



Discovering Our Heritage

*A Community
Collaborative
Approach*

*Guidebook
for Teachers and Administrators
K-6*

*Model Social Studies Program Incorporating
Environmental Education to Integrate the Teaching of
History, Geography, Science, Mathematics, and Language Arts*

Discovering *Our* Heritage

A Community Collaborative Approach

*K-6 Model Social Studies Program Incorporating
Environmental Education to Integrate the Teaching of
History, Geography, Science, Mathematics, and Language Arts*

Guidebook for Teachers and Administrators

Douglas J. Phillips

A Program of the Alabama Wildlife Federation



*Developed by the Alabama Museum of Natural History
in cooperation with the Alabama Cooperative Extension System
and the Alabama State Department of Education*

© 2001, Douglas J. Phillips and the Alabama Wildlife Federation. All rights reserved.
Design: Nancy Lambert-Brown


To obtain copies of the
DISCOVERING OUR HERITAGE Guidebook for Teachers and Administrators
and the individual grade-level
DISCOVERING OUR HERITAGE Kindergarten through Fifth Grade,
please contact:

Alabama Wildlife Federation
46 Commerce Street
Montgomery AL 36104
1-800-822-WILD (9453)
www.alawild.org

Table of Contents

<i>A Message from the State Superintendent of Education</i>	5
<i>Foreword</i>	7
<i>Acknowledgments</i>	9
<i>Part 1: Program Purposes</i>	11
<i>Why the title, DISCOVERING OUR HERITAGE (DOH)?</i>	12
<i>Why the subtitle, A Community Collaborative Approach?</i>	13
<i>Why use social studies as the umbrella for integrated teaching?</i>	14
<i>Why this emphasis on environmental education?</i>	15
<i>Part 2: Program Design</i>	17
<i>Rationale</i>	18
<i>General sequence</i>	20
<i>Content integration</i>	21
<i>Supportive intent</i>	24
<i>Part 3: Ensuring Proper Program Fit for Your School</i>	25
<i>School commitment</i>	26
<i>Community commitment</i>	26
<i>Teacher preparation</i>	27
<i>Troubleshooting</i>	27
<i>Appendix A: K–5 Yearly and Unit Overviews</i>	29
<i>Appendix B: Content Integration Matrices</i>	39
<i>Appendix C: Resources</i>	63
<i>Appendix D: Organizing the Community Collaborative</i>	69
<i>Appendix E: Optional Development of a DOH Program for Grade 6</i>	71
<i>Appendix F: Integrating Career Awareness into DOH</i>	75

A Message from the State Superintendent of Education



Alabama can proudly boast of numerous innovative educational programs currently underway in school systems around the state. This variety is beneficial because specific pathways to learning that are appropriate in one situation might not be the most appropriate for another situation. The professional judgement of local administrators and teachers is our strongest asset in making such determinations. With this in mind, I want to invite your attention to a very timely new program, DISCOVERING OUR HERITAGE, developed by Alabama educators for Alabama schools and communities.

Throughout the nation today, there is a growing recognition of the importance of environmental education, to ensure a healthy environment, to sustain a viable economy, and to augment overall student development and academic performance. DISCOVERING OUR HERITAGE is a unique program that helps address these needs for Alabama without placing added demands on our teachers. Rather, this program incorporates environmental education to support and reinforce many requirements of the Alabama Course of Study. Also, this program is sufficiently flexible to be adapted in most school systems without disrupting existing policies and practices.

I am pleased to acknowledge the organizations that sponsored production of DISCOVERING OUR HERITAGE, the Alabama teachers who helped in its development, and the Alabama schools that are using this program. I would like to join them in offering DISCOVERING OUR HERITAGE as an especially valuable pathway to educational success.

— DR. ED RICHARDSON

American education today must meet a greater range of needs and serve a larger number of students than ever before. However, our schools also face an increasing array of difficulties, many of which are complex and closely intertwined with the changing conditions of society at large. Any educational program seeking long-term success must recognize this reality. Any program hoping to truly assist schools must appreciate the prevailing demands on teachers, the heavy responsibilities on administrators, and the conflicting pressures that often beset local school boards.

