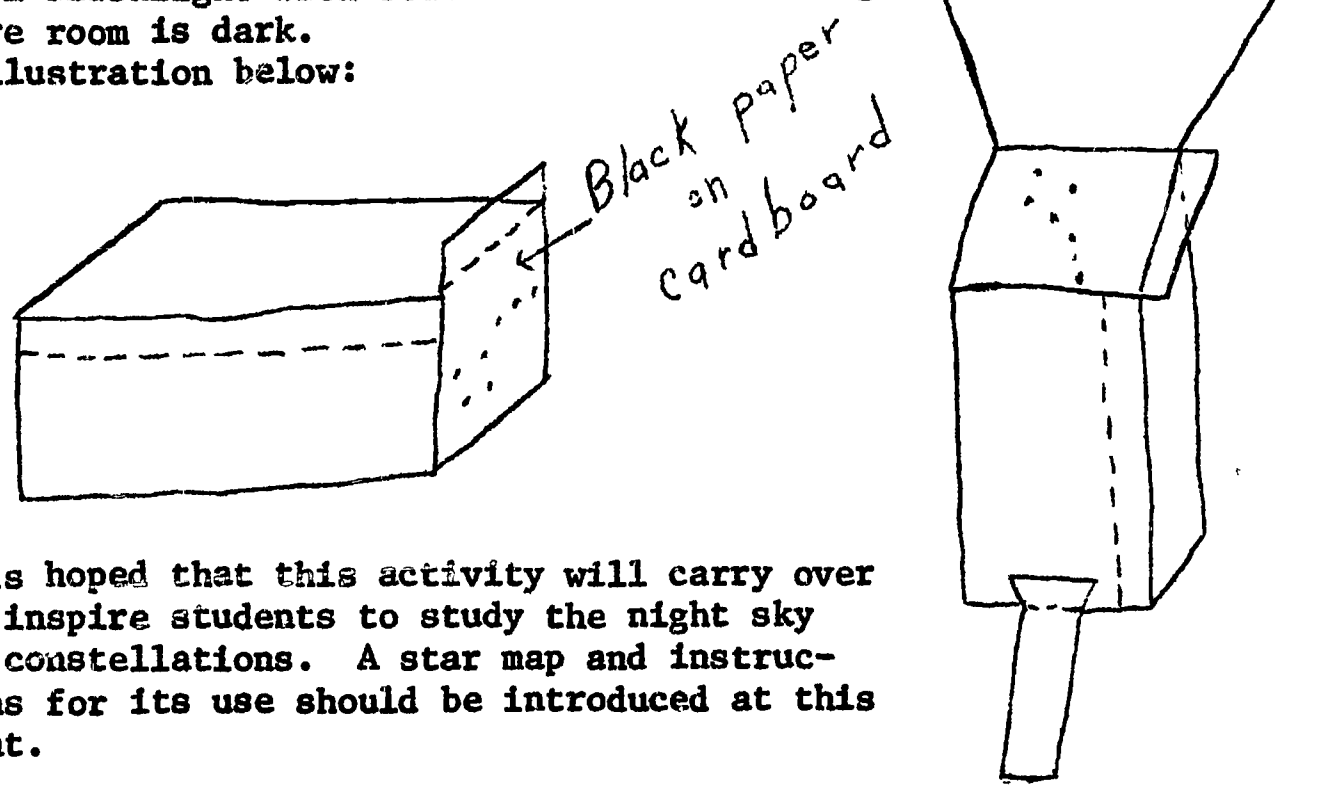
Suggested Pupil Activity
(A Constellarium)

Purpose: To acquire an understanding of constellations, to learn to identify a few of the common ones and how and where to find them.

Materials: Box about the size of a shoe box, flashlight, aluminum foil, masking tape, cardboard, black paper, large needle, darkened room.

Procedure:

1. Cut hole large enough in one end, to insert flashlight.
2. Remove other end.
3. Line lid and box with foil.
4. Replace lid and tape securely.
5. Cut slot near open end.
6. Glue black paper on cardboard. Use needle to punch the desired constellation pattern.
7. Insert a constellation pattern in slot.
8. Turn on flashlight with beam directed to ceiling.
9. Be sure room is dark.
10. See illustration below:



Summary: It is hoped that this activity will carry over and inspire students to study the night sky for constellations. A star map and instructions for its use should be introduced at this point.

SUGGESTIONS FOR THE TEACHER OF THE SLOWER-LEARNER IN EIGHTH GRADE EARTH SCIENCE

1. Short assignments. Little homework, change activity within period. Realize that most of the teaching and learning will have to be done within that class period.

2. Short break if possible.
   a. Allow pupils to get up and stretch.
   b. Be excused for drinks.
   c. Walk around room to see bulletin boards, go get books, etc.

3. Many activities.
   a. Student activities in the room.
   b. Student demonstrations.
   c. Student group and individual projects.
   d. Student committee work for investigations, reports, research on student originated questions.
   e. Teacher demonstrations and teacher demonstrations with student helper.

4. Many things to see.
   a. Exhibits of rocks, fossils, maps, globes, sand, etc.
   b. Bulletin board displays.
   c. Books
   d. Films and filmstrips.

5. Questions. Let them ask questions and make contributions. It is surprising what they grasp by seeing something, TV for example. Questions may indicate curiosity, insight, or thinking that was not evident previously.

6. Concise directions are a must. These students want to please and to do the activity being required of them but have difficulty with ambiguous or scanty directions.

7. Use tripod lenses. Have these readily available; students will use them freely.

8. Read aloud.
   a. Students may read text and other material aloud, either by turns or volunteer.
   b. Teacher may read aloud supplementary or enrichment material that is on student's reading level but has high interest. This may be stories, articles or biographies.

9. Always keep in mind the reading and/or ability level of the group and plan classes and activities accordingly.

10. Make games of activities. This is an excellent idea when used wisely. Sometimes points, tokens, etc. can be added for incentive. This makes use of the concrete instead of the abstract or distant reward.

11. Local People can be used as resource material. These people are usually delighted to contribute to the schools by sharing their knowledge or facilities.

12. More guidance. The slower-learner needs more:
    a. than the usual amount of guidance.
    b. individual help with class work.
    c. support and reassurance to build self-confidence and a sense of personal worth.

13. Praise. Genuine heartfelt praise is highly successful. Withhold exhortation and negative criticism.

AREAS TO BE COVERED FOR THE SLOWER-LEARNER IN EIGHTH GRADE EARTH SCIENCE

Following is a suggested list of the areas to be covered. The approximate time to devote to each area is at the right:

Area	Number of Weeks
1. Science orientation. Learning to observe, measure, and acquire a basic understanding of the nature of matter.	6
2. Surface of the earth. This includes the structure of the earth; forces that change the earth's surface; rocks, minerals and ores; and the oceans.	7
3. Use and conservation of the soil.	2
4. Use and conservation of water.	2
5. Understanding weather.	5
6. Earth in space. Included are: earth movements, seasons, maps, time, moon, tides.	5
7. Our solar system and beyond.	4
8. The exploration of space.	4
	35

SUGGESTED BIBLIOGRAPHY FOR THE TEACHER OF THE SLOWER-LEARNER

1. When Teachers Face Themselves, Arthur T. Jersild, Bureau of Publications, Teachers College, Columbia University, 1955, Columbia, New York.

2. Human Relations in Teaching, Lane and Beauchamp, 1955, Prentice-Hall, Englewood Cliffs, New Jersey.

3. Education and the Nature of Man, Kelley and Rasey, 1952, Harper.

4. Psychology in the Classroom, Rudolf Dreikurs, 1957, Harper.

5. The New School Science, obtain from John R. Mayor, Director of Education, American Association for the Advancement of Science, 1515 Massachusetts Avenue, N. W., Washington D. C., 20005.

