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ABSTRACT

This report describes a program that aims to be fundamentally compete and would give students a thorough grounding in the arts, communication, media and computer skills, second languages, healthful living, mathematics, science, social studies, and vocational education. Its premise is that there is a common core of knowledge and skills that every child ought to command when he or she graduates from high school, but learning in the content areas should not be at the expense of instruction in skills that enable students to continue learning after graduation. The primary purposes of the basic curriculum are (1) to help students become responsible, productive citizens and (2) to help students achieve a sense of personal fulfillment. Following an introduction, part 2 describes the curriculum of each of four grade spans--K-3, 4-6, 7-8, and 9-12. For each grade span, the purpose of each curriculum area is described; and the content sequence and learning outcomes are outlined. Part 3 describes nonsubject area programs, e.g., programs for exceptional children, part 4 describes general standards, part 5 describes material support, part 6 describes district and school staffing ratios, and the appendix lists textbooks to be used. (DCS)

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THE

# BASIC EDUCATION PROGRAM

## FOR NORTH CAROLINA'S PUBLIC SCHOOLS

NORTH CAROLINA STATE BOARD OF EDUCATION  
RALEIGH, NORTH CAROLINA

Proposed to  
The North Carolina General Assembly

October 15, 1984

EA 017 345

The BASIC EDUCATION PROGRAM  
For North Carolina's Public Schools

North Carolina State Board of Education  
Raleigh, North Carolina

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## THE BASIC EDUCATION PROGRAM

### I. Introduction

The basic education program for the State of North Carolina is just that: basic. The pages that follow describe what those programs are, what their purpose is, and what they consist of. Because this program is basic, it does not describe an ideal education program. Rather, it attempts to describe a program of instruction which is fundamentally complete and which would give the student a thorough grounding in these areas: the arts, communication, media and computer skills, second languages, healthful living, mathematics, science, social studies, and vocational education.

The premise that there is a common core of knowledge and skills which every child ought to command when he or she graduates from high school is essential to the concept of a basic education program. As defined, a basic education program is not one dimensional. Indeed, it must address all aspects of a child's development, from kindergarten through high school, or else it cannot properly be termed basic. The arts, for example, are an essential part of the basic program--as essential, for instance, as mathematics or second languages are to the development of well-rounded citizens.

Another distinguishing feature of the basic education program is that it does not encourage learning in the content areas (such as mathematics and social studies) at the expense of instruction in areas such as library skills, which enable students to continue learning after their classroom days have ended. It is said that man's knowledge about the world in which we live roughly doubles every ten years. The child who is ill-equipped to continue learning after his or her formal education has ended will be far less able to adapt to changes at home and in the workplace.

Each of the following sections briefly describes the purpose of each component, the arts, social studies, etc., and outline the content sequence and learning outcomes for each of four grade spans: K-3, 4-6, 7-8, and 9-12. These grade spans were chosen because they conform to the most commonly accepted patterns of cognitive child development. The course of study outlined is a continuum, however, and the knowledge and skills imparted in each grade level build upon and reinforce what has previously been taught.

The program also includes--as it must, if it is to be successful--support services, such as guidance and psychological services; promotion standards; special programs, such as in-school suspension and compensatory education; programs for exceptional children; equipment and material needs; staffing ratios; and facilities standards.

## II. The Curriculum

### Purposes of the Basic Curriculum

The primary purposes of the basic curriculum are (1) to help students become responsible, productive citizens and (2) to help students achieve a sense of personal fulfillment. While it is sometimes difficult to separate which specific competencies a student must develop to become a responsible, productive citizen from those competencies a student must develop to achieve a sense of personal fulfillment, it is clear that there are competencies which a student must develop in order to meet both of these purposes.

Students must develop the specific competencies needed to gain employment or continue their education. These competencies include thinking and reasoning skills, media and computer skills, and the basic content knowledge provided within a core curriculum (arts education, communication skills, healthful living, mathematics, science, social studies, and vocational education).

To succeed in an ever-changing society, our children will need to develop the ability to maintain a positive attitude toward oneself, a sense of independence and responsibility for oneself, a positive attitude toward others including those who come from different cultures, a respect for the rights of others, a sensitivity to others needs and feelings, a sense of responsibility to others, a willingness to cooperate with others in working toward a common goal, and the ability to understand and cope with a constantly changing society.

In order to help students develop these competencies and become responsible, productive citizens who have a sense of personal fulfillment, the basic curriculum has been founded on commonly accepted principles of learning. First among these principles is the importance of integrating the curriculum--of emphasizing the understanding of concepts and processes over the mere acquisition of isolated facts. Stressing the mastery of integrated knowledge helps students (1) to move from what is known to an understanding of the unknown, (2) to see relationships and patterns and to begin to make generalizations, (3) to understand the interrelatedness of the subject areas and skills areas, and (4) to achieve a more immediate success with learning. An integrated curriculum helps students learn how to learn.

A second principle considered in the development of the basic curriculum is that learners are more likely to attempt those tasks at which they feel they can succeed, and which are relevant to their lives. If students are to be successful in school and if they are to pursue life-long learning, they must see learning as fulfilling and worthwhile. The basic curriculum is, therefore, a program of continuous learning based upon the individual student's needs, interests, and stages of development. The curriculum provides opportunities for the student (1) to develop self expression, (2) to learn to communicate effectively, (3) to maintain and develop both physical and emotional health, (4) to choose among curriculum electives, and (5) to become an active participant in

the learning process. The basic program emphasizes the importance of personalizing the curriculum and helping each student to reach his or her maximum potential.

The basic curriculum represents only the minimum program which should be provided for all children in North Carolina. The following subject area descriptions and program descriptions include the basic curriculum and suggest what would be desirable in going beyond the basic curriculum. These descriptions are summaries of a detailed competency-based curriculum (in the process of being developed) directed toward helping students to achieve responsible, productive citizenship and personal fulfillment. As the curriculum itself changes to meet the needs of a changing world, the State Board of Education will modify or expand, as necessary, the Basic Education Program. Unless noted otherwise, the appropriate class size in grades K-3 is 23; for grades 4-12, 26.

### Thinking and Reasoning Skills

To become productive, responsible citizens and to achieve a sense of personal fulfillment, students must develop their ability to think and reason. In order to think critically, students must develop their memory and the other skills that will enable them to translate, interpret, apply, analyze, synthesize, and evaluate information. Instruction in these skills occurs in every area of the curriculum throughout the school day. Students are helped to apply these skills to situations inside and outside the school.

The most basic thinking skills are memory and translation. Memory is the ability to remember specific facts or information, such as names, dates, events, or rules. Translation means that a student is able to recall information and to understand and express it in his or her own words.

Remembering or restating isolated facts does not necessarily require a student to reason. Students demonstrate that ability by interpreting information, applying what they learn in one situation to another, and analyzing information. A student might demonstrate the ability to interpret information by comparing two or more objects, or by explaining why a classroom rule was established. He or she might demonstrate the ability to apply information by explaining how the principle of representative government applies to the election of officers to the student council. A student who reads a newspaper editorial and is able to distinguish fact from opinion, point out unstated assumptions, and recognize bias would be demonstrating skills of analysis.

Students use skills of synthesis to create something unique or new to them. Synthesis is often equated to creativity. Composing a song, building a model house, or formulating a hypothesis for a science experiment are examples of this skill. Evaluation is making judgments based on facts or criteria, as opposed to forming opinions, which are subjective. Students serving as jurors during a mock trial use evaluative skills to pass judgment based on the evidence and testimony

presented. Students critiquing one another's writing using conventions of grammar and style are also using evaluative skills.

Instruction in thinking and reasoning skills is not a separate subject, but rather a part of every area of the basic curriculum. Students learn to use them and to apply them in each subject area at every grade level. By developing thinking and reasoning skills, students learn how to learn and can continue their education once their formal schooling has ended.

### Grades K-3

#### Arts

Active involvement in the variety of art media develops sensory perception which sensitizes the child to the physical environment, enabling him or her to see, feel and comprehend color, form, line and texture. Through heightened awareness, the child comes to value, use and derive pleasure from sight and touch. Direct personal experiences with art media develop skills that enable the child to communicate in visual form his or her ideas, images, symbols, personality and feelings. As the child is involved in viewing, discussing and analyzing art works, he or she formulates understanding and criteria for making judgments related to form, content, techniques and purpose. Awareness of artistic accomplishments of various cultures of the world enables the child to comprehend the place of art in relation to that culture and its meaning in the lives of people.

Dance, as a way of perceiving, understanding, responding and creating is developed within the child through the exploration of the component elements of dance. Exploring ways of using time, space and energy are basic to the child's discovery of the movement potential of the various body parts, to finding movement in natural phenomena, to interpreting sounds and forces, to rhythmical responses and to organizing and developing sequence and pattern. Arrangements are made for the individual to work alone, making his or her own spaces, as well as activities which require group interaction, organization, and responses. These experiences help to shape an awareness of dance as a way of being.

The creative, cognitive and aesthetic emphases are approached in drama through various avenues and the innate dramatic skills of the child are fostered and refined. Events which take place in the home provide prime acting situations for the young child, while school occurrences and stories read in class serve to expand the repertory. Creative dramatics, (acting-out and pantomime) is used as a teaching tool in all subject areas. Natural talents for pantomime and simple storytelling are sharpened at this point and directed toward transmitting to others with skill and confidence the characteristics and feelings of familiar animals and people. Simple shadow and sock puppetry is presented. The entire scope of the program leads to the development of observation and the capacity to work together.

Among the many areas of music with which a child is involved are the development of the singing voice, the ability to match pitches and the control of the voice as to soft and loud, starting and stopping; the ability to listen to music and to respond to it; the development of a rhythmic sense and the control and coordination of muscular responses and the ability to express music through use of instruments, working in cooperation with peers. In all of the music experiences, the child is helped to become aware of the elements of music and their importance in making it real to him or her. Melody, rhythm, harmony, form, timbre and dynamics--the basic elements of music help the child to shape a consciousness of the reality and power of music. Finally, the child is aided in developing an expanding body of music literature of all types, past and present, which are familiar and meaningful. All of these developments in conjunction with a growing ability to read the printed score combine to provide for the child the beginnings of a capacity to bring music into himself or herself and to produce it for others so that the reality of it can become a part of himself or herself.

### Communication Skills

The program of these early years is framed on the basis of a firm understanding of human development and learning principles. It is child centered with multi-sensory experiences that have meaning for young children and extend their awareness and understanding of the world around them through an interdisciplinary curriculum approach. It includes a variety of forms of written and oral expression which are accounts of personal and group experience, i.e. conversational group discussion, experience, stories, games, and play activities.

At this early stage in learning the focus of the instructional program in communication skills is on encouraging students to view themselves as successful users of the language. Opportunities are provided for them to:

- . be involved in successful learning experiences
- . interact with others
- . make choices
- . be involved in planning and evaluation
- . work independently, in small groups, and in large groups
- . participate in problem solving and firsthand experiences as a basis for language skills development
- . read and listen to a rich selection of children's literature
- . develop writing skills through participation in prewriting, writing, and rewriting experiences
- . record personal experiences and activities by writing or dictating
- . express ideas, thoughts, and feelings in a variety of ways: speaking, writing, art, music, and dramatics
- . be involved in activities with print and non-print media in realistic situations

As a result of their instruction, students should be able to demonstrate the following skills in reading, writing, and speaking:

### Reading

- . recognize basic sight words
- . identify words by applying structural analysis and phonetics
- . comprehend literally, interpretively, and critically what is read
- . read with enjoyment

### Writing

- . write complete sentences
- . use upper and lower case letters conventionally
- . spell, punctuate, and capitalize conventionally
- . write legibly

### Speaking

- . pronounce words properly and enunciate clearly
- . ask and answer questions, give directions and information, and express ideas and feelings appropriately and with clarity

### Listening

- . hear differences between and among sounds
- . listen to a story/directions and relate events/follow directions in sequence

### Viewing

- . perceive likenesses and differences between and among objects

### Healthful Living

The important elements of health/education at this level focus on: (1) learning about our own bodies--what the parts are, what they do, and why our bodies are important to us; (2) becoming aware of feelings, what they are called, and accepting their existence; (3) understanding relationships with other people, especially families and classmates; (4) comprehending what illness is and understanding that illness has causes; (5) learning the importance of nutrition, rest, exercise, sleep, disease-causing organisms; (6) assuming a portion of the responsibility for one's own health and safety; and (7) recognizing that healthful living contributes to a satisfying life.

The physical education program for students at the K-3 level emphasizes fundamental motor skills, dance, gymnastics, games, and fitness activities.

At this age, children are taught fire safety and other rules and regulations necessary for their safety and the safety of others. Lessons include traffic, home, school, work, and recreational safety.

## Mathematics

In grades K-3, students should have opportunities to participate in activities conducive to developing mathematical concepts. All early ideas of mathematics grow out of noting what happens in the world of objects. Logical reasoning ability develops through actual manipulation of objects. Thus, the major emphases at these grade levels should be placed on:

- activities which involve students in exploring spatial relationships in the world around them
- manipulation of real objects which give meaning to numbers
- exploration which leads to discovery of number relationships
- experimentation which enables students to put numbers together and to separate them to solve problems using what has been learned about numbers

Educationally sound use of computers and calculators will enhance and enrich the mathematics program at these grade levels.

## Media and Computer Skills

At this early level, students become familiar with the library--in some schools, media centers--and are able to assist with simple, routine tasks. Students learn fundamental library terminology and to choose, borrow, use, and return books and equipment. Learning how to use the library helps to develop communication skills, and teaches students to get along with and to respect the rights of others. Students learn to appreciate the forms of literature--nursery rhymes, fairy tales, for example--through literary experiences offered in the media program.

Even at this relatively young age, many students are able to learn fairly sophisticated computer skills. Students learn to describe the computer as a problem-solving machine and to recognize and be familiar with computer terminology and computer parts. Students gain experience in loading and running programs on microcomputers and can use introductory commands of a computer language to create and control computer shapes or a program output. The emphasis is on relating the use of computers to all subject areas. As students acquire computer skills, they begin to learn the limitations and capabilities of computers and their daily uses.

## Science

Emphasis at this level is placed on providing manipulative "hands-on" experiences for each child. Such experiences provide opportunity for the use and development of science skills and lead gradually to the understanding of basic science and environmental concepts. Coming in contact with and interacting with objects and observing events are most important. With these children, process is more important than a correct answer or a finished product. A balanced

program is provided by placing emphasis on the concepts related to each of the broad areas of science--biological, physical, earth-space. In selecting and planning experiences, careful attention is given to the physical and intellectual development of each child. Science at this level should always be a fun and "doing" experience.

### Second Languages

Second language learning at this level emphasizes the listening and speaking skills through activities which reflect the needs, abilities, and interests of students in this age group. Children learn to talk about their immediate environment while beginning to develop an awareness of another culture. The basic program contemplates instruction in one second language.

### Social Studies

The social studies program at the primary and early childhood level focuses on the expanding horizons of the young child as students inquire into physical and social environments as a way of developing positive concepts of self and others. The program is an active one: the way in which children learn at this level is as important as, and may determine, what children learn.

The program explores the widening social world of the child and his or her relationship with others in home, school, neighborhood, and community. This exploration has a "near-and-far" emphasis as well: children in studying the neighborhood, for instance, examine their own neighborhood and compare and contrast it to other neighborhoods in different times and places. Such "near-and-far" study helps students to better understand their own familiar environments as they examine the close-at-hand with environments and people unfamiliar to them.

As they study people, families and homes, schools, neighborhoods, and communities, students become aware of the interdependence in each of these social arrangements. They learn the roles and functions of family members and school, neighborhood, and community workers; and they learn how individuals, homes, and communities change over time.

As a result of the program at this level students should:

- . grow in self-reliance (in their ability to learn independently and take responsibility for their own actions)
- . become more sensitive to and accept the feelings of others
- . learn to read, follow, and interpret simple maps, globes, charts, and graphs
- . be able to recognize problems which are real to them and will be able to suggest ways of solving them
- . be able to locate and gather information pertinent to social studies at their level, to analyze this information, and to draw conclusions from it
- . begin to understand the concepts of interdependence, responsibility, and individual worth

## Grades 4-6

### Arts

At this level, personal experiences are translated in visual form from which the child can discover clues about himself or herself. Active involvement is encouraged in a variety of art media, such as drawing, painting, sculpture, graphics, ceramics, crafts, etc. Through the use of art materials such as crayons, paints, drawing instruments, inks, clay, etc., the child further develops his visual-communicative skills and derives satisfaction from demonstrating his ideas, images, symbols, personality and feelings; i.e., the construction of a visual interpretation of personal experience. The child continues to formulate his own understandings and criteria for making judgments related to form, content, techniques and purpose through involvement in viewing, discussing and analyzing art works.

With dance, the creative, cognitive and aesthetic emphases are developed through more refined uses of time, space and energy. Further development of motor skills, sense of timing, pattern and sequence allows the child to compose simple individual and group dances. The child's experience with dance literature is broadened with exposure to stories about dances and the history of dance, such as those relating to classic, ethnic, country and folk dance. More attention is given to music which accompanies these dances.