There may be no simple solution fitting every educational need in the nation, but Alabama educators have worked together in designing DISCOVERING OUR HERITAGE as a model for addressing many of the needs in Alabama schools. Central to this design is the philosophy that the realm of nature is an exceptional laboratory for learning, that environmental education, done correctly, provides students with meaningful connections between academic learning, applied problem-solving, civic participation, and the development of personal character and individual responsibility. DISCOVERING OUR HERITAGE is recognized by Alabama teachers for its effectiveness in demonstrating these multiple values of environmental education.

Possibly the greatest potential of this program is suggested by its subtitle, A Community Collaborative Approach. Through development of the DISCOVERING OUR HERITAGE Community Collaborative, schools can promote greater local understanding of

the challenges facing education and strengthen local support for school policies and for the needs of teachers, students, and the classroom.

The heritage of our nation is one of freedom-loving peoples striving to improve opportunity for all in a land that is blessed with remarkable natural resources. As a primary vessel of this heritage, our democratic system depends increasingly upon education to inform society, sustain reason, cultivate civility, and instill both a sense of stewardship for our lands and waters and a sense of humanity for one another. In turn, to serve this role effectively, education must draw upon a central premise of democracy and ensure that communities are active participants in supporting local schooling.

DISCOVERING OUR HERITAGE provides a model for addressing these multiple aims through a coherent framework linking people to the land, learning to the real world, and the school to the community. Students and teachers are assisted in assembling otherwise fragmented subject matter into a more meaningful, conceptual understanding of our world. Science is related to society, institutions to cultures, the environment to economics, and personal responsibility to community well-being. Ultimately, DISCOVERING OUR HERITAGE is a program and a process enhancing the role of education as a purposeful means to human progress.

— DR. DOUGLAS J. PHILLIPS
Program Director, DISCOVERING OUR HERITAGE

Acknowledgments

DISCOVERING OUR HERITAGE is the product of the caring commitment of many Alabamians, including the program's sponsors, participating school systems, and, most significantly, Alabama teachers.

DISCOVERING OUR HERITAGE is the culmination of thoughtful input from master teachers in a variety of school systems, urban and rural, across Alabama. The program was initiated in 1996 as an experimental project at Westwood Elementary School, Tuscaloosa County School System, in collaboration with the "Challenge 21" planning initiative. In the following years, under the leadership of System Superintendent, Dr. Joyce Sellers, the program was piloted in elementary schools throughout Tuscaloosa County. It was later adopted and expanded in the Hoover City Schools and Escambia County Schools. Since 1999, these three systems have continued to provide field testing for the program. Sincere thanks and admiration are extended for their efforts.

Special thanks are extended to retired Westwood Elementary principal, Dr. Joan Lowery, and retired Tuscaloosa County Schools Superintendent, Dr. Neil Hyche, for their support in making this educational program possible. Thanks are also due to the Alabama State Department of Education (ADE), State Superintendent Dr. Ed Richardson; ADE specialists Judy Cooper and Frank Heatherly; and social studies consultant Jane Crowe, for assistance in helping ensure that DISCOVERING OUR HERITAGE is fully consistent with the Alabama Course of Study. Likewise, thanks are due to the Alabama Cooperative Extension System, Director Steve Jones, and Community Resource Coordinator, Warren McCord, for assistance in providing teacher training facilities.

DISCOVERING OUR HERITAGE is made available through the leadership of the Alabama Wildlife Federation (AWF). In 1995, AWF responded to the requests of Alabama teachers for development of a model environmental education program organized sequentially to support requirements of the Alabama Course of Study throughout the school year. With

the active involvement of its officers and Board of Directors, AWF spearheaded a successful statewide initiative pulling together diverse interest groups and generating the necessary funding to complete DISCOVERING OUR HERITAGE.

Program Staff

PROGRAM DIRECTOR & PRINCIPAL AUTHOR

Dr. Douglas J. Phillips
Alabama Museum of Natural History (AMNH)

PROGRAM CONSULTANTS

Dr. John C. Hall, AMNH
Dr. Brenda Litchfield, Educational Concepts

PROGRAM COORDINATOR

Cathleen A. Baker, AMNH

TEACHER LIAISONS FOR PILOT SCHOOL SYSTEMS

Sue Kidd, Westwood Elementary
Tuscaloosa County School System

Sherry Parrish, South Shades Crest Elementary
Hoover City School System

Renee Wolfe, Rachel Patterson Elementary
Escambia County School System

DOH OUTREACH COORDINATOR

Wayne Strickland, Alabama Wildlife Federation/
Alabama Cooperative Extension System

FUNDING DEVELOPMENT AND SUPPORT

Dr. Jeff McCollum & Tim Gothard
Alabama Wildlife Federation

Contributing Sponsors

**ALABAMA ASSOCIATION OF RESOURCE CONSERVATION
& DEVELOPMENT COUNCILS**

ALABAMA SOIL AND WATER CONSERVATION COMMITTEE

BOISE CASCADE

CHAMPION INTERNATIONAL CORPORATION

COMER FOUNDATION

EL PASO ENERGY

LEGACY, PARTNERS IN ENVIRONMENTAL EDUCATION, INC.