6. Mental Hygiene in Teaching, Redl and Wattenberg, 1951, Harcourt Brace and Company.

7. Perceiving, Behaving, Becoming, NEA ASCD Yearbook, 1962.

8. New Ways in Discipline, Dorothy Baruch.

9. The Saber-Tooth Curriculum, Benjamin Harold.

10. The Mature Mind, Overstreet.

11. The Art of Loving, Erick Fromm, Harper and Row.

12. Teaching the Slow-Learner, W. B. Featherstone, 1958, Bureau of Publications, Teachers College, Columbia, New York.

13. Teaching the Slow Learning Child, Marion F. Smith and Arthur J. Burks, Harper and Brothers, 1954, New York, New York.

RATIONALE FOR NINTH GRADE GENERAL (PHYSICAL - 2) SCIENCE

The slower-learner entering the ninth grade undergoes many difficult and frustrating adjustments. He comes from schools which usually have a smaller enrollment and where there is less maturity among the students--and he is placed with students who have reached a greater maturation level. He will also be introduced to a number of students who have home backgrounds and attitudes different from his. Many of these pupils have home environments which are actually detrimental to a student's learning in school. Parents may be indifferent to a child's successes or failures or even encourage his dropping out in order to supplement the family income. Because of limited background experience and these home environments, he will have difficulty absorbing and utilizing many themes presented to him, which may seem strange and unfamiliar. This makes it difficult for him to obtain maximum value from the experiences which are offered, unless they are presented to him at his level of reading, of comprehension, of visualization, and of remembrance. He has had a general lack of experience in carrying on investigations (pupil activities).

Nevertheless, he is innately curious and eager to learn and will accept the offerings of a mature individual, whether it is a teacher or an upper-classman (hero worship).

The slower-learner needs motivation, and a lot of it, and it will be a much easier task for the teacher to motivate him if units of study can be presented to him that will arouse the interests that students his age are known to possess. This student needs a minimum of theory and a maximum of practical applications, with special emphasis on the consumer aspects of physical science. He is interested in learning about things around him, i.e., his immediate environment. He will be interested in learning how to read an electricity meter, gas and water meters, etc.; things that will help him in his future life--not just an assemblage of unrelated facts. The teacher needs to give him assignments, pupil activities and demonstrations that are adjusted to his level of comprehension.

Since most textbooks are written for the average or above-average students, it will be necessary for the teacher to structure investigations so that he may guide students toward achieving maximum understanding through independent discovery. The pupil needs to learn that a search for knowledge can be personally gratifying. Premature explanations of phenomena or disclosure of "correct" answers to problems may deprive students of an opportunity to use their own abilities. Such methods also tend to produce passive acceptance of fact instead of active searchers for knowledge.

Inquiry should be stressed in science assignments by using the text and by using low-level, high-interest books and pamphlets from the school library as guides.

Since this student can concentrate on only one thing at a time and over a shorter period of time, a melding of approaches that help students develop their own powers of learning, their own insights and perceptions is especially important in the teaching of the slower-learner.

As Robert H. Carleton says in "The Science Teacher", "The skillful teacher, like the truly professional baseball pitcher, will have many offerings in his repertoire and will employ frequent changes of pace. He won't throw the same pitch to all the students all the time.

Moreover, he will realize that, unlike pitchers and batters in baseball, he and the students are on the same team. The teacher may toss curves, sliders, or sinkers, but his aim is to get the ball over every time, to give the kids an honest chance to hit a home run. The teacher's job is to get the kids on, not get them out."

The ninth grade science course is designed as a terminal course in physical science for the general education student. It is important for the student to realize that physical science is a search for knowledge based upon the best information obtained through observation, experimentation, and reading rather than that physical science is a superstition.

There is a need for a greater integration of the basic concepts of physical science into the daily lives of those who live in this generation and who will, in turn, impart their knowledge to those who follow.

The importance of understanding physical science cannot be overlooked in view of the impact science has had on all aspects of modern life--social, political, economical, technological, philosophical, etc.

The evaluation of any student is a very difficult task since there is no definite procedure by which the job can be done and as the grading process is such an intangible one which varies from teacher to teacher. With the slower-learner a greater problem exists, as methods that are useful with the average or above-average student may fail with this student. Some of the problems a teacher will face will be his own as well as those of the student. Most teachers are very busy individuals, and time is of the utmost importance; therefore, some basic factual learning based upon the lesson plan may be necessary as well as beneficial to some of the slower-learners. This factual evaluation may be in the form of objective (open or closed book tests) or essay questions. This student cannot be expected to answer all of the questions if this type of evaluation is used. Subjective evaluation should definitely be used with this type of learner. In this type of evaluation, certain understandings, appreciations, habits, attitudes, and interests may be measured only by the observations of the teacher from a divergent type of questioning on demonstrations and the student's work on pupil activities. In the final analysis, the teacher may have to judge if the basic objectives of physical science are being met. It is of great importance that this student learn how to get along with other people or, in other words, "learn the rules by which we play the game". With certain reservations, this student should not fail. Reasons for failure may include habitual absenteeism, tardiness, and failure to bring supplies (book, paper, pencil) to class, which he must have to do class work. He must be made to realize that school is his first job, and his desk is his business.

Due to the fact that the slower-learner requires individual counseling and personalized attention from the teacher, an individual physical science class should not be composed of more than twenty (20) students. This is especially important if a subjective type of teaching is used, as this student has had a general lack of experience in carrying on pupil activities. Classes of twenty-five (25) to thirty (30) students may necessitate that a fact-filled course be taught due to a lack of time, working space, and equipment.

COURSE CONTENT FOR NINTH GRADE GENERAL (PHYSICAL - 2) SCIENCE

For many years there has been a lack of correlation of the specialized sciences in general (physical) science between the Mexico junior and senior high schools. Certain basic sciences were retaught, which is not detrimental as far as enrichment is concerned, but in the process this rehashing of nearly identical material may create a dislike for general science, especially for the slower-learner, who has a low threshold to boredom. Also, there have been some students who have not been introduced to certain science fields which are necessary for living in our scientific society. (This problem, however, is not one which is isolated in Mexico schools but is a national problem). Perhaps it is not just the correlation of science classes in a specific system, but the coordination of sciences according to their difficulty and the students' chronological ages, as well as deciding what is to be taught to the student in a rapidly changing world.

Starting with the 1966-1967 school term, this problem will be alleviated in the Mexico schools. The slower-learner (and other students) will follow this course of study in general science: Seventh grade--life science; Eighth grade--earth science; and Ninth grade--basic chemistry and physics in a physical science course.

Listed below are the four general themes that should be developed in the ninth grade physical science class. With the presentation of these themes or principles, it is hoped that the slower-learner will react, recognize, relate, understand in some manner, and retain some of the concepts listed below the themes.

1. That the slower-learner has a basic understanding of the measurement, structure and changes in matter, and nuclear energy (optional).
   A. All measuring instruments are calibrated against a standard.
   B. A control situation is always provided in solving problems through the scientific method as proof that the changes observed were due to the conditions of the test experiment.
   C. The smallest particle of matter that can exist without losing its properties is an atom.
   D. When elements of matter combine to form compounds, the new substance has different properties than the elements of which it is composed.
   E. Matter changes state by gaining or losing kinetic energy as the velocity of the moving molecules in the substance changes.
   F. The intensity of radiation varies inversely with the square of the distance from the source to the object receiving the radiation.
   G. Nuclear radiation can be detected as it passes through a geiger tube and ionizes the gas molecules in the tube, thus causing a discharge of electricity to be produced between charged surfaces within the tube.
2. That the slower-learner has a basic understanding of forces: forces in motion, forces in fluids, buoyant forces, electrical forces, magnetic forces, and engines.
   A. A body in motion tends to remain in motion, and a body at rest tends to remain at rest.
   B. To every action there is an equal and opposite reaction.
   C. Bodies in a vacuum fall at the same rate regardless of their mass.

D. The pressure exerted by a liquid increases with the depth.
E. Liquids are nearly incompressible.
F. Pressure applied on a confined fluid is transmitted in every direction.
G. Fluids exert a buoyant force on submerged and floating objects equal to the weight of liquid displaced.
H. Fuels expand upon ignition to form gases and increase in volume.
I. The direction or velocity of a body is only changed when a force acts on the body.
J. A neutral object becomes charged when it is brought into contact with a charged object.
K. Like charges repel each other and opposite charges attract.
L. Static electricity consists of electrons on the surface of bodies which have been removed from atoms by friction.
M. An electric current in a wire produces a magnetic field around the wire.