In drama, simple research projects are introduced to enable students to act out and convey successfully ideas learned from assigned reading in all subjects. More elaborate puppetry and masks are utilized. The ability to sort out, understand and convey to others, through voice, movement and facial expression, ideas and conceptions of a wide variety of events and stories is nurtured through practice.

The singing voice acquires a wide range and greater control and part-singing is introduced and developed. Rhythmic senses are sharpened through instrumental experience, through movement and through responses to increasingly more complex rhythms. Solo and ensemble experiences contribute to this development. Study of the elements of music continues here to develop basic and workable concepts of each element. Concepts of form and tone color, for example, now become more sharply defined. The child's experiences with music literature become increasingly broader to include, in addition to the songs in basic textbooks, other types of music, such as music of historical periods, classic and ethnic musics, popular music and contemporary expressions, such as electronic and chance music. Development of skills in reading the printed score is emphasized at this time in both vocal and instrumental applications. Melody flute, recorder, wind, percussion and stringed instrument study are appropriate at this time.

### Communication Skills

Continuing the development of communication processes begun at the primary level is critical in the middle grades. Reading, writing,

speaking, listening, and viewing are integrated into the total program in grades 4-6. Concrete, active learning experiences occur in independent and group situations which promote decision-making, peer rapport, cooperation, and responsibility. These experiences develop proficient readers, fluent writers, clear speakers, active listeners, and critical viewers.

### Reading

The reading process in grades 4-6 continues to build upon the K-3 reading experience. Students are ready for refinement, extension, and application of the reading skills previously acquired. Not all students approach this level of learning from the same developmental point or with the same degree of reading ability; therefore, programs of instruction must be designed for the varying degrees of development.

Reading is essentially a complex organization of higher mental processes, including evaluating, imagining, reasoning, drawing conclusions, and problem solving. Specific skills development includes increased content area vocabulary, use of structural analysis, and refinement in interpreting context clues. All levels of comprehension--literal, interpretive, and critical--are addressed. Refinement in the application of study skills and a broadening appreciation for literature complete the reading program.

### Writing

Oral and written expression evolves from real life experiences or inner feelings of students. Writing is generated as the student responds to activities and experiences that occur in the classroom and non-school environment. For the writing process to develop and expand, it is necessary to allow the student to write in an environment which encourages the use of these experiences. The opportunity to write for a real audience and from the context of actual involvement is crucial to the writing process. Writing that has a main idea, an appropriate and consistent point of view, and an appropriate beginning, middle, and ending is stressed. Instruction in conventional usage, grammar, spelling, punctuation, and capitalization continues, as does instruction in handwriting, with students moving from manuscript to cursive writing.

### Speaking

Good speaking is a key factor in success. Ideas and feelings are expressed by pronouncing words clearly, by controlling the voice, and by using clear, vivid, and exact language. Appropriate eye contact, body movements, and facial expressions are emphasized at the 4-6 level.

Students are able to use speech to ask and answer questions, to express feelings, attitudes, and opinions, to entertain and

give pleasure, to display courtesy, and to conform to social customs. Speaking ability is enhanced by engaging in task-related problem solving and group discussions. Students actively participate in group discussions, speak extemporaneously, plan and give speeches, and participate in drama. Emphasis is given to purpose, clarity, organization, and sensitivity to audiences.

### Listening

Listening is an integral part of the curriculum. It involves the ability to focus on something that is heard. Students have to listen in order to follow directions, interpret data, predict outcomes, classify, summarize and consolidate information. They listen critically for fact, fiction, opinion, bias, propaganda, and inference, to draw conclusions, and to make judgments about content. By listening creatively, students construct sensory images, develop solutions to problems, and formulate new ideas.

In addition to responding to standard speech situations, listening involves receiving and responding to non-speech sounds. It requires that ample time be given for active processing and reflecting of ideas, as well as for opportunities to express these ideas in reading, writing, speaking, and viewing.

### Viewing

There are wide differences among individuals in the ways that they learn and perform. These are the result of differences in skills, attitudes, perception, and prior experiences. For many, the medium of print may be the best and most effective means of communication. For individuals who may be predominately visual learners, the film or another media may be more effective. Learning experiences must be designed to accommodate these differences and to help students become more selective and objective in choosing what they view.

As students progress through school, viewing skills are taught and enhanced. Various skills such as viewing for information, comparison, interpretation, detail, recognition of reality and fantasy, and the broadening of imagination are addressed at this level.

### Healthful Living

The principal orientations of health education in the intermediate grades center around: (1) learning how the body and its parts work; (2) understanding how the body changes through growth and development; (3) comprehending that the development and functioning of the body and mind can be influenced by personal health practices, environment, taking drugs, and diseases; (4) practicing some of the elements of health-related decision-making (5) recognizing the responsibilities that each of us has in maintaining our own health and the health of the community in which we live; (6) learning to evaluate health-related information, products, and services; and (7) developing an awareness of the human life

cycle and its relationship to our health and physical growth and development.

The physical education program for students at the 4-6 level emphasizes exposure to the following activities:

Fundamental Motor Skills  
Dance  
Gymnastics  
Games  
Fitness Activities  
Recreational Activities

A complete safety instruction program for intermediate grades is developed around activities in the home, in traffic, at school, and during leisure time. Avoiding falls, preventing fires, observing safety rules during storms, obeying traffic rules, riding school buses, and administering first aid are emphasized at this age.

### Mathematics

In grades 4-6, there is a continuation of the major emphases in grades K-3 as the learner moves to the "skill establishment" stage. Activities, exploration, and experimentation include provisions for:

- . translating ideas into mathematical language and symbols
- . learning to make reasonable estimates
- . developing independence in solving meaningful problems
- . computing with whole numbers, fractions, and decimals
- . mastering basic number facts
- . learning geometric concepts
- . developing a variety of measurement skills
- . constructing and interpreting tables, charts and graphs
- . examining notions of elementary probability and statistics

The mathematics program at grades 4-6 should be enriched and enhanced through the use of calculators and computers.

### Media and Computer Skills

At this level, teachers review and reinforce library and media skills that students acquired earlier. Students develop new competencies in using materials and equipment and produce simple audiovisual materials. Students have more opportunities for independent and small-group activities.

Students continue to build their library and media skills vocabulary, to understand and use the resources of the library, including the card catalog and reference sources, to increase their understanding and enjoyment of diverse literary forms, to understand and apply simple production techniques, and to learn responsible citizenship.

Students in these grades add to their knowledge about computers. Besides improving their computer skills, students learn to recognize several early computing devices and to compare them to modern computers. Students begin to acquire a knowledge of how computers operate and can identify the three types of computers--mainframes, minis, and microcomputers--and can describe the uses and advantages of each. As in grades K-3, the emphasis is on relating the use of computers and computer skills to all subject areas.

### Science

There is a continuation of the utilization of skills and the development of major science concepts that were begun at the primary level. The program provides a sound base for future study. Balanced coverage is given to the broad areas of science--living things, matter and energy, earth, and space. Opportunity is provided for students to begin using scientific apparatus and audio-visual materials of a more sophisticated nature. Individual and small group exploratory activities are appropriate at this level. Greater use is made of outdoor resources and non-school resource personnel as a means for making the study of science more relevant to the student's own environment. The curriculum is experiential, with major emphasis on concrete learning experiences.

### Second Languages

If second language study is begun prior to grade 4, language study at this level continues to emphasize and build on the speaking and listening skills with new vocabulary and some structure. An introduction to reading and writing may be begun with students being given opportunities to see in writing what they can already say. Activities once again address the interests and intellectual development of the age group. Learning experiences encourage awareness, acceptance, and understanding of cultural differences. The basic program contemplates instruction in one second language.

### Social Studies

Instruction at this level emphasizes geography, people, and economy, but also relates them to history and government. The students become familiar with the physical make-up of their state, nation, hemisphere, and world regions. Through a study of representative states, nations or groups of nations, the courses focus on the people of all these regions--who they are, how they live, what contributions each makes to the global society.

Grades 4-6 continue the basic "near-to-far" and "near-and-far" content sequence begun in K-3. At this level studies begin with North Carolina and continue with studies of the United States, Canada, Latin America, Europe and the Soviet Union. In this 4-6 cycle world studies are organized primarily around concepts drawn from the disciplines of geography, economics, sociology, and anthropology.

Geographic concepts such as region, land forms, climate, resources; skills in using a variety of maps, globes, charts, and tables; and

development of map reading skills are emphasized. Skills programs at this level extend skills introduced in K-3 and develop new skills, particularly in finding, assembling, and using a variety of sources of information; in evaluating such information; and in using it to suggest solutions to problems.

In comparing states, comparing nations, and comparing people of different continents, the students see more similarities than differences among people. They see the contributions made by each world region. Concepts dealing with interdependence, unity, resource use, change and culture are of considerable importance. Studies of migration, settlement patterns, populations, communications, and methods of societal control are additional ideas included at this level.

Concepts of roles, institutions, and cultural conditioners and transmission are central to much of the study in 4-6. Students who leave the 4-6 program should understand that people all over the world live and behave as they do for reasons that are rational in their cultural context.

As a result of the program at this level, students will be able to answer the following key questions about their state, their nation, and their world:

- . Who are the people of this society?
- . What is their physical environment?
- . How do the people make a living?
- . How is their society organized?
- . How has their society changed over time?
- . What are their values?

#### Grades 7-8

#### Arts

Emphasis in the visual arts at this level is placed on exploratory involvement for the individual student. The program structure allows each student personally to investigate experiences which lead to initial steps in formulating personal opinions and judgments. Greater depth of study is featured and provision is made for longer periods of time with the art media. The student is taken through a wide range of exploratory activities designed to stimulate active participation in the creative process, e.g., the experience of the alteration of a clay product from the greenware state to bisque to glazing. Over these years, the student has the opportunity to explore actively the media of drawing, painting, sculpture, graphics, crafts, film-making, photography, etc. The student is encouraged to formulate opinions and judgments by developing the processes of selection and discrimination based on exposure to a wide variety of art activities, personal experiences and on knowledge gained by commitment to his or her own learning responsibilities. By involvement in the application of the technique and skill of perspective,

the student develops abilities through visual and mental insight about the physical world and his or her relationship to it.

Treatment of ideas, images, symbols and feelings in dance becomes more precise. The student learns to make discriminating choices which help to perfect his or her interpretation. More time is required to bring the student's dance to fruition. Opportunities exist for solo and ensemble work in composition as well as improvisational experiences. Students are encouraged to formulate their own opinions and judgments based on wide exposure to dance through films, live performance and other media. Discussion of different styles and techniques is encouraged as well as participation which allows the body to be involved in an introductory way with the various dance experiences, i.e., ballet, modern, etc. The students continue involvement in the creative process, but through participation in recreation dance, they begin to build a repertoire of dance which is usable for social functions. The recreational dance forms also heighten the body's response to rhythm.

The dramatic program at this level continues to build on and refine the creative capacities, knowledge and skills and aesthetic developments of the previous years. At this stage an added dimension occurs, augmenting simple creative dramatics and puppetry with theatre skills. Appropriate vocabulary and history of theatre is introduced. Greek and Roman theatre, Commedia dell'Arte, and the common terms of stage, lighting, curtains and scripts become familiar to the student. The rudiments of stage movement, timing, make-up and props are taught, and students are able to assist a teacher or director to guide creative efforts of fellow students. Readers Theatre is a valuable dramatic medium. Growing differences in abilities and interests characterize students at this age and for this reason provision is made for individual emphases. A broad emphasis for the junior high program is to help students to use drama more discriminately and productively in daily living. They can come to see drama as a means of pleasure and a way of communication and motivation; as a means of expanding their understanding of others; a confidence-builder; a form of pleasure; a means of communication and motivation; and a part of the experience of life as a whole.

The music program continues to build on and refine the creative capacities, knowledges and skills and aesthetic development of the previous years. A greater interest in and capability for musical composition now takes place. Growing functional involvement with the elements of music, with music literature and with reading printed scores builds on the broad foundation of previous years.

#### Communication Skills

The program at this grade designation continues the sequence from 4-6, emphasizing the same concepts, skills, and attitudes. Particular emphasis is placed upon the exploration of reading, writing, speaking, listening, and viewing as they pertain to living and functioning satisfactorily in the world. At this level, learners are led toward becoming increasingly analytical in their study of language, literature, and composition. A major aim is to lead learners toward further

awareness and enjoyment of English and Language Arts in all its forms and aspects.

By the end of grade eight, students should be able to:

### Reading

- . demonstrate reading comprehension by identifying words using roots, suffixes; recalling events in sequence from a reading passage
- . recognize main ideas and supporting details in a reading passage; identifies cause and effect relationships in a reading passage
- . recognize propaganda devices
- . locate and interpret information found in the encyclopedia, dictionary, almanac, Reader's Guide, atlas, and thesaurus
- . recognize the distinguishing characteristics of various types of literature such as poems, essays, short stories, plays, novels, and biographies

### Writing

- . write legible and coherent descriptive, narrative, and explanatory paragraphs using standard grammar, capitalization, spelling and punctuation
- . write legibly in cursive form

### Speaking

- . participate effectively in group discussions
- . make a two to three minute impromptu speech using appropriate volume, gestures, eye contact, and content

### Listening and Viewing

- . listen to and watch class lectures, demonstrations, and media to gather information
- . listen to tapes and records
- . listen to and view television and movies for enjoyment

### Healthful Living

Health education at the middle school and junior high levels emphasizes: (1) accepting personal responsibility for health-related decisions and their consequences; (2) learning skills that promote healthy relationships with others; (3) maintaining a positive self-image during adolescence; (4) understanding the nature of and reasons for the rapid physical and sexual changes taking place; (5) learning first aid skills; (6) understanding potential health-related problems of this age--venereal disease, drug, alcohol and tobacco abuse, emotional stress, pregnancy, nutrition, sexual behavior; and (7) selecting life goals and behavior compatible with these goals.

The physical education program for students at the 7-8 level emphasizes exposure to a wide variety of activities. By the end of grade eight, students should be able to:

Fitness Activities - Explain the principles of exercise and diet that contribute to the development of the totally fit individual. They should know the fitness value of a variety of activities and be able to design a personal fitness program based on individual needs and interests. Students should seek to attain a minimal level of physical fitness as indicated by the results of a standardized fitness test.

Dance - Perform basic steps in modern dance, folk dance, and social dance. Interested students should be able to attain minimum skills in ballet.

Gymnastics - Perform tumbling and apparatus activities at an intermediate level of proficiency.

Team Sports - Perform the skills necessary for participation in a minimum of three team sports (basketball, flag football, team handball, soccer, softball, volleyball, etc.).

Individual/Dual Sports - Perform the skills necessary for participating in a minimum of three individual or dual sports (badminton, bowling, golf, tennis, track and field, wrestling, etc.).

Outdoor Education - Demonstrate the knowledge and skill necessary for successful participation in hiking, camping, back-packing, and boating activities. Interested students should be able to pursue skill development in rock climbing, rappelling, challenge courses, and canoeing.

Swimming - Demonstrate beginning swimming skills.

At the secondary level, the emphasis is increasingly on developing in students a higher level of knowledge and behavior concerning safety and risk-taking. Students are encouraged to assume individual responsibility and group leadership. To assist in this, there are written guides on the knowledge, content, and learning objectives for these units.

## Mathematics

In the seventh and eighth grades, the skills developed in the elementary grades are reviewed and extended. The program offers students of all ability levels the opportunity to develop a better understanding of numbers, improve their ability to reason and be exposed to some exciting new areas of mathematics. The topics emphasized at these grade levels are arithmetic, beginning algebra, informal geometry, measurement, graphs, scale drawings, elementary probability and statistics, and problem solving. Use of calculators and computers to enhance and enrich the mathematics program is also encouraged.

## Media and Computer Skills

At this level, most emphasis is on reinforcing the skills learned previously, identifying deficiencies, and eliminating them. Students develop new competencies in using special references sources and skills in production techniques using more sophisticated equipment. Students also learn to identify propaganda or biased treatment of materials.

In addition to previously taught skills, students will learn to manage essential research tools independently, to document sources of information and to appreciate intellectual honesty and rigor, to conduct research using reliable sources, to become acquainted with career opportunities in the library and media fields, to further develop their personal interests and hobbies, and to assume greater responsibility for independent work.

Students continue to build on their knowledge of computers acquired in earlier grades. Students can list occupations that use or involve the use of computers and understand the job description and training for each of them. They can trace the history of computers and the effect their development has had on society. They can operate a microcomputer, are familiar with its on-off sequences, with loading, saving, and copying a program, and can direct program output to a printer. Students are also able to modify and run instructional programs designed for that purpose. Students develop their ability to organize data. The emphasis continues to be on computer applications in all subject areas.

## Science

In grades 7 and 8, the study of science is an integrated form of life, earth, and physical science; instructional time and depth of content are increased. Content should be presented from a student-centered perspective placing emphasis on the nature of science and inquiry. Instruction should be largely laboratory-oriented stressing the scientific method through application of process skills. Problem-solving and reasoning are essential experiences in the learning process. Scientific inquiry should deal with both academic and real world problems. Personal needs, societal issues, and career preparation should be interwoven into the course content. Energy, environmental concerns, and recent advances in technology should permeate the curriculum. (This section describes 7-8 science curriculum to be implemented in school year 1985-86.)

## Second Languages

When students have had previous language study, they will continue to develop communication skills, building on previous experiences. If students have a firm base in speaking and listening they can begin developing reading and writing skills. Formal grammar may also begin to be introduced. Activities which promote increased cross-cultural understanding are also included. The basic program contemplates instruction in one second language.

## Social Studies

The seventh grade study of Africa and Asia completes the world studies cycle begun in grade five with the study of North America and South America and continued in grade six with the study of Europe and the Soviet Union. The seventh grade study is designed to allow the students to examine societies dissimilar to those of the West in such a way as to broaden their understanding of people and places in an increasingly interdependent world. The study is also designed to help students acquire knowledge, understandings and skills necessary for dealing with additional cultural area studies in the high school social studies program. No attempt should be made to study every country of Africa and Asia. Countries and groups of people chosen for study should reflect the variety of cultures on the African and Asian Continents.

The study at the seventh grade level will draw heavily from the discipline of geography, focusing especially on cultural geography. The key questions at the end of the 4-6 description are applicable to the seventh grade study as well.

North Carolina's role in the history of the American nation is the subject of a year-long study at grade eight. The course covers the entire span of the area's experience, beginning with pre-history, the founding of the Carolina colony, and reaching into contemporary times. Among the historical topics included in the course are those--the personalities, localities, and events--which have given North Carolina a distinctive place in an emerging nation. Other topics are those which have linked North Carolina to the larger national experience, such as the struggle for independence, the establishment and development of national government and economy, the reform of the economic and social orders, and the Civil War and foreign wars,

As this is the first course in the social studies sequence devoted primarily to history, instruction will emphasize the method and value of historical studies. Instruction will include such concepts as the building of traditions that give continuity in society, the complex processes of change, and the forces, personalities, and events which underlie the transformation of society.

As a result of studies at this level students should:

- be more knowledgeable about the areas studied--the people, their environment, their work, their culture and their values
- gain an appreciation for the history and development of North Carolina
- gain an understanding of and respect for the cultural pluralism that characterizes the American experience
- use geographic and chronological skills
- practice the skills of problem-solving, information gathering, evaluation, and analysis
- participate in group learning activities, and have an increased sensitivity to the feelings of others



The content of these courses should include opportunities for choreography and ensemble work.

Additional elective courses might include:

Dance III	Dance History
Dance IV	Composition
Ballet I	Choreography
Ballet II	

A basic high school program in drama should include, at least, the following:

Theatre Arts I (including introduction to theatre)  
Theatre Arts II  
Technical Theatre I.

Additional elective courses might include:

Introduction to Theatre  
Technical Theatre II  
Acting I  
Advanced Acting  
Directing  
Theatre History

A basic high school program in music should include, at least, the following:

General Music (including history and appreciation)  
Vocal Music  
Instrumental Music

Additional elective courses might include:

Classical Piano	Stage Band
Electronic Music	Classical Guitar
Music Theory	Swing Choir

### Communication Skills

The program consists of the interrelated study of language, literature, and composition. Instruction in the skills of reading, writing, speaking, listening, viewing, and thinking continues. Language content includes the study of spelling, vocabulary, grammar, usage, dialects, dictionary and other reference tools, semantics, language history, and non-verbal language. The content of literature includes plot, setting, characterization, conceptual patterns and themes, point-of-view, writer's attitudes, genres, the language of literature, and literary history and the movements. The content of the composition program includes pre-composition (real and imaginary experiences as a source for composition), purpose, writer's understanding of audience, the whole composition (sentence sense, paragraphs, unity, coherence,

emphasis) types of composition, consistency in point-of-view, tone, and style, diction, mechanics of oral and written language, and revision.

Through advanced study of all elements of the program, students are led to critical understanding and application of communication skills which contribute to enjoyment and success in leisure and in work.

A basic high school program must include:

English I, English II, English III, English IV

The following elective course offerings are also recommended (these courses may not be substituted for English I, II, III, or IV):

Journalism  
Drama  
Humanities  
Speech

Developmental Reading  
Composition  
Creative Writing

### Healthful Living

Course emphases in health should reflect student interests and needs in: (1) learning effective family leadership skills; (2) learning to care for one's own children; (3) understanding the causes and effects of disease and methods of disease prevention and treatment; (4) learning about careers in health fields; (5) developing skills necessary to form healthy relationships; and (6) developing the skills necessary for a satisfying and healthy life.

The following offerings, as courses or units, must be a part of a high school program:

Parenting  
Cardio-pulmonary Resuscitation  
Chronic Diseases  
Family Living

Mental Health  
Drugs, Alcohol, & Tobacco  
Consumer Health  
Nutrition

Physical education at the senior high school level should be vigorous and challenging and should reflect individual needs and interests. At this level, knowledge of physical education should enable students to pursue activities from the following programs:

- . Games and Sports (team and individual)
- . Gymnastics (tumbling, floor exercises, apparatus)
- . Rhythms and Dance (modern, interpretive, folk and square dancing)
- . Physical Fitness (weight training, obstacle course, jogging, calisthenics, cycling)
- . Swimming

All areas of safety education are continued. Teachers are expected to use basic safety procedures in their daily activities. At these grade levels, increasing emphasis is given to traffic safety. It is expected that there will be no change in the funding of driver's training programs.

Other course offerings might include the following:

Advanced Driver Education for school bus, light delivery vehicle,  
and motorcycle drivers  
Occupational safety

### Mathematics

The aim of the high school mathematics curriculum is to provide every student with the mathematical content that is appropriate for them. The content has to be broad in scope. Some of the content has to be of the nature that students can use immediately in their role as consumers. It is essential that some of the mathematics taught at this level be appropriate for use by students having part-time employment. The content must also enable students to study higher level mathematics as a prerequisite. The mathematics curriculum then should help prepare students for entrance into many different careers and vocations.

For students having a high aptitude in mathematics, courses in Algebra I, Geometry, Algebra II, and Advanced Mathematics are offered. In some schools this program is enriched by such courses as Calculus and computer-related mathematics. An alternative program consists primarily of courses in General Mathematics, Introductory Algebra (Parts 1 and 2), Technical Mathematics, and Consumer Mathematics.

A basic high school mathematics program must include, at least, the following courses:

General Mathematics	Algebra I
Consumer Mathematics	Geometry
Introductory Algebra (Part 1)	Algebra II
Introductory Algebra (Part 2)	Advanced Mathematics

Other courses might include the following:

Technical Mathematics	Computer Applications
Trigonometry	Analytical Geometry
Advanced Algebra	Probability and Statistics
Advanced Placement Calculus	

### Media and Computer Skills

At this level, students will master library and media skills acquired previously and acquire advanced research skills using specialized reference tools. The emphasis is on using all available media to acquire skills in inquiry, analysis, organization, critical thinking, and problem-solving. Students learn to apply these skills in ways that strengthen their ability to continue to learn throughout life for personal growth, vocations, and recreation.

Students use specialized reference sources to aid critical analysis and conduct reliable research. They also learn to produce more

sophisticated audiovisual materials, to read discriminately for information and pleasure, and to identify and locate information necessary in their daily lives.

In these grades, students continue to apply knowledge acquired in earlier grades on microcomputers in the classroom. In addition to refining competencies they have already learned, students learn to identify the common programming languages, and their applications. Students also learn to select and use programs to enrich and extend the regular course of instruction, to determine applications for computers, and to use microcomputers for gathering, organizing, analyzing, processing, and evaluating information. As in earlier grade spans, the emphasis is on computer applications in all subject areas.

### Science

Beginning in grade 9 and continuing through grade 12, all students should be encouraged to enroll in elective science courses in addition to the basic graduation requirements. To increase student enrollment and provide a more comprehensive science curriculum, two types of courses are offered. One type, applied/technical, should be designed for the secondary student who is interested in a program which places emphasis on the practical and applied aspects of science. These courses should stress doing science through the use of laboratory work presenting science as a practical and relevant subject. Math requirements should be limited to basic functions. The courses should emphasize socially relevant topics and recent developments in science. The basic philosophy should reflect an attitude that science is a process of finding out about our universe, is understandable, and anyone can achieve and benefit from learning science. A wide variety of evaluation techniques should be employed for measuring achievement of course objectives. In determining grades, major emphasis should be placed on laboratory and project work that involves problem solving. Pencil and paper tests should play a minor role in evaluation.

The second type of courses should be designed for the more academically inclined student. Students electing those courses for graduation requirements should also be allowed to enroll in applied/technical courses as electives and vice versa. The academic courses should be challenging and reflect a philosophy of science as inquiry. Emphasis should be placed on using current technology as students investigate relevant problems through research and project work. The courses should demand competence in communications and mathematics skills. Course content should center on current developments and include socially relevant issues. Evaluation techniques should be varied and test questions should be phrased to require responses involving high-level thinking. Memorization of low-level factual information should be de-emphasized.

A basic high school science program must include, at least, the following courses:

### Academic Courses

Physical Science  
Biology  
Earth Science  
Chemistry  
Physics

### Applied/Technical Courses

Physical Science  
Biology  
Earth Science  
Chemistry  
Physics

Other elective courses might include the following:

Advanced Biology  
Advanced Chemistry  
Anatomy & Physiology  
Applied Science  
Astronomy

Geology  
Field Botany  
Environmental Studies  
Advanced Physics  
Independent Study

### Second Languages

At present, most language instruction in North Carolina begins at this level and therefore must emphasize the basic skills. However, when students have already had a full sequence of second language study, language learning at this level will concentrate on perfecting all the communication skills through oral and written practice, the formal study of grammar, and the examination of other cultures and literatures. Upper level courses can be varied and centered on the needs and interests of the particular students while continuing to emphasize skills development.

At each level of language learning, a student should achieve some proficiency in each skill. The following is an outline of what students should be able to do by the end of each year of a four year sequence at grades 9-12:

#### First Year

By the end of the first year, students should be able to exhibit the following skills:

- . Listening - understand memorized words and phrases in the areas of immediate needs
- . Speaking - satisfy immediate needs using learned words and phrases
- . Reading - comprehend the written language sufficiently to interpret set expressions in areas of immediate needs
- . Writing - write simple, fixed expressions and limited memorized materials

#### Second Year

By the end of the second year, students should be able to exhibit the following skills:

- . Listening - comprehend sufficiently some non-memorized material such as simple questions and answers in areas of basic survival needs and limited areas beyond basic needs
- . Speaking - satisfy basic survival needs and minimum courtesy requirements

- . Reading - comprehend sufficiently simple material in printed form which deals with basic survival or social needs
- . Writing - meet limited practical needs through recombination of learned vocabulary and structures into simple sentences

### Third Year

By the end of the third year, students should be able to exhibit the following skills:

- . Listening - comprehend sufficiently simple conversations about some survival needs and some limited social conventions in present, past, and future
- . Speaking - satisfy routine needs and limited social demands and maintain simple face-to-face conversations
- . Reading - comprehend sufficiently in printed form simple discourse for informative or social purposes including announcements, advertisements
- . Writing - meet some survival needs and social demands with short paragraphs on familiar topics grounded in personal experience

### Fourth Year

By the end of the fourth year, students should be able to exhibit the following skills:

- . Listening - comprehend sufficiently short conversations about most survival needs and some topics beyond those needs which utilize familiar vocabulary and common verb tense forms
- . Speaking - satisfy survival needs with developing language flexibility and sustains general conversation on factual topics beyond those needs
- . Reading - comprehend sufficiently simple paragraphs for personal communication, information or recreational purposes, and uncomplicated authentic prose and poetry
- . Writing - meet most survival needs and writes simple letters, brief synopses, and short compositions on familiar topics

Throughout all levels of language instruction, cultural experiences are provided for students to develop the ability to recognize, understand and appreciate the value system, life styles, behaviors, thought processes, and beliefs of other people; the interrelatedness of nations; and an acceptance of the commonalities and differences among people and nations. The basic program contemplates instruction in one second language.

### Social Studies

The basic social studies program in grades 9-12 includes courses in government, economics, world studies, United States history and elective courses from the social sciences and history.

This program focuses on economic, political, historical and social knowledge and skills needed by all students for becoming responsible

citizens in an interdependent world. This knowledge and skill will help form attitudes and values consistent with our democratic heritage and will be of both immediate and long-term importance.

As a result of studies in grades 9-12 students will:

- . analyze and evaluate economic, social, and political problems and policies
- . gain historical perspective
- . understand the basic concepts and methodology of the particular disciplines
- . recognize what it means to be an American citizen and understand and respect the cultural pluralism that characterizes the American experience
- . become more competent users of information about national and world affairs
- . gain a basic understanding of the American system of private enterprise
- . develop a respect for law and an understanding of rights and responsibilities of citizenship
- . continue to develop their critical thinking and research skills and to apply them in their study of history

The basic high school social studies program must include the following courses:

United States history  
World history, cultures, and geography  
Economics  
Government

and appropriate electives from the following list:

International studies	Humanities
Law and Justice	Advanced U. S. history
Psychology	Advanced world history
Sociology	Advanced government
Local and state history and government	

### Vocational Education

Beyond grades 7 and 8, vocational education is organized in a sequence of introductory, advanced, and specialized courses. In grades 9 and 10, advanced and specialized classroom instruction are combined with simulated work experiences and later, in grades 11 and 12, with on-the-job training. Students also do production work and community service projects, visit workplaces, shadow workers, and participate in internship and apprenticeship programs.

Introductory courses familiarize students with the range of occupations in each program area and with the skills needed to become proficient in them. Students also learn practical life skills. These

are elective courses open to all students in grades 9-12. Through them, students:

- . Learn about our system of free enterprise and the world of work
- . Learn to use computers and other technologies
- . Develop their skills in human relations and critical thinking
- . Develop leadership skills by participating in student organizations
- . Develop consumer skills and good safety habits

Advanced and specialized courses are designed for students who decide to enter an occupational cluster to gain saleable job skills, or who desire to continue occupational training at the postsecondary level. Clusters of advanced and specialized courses are offered in these program areas:

Agricultural Education  
Business and Office Education  
Marketing and Distributive Education  
Health Occupations Education  
Home Economics Education  
Industrial Arts Education  
Trade and Industrial Education

All courses are based on identified objectives, core content and competencies, and specified levels of proficiency. A basic high school vocational education program must include course sequences from no fewer than three of the program areas listed above. Courses and clusters of courses for each program area and appropriate class sizes are described in more detail in the "Vocational Education Program of Studies."

In addition to the basic high school vocational program offering, school districts must establish a vocational guidance, placement and follow-up program to assist students in planning and enrolling in an appropriate sequence of courses in grades 9-12.

### III. Programs Not Confined To Subject Areas

#### Exceptional Children

##### The Purpose of Programs for Exceptional Children

The primary purpose of exceptional children programs is to insure that handicapped and gifted learners develop mentally, physically and emotionally to the maximum extent possible through the provision of an appropriate, individualized education in the proper setting.

Exceptional children are (1) learners who because of permanent or temporary mental, physical or emotional handicaps need special education and are unable to have all their educational needs met in a regular class without special education or related services, or (2) learners who demonstrate or have the potential to demonstrate outstanding intellectual aptitude and specific academic ability and, in order to develop their abilities, may require differentiated educational services beyond those ordinarily provided by the regular school program. Classifications of exceptional children include those who are autistic, academically gifted, hearing impaired (deaf or hard of hearing), mentally handicapped (educable, trainable or severely/profoundly), multihandicapped, orthopedically impaired, other health impaired, pregnant, emotionally handicapped, specific learning disabled, speech-language impaired, and visually impaired (blind or partially sighted). See Section .1501 of Rules Governing Programs and Services for Children with Special Needs for definitions of these classifications.

Exceptional children programs and services may be classified as both instructional programs and instructional support services, depending upon the educational need of an individual learner.

##### Content Sequence and Learning Outcomes

Curricula for most exceptional learners follow the curricula designed for learners in general education. Emphasis must be given to instruction in communications, cultural arts, healthful living, mathematics, science, career and vocational education, depending upon the needs of the individual learner. Attention must focus upon cognitive, affective, psychomotor and vocational development within the curricular areas. The Individualized Education Program for the handicapped and the Group Education Program for the academically gifted, both of which are based upon a comprehensive assessment, are to state in writing the special curricular offerings to be provided to each exceptional learner.

Learning outcomes--knowledge, skills, concepts, understandings and attitudes--for the handicapped and the academically gifted will differ from learner to learner. For many exceptional learners, the same learning outcomes developed for learners in general education will be appropriate. Some exceptional learners will meet the learning outcomes at a different time and in a different manner than learners in general education. Some severely handicapped learners might not meet the

learning outcomes in general education and will need a totally different curriculum.

The purpose for adapting or changing curricula and teaching and learning strategies for exceptional learners is to assist the learners to achieve as much as is possible from their school experiences and be prepared to function as independently as is possible in their environments. Completion of school experience by handicapped learners is determined by meeting the requirements for graduation or by attaining the goals set forth in the Individualized Education Program, or both. In order to graduate, an exceptional learner must obtain the State-mandated units of credit based upon successful completion of course work and make a passing score on the State Competency Test.