3. That the slower-learner has a basic understanding of waves and energy, thermal energy, and electricity.
A. Energy is transmitted in the form of waves.
B. Curved surfaces can produce real images by reflection.
C. Real images vary in size depending on the position of the object and the projecting lens.
D. Some substances are excited by energy in one form to emit energy in another form.
E. Heat is the effect produced by infrared radiation on matter.
F. Most substances expand when heated, and all substances have characteristic expansion rates.
G. Temperature is a measure of the average kinetic energy of molecules.
H. Dark rough surfaces absorb more radiation than light smooth surfaces.
I. Evaporation is a cooling process.
J. Heat is transferred by radiation, conduction, and convection.
K. An electrical pressure or voltage is produced by connecting a body having an excess of electrons to one having an electron deficiency.
L. The watt is the unit of electrical power, and the kilowatt is the unit of measurement of electrical consumption.
M. The magnetic effect of an electric current is utilized in a transformer to increase or decrease voltage in a circuit.

4. That the slower-learner has a basic understanding of the universe, which includes man's conquest of space, the planet earth, and how to use the earth's resources.
A. The light emitted by a star is directly proportional to its surface temperature.
B. The surface temperature of stars is directly proportional to their mass.
C. The temperature of air determines the amount of moisture it can hold.
D. All weather occurs in the troposphere.
E. Weather disturbances are produced when one air mass overtakes or contacts a mass having different characteristics.
F. Plants and animals, along with weather and climate, help to form and change the soil.
G. Good soil can be maintained in production by proper land use.

H. The earth's resources are not inexhaustible and must be conserved.
I. Plants and animals support each other in closed-systems once a balance is reached in food, oxygen, and energy requirements.
J. Radiation in outer space is much greater than on the earth's surface.
K. Man can exist in space in a state of weightlessness for extended periods of time without apparent ill effects.
L. Satellites can receive, store, and transmit data to earth entirely from ground control.

In teaching these themes, it is of utmost importance to make one theme lead to the next so that the pupil will gain the concept that science is not a series of disconnected parts but a succession of divisions or sections all closely related and can be integrated into daily living.

SAMPLE PLAN

Every teacher has his own "teaching package"; therefore, this plan is only to serve as a sample for teaching a unit of general science, with our present temporary textbook to be used as a guide. Listed below are sample materials that may be used with the slower-learner. These materials consist of: (1) an orientation sheet, (2) pupil activities, (3) a teacher demonstration, (4) visual aids, (5) a sample ten-point quiz, (6) a unit quiz, and (7) essay questions.

Orientation for the Slower-Learner in General (Physical) Science

To the Teacher:

This sheet should be distributed to the student during the first or second day of school, as this is a time of many interruptions, with many extra-curricular activities. Take time and explain to the student all of the information on the sheet so that he will know what is expected of him in general science class at Mexico High School. This will do much to ease his tensions and help him to become adjusted to a new school year after a summer of leisure.

1. Conduct:
   A. You are ninth graders, and we think you know the right conduct; use it or expect the results.
   B. School desk tops are not to be written on or defaced in any manner.
   C. Do not chew gum or eat candy during the class period.
   D. No talking after you enter class, unless you have permission. (A limited amount of talking will be allowed with students with whom you are working during pupil activities).
   E. You are expected to be prompt in coming to class. You must have an adequate excuse for coming in late. Constant tardiness may result in suspension and the lowering of your grade.

2. Texts:
   A. "Science Discovery and Progress" by Davis, Burnett, and Gross. Use this text, but take care of it. Do not mark in it, turn down corners, get it wet, etc. If your text is damaged in any way (missing pages, etc.) upon distribution, let me know at that time so that you will not have to pay a fine for someone else's damage. Lost textbooks must be replaced by the student at a cost of one dollar.
   B. Interesting science books and pamphlets are available in the school library. Become acquainted with our library.
3. Grading System:
   A. Your grade will be based upon the following items: unit tests, ten-point quizzes, work on pupil activities, and participation in class discussions. The teacher can also tell from questioning you how much you have gained from teacher demonstrations. This, plus promptness in coming to class on time, bringing the required equipment to class, your conduct, and your attitude toward the class will be taken into consideration.
   B. You should not miss over five days of school a quarter and still expect to receive a good grade. Serious illness cannot be helped, and in this case, we will do everything we can to help you reorganize when you return to school.
   C. You may earn extra credit by entering a good project in the science fair next April. Start thinking about something you are interested in and want to learn more about.
4. Tests:
   A. Unit tests--average one every one and one-half weeks to two weeks. It will cover a unit of work and usually consists of 50 objective-type questions. It may include material from lectures, discussion, pupil activities, demonstrations, and data on bulletin boards.
   B. All unit tests must be taken in ink. You may use any color but red.
   C. Occasionally ten-point quizzes will be given to check your study habits. They may be of the following type: matching, essay or diagrams.
   D. If the above quizzes are graded in class, you will put the grade in the upper right hand corner. Be accurate in grading, as I will recheck these quizzes periodically.
   E. When taking any type of test, a cover slip or sheet must be used.
5. Assignments:
   A. Each and every day you come to class, you will need to bring these articles: pen (or ballpoint), pencil, paper, textbook, and spiral notebook.
   B. All papers handed in to me will have, on their outside, the name, date, subject, and hour. Write clearly!
   C. You are responsible for all information on the bulletin boards. Look at this material before the bell rings, or get permission from me to do this during the study period.
   D. You are responsible for all films and filmstrips shown in class. Notes will not have to be taken, but you are expected to pay attention.
   E. Lecture, discussion, explanation of demonstrations, or procedure to follow in pupil activities, will compose 15 to 35 minutes of the class period in which they are given. Listen carefully and take notes. You will be given a study period of 20 to 30 minutes each day for general science study.

6. Study Guide:
   A. Write down your assignments in a regular place.
   B. Your reading assignments will be short (2 - 5 pages). They should be read at least three times and studied.
   C. Study all diagrams, charts, and pictures in the text. They will help you to understand your assignment.
7. Make-Up Work:
   A. It is your responsibility to make an appointment to see me as soon as possible to make up work you have missed. (This can usually be taken care of during class hours).
   B. If you are absent, telephone a person in your class, or your teacher, and ask what homework you have to make up, and prepare yourself for the next school day. (School doesn't stop when you are absent.)
   C. Remember: On excused absences, homework is to be made up in advance.

Pupil Activity for Section B

Title: Volume

Purpose of This Experiment: To learn that the volume of any irregular object can be measured by displacement.

Apparatus You Will Need: Graduated cylinder, objects such as: thimble, marble, stone, ring, or a paper clip, and water.

What To Do:
1. Obtain a graduated cylinder from your teacher. (A liquid measuring cup may be used).
2. Put some water into the cylinder and take a reading of the water level.
3. Immerse an object such as those listed above, and take a second reading of the water level.
4. The difference between the two readings will be the volume of the object.
5. Repeat with different objects.
6. You may wish to estimate the volume by guessing before making the readings.
7. Have a classmate check your answers by making separate readings. Check your answers.

General Questions About This Experiment:

1. What is the metric unit of measurement for volume?
2. The English unit?
3. What is the proper method of reading the level of liquids in a graduated cylinder?
4. What is the curved surface of a liquid in a column called?
5. What is meant when it is said that matter occupies space?
6. What measurements are needed to calculate volume?

Pupil Activity for Section C

To the Teacher: Pupil activities in which the subject matter is based upon the everyday activities of the student, such as the one listed below, will be more meaningful to him than those which he cannot correlate with daily living.

Title: Friction

Purpose of This Experiment: To learn that most of the motion of matter is dependent upon friction. We usually think of friction as being a hindrance, but without it our cars would just spin their wheels on roads, and we would not even be able to walk.

Apparatus You Will Need: Weight block or a wooden box filled with sand or weights, spring balance, several round pencils, wooden or metal rods, or sections of glass tubing, lead shot. (See Fig. 1-9 in text)

What To Do:
1. Attach the spring balance to the block or box, and determine the force needed to drag the box along your desk top.
2. Repeat with several of the rods under the box.
3. Repeat with the round lead shot under the object.
4. Now, determine the force needed to keep the object moving when the table top is wet with water.