The units of credit may be obtained by:

- . Enrolling the exceptional learners with non-exceptional learners into courses required for graduation.
- . Providing special courses for the exceptional learners and modifying the courses required for graduation to meet the particular needs of the learners. The courses may be taught by special education teachers and/or other teachers.
- . Providing units of credit for the courses needed by individual learners for graduation when they are enrolled in a block program. In a particular class, more than one course may be taught. For example, a teacher of the educable mentally handicapped may teach mathematics to some students and English to others during the same class period. These courses may be counted toward graduation.

Although the course requirements are the same for exceptional learners as with non-exceptional learners, the courses must be tailored on an individual basis to meet a learner's particular needs.

Teachers, principals and the school system's central office staff have the responsibility for evaluating the learning outcomes for exceptional learners just as they do for learners in general education. The primary purposes for the evaluation of learner outcomes are to determine gains made by individual learners and to determine changes that occur at class, school and system levels. Learning outcome data are useful in the formulation of goals, the derivation of measurable objectives from stated goals, and a systematic method for planning.

The Individualized Education Program for the handicapped requires objective criteria, evaluation procedures, and schedules for determining, on at least an annual basis, whether or not short-term instructional objectives have been achieved. The Group Education Program for the academically gifted requires annual goals and evaluation methods. Periodic probes to determine a learner's achievement may be made through various tests or methods: teacher observation, commercially-made and teacher-made tests, checklists, writing samples, product development, sociograms, and the like. Data-based teaching, with daily recording of learner responses, is most appropriate for determining degree of mastery.

All special education instruction provided to handicapped and academically gifted learners is to be individualized and designed to meet unique learning needs. Modification of instructional programs, creative instructional approaches, and individualized programming are necessary to meet the special needs of exceptional learners.

Autistic. Learners with autism are a very heterogeneous group in their intellectual abilities, ranging from profoundly mentally handicapped to normal or near normal levels of intelligence, but with most functioning at the mentally handicapped level of intellectual development. Regardless of level of intellectual ability, the characteristic problems in language and social relationships interfere with the school achievement of all learners with autism. The expected learning outcomes vary widely depending upon the abilities of the individual.

Emotionally Handicapped. If appropriate early intervention services are provided to the emotionally handicapped learner, that learner will generally be able to progress academically on grade level. If services are delayed, the emotionally handicapped learner may fall several grades below his or her indicated potential. Emotionally handicapped learners range in intelligence and achievement from very low to superior, and may score very high on standardized tests while failing the course work in school. Others may perform well in the course work, but score very low on standardized tests. It is imperative that the learning outcomes set for emotionally handicapped learners be determined on an individual basis according to the special behavioral, intellectual, perceptual and educational strengths and weaknesses of the learner.

Academically Gifted. These learners possess general intellectual ability and specific academic achievement. The determining factors for learning outcomes of gifted learners are program design and intent. A learner that is gifted in one academic subject or area may not be gifted in all subjects or areas. Academically gifted learners are expected to excel far beyond general education minimum competency goals and performance indicators established in any area of study in which they have been identified as gifted.

Hearing Impaired. Educational programming for the deaf or hard of hearing learner has the same learning outcomes as those of hearing learners. The curricular requirements of the regular course of study are appropriate for determining competency goals and performance indicators for the hearing impaired learner. Exceptions may be indicated depending upon the extent of the impairment and the functioning level of the learner.

Mentally Handicapped. The skills, knowledge and attitudes developed for learners in general education may be the same for many educable mentally handicapped learners and for some trainable mentally handicapped learners. In addition to competency goals in basic skills areas, these learners require competency goals in self-care, personal development and selected areas of vocational education. Learners who are severely or pro-foundly mentally handicapped require the establishment of learning outcomes that are different from those developed by general education.

Multihandicapped. Learning outcomes for some multihandicapped learners may be the same as for those learners in general education. Generally, multihandicapped learners possess severe types of handicapping conditions that require learning outcomes that are much the same as those for the severely mentally handicapped. The type and severity of the various handicapping conditions are important factors in determining competency goals for these learners.

Orthopedically Impaired, Other Health Impaired, Speech-Language Impaired, and Visually Impaired. Learners with these handicapping conditions are basically the same as non-handicapped learners; therefore, the learning outcomes developed for general education are usually appropriate. Exceptions may be indicated depending upon the extent of the impairment and the functioning level of the learner.

Specific Learning Disabled. Learning outcomes of general education will be the same for most learners with specific learning disabilities. However, the performance indicators may often differ. Instruction may be provided on a one-to-one basis, in small groups or in large groups, with most learners needing a combination of these approaches during the school day. Attention must be given to the need for individualization, with instruction designed in keeping with each learner's preferred learning modality.

The necessary components for exceptional children programs include (1) identification, referral, screening, evaluation and placement of learners, (2) parental involvement in evaluation and placement processes, (3) development of Individualized Education Programs or Group Education Programs, (4) due process rights for parents, (5) maintenance of confidentiality of records and of a data collection system, and (6) provision of instruction and related services.

Instruction is based upon the curricula needs (academic, affective and vocational) of each learner. Instruction varies from learner to learner; curriculum may vary from learner to learner. Grade levels often have little meaning for many handicapped learners, especially those with the more severe types of handicapping conditions, including those with cognitive defects.

For those handicapped students for whom grade-level recognition may be significant, the following descriptions may be appropriate:

#### Grades K-3

The curriculum for the handicapped learner, in general, should revolve around health, mental and physical; social experiences; readiness activities; visual and auditory discrimination; language; speech; quantitative concepts; motor skills; and familiarity with common materials, their uses and methods of using them. These are not taught effectively in isolation, but rather should be taught through the use of units and activities. In this way meaning is associated with the development of skills and concepts, a need for them is present, and an opportunity for their application at hand.

### Grades 4-6

The curriculum is developed around two major areas of emphasis-- improvement in general living skills and development of proficiency in the understanding and use of academic skills. The areas are taught as integrated activities rather than apart from each other.

### Grades 7-8

The curriculum offers a consolidation of social and academic skills learned at the previous levels. Greater and more varied application of academic skills, prevocational skills and social experiences are presented. Efforts are made to establish readiness for learning about jobs and job requirements.

### Grades 9-12

The curriculum at this level draws upon all that has been taught to the learner and emphasizes the provision of experiences and the development of concepts and attitudes required in wholesome, contributing community membership. Extensive attention must be given to occupations and employment.

A basic high school (handicapped children) program should include the following:

- Four Units in English
- Two Units in Mathematics
- Two Units in Social Studies
- Two Units in Science
- One Unit in Physical Education and Health
- Nine units based upon the Individualized Education Program

### Staffing

The following teacher to student ratios are recommended:

<u>Category</u>	<u>Degree</u>	<u>Recommended Ratios</u>
Educable Mentally Handicapped	Mild	1:35
	Moderate	1:25
	Severe	1:12
Trainable Mentally Handicapped	Mild, Moderate, & Severe	1:10
	Severely/Profoundly Handicapped	Mild, Moderate, & Severe
Multiply Handicapped/Deaf-Blind	Mild & Moderate	1:10
	Severe	1:7

Learning Disabled	Mild	1:35
	Moderate	1:25
	Severe	1:12
Emotionally Handicapped	Mild	1:20
	Moderate	1:16
	Severe	1:8
Physically Handicapped	Mild	1:15
	Moderate	1:15
	Severe	1:12
Hearing Impaired	Mild	1:20
	Moderate	1:20
	Severe	1:6
Speech Impaired	Mild	1:40
	Moderate	1:12
	Severe	1:10
	Supportive*	1:25
Visually Impaired	Mild	1:35
	Moderate	1:25
	Severe	1:5
Other Health Impaired	Mild	1:20
	Moderate	1:16
	Severe	1:12
Pregnant Students		1:20
Gifted Students		
Regular Class/Supportive		1:75
Part-time Sp. Class		1:100
Self-contained		1:26

\*Supportive services for children in other classes for the handicapped.

#### Extended Day Program

The Extended Day Program offered in North Carolina is an alternative for students who have difficulty during the traditional school day. The program is designed to serve students, ages 16-19, who have needs which cannot be met between the traditional school hours of 8:00 a.m. - 3:00 p.m. Smaller class size, individualized instruction and an informal learning environment are the cornerstones for success of the program. The extended day program, an extension of the regular school day, should provide the following:

- re-entry into the regular school day, if appropriate
- development of opportunities for post-secondary training
- employment opportunities
- graduation from high school

There is a definite need to expand the extended day program for students in the middle grades. A preventive approach, dealing with potential problems as they develop, is necessary for long term success. The ideal program should be expanded to a larger population of students with a wider variety of instructional programs, encouraging full utilization of facilities and human resources.

### Remedial and Compensatory Efforts

North Carolina's remediation program is designed to assist students on the high school level in completing the requirements of the North Carolina Competency Test by providing them additional assistance in passing the test. The remediation program includes state appropriated funds for personnel (teachers, aides, tutors), employee benefits, instructional supplies and equipment.

Compensatory education programs provide assistance to students who need additional help to succeed in school, particularly in basic academic areas. Not all eligible children are served, because the program is supported only by federal dollars.

### In-School Suspension Program

In-school suspension is a better alternative for dealing with disruptive student behavior in grades 7-12 than out-of-school suspension or expulsion. When the student is removed from the total school experience (i.e., out-of-school suspension or expulsion), the student receives guidance, counseling, or assistance in examining his or her behavior--the consequences of his or her action. In-school suspension program impact on students where teachers and school officials may provide student experiences for:

- . Modifying of unacceptable behavior of students in such a way as to allow them to function successfully in the regular classroom.
- . Counseling to help students better understand the nature of their personal problems through individual and group counseling.
- . Continuing their regular academic work while being disciplined.
- . Formulating a solution to the student's behavior problem through conferences of all concerned . . . the parent(s), counselor, student, and other appropriate individuals.

### Student Services

Student services programs focus on the well-being of students and on helping to prevent or correct any conditions which might interfere with learning.

## Screening

Each school district should have a comprehensive pre-school screening program to identify students with learning problems and who should be referred for evaluation or further observation. The areas to be screened include speech, hearing, sight, and fine and gross motor skills.

## Guidance and Counseling Programs

### School counselors:

- . Provide individual counseling for students
- . Share information with school personnel, parents, and community agencies about the needs and concerns of students
- . Provide group counseling for students
- . Assist students in educational and vocational placement based on their aptitudes, achievements, and interests
- . Refer students to community agencies for services

## School Social Work Services

### School social workers:

- . Provide a liaison between the school, home, and community resources in resolving problems of school adjustment and attendance
- . Help students, their families and school in crisis situations by reducing tensions, providing support and offering alternatives for action.
- . Serve as a student advocate to ensure that the student's educational, legal and personal rights are not violated.
- . Refer students to community agencies for help in problems such as substance abuse, family violence, and individual and family counseling

## School Psychological Services

School psychological services are provided in the areas of prevention, early intervention, and remediation.

### Direct services for students, parents and school personnel include:

- . Consulting with parents, teachers, and administrators about the educational, behavioral, and mental health needs of students
- . Providing services such as counseling, behavior management, social skills training, and crisis intervention
- . Assessing students to determine their instructional needs, strengths and weaknesses, learning styles, etc.

### Indirect services include:

- . Coordinating group testing programs and assisting school officials to identify student needs

- . Coordinating services from other community agencies to meet the educational and mental health needs of students
- . Disseminating research findings to teachers and staff on topics such as effective instruction and student learning styles

### Health Services

Health services promote physical and mental well-being of children by:

- . Providing health counseling
- . Providing assessments and referrals concerning health care needs
- . Assisting in disease prevention and control
- . Monitoring health hazards and their removal
- . Educating students to develop positive health habits
- . Removing barriers to community health services

### Human Relations

Human relations services include:

- . Helping teachers and school principals to develop effective classroom management techniques and strategies
- . Helping teachers and school principals to promote a positive school climate which encourages student achievement and growth

### Child Nutrition

The child nutrition program helps to provide all students access to nutritionally sound meals each school day. These meals promote the health and well-being of all students and enable them to take full advantage of their schooling. The child nutrition program reinforces activities promoting good eating habits.

All school districts participate in federally-funded child nutrition programs, which provide breakfasts and lunches at full, reduced, or free prices based on federal guidelines.

Federal funds available through the Nutrition Education and Training program are used for developing instructional resources and for training teachers and school food service personnel. All resources used in the classroom are developed in accordance with competency goals and objectives at each grade level, are provided at no cost to school districts, and support other nutrition education efforts in the classroom.

### Library/Media Programs

#### Resources

Print materials, nonprint materials, and accompanying equipment comprise resources found in the library/media collection.

The library/media collection provides supplementary resources in every curricular area compatible with the diverse learning styles and

interests of individual students at all levels of ability and maturity. It also provides for leisure interests and professional use.

### Selection

Selection of all resources is an important step in developing a collection and should be based on sound principles formulated to carry out the school's philosophy, objectives and curricular specifications.

In compliance with North Carolina General Statute 115 C-98(b), each local board of education has adopted a system-wide Selection Policy that includes criteria and procedures for evaluating and selecting resources for its schools and a procedure for handling challenged materials.

The evaluation and selection of resources should be a cooperative activity of all school personnel and coordinated by the school's Media Advisory Committee in keeping with the adopted Selection Policy.

In order to maintain a relevant collection, obsolete and inappropriate items should be routinely removed from the collection.

Educational equipment should be selected from State contracts listing those items.

### Organization

All of the school's resources need to be organized and arranged so that students and teachers can obtain any item quickly and easily. This organization includes classifying, cataloging and providing in a unified card catalog entries for all materials. The inventory of the school's entire holdings of both instructional materials and equipment should be coordinated through the school's library/media center.

Periodic review of the circulation, loan and scheduling policies is encouraged to ensure that no obstacles inhibit the use of the school's library/media collection.

### Quantitative Guidelines

Establishing meaningful quantitative guidelines for library/media collections is difficult because instructional programs, teaching-learning strategies and school-wide objectives vary.

Any school conducting an instructional program must have a minimum of materials and equipment. In the school with an enrollment of fewer than 400 students, the library/media collection must have as much scope and variety as the school with an enrollment of more than 400 students.

Quantities below indicate a basic collection for an effective library/media program for 400 students. These stated quantities refer to quality, up-to-date resources. Do not count obsolete, badly worn and inappropriate materials that should be removed from the collection. Also, exclude excessive duplicate materials.

The interdependence of materials and equipment must be recognized as collections are planned. Materials in many different formats can be used only with the appropriate equipment.

Printed Materials

	<u>Per Student</u>	<u>Per Media Center</u>
Books	10	
Magazines		15-30
. provide an index to magazines		
. keep back issues 3-5 years		
Newspapers		1-2
. provide local, state and national coverage		
. at least one daily		
Information File		1
Community Resource File		1
Art Reproductions		appropriately represented
. can be a part of Information File		
. represent various artists, subjects, periods		
Globes		1+
. globes compatible with abilities and skills of students and subjects taught		
Maps		appropriately represented
. consider merits of overhead transparency maps		
Study Prints		appropriately represented
. includes charts, posters, graphs		

Nonprint Materials And Accompanying Equipment

A balance between printed and nonprint materials is basic. In order to determine their needs, schools should identify major units of study within the curriculum. These identified curricular areas represent the need for appropriate nonprint, as well as print, resources. Nonprint resources which should be appropriately represented include:

Materials

Audio Recordings  
-disc and cassette tapes

Filmstrips  
-silent and sound

Microforms (secondary schools)  
-microfilm and microfiche

Slides (2" x 2")

Supporting Equipment

Record Players  
Tape Recorders, cassette  
Tape Players, cassette  
earphones and jackboxes

Filmstrip Projectors  
Filmstrip Viewers

Microform Readers  
Microform Reader-Printers

Slide Viewers  
Slide Projectors

Films, 16mm sound  
Transparencies  
School Television Programs

16mm Film Projectors  
Overhead Projectors  
Antenna and/or Cable Hook Up  
Television Monitor/Receivers  
with carts  
Videocassette Recorder

Microcomputer Courseware

Microcomputer Systems,  
including appropriate  
furniture for use

Each school needs an AM/FM radio. Audiovisual carts and projection screens should be in sufficient quantities to facilitate the use of non-print resources. (White walls with matte finish may be used for projecting visuals).

### Production Equipment

Any instructional programs requires a great number of locally produced or teacher-made materials that must be, for the most part, tailored to fit specific situations. For these special purposes, every school needs at least the basic equipment necessary for library/media professionals and teachers to prepare their own materials.

#### Materials To Be Produced

Laminated pictures and/or  
mounted pictures

Overhead transparencies  
Slides without camera

Recording, audio

2" x 2" slides, photographs

Programmed materials

Computer courseware

School television programs,  
recorded off air

#### Production Equipment Needed

Dry-mount press; tacking  
iron; paper cutter, 30"-36"  
blade minimum; laminating  
machine

Thermal copier; lettering  
devices; large-letter  
typewriter

Tape recorder; microphone

Instamatic camera (with  
prefocused copystand,  
preferred)

Typewriter, standard;  
duplicating machine, spirit  
or mimeograph

Computer system; blank  
diskettes

Videocassette recorder;  
blank videocassettes

### Intramurals

Interested students in grades 4-12 will be able to participate in a wide range of intramural activities. The program is an extension of the physical education instructional program.