General Questions About This Experiment:

1. How did the force required to start the body moving compare with the force needed to keep it moving?
2. Explain your answer. (Inertia)
3. How do you account for the different scale reading in the above observations?
4. Explain the difference in force required to move the object on the wet surface from that required on the dry table top.
   (a) What is this method of reducing friction called?
   (b) List some ways in which this method is used.
5. List two ways of reducing friction.

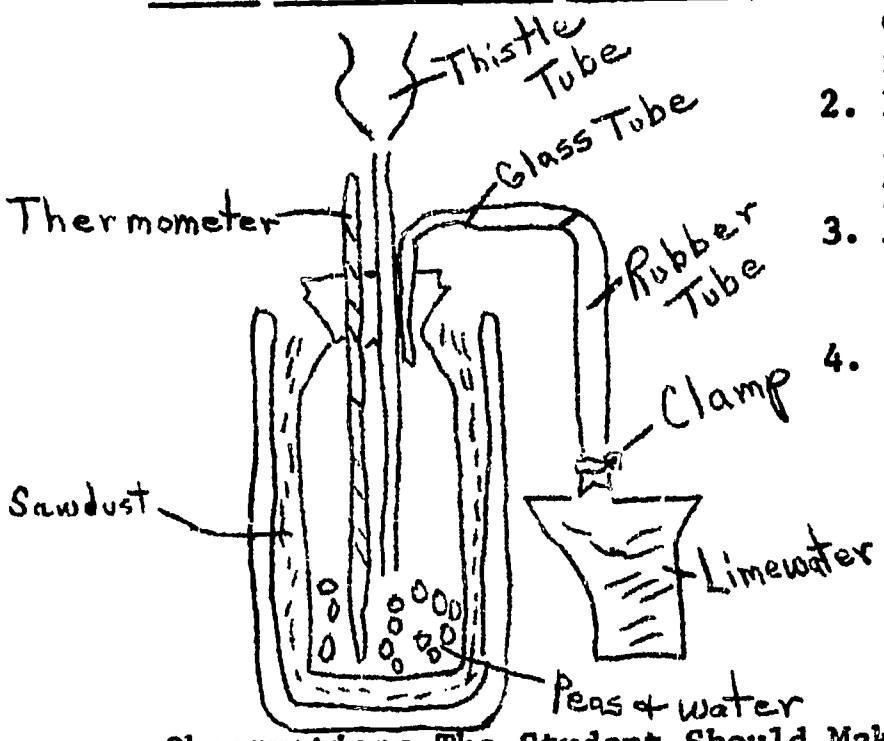
Demonstration for Section D:

Title: Energy Release in Living Things

Purpose of the Demonstration: To show that living things need energy to carry on most of their processes.

Materials to be Assembled Before Class: Gas-collecting bottle, three-holed rubber stopper to fit the bottle, thermometer, thistle tube, bent glass tube fitted with a short length of rubber tubing and clamp, can of sawdust, whole peas, and limewater. Assemble as shown on the following page.

Class Demonstration Procedure:



1. Cover the peas with water, and place the can tightly packed with sawdust all around it.
2. Record the thermometer reading at the start and again at the start of the class period the next day.
3. After 24 hours, release the clamp on the rubber tube, and place the end of the tube in a small amount of limewater.
4. Force the gas in the jar through the limewater by pouring water into the thistle tube until the jar is filled. (If the limewater turns milky, carbon dioxide is present.)

Observations The Student Should Make:

1. Any change visible after the lapse of time in the appearance of the contents of the jar.
2. The readings of the thermometer.
   (a) At the start of demonstration (b) After 24 hours
3. The room temperature.
   (a) At the start of the experiment (b) After 24 hours
4. The change, if any, occurring in the appearance of the limewater.

Questions the Teacher may ask the Student:

1. What evidence was there that germinating peas are releasing energy?
2. What gas was produced during the reaction?
3. What are the products of the oxidation of peas (carbohydrates)?
4. What process apparently provides plants with the energy necessary for them to live and grow?
5. Why was the jar packed in sawdust?

Pupil Activity for Section F

Title: The Scientific Method

Purpose of This Experiment: To learn that there is a scientific method of solving problems

Apparatus You Will Need: A moist piece of steel wool, two test tubes, ring stand, two clamps, a water bath or pan, and water.

What To Do:

1. Fill pan with water.
2. Place a piece of moist steel wool in one test tube.
3. Invert both test tubes, and immerse the open end into the water. Secure with clamps.
4. Leave in this position for 24 hours (next class period).
5. Between the class periods try to form an opinion about what you think will happen to the water in the test tubes.

General Questions About This Experiment:

1. After 24 hours, what are your observations?
2. What data did you collect as measurements?
3. What was the purpose of the empty test tube?
4. How would you verify your conclusions?
5. What is the purpose of repeating an experiment many times?
6. Why do scientists devise and conduct scientific experiments?
7. What is the variable in an experiment?
8. What is the purpose of the control in an experiment?

Sample Visual Aids

In teaching the slower-learner, the use of visual aids should be encouraged. They may be in the form of films, filmstrips, slides, models, charts, drawings, transparencies, and specimens that the student may bring to class. Below I have listed a few samples that may be useful to the teacher. (For the study of Unit 1)

Films:

1. Metric System--11 min., B&W-Color, Cor.
2. The Scientific Method--12 min., B&W-Color, EBF***
3. Force and Gravity--28 min., Color, MH***
4. Friction and its Effects--11 min., B&W-Color, Cor.
5. Inertia at Rest--11 min., B&W, MH***
6. Inertia in Motion--11 min., B&W, MH***
7. Matter and Energy--11 min., B&W-Color, Cor.
8. Physical and Chemical Change--28 min., B&W-Color, Cor.
9. Science and Superstition--11 min., B&W-Color, Cor.

Sources:

1. Cor. Coronet Films, Coronet Building, Chicago 1, Ill.
2. EBF Encyclopedia Britannica Films, 1150 Wilmette Ave., Wilmette, Ill.
3. MH McGraw-Hill Text Films, 330 W. 42nd St., New York 36, N. Y.
4. *** Indicates that film may be rented from Missouri University (See film catalogue in school library)

The generally approved procedure to be followed when using films and filmstrips consists of these steps:

1. The film is viewed by the teacher so that plans for the best possible use of it can be made.
2. The pupils are made ready to see the film by reading, discussion, and observation.
3. The film is projected in a manner most conductive to maximum learning. (This may involve a second projection, with appropriate pauses for questions and discussions)
4. The information gained and learning acquired is evaluated by oral questioning and by observing applications of the information made by the pupils, both in and out of the classroom.
5. The subject matter of the film must always be an integral part of the content being taught.

Filmstrips: (Mexico Audrain County Library)

1. Elementary Science Series
   (a) Atoms and Molecules (3F-23)
   (b) Energy (3F-31)

Objective Testing

To the Teacher:

The slower-learner will have greater success on a matching type of quiz than he will on a completion (fill-in) one, due to his inadequate spelling ability. (Twice) means he can use a certain answer two times. This type of quiz can be used before lecture and discussion as a method of checking study habits or after lecture and discussion as a means of checking what he has retained. With the slower-learner, the latter method is usually more successful.

Sample Ten-Point Quiz:

Match the terms to the questions. Use only capital letters.

_____1. Small particles which make up all matter are called _____.	A. Atom(s) (Twice)
_____2. The smallest particle of an element, with all the properties of that element, is _____.	B. Nucleus
_____3. The central part of an atom is called the _____.	C. Electrons (Twice)
_____4. Surrounding the nucleus of an atom, are one or more _____.	D. Hydrogen
_____5. The simplest element, because of its lack of neutrons, is _____.	E. Nuclear Energy
_____6. The energy released when atoms are split, is called _____.	F. Neutrons
_____7. Name the three particles which make	G. Protons
_____8. up the atom _____, _____	H. Matter
_____9. and _____.	
_____10. Anything that occupies space and has weight is _____.	

Sample Unit Quiz: Part I

Place the number of the answer listed below in the correct blank at the left of the question.

1. organic	11. one	21. nucleus	31. area
2. molecule	12. hypothesis	22. solid	32. volume
3. set free	13. 2.54	23. 1/1000	33. inertia
4. meter	14. science	24. 1000	34. decimal
5. balance	15. matter	25. liquid	35. friction
6. atom	16. electron(s)	26. gases	36. 454
7. variable	17. protons	27. absorbed	37. 1/10
8. gram	18. energy	28. kinetic	38. force
9. control	19. inorganic	29. potential	39. 1/100
10. liter	20. carbon	30. steam	40. gravity

___1. The smallest particle of a compound that still retains the properties of that compound is called ___.
___2. The smallest particle of an element that can exist and still have the properties of that element is ___.
___3. The unit of length in the metric system is the ___.
___4. The metric unit of weight is ___.
___5. The metric unit for measuring volume or size is the ___.
___6. One inch equals ___ centimeters.

___7. Classified knowledge gained from observation and experimentation as we shall study throughout the course is ___.
___8. Anything that occupies space and has weight is ___.
___9. The true nature of matter and ___ is still not entirely understood, so we can study them better by the properties they have, rather than by what they are.
___10. ___ matter has never been alive and is always non-living.
___11. Most organic matter will burn or char easily; this is because organic substances contain ___.
___12. Has a definite size and a definite shape ___.
___13. Have a definite size or volume, but their shape depends on the shape of the container into which they are put ___.
___14. ___ have neither a definite shape nor a definite volume.
___15. Matter may be changed from one form to another by raising or lowering the temperature--such as water plus heat equals ___.
___16. The product of three dimensions--length, width, and thickness--is usually the ___.
___17. The product of two dimensions--length and width--is ___.
___18. The chief advantage of the metric system is that it is a ___ system.
___19. The prefix deci means ___.
___20. The prefix centi means ___.
___21. The prefix kilo means ___.
___22. The prefix milli means ___.
___23. The force of attraction that pulls bodies toward the earth is called ___.
___24. A push, a pull, or a lift which acts on all forms of matter, tending to move them or to change their position or form, is a(n) ___.
___25. A pound is equal to approximately ___ grams.
___26. The resistance to motion which occurs when materials rub against each other is ___.
___27. The tendency of matter to remain at rest, or to continue in motion with uniform speed in a straight line, is expressed as ___.
___28. Energy which is stored up, as in coal, or in the water at the top of a dam, is ___ energy.
___29. Energy of motion is called ___ energy.
___30. Energy is ___ or given off when matter is changed from one form to another.
___31. The central part of the atom is called the ___.
___32. The central part of the atom contains two principal types or particles, neutrons and ___.
___33. Surrounding the nucleus of an atom, there are one or more ___.
___34. In following the scientific method, your offered suggestions for solving the problem are called the ___.
___35. The scientific method allows only ___ factor to be changed during the same trial of an experiment.
___36. Those factors that are not allowed to change in a controlled experiment are called the ___ factors.
___37. In a controlled experiment, the factor that is allowed to change is called the ___ factor.
___38. The ___ compare a known weight on one arm with the unknown weight you are trying to measure on the other arm.
___39. Is heat energy absorbed or set free when steam changes back to water?
___40. Living things are a form of matter classed as ___.

Sample Unit Quiz: Part II

Mark the following statements with a + sign if they are true; with a 0 sign if they are false.

____41. Energy can be created.
____42. Coal contains potential energy.
____43. When matter is changed from one form to another, energy is absorbed or set free.
____44. The atom contains electrons, protons, and neutrons.
____45. Matter can be changed from one form to another.
____46. Light is a form of matter.
____47. In a fire, heat energy is changed into chemical energy.
____48. In early times people solved problems in a systematic way.
____49. If two things happen at the same time, one must be the direct cause of the other.
____50. The original source of most of our energy is the sun.

Sample Essay Questions

To the Teacher:

These questions are designed to relate the facts and principles covered so that the student must test his understanding of the materials in the unit to answer the questions satisfactorily.

Part I: Answer two (2) of four (4) questions (50 points).

1. How could a scientific procedure be applied to discover the cause of an unknown disease which has become epidemic in a community?
2. Why is the metric system used universally in obtaining scientific data?
3. Describe the energy changes which occur when a substance changes state from a solid to a liquid. From a liquid to a gas.
4. Describe a physical change which electrical energy can produce in some matter. A chemical change.

Part II. Answer five (5) of seven (7) questions (50 points).

1. How do weight and mass differ?
2. Would the weight of an object on a planet larger than the earth be greater or less than on earth? Why?
3. Explain the difference between a general and special property of matter?
4. Describe five different ways in which man utilizes friction in his daily activities.
5. How does the force of gravity at the surface of the earth compare with the force of gravity at the center of the earth? Half-way to the center?
6. What is the difference between a physical and a chemical change in matter?
7. Describe three ways in which energy can be stored.

RATIONALE FOR TEACHING BIOLOGY TO THE TENTH GRADE SLOWER-LEARNER

The slower-learner at this grade level is the student at the crossroads. The year is one full of decisions and time is suddenly precious to him. If he feels that the classroom has nothing to offer except repeated failure, then his other activities will become the greater drawing card. The biology teacher may play an important role as to whether he becomes a stay-in or a drop-out. Biology, as a science, is initially one of observation wherein the student discovers. The slower-learner or unmotivated student may find new and interesting experiences in a biology classroom. Here he sees living things move, grow, reproduce, battle for existence and interact.

Motivation in biology can take place as the lesson opens; sometimes even before the class begins. The most effective motivation, generally, involves demonstrations that puzzle, challenge, or turn the student's mind back to his experiences and environment. A simple demonstration, assembled before class time, can be used for initiating techniques of inquiry, leading toward a process of learning and ending in a reasonable conclusion. If some sort of capsule demonstration is offered during the first formal class period, the slower-learner may return the following day anticipating a chance to express his opinion, or hoping he will be allowed to do an experiment himself.

Simply and bluntly put, any student, especially the slower-learner, tries hard when he likes and admires his teacher. Curiosity and interest in biology may be the <u>cause of</u> or the <u>result of</u> liking the teacher. The enthusiasm, interest, and fairness of the teacher is contagious. The teacher must let the slower-learner know immediately if he is on the right path toward the correct completion of a task. The teacher must inform this student of his progress, praise him for small successes, and let him know that he has a personal interest in him. In a sense, this is a type of reward and the simplest and most effective motivating device ever invented, but the most difficult to accomplish.

Due to the fact that time is a precious commodity to this student, study time outside the classroom may be at a premium. With the slower-learner it is probably more feasible to keep home assignment to a minimum, and let the classroom be the learning center. This student should be made aware of certain responsibilities that are a part of his learning situation. For example, he must have equipment with which to work (paper, pencil, or pen, etc.), he must do any and all assignments to the best of his ability, he must conform to certain modes of classroom conduct, and he must be in class and prepared to begin work promptly. He should not be reprimanded publicly but privately and calmly, because this student may already possess repugnance to any school situation.

If the teaching attitude toward the slower-learner has a positive approach, then the teacher can proceed from the following premises:

1. <u>Any</u> student can learn <u>some</u> important basic biological concepts.
2. This special student learns best if materials are presented in a carefully arranged sequence of small steps.
3. <u>Any</u> student learns best if the learning situation is one in which he is accepted as a person and a learner.
4. A flexible day-by-day program allows for maximum possible individual study.

5. Any student learns best those things which he finds meaningful to him.
6. Any student learns best when he is given the opportunity to apply simple "techniques of inquiry" (what, why, how)

If biology is experienced by any student not as a collection of facts, but as a means of personal engagement in the investigative process, in order to promote the understanding of basic concepts, then it is doubly important to percolate understanding for the slower-learner by the same procedure. If biology as a science is initially one of observation, then during any observation this student makes in the laboratory, he may discover the need for terms to describe what he sees. Real learning in biology occurs when the dialogue between the student and teacher takes place during the discussion of the findings resulting from an experimental investigation.