### Sports Medicine

The sports medicine program is a support service available to all schools in North Carolina's public schools. The program provides services to persons involved in interscholastic athletics, intramurals, and physical education at the secondary level as well as students or teachers who need emergency medical services due to sudden illness or injury. Although athletic trainers are only required in the high schools, it is recommended provisions be made to provide students in the middle/junior high schools and elementary schools with treatment and conditioning programs. To accomplish this goal, it is suggested that the person in the middle/junior high schools involved with athletics, intramurals, and physical education be trained in basic first aid and CPR by the high school athletic trainer. It is further recommended that a minimum of two persons in each elementary school be trained in these important areas of emergency care.

#### IV. General Standards

##### Promotion Standards

The state will require mastery of specific competencies before a student is promoted from grades 3, 6, and 8. Meeting the state standards, however, does not guarantee promotion. A student must also meet local standards. All local school districts must develop their own promotion policies, submit them to the State Board of Education for information by August 1, 1986, and subsequently report any changes. The State Board of Education will develop a model promotion policy, which local boards may adopt at their discretion. The State Board of Education will, at the request of school districts developing their own policies provide them technical assistance. The State Board suggests that local units consider factors such as teachers' judgment, grades, attendance, and maturity in designing their policies.

The state standard will not apply to students already retained in the same grade span or certified as trainable mentally handicapped, educable mentally handicapped, or severely/profoundly mentally handicapped. Students otherwise handicapped may also be exempted according to standards and procedures developed by the State Board of Education.

The promotion standards and minimum competencies which follow are based upon the curriculum and courses of instruction listed and described in the Basic Education Program. One of the attributes of an effective curriculum is that it evolves as the needs of students change in order to meet the demands of a rapidly changing world. Therefore, standards of promotion and minimum competencies must also change if they are to continue to reflect the curriculum. The State Board of Education will modify state promotion standards and minimum competencies as necessary to be consistent with the standard course of study as described in the Basic Education Program. When the State Board of Education adds curricular areas to the Annual Testing Program, the Board shall add minimum competencies students should meet in these areas as a part of the promotion standards.

The state standard will be implemented in two phases:

Phase One. A student in grade 3, 6, or 8 who scores at or above the 25th percentile (total battery) in the Annual Testing Program meets the state standard and must then meet local requirements. A student who scores at the 24th percentile or below enters phase two.

Phase Two. In phase two, a student is tested for mastery of the competencies listed below on a test developed by the State Board of Education. Students who demonstrate mastery meet state standards and then must meet local requirements. Students who do not demonstrate mastery must be retained or attend a state-supported summer remediation program. In order to reduce retentions, the summer program will be available to all grades, K-12. Students

attending the summer program will be tested again at the end of the program. Those who demonstrate mastery will have met state standards and may be promoted if they have also met local requirements. Those who have not demonstrated mastery will be retained.

A student who is retained as a consequence of failing to meet State or local standards shall receive a comprehensive educational assessment. Findings of the assessment shall be used in determining the appropriate remediation goals and programs.

Local units shall develop special procedures to identify high risk students. The State Board of Education shall provide appropriate technical assistance in these efforts. High risk students are those who score at or below the 25th percentile on a standardized achievement test, or are judged by their teachers to be in danger of failing to achieve the minimum competencies specified by the State Board of Education. Emphasis should be placed on identifying high risk students at grades 1, 2, 5, and 7.

School personnel (including teachers, instructional support staff, and administrators) shall consider how the curriculum content and instructional methods may be modified within the regular classroom to benefit high risk students.

## Minimum Competencies

### Third Grade

#### Reading/Language Arts

1. Demonstrate mastery of vocabulary, word attack, and comprehension skills in basal readers through the second grade
2. Recognize the "who," "what," "when," "where," and main idea in an oral and written selection on second grade reading level
3. Spell correctly at least 50 words from a list of "basic" or "survival" words
4. Recognize and use complete sentences in written and oral forms
5. Identify subjects and predicates in sentences
6. Write at least three complete sentences related to a topic, using conventional subject-verb agreement and appropriate end marks of punctuation
7. Capitalize: first word in sentences, proper nouns, and the pronoun "I"
8. Recognize and write declarative and interrogative sentences using appropriate end marks of punctuation
9. Recognize and form legibly all the upper and lower case manuscript letters in sequence
10. Locate words in dictionary
11. Follow two-step oral and written directions in sequence
12. Participate appropriately in a group discussion as both a speaker and a listener
13. Perceive likenesses and differences between and among objects
14. Read independently a minimum of 4 books

#### Mathematics

1. Add three/1-digit numbers
2. Compare two numbers less than 100
3. Order numbers less than 1000
4. Add two 2-digit numbers, regrouping ones
5. Add a 1-digit number to a 2-digit number, regrouping ones
6. Add three 2-digit numbers, regrouping ones
7. Add two 3-digit numbers with no regrouping
8. Subtract two 2-digit numbers, regrouping tens
9. Subtract a 1-digit number from a 2-digit number, regrouping tens
10. Subtract two 3-digit numbers with no regrouping
11. Use addition or subtraction to solve word problems
12. Write the value of dollars, dimes, and pennies to \$9.99
13. Write the standard form for thousands, hundreds, tens, and ones
14. Use repeated addition to develop multiplication facts through 25 in horizontal form
15. Multiply two 1-digit numbers, using facts through 25
16. Use arrays to develop division facts through 25
17. Use 1-digit numbers as factors and divisors, using facts through 25
18. Use multiplication or division (facts through 25) to solve word problems

19. Tell time to the nearest quarter hour
20. Measure length to the nearest centimeter and inch
21. Understand fractional parts ( $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ )
22. Identify cubes, cylinders, and spheres
23. Identify circles, triangles, squares, and rectangles

### Sixth Grade

#### Reading/Language Arts

1. Demonstrate mastery of vocabulary, word attack and comprehension skills in basal readers through the fourth grade
2. Recognize the "who," "what," "when," "where," "why," and main idea in an oral and written selection on fourth grade reading level
3. Spell correctly at least 75 words from a list of "basic" or "survival" words
4. Recognize and use complete sentences in written and oral forms
5. Identify subjects and verbs in sentences
6. Write a paragraph in both the descriptive and clarification modes consisting of at least five complete sentences related to the topic, and using conventional grammar, punctuation, and capitalization
7. Capitalize: first word in sentences and quotes, proper nouns, the pronoun "I," and titles
8. Use correctly the following marks of punctuation: periods; question marks; exclamation points; apostrophes; commas after a person addressed, and "Yes" or "No" when they begin a sentence
9. Write legibly using both upper and lower case letters in manuscript and cursive forms
10. Locate and record information from a dictionary and an encyclopedia
11. Follow three-step oral and written directions in sequence
12. Participate appropriately in a group discussion as both a speaker and a listener
13. Collect and report information from viewing/observing
14. Read independently a minimum of 4 books

#### Mathematics

1. Write the standard form of a number up to billions
2. Compare numbers to millions
3. Add two 4- or 5-digit numbers with regrouping
4. Subtract two 4- or 5-digit numbers with regrouping
5. Multiply a 2-digit number or a 3-digit number by a 1-digit number, regrouping as necessary
6. Multiply a 3-digit number or a 2-digit number by a 2-digit number
7. Divide a 4- or 5-digit number by a 1-digit number with a zero in the quotient
8. Divide a 3- or 4-digit number by a 2-digit number
9. Estimate the sum, difference, product, and quotient of two numbers

10. Write decimals to thousandths
11. Add decimals to thousandths
12. Subtract decimals to thousandths
13. Write decimals greater than 1 using tenths and hundredths
14. Write the least common multiple of two numbers
15. Find the greatest common factor of two numbers
16. Write the simplest form for a fraction
17. Write a fraction or mixed number with denominator 10, 100, or 1,000 as a decimal and a decimal as a fraction
18. Multiply two fractions
19. Multiply a mixed number by a fraction, whole number or another mixed number
20. Multiply two decimal numbers
21. Multiply a decimal number by a whole number
22. Add fractions
23. Find the missing length for a similar figure
24. Compare two integers
25. Add, subtract, multiply, and divide two integers
26. Find the square root of a number using a table of square roots, a calculator, or an algorithm
27. Use the Pythagorean Theorem to determine the length of the hypotenuse of a right triangle
28. Read and interpret bar, line, circle, and picture graphs
29. Compute the actual distance between two towns when the scale and the distance between them are on a map
30. Solve a distance, rate, and time problem when given two of the three variables
31. Add, subtract, multiply, and divide to solve word problems

### Eighth Grade

#### Language Arts

1. Demonstrate mastery of vocabulary, word attack, and comprehension skills on a fifth grade reading level
2. Recognize the "who," "what," "when," "where," "why," and main idea in an oral and written selection on fifth grade reading level
3. Identify and use synonyms, antonyms, and homonyms in oral and written forms
4. Recognize and use complete sentences, both simple and compound, in written and oral forms
5. Identify simple subjects, verbs, and direct objects in sentences
6. Write a paragraph in both the point-of-view and persuasive modes consisting of at least seven complete sentences related to the topic, and using conventional grammar, punctuation, and capitalization
7. Capitalize: first word in sentences and quotes, proper nouns and adjectives, the pronoun "I," and titles
8. Use correctly the following marks of punctuation: periods, question marks; exclamation points; apostrophes; quotation marks; commas after a person addressed, "Yes" or "No" when they begin a sentence, and a quote from the remainder of the sentence
9. Write legibly using both upper and lower case cursive letters

10. Locate and use information from several reference resources (i.e., dictionary, encyclopedia, charts, thesaurus, maps, globes, newspapers, atlas, guides, indexes, telephone book, almanacs)
11. Follow oral and written directions to complete a task
12. Present an oral report to the class in an organized manner
13. Collect and interpret in both oral and written forms information from observing
14. Read independently a minimum of 4 books

### Mathematics

1. Write the standard form for numbers in expanded notation
2. Raise a whole number to a given power
3. Compare decimals and fractions
4. Add, subtract, multiply and divide whole numbers, fractions, mixed numbers, and decimals
5. Multiply or divide a decimal by a power of 10
6. Round a whole number to a designated place
7. Round a decimal to a designated place
8. Divide two decimals, rounding the quotient to the nearest tenth or hundredth
9. Estimate a sum, difference, product or quotient of two decimals
10. Write the prime factorization of a number
11. Write fraction, decimal, and percent equivalents
12. Find a percent of a number
13. Find the percent one number is of another number
14. Find the perimeter of a polygon
15. Find the circumference of a circle
16. Find the area of a circle, parallelogram, and trapezoid
17. Find the volume of a cylinder, cone, and sphere
18. Determine the solution to problems involving discounts, commissions, taxes, and simple interest
19. Find the mean, median, and mode of a group of numbers
20. Find the missing term of a proportion
21. Determine the difference between two times
22. Identify similar and congruent figures and name the corresponding parts
23. Add mixed numbers
24. Subtract fractions
25. Subtract mixed numbers
26. Divide a whole number or a fraction by a fraction
27. Divide a decimal number by a 1- or 2-digit whole number
28. Estimate the sum and difference of two decimal numbers
29. Solve word problems
30. Identify angles, parallel lines, and perpendicular lines
31. Identify right triangles, isosceles triangles, and equilateral triangles
32. Find the area of a rectangle and triangle
33. Find the volume of a cube and a rectangular solid
34. Use metric units for length, area, volume, mass and temperature
35. Use Customary units for length, area, volume, weight, and temperature

## Instructional Time

Instructional time is that time during which students are assigned to a teacher for the primary purpose of instruction. Although instruction occurs during all times of the school day, regardless of the activity involved, this definition of the length of the instructional day does not include activities such as changing class, lunch, or pep rallies. Other assemblies are included in instructional time. Each school day must include at least five hours and 30 minutes of instructional time. School systems which, due to local circumstances, believe they need to deviate from the 5.5 hour day may request such an exemption. Local boards of education may deviate from this standard in providing education for kindergarteners and for handicapped children.

The school day consists of instructional time, lunch time, and time set aside for education-related activities. Although the instructional day will last a minimum of 5.5 hours, the length of the school day can be expected to vary from school district to school district, from school to school, and from student to student. This variation will result from students taking advantage of opportunities to participate in clubs, school plays, athletics, school newspapers, student government, and other educational activities not part of the instructional day.

## High School Graduation Requirements

All students enrolled in public high school graduation programs must receive passing scores, as specified by State Board of Education policy, on one of three approved North Carolina Competency Tests in Mathematics and in Reading in order to graduate. The competency test is administered annually to students during their junior year in high school. Any student who fails all or part of the competency test receives remedial instruction and will have additional opportunities to take the test up to and including the last month of the twelfth grade.

Handicapped students may be exempted from taking the competency test, but must submit a written request for a waiver to the superintendent of the local school district in accordance with State Board of Education policy.

In addition to passing the minimum competency test, students must successfully complete 20 units of credit in grades 9 through 12 as specified by State Board of Education policy in order to graduate from high school. (Students graduating prior to the 1986-87 school year must successfully complete 18 units of credit.) The 20 units must include:

- four units in English
- two units in mathematics
- two units in social studies (one in government and economics and one in United States history)
- two units in science (one in a life science or biology and one in a physical science)
- one unit in physical education and health
- nine units to be determined by the local education agency

In addition to the State's graduation standards, local school units may adopt additional requirements or standards which students must also attain in order to graduate from high school.

## V. Material Support

### Instructional Materials

Funds for instructional supplies and materials will be allotted in the amount of \$25 in constant (1984) dollars for each student in average daily membership.

### Instructional Equipment

An additional five dollars will be provided for each student in ADM for instructional equipment, including, but not limited to math and science, and also an additional five dollars for every student in ADM in grades 7-12 for vocational equipment in constant (1984) dollars.

### Textbooks

Funds for textbooks will be allotted in the amount of \$20 in constant (1984) dollars for each student in average daily membership. A list of approved textbooks is included in the appendix.

### Facility Program

#### Individual School Facilities

School facilities should provide an adequate environment to support all learning activities, functions and student services which make up the total school curriculum. Some characteristics of good school facilities are:

- . Safe - complies with North Carolina Building Codes for fire, health, and safety
- . Clean, sanitary
- . Adequate heating and ventilating systems
- . Adequate air conditioning systems (particularly in piedmont and coastal North Carolina)
- . Adequate lighting
- . Good acoustics
- . Aesthetically pleasing and conducive to learning
- . Accessible to handicapped persons
- . Suitable for use by the community
- . Flexible in design to allow for change in curriculum demands

Individual school facilities provide adequate space for programs as indicated below for elementary, middle/junior high, and high schools. The spaces described are for typical schools, but vary in size and nature according to the schools' expected membership and curriculum offerings. Some typical school spaces and their suggested sizes are:

Elementary Schools - 500-700 students - 90 square feet per student

<u>Classrooms</u>	<u>Square Footage</u>
K-1	1,200
Grades 2-3	1,000
Grades 4-6	850
Music	1,000
Reading Lab	450
Mathematics Lab	450
Learning Disabled	450
Speech	200
Gifted & Talented Resource	450
Educable Mentally Handicapped Resource	450
Trainable Mentally Handicapped*	1,000
Project Room (Art, Science, Crafts, etc.)	1,200

### Administration

Principal	250
Assistant Principal*	150
Secretary/Receptionist	400
Guidance - Individual or Small Groups	150
Health/Restrooms	300
Other Student Services	150
Workroom	300
Conference Room	300
Custodial Spaces	400
General Storage	1,500
Book Storage	1,000
Media - 4-6 square feet/student plus 1,200 support areas	
Dining Room - 1/3 X student body X 10 sq. ft.	
Kitchen	1,800
Playroom/Assembly	3,600
Teacher Lounge	500
Teacher Workroom	500
Circulation, Mechanical Rooms, Toilets, etc. @ 25% of total square footage	

Middle/Junior High Schools - 500-800 Students - 120 square feet per student

Regular	750
Science and Storage	1,200
Choral	1,200
Band	1,200
Reading Lab	450
Mathematics Lab	450
Speech	200
Educable Mentally Handicapped Resource	450
Trainable Mentally Handicapped*	1,200

\*If required

Prevocational Education - (grades 7-8)

Occupational Information*	1,000
Service Laboratory*	1,500
Industrial Laboratory*	1,300
Business Laboratory*	1,500
Environmental Laboratory*	1,300

Vocational Education - (if 9th grade is included)

Industrial Arts*	2,950
(classroom 750, lab 2,000, storage 200)	
Agriculture*	2,800
(classroom 750, lab 1,850, storage 200)	
Consumer & Home Economics*	1,600
Health Occupation*	1,200
Marketing and Distributive Education*	1,000
Business Education*	1,400
Typewriting, Keyboarding, introduction to computers, introduction to business	1,200
Drafting*	1,000