Reading is an essential part of the biology classroom procedure and much assistance must be given the slower-learner because of the difficult vocabulary. Much time must be spent selecting suitable reading materials for this student and much textbook material may have to be omitted or read aloud to the class. This presents a problem at the present because the biology classes are heterogeneous. If or when these classes are grouped homogeneously, the selection of a more suitable textbook will become necessary for the slower-learner. Thus the evaluation of this student's reading comprehension becomes difficult at this time.

Experiences in writing are necessary for the slower-learner in biology. He must learn to express his ideas concerning the investigation of some problem in the laboratory, but he should not be expected to express thoughts about more than one idea at a time. This student should be required to write frequent short impressions he gained from some observation. This is one of the many ways his efforts may be evaluated.

Many of the intangible outcomes for which the teacher of the slower-learner in biology will strive become very difficult to measure. How does one measure for change in attitude, an understanding of one's self, the ability to evaluate a situation, the ability to hypothesize, come to a conclusion or make a judgment? These are very lofty goals and perhaps the teacher can only point the slower-learner in the direction in which he hopes he will continue to travel.

This student will grow up in a world that is more and more space oriented, and problems of pollution and population will have to be faced squarely. However, the slower-learner cannot be expected to seek out the solution to these problems, but he can be expected to come to an understanding that these problems do exist and that it may be important to him to refrain from throwing debris into the waters of his vicinity. As is exampli-fied here, the evaluation of an understanding or an attitude must be worked out by the teacher, and boils down to: what has each student learned, and how can the teacher become aware of this learning?

Maintaining class size is the responsibility of the administration. In keeping with the needs of the slower-learner and the time consumed in directing each student during individual attention, the teacher should be allowed to work with a smaller number of students than in a class of average or above average. A class size of 20 would be feasible, and no more than 26 should be considered a maximum number for the success of a laboratory oriented biology class.

FIVE SIGNIFICANT TEACHING-LEARNING STEPS IN CONCEPT DEVELOPMENT FOR BIOLOGICAL SCIENCE
AREA OF STUDY: (ILLUSTRATIVE PURPOSES ONLY) INTERCHANGE OF MATTER AND ENERGY IN BIOLOGICAL SYSTEMS

Facts	Knowledges	Understandings	Concepts	Attitude
1.Matter is anything that occupies space and has weight. 2.Energy is the ability to do work.	1.Living things use matter and energy. 2.Energy and matter may be transformed but is not created or destroyed in living things.	1.Living things are products of their environment. 2.Living things are structures of matter and energy is required to organize these structures. 3.Communities of living things depend upon the chemical and physical relationships of the factors of their environment.	1.Living things carry on a constant interchange of matter and energy with their environment, including each other. 2.The green plants form the link between the inorganic and organic worlds and furnish the living world with all its food supply. 3.Living things are constantly changing through time, and some become extinct and new forms appear.	As humans interact with the environment, the wise use of this environment becomes important in order for life to continue to exist on earth.
3.The source of all energy is the sun. 4.All living things exist in an environment of living and non-living influences.	1.Living things require energy to live. 2.The environment supplies living things with the materials necessary to sustain life.			
5.Plants depend on water, soil, and air for life. 6.Animals eat plants and other animals for food.	1.Plants make food and furnish the animals with their food supply. 2.Plants and animals have structures with which they are able to carry on their life processes.	1.The organic matter composing living things is built from the inorganic materials of the environment. 2.Living things reorganize minerals, water, and organic materials into substances peculiar to the species and to the individual.		
7.Organic matter is any substance which contains the element carbon. 8.Inorganic matter is any substance which does not contain the element carbon.	1.Living things are composed of organic and inorganic matter in many different combinations. 2.Death and decay of living things replenish the soil with organic and inorganic materials.	3.The living world maintains a measure of stability by means of chemical cycles.		

COURSE CONTENT IN BIOLOGY:

The course content included in biology for the slower-learner should be an expansion of the themes emphasized in the life science taught at the junior high level and should proceed into greater understandings of these themes. The teacher must begin with what this student knows concerning the world of living things, and proceed to the unknown. Knowledge that this student has gained in his life science experiences may be rehashed but should not be retaught. From this approach, schemes for building concepts can be developed. For example, a simple system leading to conceptual thinking can be formed from what he knows, to more things he learns, to things he understands, to basic concepts, and finally to an attitude. Along the way as each student proceeds at his own pace, there will be variations of peaks of comprehension among members of the class, but the goal of the teacher must be to lead the slower-learner as far as the step of understanding or effective learning will not be achieved.

In all biology textbooks there are certain themes that cut across the units of study. In organizing these themes, the teacher will find that they form a pattern and become unified. There are many of these unifying themes which are applicable to the slower-learner. The following is a list of some themes from which choices may be made which will be applicable to the individual teaching situation:

1. There are a variety of living things and all living things change through time.
2. There is a unity of pattern found in all living things.
3. The organism interacts with its environment, including man.
4. The organism, whether simple or complex, is usually limited by its heredity and environment.
5. Organisms are classified according to their similiarities and differences.
6. There is a relationship between the structures found in organisms and the functions of these structures.
7. Organisms as individuals, groups, societies, or communities have certain behaviorial patterns which are common to all, but at the same time have those which are peculiar to each level of organization.
8. Man is an animal organism possessing the unity of pattern of all living things, yet different in many respects, and is unique in behavior patterns.
9. The history of scientific endeavors. (Polio vaccine discovery, Van Helmont's dirty shirt experiment, and many others have an interest value)
10. Scientists are continuously working with new ways to improve man and his environment.

It seems neither realistic nor practical to teach biology to the slower-learner (or any student) as an established body of knowledge nor as a body of facts to be memorized and soon forgotten. It is impossible and impractical to set up a course of study in its totality, because of the many variables that will exist while teaching. Any course for learning must be flexible in order to meet the demands of the day-by-day needs of the students involved. It seems more realistic and practical for the biology teachers in the Mexico schools to approach the course content problem through the unifying principles of: biology as a science of inquiry, uniqueness of life, inter-relations in the biosphere, and man as a biological species.

Then the teachers can interchange materials and ideas throughout the year 1966-1967. From this interchange an attempt will be made to build a teaching pattern for the slower-learner.

Samples of materials for teaching are presented as guidelines in the form of a demonstration, an investigation, a suggested film, student study question guide, and a short test.

To the Teacher:

The immediate purposes of this demonstration is to create interest, to initiate thinking, to make a tentative conclusion, and to encourage some of the students to try the investigation on their own.

This demonstration can be left in place for observation from day-to-day and many ramifications will radiate from it and to it and finally, at some point in the learning process during the conversation concerning the project, a student or a group of students will stumble upon the concept that an interaction exists between the plant and the fish.

Before the first formal class period, prepare a gallon glass jar as follows:

1. Add thoroughly washed sand to about two inches depth.
2. Place paper over the sand, in order to avoid undue water-sand mixing.
3. Fill the jar to about two-thirds full with lake water that has been allowed to stand in a container overnight.
4. Remove the paper, and let the jar remain uncovered overnight or until the water is reasonably clear. If the water seems clear without standing overnight, proceed to number 5.
5. Set two sprigs of elodea in the sand, add a small snail or two, and a small fish and screw the top on tight.
6. Place in a prominent place so all can see. Several jars may be prepared and placed at various vantage points depending upon the size of the class.

Suggested oral questions that could be discussed, but not teacher answered:

1. How long do you think the fish will live in the sealed jar?
2. If the fish is dead tomorrow, what do you think caused it to die?
3. If the fish is still alive tomorrow, how do you think he could live overnight?
4. Shall we see how long the fish will live without opening the jar.

Film - Introduction to Biology - University of Missouri Rental.

The Laboratory Investigation:

In Part I of the sample guide questions some discussion will take place concerning the microscope. Experiences in the manipulation of the microscope will be of great interest to the slower-learner. As previously mentioned there are many procedures and directions for the use of the microscope found in a variety of laboratory guides. Many of these can be used as guidelines with which the teacher can build a procedure suitable to the class situation. Printed directions in the hands of each student lend to more effective teaching of the manipulation of the microscope.