Administration

Principal	300
Assistant Principal	200
Secretary/Receptionist	400
Guidance/Receptionist	300
Health and Toilets	400
Other Student Services	200
Workroom/storage	400
Conference Room	300
Custodial Spaces	500
General Storage	1,500
Book Storage	2,000
Media - 4-6 sq. ft./student plus 2,000 support services	
Audio Visual Viewing	600
Dining Room - 1/3 x student body x 12 sq. ft.	
Kitchen	2,000
Teacher Lounge	800
Teacher Workroom	800
Gymnasium/Locker Room/Offices	10,000
Teaching Theater	2,000
Commons	1,500
Circulation, Mechanical, Toilets, etc. @ 30% of total square footage	

High Schools - 800-1,200 Students - 140 sq. ft. per student

Regular	750
Science/Storage	1,500
Choral	1,200

\*If required

<u>Classrooms</u>	<u>Square Footage</u>
Band	1,500
Reading Lab	450
Mathematics Lab	450
Speech	200
Educable Mentally Handicapped Resource	450
Trainable Mentally Handicapped*	1,200
Art	1,500
Dramatics	1,000
Typing	1,200
Home Economics	1,400
Marketing & Distributive Education*	1,200
Health Occupations*	1,200
Industrial Arts*	2,000
Auto Mechanics*	2,000
Agriculture*	2,000
Machine Shops*	2,000
Construction*	3,000
Business & Office Education*	1,200
Computer Lab	1,000
Drafting*	1,000
 <u>Administration</u>	
Principal	400
Assistant Principal	300
Secretary/Receptionist	400
Secretary	200
Guidance/Receptionist	400
Health/Restrooms	400
Other Student Services	200
Workroom/Storage	400
Conference Room	300
Record Storage	100
Custodial Spaces	500
General Storage	1,500
Book Storage	2,000
Media - 4-6 sq. ft./student + 2,000 support services	
Dining Room - 1/3 x student body x 12 sq. ft.	
Kitchen	2,500
Teacher Lounge	800
Teacher Workroom	800
Gymnasium/Locker Room/Offices	20,000
Auxiliary Gym	3,600
Auditorium - largest class x 8 sq. ft. per student + 4,000 sq. ft. for stage/dressing/storage	
Commons	2,000
Student Offices	2,000
Circulation, Mechanical Rooms, Toilets, etc. @ 30% of total square footage	

\*If required

## School Sites

School sites must provide adequate space for the location of buildings, access between and among these and to the street and drives for buses, autos, and pedestrians. Like school buildings, sites are also

\*If required places for learning and must provide for physical activities, athletics, and environmental and aesthetic experiences. Some characteristics of good school sites are:

- . Safe, protected from major highways, railroads, or other traffic hazards
- . Attractive both naturally and by design
- . Good landscaping and site development to allow maximum use and safe, efficient traffic flow for pedestrians, automobiles, and buses
- . Free from erosion or flooding
- . Paved drives, parking areas, sidewalks, and bus loading areas
- . Exterior lighting
- . Physical education equipment and play areas
- . Physical education fields--paved and grassed
- . Athletic fields
- . Spectator accommodations
- . Widely accepted, minimum site acreage as recommended by the Council of Educational Facility Planners as indicated below:

Elementary - Ten acres plus one acre for each 100 students

Middle School/Junior High - Twenty acres plus one acre for each 100 students

High School - Thirty acres plus one acre for each 100 students plus 10 acres for an athletic complex

## Equipment

Adequate equipment is needed to support the instructional program and provide essential services. Typically, equipment includes chairs, desks, science equipment, vocational tools and equipment, library furniture, typewriters, copying machines, maps, globes, computers, bookcases, printing equipment, movable storage closets, televisions, projectors, record players, tape recorders, reading machines, dining room furniture, aquariums, terrariums, animal cages, physical education equipment, athletic equipment, and food service equipment.

For planning purposes, many estimate that initial capital outlay equipment should represent approximately ten percent of the building's cost.

## Board Of Education Office

Adequate facilities are needed for the superintendent and his staff. Some characteristics of good board of education office facilities are:

- . An attractive, landscaped site in an appropriate neighborhood

- . Paved parking lots, drives, and sidewalks
- . Adequate parking for staff and visitors
- . Offices for the central staff, bookkeeping and record storage
- . An attractive, functional board room with capacity for typical audiences
- . Professional and curriculum library
- . Print shop
- . Mail room
- . Staff lounge
- . Facilities for audio visual equipment, materials and their maintenance

### Maintenance Shop

A maintenance facility is needed to facilitate the unit's maintenance program. Some characteristics of a good maintenance facility are:

- . Adequate acreage for parking maintenance vehicles, and staff's personal vehicles; adequate acreage for storing maintenance equipment and supplies
- . Appropriate shops, i.e., cabinetmaking, plumbing, heating, glass, electrical, hardware, welding, roofing, landscaping, etc.

### Transportation Garage

County boards of education need an adequate facility to maintain and operate the school buses in the county including those serving the city school districts, where applicable. Some characteristics of good transportation facilities are:

- . Adequate site for storing buses and maintenance facilities, preferably in a fenced area
- . Storage for parts, fuel, tires, batteries, etc.
- . Repair bays - mechanical, body and tire service
- . Wash rack
- . Paint bay
- . Battery charging and service area

### School Food Service Office And Storage

Many boards of education have central facilities to support the food service program. These facilities include offices for management, clerical and bookkeeping personnel. Space is provided for receiving food stuffs, materials and equipment, for storing both dry and refrigerated food, and for making final distribution to the schools. The site also provides for parking and vehicular access, particularly for large trucks and vans delivering in quantity.

## VI. Staffing

### A. District Level Staffing

1. Superintendents - One for each LEA
2. Assistant or Associate Superintendents - Positions will be allotted as follows:

<u>ADM</u>	<u>Number of Positions</u>
0 - 1,999	1
2,000 - 4,999	2
5,000 - 9,999	3
10,000 or above	4
each additional 10,000 above 19,999	1

3. Finance Officer - One position will be allotted for each LEA
4. Psychologists - One for every 2,000 students in ADM, at least one per county
5. School Social Workers - One for every 2,500 students in ADM, at least one per county
6. School Nurses - One for every 3,000 students in ADM, at least one per county
7. Instructional Supervisors - Positions will be allotted as follows:

<u>ADM</u>	<u>Number of Positions</u>
0 - 1,999	1
2,000 - 4,999	2
5,000 - 9,999	3
10,000 - 14,999	4
each additional 5,000	1

8. Math, Science and Computer Science Teachers (Special allotment of 100 teachers) - One for each county
9. Maintenance Supervisors - One for each LEA
10. Secretaries/Clerical Support (Central Office) - Positions will be allotted as follows:

<u>ADM</u>	<u>Number of Positions</u>
0-1,999	3
Each additional 1,000	1

11. Maintenance Workers - One position for every 400 students in ADM

12. Transportation Supervisors - One for each county
  13. Child Nutrition Supervisors - One for each LEA
  14. Transportation Workers - Allotment to be determined based on demonstrated need, including the approved number of school buses in operation during the school year.
- B. School Level Staffing (All positions in this section are assigned at the school level. Some are allotted, however, based on district-wide ADM; others by school.)\*

By District ADM:

1. Classroom Teachers (The following ratios are needed to maintain appropriate class sizes.)
  - K-3: One teacher for every 20 ADM
  - 4-6: One teacher for every 22 ADM
  - 7-8: One teacher for every 21 ADM
  - 9-12: One teacher for every 24.5 ADM
  - Handicapped, K-12: One for every 22 certified ADM
  - Academically Gifted, K-12: One teacher for every 80 certified ADM
  - Pregnant: One teacher for every 20 certified ADM
  - Summer, K-12: One teacher for every 15 ADM (not to exceed 10% of school year ADM)
  - Vocational Education, 7-12: One teacher for every 95 ADM
2. Instructional Aides
  - K-3: One for every 23 ADM
3. Counselors - One position for every 400 students in ADM
4. Media Specialists (librarians) - One position for every 400 students in ADM
5. Assistant Principals - One position for every 700 students in ADM
6. Custodians - One 12-month position for every 216 students in ADM
7. Instructional, Lab, or Clerical Aides - One position for every 285 students in ADM
8. School Secretaries - One position for every 375 students in ADM

\*Recommended classroom teacher ratios are currently being tested by a number of school principals throughout the State to determine their adequacy for scheduling the Basic Education Program.

- By School:

9. Principals - One for every school with at least seven (7) state allotted teachers or 100 students in ADM, unless the State Board of Education determines that special circumstances warrant allotment of a principal to a smaller school.
10. Athletic Trainers - One for every high school
11. In-School Suspension Teacher - One for each school in grades 7-12

**Appendix**

## ELEMENTARY TEXTBOOKS

### GRADE ONE

#### Handwriting (1979-84-85)

Creative Growth With Handwriting, Book 1, 2E (paper)  
Imaginary Line Handwriting: Going Forward,  
Text Ed. (paper)

#### Reading (1980-85)

##### Basics in Reading Series:

Puppy Paws, PP1 (paper)  
Jumping Jamboree, PP2 (paper)  
No Cages, Please, PP3 (paper)  
Dragon Wings, P  
Calico Capers, 1

##### Bookmark Reading Program Series:

Sun Up, PP1 (paper)  
Happy Morning, PP2 (paper)  
Magic Afternoon, PP3 (paper)  
Sun and Shadow, P  
Together We Go, 1

##### Houghton Mifflin Reading Series:

Rockets, PP1 (paper)  
Surprises, PP2 (paper)  
Footprints, PP3 (paper)  
Honeycomb, P  
Cloverleaf, 1

##### Pathfinder: Allyn and Bacon Reading Program Series:

Rides and Races, PP1, L6 (paper)  
High Wires and Wigs, PP2, L7 (paper)  
Surprises and Prizes, PP3, L8 (paper)  
Upside and Down, P, L9  
Inside and Out, 1, L10

##### Rand McNally Reading Program,

##### Young America Basic Series:

Little Pig, PP1, L2 (paper)  
C. A. Zoo and Kangaroo, PP2, L3 (paper)  
Lost and Found, PP3, L4 (paper)  
Magic Rings and Funny Things, P, L5  
Red Rock Ranch, 1, L6

##### Reading 720 Series, Rainbow Edition:

A Pocketful of Sunshine, PP1, L2 (paper)  
A Duck Is a Duck, PP2, L3 (paper)  
Helicopters and Gingerbread, PP3, L4 (paper)  
May I Come In?, 1, L5

#### Arts Education

##### Art (1982-89)

Art: Meaning, Method, and Media, Book 1, T.E., RV

##### Music (1982-89)

The Music Book, Grade 1, Tea. Ref. Bk. (paper)  
Silver Burdett Music, Grade 1, T.E. (paper)

#### Language (1978-83-84-85)

Language for Daily Use, Blue, L1, T.E.,  
Explorer Ed. (paper)

Listening, Reading, and Talking, T.E. (paper)

Our Language Today, LA, T.E. (paper)

Spectrum of English, Red, L1, T. E. (paper)

#### Mathematics (1982-86)

##### Consumable Texts

Harper and Row Mathematics, Grade 1 (paper)  
Heath Mathematics, Grade 1 (paper)  
Holt Mathematics, Grade 1 (paper)  
Mathematics, Grade 1 (paper)  
Mathematics In Our World, Grade 1, 3E (paper)  
Scott, Foresman Mathematics, Grade 1 (paper)

#### Science (1980-85)

Accent on Science, L1, T.A.E. (paper)  
Concepts in Science, Blue, L1, T.E., Curie  
Edition (paper)  
Gateways to Science, L1, T.E. (paper)  
Holt Elementary Science, Book 1, T.E. (paper)

#### Social Studies (1983-88)

At School  
Families and Neighborhoods  
Meeting People  
People  
You and Me

### GRADE TWO

#### Handwriting (1979-84-85)

Creative Growth With Handwriting, Book 2, 2E (paper)  
Creative Growth With Handwriting, Book 2,  
Transition, 2E (paper)  
Imaginary Line Handwriting: Writing On  
(Manuscript), Text Ed. (paper)  
Imaginary Line Handwriting: Changing Step  
(Transitional), Text Ed. (paper)

#### Reading (1980-85)

##### Basics in Reading Series:

Daisy Days, 2-1  
Hootenanny, 2-2

##### Bookmark Reading Program Series:

World of Surprises, 2-1  
People and Places, 2-2

##### Houghton Mifflin Reading Series:

Sunburst, 2-1  
Tapestry, 2-2

##### Pathfinder: Allyn and Bacon Reading Program Series:

Moon Magic, 2-1, L11  
Riding Rainbows, 2-2, L12

##### Rand McNally Reading Program,

##### Young America Basic Series:

Boxcars and Bottle Caps, 2-1, L7  
Cartwheels and Caterpillars, 2-2, L8

##### Reading 720 Series, Rainbow Edition:

One to Grow On, 2-1, L6  
The Dog Next Door and Other Stories, 2-2, L7

#### Spelling (1979-84-85)

Basic Goals in Spelling, Grade 2, 5E  
Growth in Spelling, Level 2  
Spell Correctly, Grade 2  
Spelling: Words and Skills, Grade 2

#### Arts Education

##### Art (1982-89)

Art: Meaning, Method, and Media, Book 2, RV

##### Music (1982-89)

The Music Book, Grade 2  
Silver Burdett Music, Grade 2

Language (1978-83-84-85)  
Language for Daily Use, Red, L2, T.E.  
Explorer Ed. (paper)  
Listening, Reading, Talking, and Writing, T.E.  
(paper)  
Our Language Today, LB, T.E. (paper)  
Spectrum of English, Blue, L2, T.E. (paper)

Mathematics (1981-86)  
Consumable Texts  
Heath Mathematics, L2 (paper)  
Holt Mathematics, Grade 2 (paper)  
Mathematics, Book 2 (paper)  
Mathematics In Our World, Book 2, 3E (paper)  
Scott, Foresman Mathematics, Grade 2 (paper)

Science (1980-85)  
Accent on Science, L2  
Concepts in Science, Red, L2, Curie Edition  
Gateways to Science, L2  
Holt Elementary Science, Book 2

Social Studies (1983-88)  
Going Places  
Here We Are  
In Neighborhoods.  
Neighborhoods  
Neighborhoods and Communities

GRADE THREE

Handwriting (1979-84-85)  
Creative Growth With Handwriting, Book 3  
Transition, 2E (paper)  
Imaginary Line Handwriting: New Skills  
(Beginning Cursive), Text, Ed. (paper)

Reading (1980-85)  
Basics in Reading Series:  
Ride a Rainbow, 3-1  
Step Right Up!, 3-2,  
Bookmark Reading Program Series:  
Widening Circles, 3-1  
Ring Around the World, 3-2  
Houghton Mifflin Reading Series:  
Windchimes, 3-1  
Passports, 3-2  
Pathfinder: Allyn and Bacon Reading Program Series:  
Sunshine Days, 3-1, L19  
Handstands, 3-2, L14  
Rand McNally Reading Program,  
Young America Basic Series:  
Moonbeams and Microscopes, 3-1, L9  
Telephones and Tangerines, 3-2, L10  
Reading 720 Series, Rainbow Edition:  
How It Is Nowadays, 3-1, L8  
Inside Out, 3-2, L9

Spelling (1979-84-85)  
Basic Goals in Spelling, Grade 3, 5E  
Growth in Spelling, Level 3  
Spell Correctly, Grade 3  
Spelling: Words and Skills, Grade 3

Arts Education  
Art (1982-89)  
Art: Meaning, Method, and Media, Book 3, RV  
Music (1982-89)  
The Music Book, Grade 3  
Silver Burdett Music, Grade 3

Language (1978-83-84-85)  
Adventures in English, 2E  
Language for Daily Use, Green, L3, Explorer Ed.  
Our Language Today, LC  
Spectrum of English, Yellow, L3

Mathematics (1981-86)  
Heath Mathematics, L3  
Holt Mathematics, Grade 3  
Mathematics, Book 3  
Mathematics In Our World, Book 3, 3E  
Scott, Foresman Mathematics, Grade 3

Science (1980-85)  
Accent on Science, L3  
Concepts in Science, Green, L3, Curie Edition  
Gateways to Science, L3  
Holt Elementary Science, Book 3

Social Studies (1983-88)  
Communities  
Communities  
Communities and Resources  
In Communities  
Our Land

GRADE FOUR

Handwriting (1979-84-85)  
Creative Growth With Handwriting, Book 4.2E (paper)  
Imaginary Line Handwriting: Carry On,  
Text Ed. (paper)

Reading (1980-85)  
Building Bridges, Skills Reader, 4  
Flying Hoofs, 4  
A Lizard to Start With, 4, L10, Rainbow Edition  
Many Voices, Literature Reader, 4  
Medley, 4  
Person to Person, L15/Free Rein, L16  
Twirling Parallels, 4, L11

Spelling (1979-84-85)  
Basic Goals in Spelling, Grade 4, 5E  
Growth in Spelling, Level 4  
Spell Correctly, Grade 4  
Spelling: Words and Skills, Grade 4

Arts Education  
Art (1982-89)  
Art: Meaning, Method, and Media, Book 4, RV  
Music (1982-89)  
The Music Book, Grade 4  
Silver Burdett Music, Grade 4

Health (1979-84-85)

You Learn and Change, Orange, Grade 4  
You and Your Health, Grade 4

Language (1978-83-84-85)

Exploring in English, 2E  
Language for Daily Use, Orange, L4, Explorer Ed.  
Our Language Today, LD  
Spectrum of English, Purple, L4

Mathematics (1981-86)

Heath Mathematics, L4  
Holt Mathematics, Grade 4  
Mathematics, Book 4  
Mathematics In Our World, Book 4, 3E  
Scott, Foresman Mathematics, Grade 4

Science (1980-85)

Accent on Science, L4  
Concepts in Science, Orange, L4, Curie Edition  
Gateways to Science, L4  
Holt Elementary Science, Book 4

Social Studies (1983-88)

The People of North Carolina

GRADE FIVE

Handwriting (1979-84-85)

Creative Growth With Handwriting, Book 5, 2E (paper)  
Imaginary Line Handwriting: Think and Write,  
Text Ed. (paper)

Reading (1980-85)

Changing Scenes, Literature Reader, 5  
Fins and Tales, 5  
Keystone, 5  
Majesty and Mystery, L17/Standing Strong, L18  
Reaching Out, Skills Reader, 5  
Soaring Plateaus, 5, L12  
Tell Me How the Sun Rose, 5, L11, Rainbow Edition

Spelling (1979-84-85)

Basic Goals in Spelling, Grade 5, 5E  
Growth in Spelling, Level 5  
Spell Correctly, Grade 5  
Spelling: Words and Skills, Grade 5

Arts Education

Art (1982-89)  
Art: Meaning, Method, and Media, Book 5, RV  
Music (1982-89)  
The Music Book, Grade 5  
Silver Burdett Music, Grade 5

Health (1979-84-85)

Balance in Your Life, Purple, Grade 5  
You and Your Health, Grade 5

Language (1978-83-84-85)

Discovery in English, 2E  
Language for Daily Use, Purple, L5, Explorer Ed.  
Our Language Today, LE  
Spectrum of English, Green, L5

Mathematics (1981-86)

Heath Mathematics, L5  
Holt Mathematics, Grade 5  
Mathematics, Book 5  
Mathematics In Our World, Book 5, 3E  
Scott, Foresman Mathematics, Grade 5

Science (1980-85)

Accent on Science, L5  
Concepts in Science, Purple, L5, Curie Edition  
Gateways to Science, L5  
Holt Elementary Science, Book 5

Social Studies (1983-88)

Journeys Through the Americas  
Our United States  
The United States and Its Neighbors  
The United States and the Other Americas

GRADE SIX

Handwriting (1979-84-85)

Creative Growth With Handwriting, Book 6, 2E (paper)  
Imaginary Line Handwriting: Ventures, Text Ed.  
(paper)

Reading (1980-85)

Impressions, 6  
Measure Me, Sky, 6, L12 (Basic), Rainbow Edition  
Mountains Are For Climbing, 6, L13  
(Enrichment or Alternate Level), Rainbow Ed.  
Moving Forward, Skills Reader, 6  
Racing Stripes, 6  
Shifting Anchors, 6, L13  
Timeless Voyages, Literature Reader, 6  
The Widening Path, L19/Time and Beyond, L20

Spelling (1979-84-85)

Basic Goals in Spelling, Grade 6, 5E  
Growth in Spelling, Level 6  
Spell Correctly, Grade 6  
Spelling: Words and Skills, Grade 6

Arts Education

Art (1982-89)  
Art: Meaning, Method, and Media, Book 6, RV  
Music (1982-89)  
The Music Book, Grade 6  
Silver Burdett Music, Grade 6

Health (1979-84-85)

Toward Your Future, Brown, Grade 6  
You and Your Health, Grade 6

BEST COPY AVAILABLE

Language (1978-83-84-85)  
Language for Daily Use, Brown, L6, Explorer Ed.  
Our Language Today, LF  
Progress in English, 2E  
Spectrum of English, Gold, L6

Mathematics (1983-86)  
Heath Mathematics, L6  
Holt Mathematics, Grade 6  
Mathematics, Book 6  
Mathematics In Our World, Book 6, 3E  
Scott, Foresman Mathematics, Grade 6

Science (1980-85)  
Accent on Science, L6  
Concepts in Science, Brown, L6, Curie Edition  
Gateways to Science, L6  
Holt Elementary Science, Book 6

Social Studies (1983-88)  
The Eastern Hemisphere  
Europe, Africa, Asia, and Australia  
Nations of the World  
The World  
The World Now and Then

#### GRADE SEVEN

Reading (1980-85)  
Encore, 7  
Exploring Paths, Skills Reader, 7  
Purpose In Literature: Medallion Edition of  
America Reads  
Rally: A Reading Program, LA(paper) \*\*\*  
Set of four titles as follows:  
Nature's Wonders  
Known and Unknown  
Turning Points  
In Action  
Sightings, 7, LLL  
To Make a Difference, 7, LLL  
Vistas: A Reading Achievement Program(paper): \*\*  
Level One \*\*\*  
Set of two titles as follows:  
Horizons  
Summits  
Level Two \*\*\*  
Set of two titles as follows:  
Tempos  
Paces  
Level Three \*\*\*  
Set of two titles as follows:  
Networks  
Patterns  
With the Works, 7

Spelling (1979-84-85)  
Basic Goals in Spelling, Grade 7, 5E  
Growth in Spelling, Level 7  
Spell Correctly, Grade 7  
Spelling: Words and Skills, Grade 7

Arts Education  
Art (1982-89)  
Art: Discovering and Creating  
Art In Your World  
Music (1982-89)  
The Music Book, Grade 7  
Silver Burdett Music, Grade 7

French (1983-90)  
Et Vous?  
Le Francais: Commencons, 2E

Spanish (1983-90)  
Espanol: Comencemos, 3E  
Spanish For Mastery: Bienvenidos

Health (1979-84-85)  
You and Your Health, Grade 7

Language (1978-83-84-85)  
Basic Language: Messages and Meanings I  
Growth in English, 2E  
Modern English in Action, 7  
Warriner's English Grammar and Composition,  
First Course, Heritage Ed.

Mathematics (1981-86)  
Heath Mathematics, L7  
Holt Mathematics, Grade 7  
Mathematics, Book 7  
Mathematics: Essentials and Applications, Course 1  
Mathematics In Our World, Book 7, 3E  
Mathematics: Structure and Method, Course 1  
Scott, Foresman Mathematics, Grade 7

Consumer and Homemaking (1979-84-85) \*\*  
Exploring Homemaking and Personal Living, 4E  
Today's Teen, RV

Industrial Arts (1983-90) \*\*  
Basic Industrial Arts: Electricity/Metalworking/  
Drafting/Woodworking  
Basic Industrial Arts: Plastics/Graphic Arts/Power  
Mechanics/Photography  
General Industry, 2E  
Manufacturing: A Basic Text For Industrial Arts

Life Science (1980-85)  
Focus on Life Science  
Holt Life Science  
Life Science  
Life Science  
Life Science: Ideas and Investigations in  
Science, 2E

Social Studies (1983-88)  
The African and Asian World  
Civilizations of the Past: Peoples and Cultures  
The New Exploring the Non-Western World  
People, Places, and Change  
World Views

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GRADE EIGHT

Reading (1980-85)

Ascents, 8  
Better Up!, 8  
Expanding Horizons, Skills Reader, 8  
Gifts of Promise, 8, LL5  
Literature and Life: Medallion Edition of  
America Reads  
Rally: A Reading Program, LB(paper): \*\*\*  
Set of four titles as follows:  
Nature's Frontiers  
Present and Future  
Crossroads  
On the Move  
Soundings, 8, LL5

Social Studies (1983-88)

North Carolina: The History of An American State

Spelling (1979-84-85)

Basic Goals in Spelling, Grade 8, 5E  
Growth in Spelling, Level 8  
Spell Correctly, Grade 8  
Spelling: Words and Skills, Grade 8

Arts Education

Art (1982-89)

Art: Choosing and Expressing  
Art: Your Visual Environment  
Crafts: Illustrated Designs and Techniques

Music (1982-89)

The Music Book, Grade 8  
Silver Burdett Music, Grade 8

French (1983-90)

Le Francais: Continuations, 2E  
Nous Tous

Spanish (1983-90)

Espanol: Sigamos, 3E  
Spanish For Mastery: Dia a Dia

Health (1979-84-85)

You and Your Health, Grade 8

Language (1978-83-84-85)

Basic Language: Messages and Meanings II  
Modern English in Action, 8  
Power in English, 2E  
Warriner's English Grammar and Composition,  
Second Course, Heritage Ed.

Mathematics (1981-86)

Heath Mathematics, L8  
Holt Mathematics, Grade 8  
Mathematics, Book 8  
Mathematics: Essentials and Applications, Course 2  
Mathematics In Our World, Book 8, 3E  
Mathematics: Structure and Method, Course 2  
Foresman Mathematics, Grade 8

Earth Science (1980-85)

Earth Science  
Earth Science: Ideas and Investigations in  
Science, 2E  
Focus on Earth Science  
Holt Earth Science

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ARTS EDUCATION

Music Survey

Appreciation and Survey of Music (1979-84-85)  
Politoske. Music

Choral (1979-84-85)  
Barber. ABC Choral Art Series(paper):  
Volume I  
Volume II  
Volume III  
Volume IV

Theory (1979-84-85)  
Andrews. Beginning Music Theory, A Programmed Text(paper)

Visual Arts

Art Appreciation and History (1981-86)  
Horn. Art For Today  
Richardson. Art: The Way It Is, 2E(paper)  
Feldman. Varieties of Visual Experience, 2E(paper)

Studio (1981-86)  
Hubbard. Art: Choosing and Expressing  
Simmons. Drawing: The Creative Process  
Craven. Object and Image: An Introduction to Photography, 2E

FOREIGN LANGUAGE

French I (1983-90)  
Valette. French For Mastery: Salut, Les Amis!, 2E  
Lutz. Nos Amis  
Valdman. Son et Sens

French II (1983-90)  
Valette. French For Mastery: Tous Ensemble, 2E  
Lutz. Le Monde des Jeunes  
Valdman. Scenes et Sejours

French III (1983-90)  
Valette. C'est Comme Ca(paper)  
Valdman. Promenades et Perspectives

Latin I (1979-84-85)  
Jenney. First Year Latin  
Hines. Our Latin Heritage, Book I, Harbrace Ed.

Latin II (1979-84-85)  
Hines. Our Latin Heritage, Book II, Harbrace Ed.  
Jenney. Second Year Latin

Latin III (1979-84-85)  
Hines. Our Latin Heritage, Book III, Harbrace Ed

Spanish I (1983-90)  
Griffith. Churros y Chocolate, I1  
Heptner. Nueva Vista  
Sandoval. Nuestros Amigos  
Valette. Spanish For Mastery 1

Spanish II (1983-90)  
Sandoval. El Mundo de la Juventud  
Griffith. Plazas y Paisajes, I2  
Valette. Spanish For Mastery 2  
Heptner. Vista Hispanica

Spanish III (1983-90)  
Jarvis. Basic Spanish Grammar  
Heptner. Multivista Cultural  
Griffith. Salsa y Salero, I3

German I (1983-90)  
Kraft. Deutsch: Aktuell 1  
Moeller. German Today 1, 3E  
Winkler. Unsere Freunde

German II (1983-90)  
Kraft. Deutsch: Aktuell 2  
Winkler. Die Welt Der Jugend  
Moeller. German Today 2, 3E

German III (1983-90)  
Winkler. Auf Dem Wege!, Review Grammar, Advanced Level  
Moeller. Blickpunkt Deutschland, 2E

HEALTH

Health Education (1979-84-85)  
Haag. Focusing on Health, RV  
Diehl. Health and Safety For You, 4E  
Otto. Modern Health

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## LANGUAGE ARTS

### English

#### Language and Composition I (1982-89)

- Guth. American English Today: The Tools of English, 3E  
Littell. Basic Skills in English, Book 3  
Warriner. English Grammar and Composition, Third Course, Franklin Ed.  
Bauer. Grammar and Composition, Level 3  
Loban. Grammar and Writing, Grade 9  
Christ. Modern English in Action, Grade 9

#### Language and Composition II (1982-89)

- Guth. American English Today: The World of English, 3E  
Littell. Basic Skills in English, Book 4  
Warriner. English Grammar and Composition, Fourth Course, Franklin Ed.  
Bauer. Grammar and Composition, Level 4  
Loban. Grammar and Writing, Grade 10  
Christ. Modern English in Action, Grade 10

#### Language and Composition III (1982-89)

- Guth. American English Today: The Uses of Language, 3E  
Littell. Basic Skills in English, Book 5  
Warriner. English Grammar and Composition, Fifth Course, Franklin Ed.  
Bauer. Grammar and Composition, Level 5  
Loban. Grammar and Writing, Grade 11  
Christ. Modern English in Action, Grade 11

#### Language and Composition IV (1982-89)

- Guth. American English Today: Our Changing Language, 3E  
Littell. Basic Skills in English, Book 6  
Warriner. English Grammar and Composition, Complete Course, Franklin Ed.  
Bauer. Grammar and Composition, Level 6  
Loban. Grammar and Writing, Grade 12  
Christ. Modern English in Action, Grade 12

#### Writing (1982-89)

- Guth. Advanced Composition, 2E(paper)  
Guth. Basic Composition 1, 2E(paper)  
Guth. Basic Composition 2, 2E(paper)  
West. Developing Writing Skills, 3E  
Payne. The Lively Art of Writing: Developing Structure  
Payne. The Lively Art of Writing: Effecting Style  
Payne. The Lively Art of Writing: Understanding Forms  
Roberts. Thinking and Writing About Literature

#### Literature Anthologies I (1979-84-85)

- Farrell. Arrangements in Literature: Medallion Edition of America Reads  
Niles. Gallery: Signal Series  
Carlsen. Insights: Themes and Writers Series, 3E  
Cline. New Voices 1: Literature, Language and Composition  
McFarland. Viewpoints: Focus on Literature

#### Literature Anthologies II (1979-84-85)

- Carlsen. Encounters: Themes and Writers Series, 3E  
McFarland. Forms: Focus on Literature  
Cline. New Voices 2: Literature, Language and Composition  
Niles. Nova: Signal Series  
Miller. Question and Form in Literature: Medallion Edition of America Reads

#### Literature Anthologies III (1979-84-85)

- Niles. Album: Signal Series  
McFarland. America: Focus on Literature  
Carlsen. American Literature: Themes and Writers Series, 3E  
Cline. New Voices 3: Literature, Language and Composition  
Miller. U. S. in Literature, With the Glass Menagerie: Medallion Edition of America Reads  
Miller. U. S. in Literature, With I Never Sang For My Father: Medallion Edition of America Reads

#### Literature Anthologies IV (1979-84-85)

- Carlsen. British and Western Literature: Themes and Writers Series, 3E  
McDonnell. England in Literature, With Hamlet: Medallion Edition of America Reads  
McDonnell. England in Literature, With Macbeth: Medallion Edition of America Reads  
McFarland. Ideas: Focus on Literature  
Niles. Latitude: Signal Series  
Cline. New Voices 4: Literature, Language and Composition

#### Literature [Reading] (1979-84-85)

- Hipple. Allyn and Bacon Literature Series(paper):  
Classic American Short Stories  
Stories of Youth and Action  
Tales of Mystery and Suspense  
Twentieth Century American Short Stories  
Smith. Be A Better Reader Series, Basic Skills Edition(paper):

Level A  
Level B  
Level C  
Level D  
Level E  
Level F  
Level G  
Level H  
Level I

#### Teplitzky. Walk In My Shoes Series(paper):

Are You With Me?  
Cities/U.S.A.  
Escape Routes  
Fair/No Fair  
Ins and Outs  
It's a Free Country  
Something of Value  
To Be Somebody

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### Literature Special Interest Courses

#### Biblical Literature (1979-84-85)

Ackerman. The Bible As/In Literature(paper)

#### Drama (1979-84-85)

Franklin. Rehearsal, 5E

#### Journalism (1979-84-85)

Adams. Press Time, 3E

#### Mythology (1979-84-85)

Herzberg. Myths and Their Meaning(paper)

#### Science Fiction (1979-84-85)

Farrell. Science Fact/Fiction(paper)

#### Speech (1979-84-85)

Wilkinson. Speaking of . . . Communication/  
Interpretation/Theater  
Kemp. Speech, An Important Skill

### MATHEMATICS

#### Advanced Mathematics

##### Advanced Mathematics (1981-86)

Coxford. Advanced Mathematics: A Preparation  
For Calculus, 2E  
Swokowski. Fundamentals of College Algebra, 4E  
Yunker. Merrill Advanced Mathematical Concepts  
Wooton. Modern Analytic Geometry  
Dolciani. Modern Introductory Analysis  
Coxford. Trigonometry

##### Calculus (1981-86)

Thomas. Elements of Calculus and Analytic  
Geometry  
Swokowski. Elements of Calculus With Analytic  
Geometry

##### Probability and Statistics (1981-86)

Levin. Applied Elementary Statistics

#### Algebra

##### Introductory Algebra (1981-86)

Danholm. Elementary Algebra,  
Part 1, New Edition  
Part 2, New Edition  
Nichols. Holt Pre-Algebra  
Jacobs. Introductory Algebra,  
One, 3E  
Two, 3E

##### Algebra I (1981-86)

Payne. Algebra One, 3E  
Dolciani. Algebra: Structure and Method, Book 1  
Foster. Merrill Algebra One.