With the slower-learner, greater results will develop if these directions and materials are read to the student step by step as he performs them.

The procedures for the investigation of microscope use are very detailed, and it seems impractical to include them in this guide. Some of the materials, perhaps, that should be included in an investigation concerning microscope use are:

1. Setting up the microscope and its magnification
2. The parts of the microscope and their function
3. The care of the microscope
4. Preparing materials for microscopic study
   a. small newsprint letters a, b or e
   b. followed by any simple material of the teacher's choice--hair, thread, etc.
5. How to focus the microscope
6. Measurement of the microscopic field

With the slower-learner these procedures should be set up into Part I, including procedures 1 through 3, for one day's work and Part 2, including procedures 4 through 6, for the second day.

During the second subunit subject matter, the discussion of cell and cell structure is presented. Therefore, in order to demonstrate a format for student investigation, an example follows which is concerned with this second subunit.

Investigation: (Historical Value)

This investigation can easily be completed during one laboratory period. Emphasize to the students that they are repeating one of the great classical experiments which lead to the origin of the word cell and which eventually led to the knowledge that all living things are made up of cells. The purpose of this exercise is to acquaint the student with a simple cell; to observe the shape and size of a particular cell, and to repeat one of the greatest biological observations of all times.

The cork-tip filter on a cigarette may be substituted for the bottle cork listed to be used in the following investigation. After they are removed from cigarettes and soaked until the cork layer becomes detached, they provide ready made slices for the purpose of observation under the microscope, depending on whether an extra manual manipulation is desired or not. Perhaps some students prefer the manual slicing as described in the exercise and others may wish to use the cork-tip.

The following is a suggested format for presenting the investigation to each student and the teacher may have to explain some of the terms to the slower-learner. Naturally, this investigation must be preceded with an exercise involving the manipulation of the microscope.

Name_____
Hour_____

Biology I - Investigation (Number)

We will begin our observation of cells in much the same way it was first done in 1665 by Robert Hooke, an Englishman who studied nature. You will use some of the same things that he used, but some are better than he had to work with.

As you have already learned, the microscope has been greatly improved. The only thing that has not been improved is bottle cork. It has the same make-up now as it did the first time it was seen through a microscope.

Title: Cells as Robert Hooke first saw them.

Purpose: To look at the cork cells as an introduction to our study of the structure and function of a cell.

Materials:

Compound microscope	Slide and cover glass	Forceps
New single-edged razor blade	Medicine dropper	Water
Large bottle cork	Cleaning tissue	Paper towel

Procedure:

1. You must be very careful of your fingers.
2. Hold the cork firmly in one hand and, with a sharp, single-edged razor blade, slice a tissue-paper thin sliver from the top of the cork. You may have to try several times. With practice you can obtain a thin enough slice.
3. When you think you have a thin enough slice, cut a small two millimeter square piece from the thinnest area and place it on a piece of white paper so you can see it and not lose it.
4. With the medicine dropper place a drop of water on a clean slide.
5. With the forceps place your cork section in the drop of water, and add another drop of water on top of the cork section. This keeps too many air bubbles from forming which will hinder your observation.
6. Now, with your forceps, place your clean cover glass over the materials on your slide. Very gently press the cover glass firmly down.
7. If water seeps out around the cover glass, soak it up with a small piece of paper toweling. If there is not enough water do not remove the cover glass, but add a small amount of water with your medicine dropper along one edge of the cover glass. Give it time to make its way under the cover glass.
8. Observe the specimen under the low power of the microscope. Carefully move the slide around until you find the thinnest part. This gives you the clearest view of cork structure.
9. Remember you are looking at cells as they were seen for the first time by Robert Hooke. He is the man who named these small units and this name has been used ever since, when talking about the smallest whole unit that makes up the bodies of all plants and animals.

Draw a small section of the cork to show the size and shapes of the cells.

Discussion: Write a short answer to the following questions. After you have decided what you think is a correct answer, we will discuss our findings in class.

1. Are all your cork cells the same shape? Why or why not?
2. What do you see inside each cell?
3. Do the cells have spaces between them?
4. What part of the cell do you think would keep out the water when cork floats?
5. Do you think these cells are alive?
6. Do you think these cells have been alive sometime in the past?

Conclusion: What have you learned from this investigation?

A Sample of Student Guide Questions:

Usually a biology textbook introduces its reading content with a discussion of the nature of life as the first unit of study. Following are examples of questions that might be used as a guide by which the slower-learner can direct his attention. These questions encompass only a small section of the probable first unit. If study questions are in the hands of the slower-learner, he will feel more secure in knowing exactly what he is required to do as far as subject matter is concerned. These questions were formulated to follow the adopted textbook in biology.

With the slower-learner perhaps reading aloud by the teacher and voluntary students will be necessary because of the low reading ability of some students in a heterogeneous class. By reading aloud three or four of the guide questions can be blocked off and be "things to look for" while reading.

The expectancies desired from this first subunit of subject matter which has been correlated with other activities are as follows:

Part I: The Science of Life - Biology
Major Understandings:
1. Recent accelerated progress in biology has been aided by the development of new tools and achievements in related fields.
2. If reliable results are desired, investigations must include controls as well as experiments.
3. Pure science is conducted for the sake of knowledge alone; applied science makes use of the knowledge gained from pure science.

Part II: The Living Conditions
Major Understandings:
1. Only living things organize protoplasm.
2. Cells are the basic units of structure and function of living things.
3. Living things have a critical relationship with the environment and are capable of responding to its changes.
4. Origin is significant in separating living from nonliving material.

Major Concepts:
1. Life comes only from life and is a condition of protoplasm.
2. Many of the recent discoveries are the result of efforts of scientists of the world both past and present.
3. Certain variations may improve the chances of survival, others may not, and no organism voluntarily changes in order to survive; it survives because of the natural change.

Part I: The Science of Life - Biology

Biology is the study of all living plants and animals, including man, and the problems they have existing. Naturally, we cannot study all the living plants and animals but we can explore the world of living things and study some of them to see how they are alike, how they are different, how they behave, how they reproduce, and many other things about them.

In this first part of our study, we will find out how the word biology came about, what important men have made life better for us, what tools have made biology as a science expand, what some of the methods are that a scientist uses, and what problems are yet to be solved by scientists.

Guide Questions:

1. From what language did the word biology come?
2. From what words in this language did the word biology come. Tell what these words mean.
3. How did the science of biology begin? How fast has it developed?
4. Give some examples of scientific achievements that show that science discoveries do not belong to one nation alone.
5. Give some superstition sayings that you have heard.
6. Why do you think people are superstitious?
7. How can scientific thinking wipe out superstition?
8. What do you think a scientist is?
9. How has the attitude toward scientists changed since the years during which Edward Jenner lived?
10. How do the methods of a research method and a technical method differ in finding the solution to a problem?
11. How were both methods used in the fight against polio?
12. Which of the following would be classified as pure science and which is applied science?
    a. Studying the effects of X-ray on mice
    b. Destroying cancer tissue in humans by the use of X-ray
13. Biology covers so many fields of study that it has been subdivided into many smaller study areas. Using a tree as an example, tell how a biologist might examine it from the standpoint of each of the following: anatomy, physiology, ecology, taxonomy, and genetics.
14. What is the biologist's main tool for studying biology? To whom do we credit the improvement of this tool? You will have some experience in working with this tool when we complete the discussion of these questions.
    To the teacher: Many good formats are available to use for student directions in the manipulation of the microscope.
15. In what ways is an electron microscope better than a compound microscope for viewing some objects?
16. In what ways is a compound microscope better than an electron microscope for viewing some objects?

You have found some words that may be new to you. These words are what we call a way of biologically speaking. Each of the following statements on the left describe a word on the right. Select the word that each statement describes and write it in the space provided.