##### Algebra II (1981-86)

Dolciani. Algebra and Trigonometry: Structure  
and Method, Book 2  
Payne. Algebra Two With Trigonometry, 3E  
Foster. Merrill Algebra Two With Trigonometry

##### Consumer Mathematics (1981-86)

Bolster. Consumer and Career Mathematics  
Fairbank. Mathematics For the Consumer, 3E  
Price. Mathematics For Today's Consumer,  
With Career Applications

##### General Mathematics (1981-86)

Shaw. General Math 1  
Keedy. General Mathematics: A Fundamentals  
Approach  
Bragg. General Mathematics: Skills and  
Applications  
Price. Mathematics For the Real World  
Bolster. Mathematics In Life  
Stein. Refresher Mathematics, 7E

##### Geometry (1981-86)

Jurgensen. Geometry, New Edition  
Nichols. Holt Geometry  
Foster. Merrill Geometry  
Hirsch. Scott, Foresman Geometry

##### Applied Trades Mathematics (1981-86)

Lyng. Career Mathematics: Industry and the  
Trades  
Rogers. Mathematics For Trade and Industrial  
Occupations(paper)

### VOCATIONAL EDUCATION

#### Agricultural Education

##### Agricultural Mechanics (1983-90)

Colvin. Electrical Wiring, 2E(paper)  
Phipps. Mechanics in Agriculture, 3E  
Crouse. Small Engine Mechanics, 2E(paper)  
Turner. Small Engines, Care and Operation,  
Volume 1(paper)  
Turner. Small Engines, Maintenance and Repair,  
Volume 2(paper)

##### Agricultural Production (1983-90)

Lee. Agribusiness Procedures and Records(paper)  
Long. Introduction to Agribusiness Management  
(paper)  
Bundy. Livestock and Poultry Production, 5E  
Wakeman. Modern Agricultural Mechanics  
Boone. Producing Farm Crops, 3E

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### Forestry (1983-90)

Collins. Elementary Forestry  
Anderson. Forest and Forestry, 3E  
Bromley. Pulpwood Production, 3E

### Homestead and Gardening Skills (1983-90)

Colvin. Applying Pesticides(paper)  
Baudendistel. Horticulture: A Basic Awareness, 2E  
(paper)  
Turner. Understanding Electricity and  
Electrical Terms(paper)

### Introduction to Ag/Natural Resources (1983-90)

Krebs. Agriculture In Our Lives, 4E  
Donahue. Exploring Agriculture, 6E  
Bishop. Working In Plant Science(paper)

### Natural Resources and New Environmental Protection (1983-90)

Jones. Fertilizers and Soil Fertility, 2E  
Kircher. Our Natural Resources, 5E

### Ornamental Horticulture (1983-90)

Nelson. Flower and Plant Production In the  
Greenhouse, 3E  
McDaniel. Ornamental Horticulture, 2E  
Richardson. Working In Horticulture

### Business and Office Education

#### Accounting and Computerized Accounting Occupations I (1982-89)

Fletcher. Accounting Principles for Midmanagement  
Weaver. Accounting: Systems and Procedures, 4E  
Swanson. Century 21 Accounting, First Year  
Course, 3E

#### Accounting and Computerized Accounting Occupations II (1982-89)

Weaver. Accounting: Systems and Procedures,  
Advanced Course  
Swanson. Century 21 Accounting, Advanced Course, 3E

#### Business Communications (1982-89)

Himstreet. Business Communications: A Guide to  
Effective Writing, Speaking, and  
Listening  
Burtness. Effective English for Business  
Communication, 7E

#### Business Data Processing Occupations I (1982-89)

Golden. Computer Programming in the Basic  
Language, 2E

#### Business Data Processing Occupations II (1982-89)

Awad. Business Data Processing, 5E

#### Business Economics (1982-89)

Brown. Economics of Our Free Enterprise System  
Olgen. Economics: Principles and Applications, 9E  
Clayton. Economics: Principles and Practices

#### Business Law (1982-89)

Frank. Applied Business Law, 12E, Abridged  
Goldman. Business Law: Principles and Practices

#### Business Management Ownership (1982-89)

Overard. Business Principles and Management, 8E  
Justis. Managing Your Small Business

### Business Mathematics (1982-89)

Fairbank. Applied Business Mathematics, 11E  
Lange. Business Mathematics  
Olson. Consumer and Business Arithmetic

### Introduction to Business (1982-89)

Warneke. Consumer Decision Making -- Guide to  
Better Living, 2E  
Daughtrey. General Business for Economic  
Understanding, 12E  
Brown. General Business: Our Business and  
Economic World

### Introduction to Data Processing (1982-89)

Wanous. Fundamentals of Data Processing, 2E  
Fuori. Introduction to the Computer: The Tool  
of Business, 3E  
Wanous. Introductory Data Processing -- An  
Intensive Course, 2E(paper)

### Office Occupations I (1982-89)

Pasewark. Procedures for the Modern Office, 7E  
Pasewark. Electronic Display Calculator Course  
(paper)  
Stewart. Office Procedures  
Oliverio. Secretarial Office Procedures, 10E

### Office Occupations II (1982-89)

Luke. Office Systems and Procedures

### Recordkeeping (1982-89)

Baron. Practical Record Keeping, 5E  
Baron. Practical Record Keeping and  
Bookkeeping, 3E  
Lasselle. Recordkeeping: The Total Concept

### Secretarial/Word Processing Occupations I (1982-89)

Reiff. Communication Skills for the Processing  
of Words(paper)  
Casady. Word/Information Processing Concepts, 2E  
(paper)

### Secretarial/Word Processing Occupations II (1982-89)

Jennings. Secretarial and Administrative  
Procedures, 2E

### Shorthand I (1982-89)

#### [First Semester Texts]

Christensen. Century 21 Shorthand: Theory and  
Practice  
Gregg. Gregg Shorthand, Series 90  
Leslie. Gregg Shorthand, Functional Method,  
Series 90

#### [Second Semester Texts]

Haggblade. Century 21 Shorthand: Intensive  
Dictation/Transcription  
Leslie. Gregg Dictation and Introductory  
Transcription, Series 90

### Shorthand II (1982-89)

#### [First Semester Text]

Leslie. Gregg Transcription, Series 90  
[Second Semester Text]  
Gregg. Gregg Speed Building, Series 90  
[Both Semester Text]

Stoddard. Century 21 Shorthand: Advanced  
Dictation/Transcription

Typewriting I (1982-89)

Crawford. Century 21 Typewriting, Book One, 3E  
Wancus. Personal Typewriting, 4E

Typewriting II (1982-89)

Crawford. Century 21 Typewriting, Book Two 3E

Typewriting [Complete Course] (1982-89)

Crawford. Century 21 Typewriting, Complete Course, 3E  
Altholz. Type Right! A Complete Program for Business Typewriting

Marketing and Distributive Education

Advertising Design and Sales Promotion (1983-90)

Wray. Advertising Services(paper)

Advertising and Sales Promotion (1983-90)

Norris. Advertising, 2E  
Carty. Visual Merchandising: Principles and Practice, 2E

Fashion Merchandising (1983-90)

Frings. Fashion: From Concept to Consumer

Fashion Merchandising and Management (1983-90)

Mathisen. Apparel and Accessories(paper)

Food Marketing and Management (1983-90)

Reese. Food Marketing(paper)

Introduction to Marketing and Distributive Education

Bikkie. Careers in Marketing, 2E(paper)  
Greif. Store Talk(paper)  
Kimbrell. Succeeding in the World of Work

Marketing (1983-90)

Mason. Marketing Practices and Principles, 3E  
Meyer. Retailing Principles and Practices, 7E

Marketing, Management and Ownership (1983-90)

Hutt. Creating a New Enterprise(paper)  
Ely. Starting Your Own Marketing Business, 2E (paper)

Marketing and Merchandising (1983-90)

Samson. Retail Merchandising, 9E

Marketing, Merchandising and Management (1983-90)

Pintel. Retailing, 3E

Marketing Research (1983-90)

Kress. Marketing Research, 2E

Sales Fundamentals (1983-90)

Stull. Marketing Math(paper)  
Ditzenberger. Selling: Helping Customers Buy

Service Station Marketing and Management (1983-90)

Humbert. Petroleum Marketing(paper)

Wholesaling (1983-90)

Ertel. Wholesaling and Physical Distribution, 2E (paper)

Health Occupations Education

Introduction to Health Occupations Education (1984-89)

Fisher. Basic Medical Terminology, 2E(paper)

Health Occupations Education I (1984-89)

Ferris. Body Structures and Functions, 6E(paper)  
Thygerson. The First Aid Book(paper)  
Milliken. Understanding Human Behavior, 3E

Health Occupations Education II (1984-89)

Simmers. Diversified Health Occupations  
Cooley. Nursing Skills for Human Needs(paper)

Home Economics

Child Development (1980-85)

Ames. Child Care and Development, RV  
Westlake. Children: A Study in Individual Behavior  
Baker. Understanding and Guiding Young Children, 3E

Clothing Services (1980-85)

Wyllie. Today's Custom Tailoring, RV

Clothing and Textiles (1980-85)

Liddell. Clothes and Your Appearance  
Jones. Clothing -- Your Way(paper)  
McFarland. Exploring Fabrics

Consumer Education and Management (1980-85)

Maedke. Consumer Education  
Oppenheim. Consumer Skills, RV  
Kelly. Survival: A Guide to Living on Your Own

Cooperative Occupational Home Economics (1980-85)

Jacoby. Preparing For a Home Economics Career

Food Services (1980-85)

Ray. Exploring Professional Cooking, RV  
Cornelius. Food Service Careers, RV

Foods and Nutrition (1980-85)

Kowtaluk. Discovering Food, RV  
Kowtaluk. Food For Today, RV

Housing and Home Furnishings (1980-85)

Sherwood. Homes: Today and Tomorrow, RV  
Craig. Homes With Character, 4E  
Lewis. Housing Decisions

Interpersonal Relationships (1980-85)

Ryder. Contemporary Living  
Sasse. Person to Person, RV

Personal and Family Living (1980-85)

Riker. Married Life, 2E  
Landis. Personal Adjustment, Marriage and Family Living, 6E  
Brinkley. Teen Guide to Homemaking, 4E  
Landis. Your Marriage and Family Living, 4E

Teacher Aides/Child Care Services (1980-85)

Draper. Caring For Children, RV  
Conger. Child Care Aide Skills

## Industrial Arts

### Industrial Arts Education

#### Communications (1984-89)

Shaeffer. Basic Mechanical Drawing, 3E(paper)  
Broekhuizen. Graphic Communications

#### Construction (1984-89)

Landers. Construction: Materials, Methods, Careers  
Zimmerman. Exploring Woodworking  
Huth. Introduction to Construction

#### Energy/Power/Transportation (1984-89)

Walker. Exploring Power Technology  
Bohn. Power: Mechanics of Energy Control  
Roth. Small Gas Engines

#### General Industrial Arts - Manufacturing (1984-89)

Lindbeck. Basic Crafts, 2E  
Fales. Manufacturing: A Basic Text For Industrial Arts  
Wright. Manufacturing: Material Processing, Management, Careers  
Brown. Modern General Shop

### Unit Shop Industrial Arts

#### Architectural Drawing (1984-89)

Kicklighter. Architecture: Residential Drawing and Design  
Wallach. Basic Architectural Drafting

#### Basic Electricity/Electronics (1984-89)

Miller. Energy: Electricity/Electronics  
Miller. Experiences With Electrons

#### Graphic Arts (1984-89)

Walker. Graphic Arts Fundamentals

#### Materials and Processes (1984-89)

Thode. Materials Processing

#### Metals Technology (1984-89)

Repp. Metalwork: Technology and Practice  
Walker. Modern Metalworking

#### Plastics Technology (1984-89)

Baird. Industrial Plastics

#### Technical Drawing and Planning (1984-89)

Walker. Exploring Drafting  
French. Mechanical Drawing, 9E

#### Wood Technology (1984-89)

Groneman. General Woodworking, 6E  
Wagner. Modern Woodworking

### Trade and Industrial Education

#### Auto Body Repair (1984-89)

Duenk. Auto Body Repair  
Schmidt. Auto Body Repair and Refinishing

#### Auto Mechanics (1984-89)

Stockel. Auto Mechanics Fundamentals  
Crouse. Automotive Mechanics, 6E

#### Cabinetmaking (1984-89)

Lewis. Cabinetmaking, Pattermaking and Millwork(paper)

#### Carpentry (1984-89)

Feirer. Guide to Residential Carpentry  
Wagner. Modern Carpentry

#### Climate Control (1984-89)

Schubert. Fundamentals of Solar Heating  
Althouse. Modern Refrigeration and Air Conditioning  
Miller. Refrigeration and Air Conditioning Technology

#### Cosmetology (1984-89)

Scott. The Prentice-Hall Textbook of Cosmetology, 2E  
Kibbe. Standard Textbook of Cosmetology  
Barrett. The Van Dean Manual

#### Diesel Mechanics (1984-89)

Weathers. Diesel Engines for Automobiles and Small Trucks

#### Electrical Trades (1984-89)

Gerrish. Electricity and Electronics  
Fowler. Electricity: Principles and Applications  
Miller. Industrial Electricity, RV

#### Electronics (1984-89)

Crozier. Introduction to Electronics  
Gerrish. Transistor Electronics

#### Furniture (1984-89)

Feirer. Advanced Woodwork and Furniture Making, 4E, 2RV  
Feirer. Furniture and Cabinet Making

#### Graphics and Industrial Communications (1984-89)

Adams. Printing Technology, 2E

#### Introduction to Trade and Industrial Education (1984-89)

Bane. Exploring Technology  
Los Angeles Unified School District.  
General Industrial Education  
Herr. Your Working Life

#### Machine Shop (1984-89)

Repp. Machine Tool Technology  
Walker. Machining Fundamentals

#### Maintenance (1984-89)

Wireman. Industrial Maintenance

#### Masonry (1984-89)

Kreh. Masonry Skills

#### Plumbing (1984-89)

Sullivan. Plumbing: Installation and Design

#### Programming and Broadcasting (1984-89)

Bittner. Professional Broadcasting: A Brief Introduction(paper)

Technical Drafting (1984-89)

Spence. Drafting Technology and Practice, RV  
Bethune. Essentials of Drafting

Textiles (1984-89)

Smith. Textiles in Perspective

Welding (1984-89)

Althouse. Modern Welding  
Sacks. Welding: Principles and Practices, RV

SCIENCE

Biology I (1980-85)

Haynes, Editor. Biological Science: An Ecological Approach, BSCS Green Version, 4E  
Hickman. Biological Science: An Inquiry Into Life, BSCS, 4E  
Slesnick. Biology  
Wong. Biology: Ideas and Investigations in Science, 2E  
Oram. Biology: Living Systems, 3E  
Morholt. Biology: Patterns in Living Things  
Otto. Modern Biology

Biology II (1980-85)

Volpe, Biological Science: Interaction of Experiments and Ideas, BSCS, 3E  
Arms. Biology

Chemistry I (1980-85)

Choppin. Chemistry  
Cotton. Chemistry: An Investigative Approach, RV  
Smoot. Chemistry: A Modern Course  
Metcalf. Modern Chemistry

Physical Science (1980-85)

Brandwein. Energy: A Physical Science, Concepts in Science, Curie Edition  
Heimler. Focus on Physical Science  
Ramsey. Holt Physical Science  
Barman. Physical Science  
Wong. Physical Science: Ideas and Investigations in Science, 2E  
Brown. Physical Science: A Search for Understanding

Physics (1980-85)

Williams. Modern Physics  
Murphy. Physics: Principles and Problems  
Hulsizer. The World of Physics

Special Interest Courses

Ecology (1980-85)

McCombs. What's Ecology? (paper)

Marine Biology (1980-85)

Raseck. Marine Biology, RV

Oceanography (1980-85)

Oxenhorn. Oceanography and Our Future (paper)

Anatomy and Physiology (1981-85)

Evans. Anatomy and Physiology, 3E

SOCIAL STUDIES

United States History (1983-88)

Grade Eleven Texts

Branson. America's Heritage  
Berkin. Land of Promise: A History of the U.S.  
Bass. Our American Heritage  
Todd. Rise of the American Nation, Liberty Edition

Davidson. The United States: A History of the Republic, 2E

Grade Twelve Texts - Advanced Placement

Jordan. The United States, 5E, Combined Edition

The Economic, Legal and Political Systems (1983-88)

Grade Nine Texts

Kownslar. Civics: Citizens and Society, 2E  
Fraenkel. Civics: Government and Citizenship  
Smith. Free Enterprise - - The American Economic System  
Berry. Our Legal Heritage  
Carter. You the Citizen

World Geography (1983-88)

Grade Ten Texts

Educ. Challenges. World Geography  
Israel. World Geography Today

World History (1983-88)

Grade Ten Texts

Wallbank. History and Life: The World and Its People, 2E  
Lainwand. The Pageant of World History  
Kownslar. People and Our World: A Study of World History  
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