_____1.	The study of how eye color, leaf shape, or fingers are inherited	anatomy
_____2.	The study of the make-up (structures) of a plant or animal	control
_____3.	The study of the life activities (functions) of living things	ecology
_____4.	A scientific idea (an educated guess) to be proved or disproved	genetics
_____5.	A branch of biology which groups and names living things in an orderly manner	hypothesis
_____6.	The study of the relationship of living things to their environment	physiology
_____7.	Two experiments which are alike in all conditions except one factor	taxonomy
_____8.	The one factor that is different in duplicate experiments	variable

Part II: The Living Conditions

A definition of life is very difficult to make. If we explore some of the differences between the living and nonliving things, we may be able to find certain facts about life that are common to all living things and are not found in nonliving things. Also, in this study we will see how some ideas about life came about.

Guide Questions:

1. Instead of having to say plants and animals every time we talk about living things, what word can we use?
2. List some things that you know that are not alive and never have been.
3. Look about you, in the classroom and out the window, and make a list of things you see that are alive.
4. What are some things that are not alive but are the products of organisms?
5. Biologists have a principle they call biogensis. What is this principle?
6. Do you think the principle called biogensis could be true in all respects?
7. What do you think about the idea of spontaneous generation?
8. Do you think Van Helmont was a good scientist? Why or why not?
9. Why was Redi's experiment considered a good one?
10. How did Spallanzani show that Needlam's conclusions might have been wrong?
11. Who finally proved the principle of "life comes from other life".
12. What makes protoplasm different from anything else in the world?
13. Tell something about each way all organisms are alike.
14. In what way is growth of an organism different from growth of nonliving material?
15. List several conditions of the environment that influence organisms.
16. What is the relationship of variations to adaptations?

Biologically Speaking:

Select a word from the word list that each of the following statements describes and write it in the space provided.

_____1. The differences occurring within the offspring of the same kinds of organisms.

_____2. The belief that life can arise from nonliving materials

_____3. The ability to respond to a stimulus

_____4. The idea that life comes only from life

_____5. A complex ever-changing system of substances found only in living organisms

_____6. A term that refers to a complete and entire living thing

_____7. An adjustment to conditions in an environment

_____8. A factor that causes a response

adaptation
biogensis
irritability
organism
protoplasm
spontaneous generation
stimulus
variation

Formal Testing:

Any test, no matter what kind, is a sampling of tasks. Therefore, we can never hope to encompass the entire domain to be evaluated in a single test or in a battery of tests. However, there are certain guidelines that can be used in the construction of test items. Four outcomes are relevant to biology testing according to the BSCS. They are:

1. The ability to recall information and make minor reorganization of materials learned
2. The ability to show relations between different bodies of knowledge learned
3. The understanding of materials learned as demonstrated by ability to apply knowledge in new situations
4. The ability to use skills involved in an understanding of scientific problems

The first three outcomes concern themselves with the remembrance, organization, and application of knowledge and the slower-learner can only advance as far as his ability will allow. Great care and much time must be spent in the construction of tests for a heterogeneous group which includes slower-learners. It is doubtful that the slower-learner will be able to master the last mentioned outcome since it has to do with arriving at knowledge through systems of understanding as the outcome of scientific research.

In other words, a test should be constructed to include the following categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. The knowledge category emphasizes the process of remembering and the acquisition of factual information. The other categories constitute the various intellectual abilities and skills.

In test construction the item types, or format, of the questions to be asked should be determined by the nature of the material. The item types arranged from simple, or easier ones, to difficult usually give better results, especially for the slower-learner. Good tests are rarely written in a single sitting. Jot down possible questions and ideas as they occur to one in preparing or teaching a lesson. Keep a record of useful questions from class discussion or other tests; the job will get easier and the tests better with each year. The test should not be too easy, but easy enough that the slower-learner feels he has had reasonable success in mastering it.

Because homogeneous grouping is not a reality in our biology classes, the sample test which follows has been formulated to include enough easy but pertinent questions so that the slower-learner <u>will</u> experience reasonable success. The sample is a multiple-choice form and is the most flexible and useful, but at the same time the most time consuming and the most difficult to construct. If entirely irrelevant alternates are used, only one should be listed with any single question item; the other alternates should be possible or plausible. This sample is a midunit test and is short enough so that the items can be discussed one at a time, after the test is taken and student graded. The students can discuss why one response is good but not the best, why another is better, and so on. This test, then, can become a classroom "post mortem", and it becomes a teaching and reviewing instrument. This multiple-choice item type is for illustrative purposes only; a matching items section could very well be included for purposes of extending knowledge items. For the slower-learner the matching items should be no more than eight or ten in number.

Biology Test: The Science of Life and the Living Conditions

Directions: Each question in this test is followed by four choices for an answer. Read each choice carefully and then decide which one is the best answer. On a separate sheet of paper write the letter of the choice you have made for each.

1. The science that has to do with all living things is called:
   A. botany
   B. zoology
   C. biology
   D. geology

2. The surroundings and conditions in which an organism lives make up:
   A. a climate
   B. an environment
   C. a home
   D. an adaptation

3. A scientific guess or idea to be proved or disproved by experiment is:
   A. a method
   B. an attitude
   C. a hypothesis
   D. a technique

4. Organisms are alike in that they all possess:
   A. ability to move
   B. ability to feel
   C. thick cell walls
   D. protoplasm

5. The belief that horsehairs become horsehair snakes when placed in water is a:
   A. fact
   B. hypothesis
   C. superstition
   D. theory

6. Louis Pasteur disproved the idea of spontaneous generation in his experiment with:
   A. microorganisms
   B. maggots
   C. flies
   D. mice

7. A boy's protoplasm is more nearly like that of his:
   A. father
   B. mother
   C. sister
   D. identical twin

8. In testing of the Salk vaccine, the vaccine itself was the:
   A. hypothesis
   B. control
   C. data
   D. variable

9. A doctor wishing to test the blood of a person for the presence of some disease germ would use:
   A. the technical method
   B. the research method
   C. pure science
   D. basic research

10. Which of the following is not applied to all living things?
   A. ability to make food
   B. require a constant source of energy
   C. have a definite life span
   D. enlargement and replacement of parts by growth within

11. Reasonable success in the conquest of polio has come about by:
   A. the research of one man
   B. the constant work of three men at Harvard University
   C. the research of several men over a long period of time
   D. none of the above

12. Dirty shirts and wheat were placed together in each of several uncovered containers. Mice were observed in the containers a few days later. On the basis of this observation, one might conclude that spontaneous generation:
   A. is impossible
   B. caused the mice to appear
   C. produced the mice from the shirts
   D. produced the mice from the wheat

13. A scientist does which of the following when he performs an investigation:
    A. He states his problem clearly
    B. He suggests many probable answers
    C. He tests each problem answer
    D. all of the above

14. Because of its adaptations, an organism has:
    A. many body parts
    B. structures and functions that enable it to live successfully in its environment
    C. the ability to change its structure to fit changing environments
    D. more competition from other organisms

15. On the basis of what you learned while working with the microscope, any object you see through it will appear to be:
    A. out of shape
    B. out of focus
    C. upside down
    D. upside down and reversed

16. A biologist injected some blood from a diseased cow into a healthy cow. The healthy cow developed the same disease. Which, if any, of the following conclusions is justified?
    A. There is not enough evidence to reach any conclusion
    B. A microorganism caused the disease
    C. The disease is caused by some food both cows have eaten
    D. Something in the blood caused the disease

17. A fish was placed in a gallon jar containing lake water and some sprigs of elodea, then sealed. The fish was alive at the end of two weeks. The best tentative conclusion that can be made of this happening is:
    A. the fish stored up enough food and oxygen in its body to last two weeks
    B. there is probably some interaction between the fish and the plant
    C. the fish hasn't had time to use up all the oxygen dissolved in the water and can do without food for two weeks
    D. the lake water had enough food and oxygen in it to last for two weeks

18. A student placed 100 radish seeds in a glass-covered dish on moist blotting paper and placed the dish in the light. Another 100 seeds treated the same way were set beside the first dish and covered with a cardboard box. Of the seeds in the light, 94 sprouted, and those kept in the dark, only 90 sprouted. On the basis of this observation, it may correctly be concluded that:
    A. light is necessary for seeds to sprout
    B. sprouting of radish seeds takes place in either light or darkness
    C. water is necessary for seeds to sprout
    D. darkness is helpful to seed sprouting

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