REYNOLDS METALS COMPANY

SUSTAINABLE FORESTRY INITIATIVE

VULCAN MATERIALS COMPANY FOUNDATION

W.T. NEAL TRUST

Part 1

Program Purposes

DISCOVERING OUR HERITAGE provides a "teacher-friendly" structure that addresses multiple dimensions of students' academic, civic, and personal growth.

Alabama is blessed with many organizations, agencies, and individuals seeking a quality future through improved education. Various advisory groups serve the governor and others in helping decide important governmental and legislative needs for education. The Alabama State Department of Education (ADE) is committed to providing official policy, curriculum guidelines, and expert assistance required for educational success. Other groups offer a great variety of educational materials and programs providing supplementary resources to schools.

Therefore, one might ask: Why develop another program when there is already an abundance of educational resources in Alabama? The answer to this question is related in part to the very fact that there are so many different materials and programs available to schools. DISCOVERING OUR HERITAGE provides an approach for organizing this variety of resources systematically across the school year.

Another part of the answer has to do with the fact that there are many different and often disparate ways of presenting content and conducting learning in classrooms around the state. While recognizing the importance of such diversity, DISCOVERING OUR HERITAGE offers a framework to help provide a consistent, conceptual context for learning.

A final part of the answer is simply that many teachers have long sought a sequential plan that integrates subject matter, places greater emphasis on the natural environment, incorporates supportive resources, and expedites overall educational improvement and whole-student development. DISCOVERING OUR HERITAGE provides a "teacher-friendly" structure that addresses multiple dimensions of students' academic, civic, and personal growth.

DISCOVERING OUR HERITAGE is offered to assist Alabama schools seeking to achieve overall educational improvement. A primary aim of the program is to support the educational policies of the State of Alabama and the requirements of the Alabama Course of Study. In other words, DISCOVERING OUR HERITAGE is based on the standards and guidelines of the Alabama State Department of Education and is intended to help meet the genuine educational needs of Alabama's teachers and students.

In giving consideration to this program, there are additional questions that might be asked by Alabama educators. Several of these questions are addressed in the following sections.

*Why the title, DISCOVERING OUR HERITAGE (DOH)? **

As Ben Franklin was leaving the constitutional convention one afternoon in September 1787, a young woman approached him and asked, "Well, Dr. Franklin, what have you given us?" "A republic—if you can keep it," was his reply. Keeping the republic requires that United States citizens labor vigilantly to ensure that this form of government continues to extend the blessings of liberty to all its people.

Events in today's world present new concerns for our republic. These concerns arise not only because of possible developments elsewhere in the world, but also because of challenges within, including the educational challenge of providing citizens with a full understanding of the significance of our nation's history and development. The title, DISCOVERING OUR HERITAGE (DOH), reflects an overarching aspect of program design, whereby the process of learning through active *discovery* is tied to the outcome of appreciating *America's heritage*.

As we move deeper into the twenty-first century, it is clear that the dominant social, economic, cultural, and scientific trends that have defined the western world for five centuries are rapidly leading in new

directions. We are living in a period of dramatic change, which has brought new conceptions of time, community, family, and even nationhood. We are being forced to reexamine fundamental institutions and to construct relationships as we continue efforts to establish justice, ensure domestic tranquillity, provide for the common defense, protect the environment, promote the general welfare, and secure the blessings of liberty for ourselves and our children.

The twenty-first century brings us face to face with the information-electronic-biotechnological age. New issues and new problems

confront us and tax our intellectual and moral fiber. Already, demographic and statistical data force us to look closely at the changing nature of our families, the reconstruction of work, the distribution of justice and poverty, the conditions of illiteracy, and the age, class, gender, and ethnic makeup of our people. Scientific data force us to recognize that an expanding human population has stressed life-supporting environmental systems in many ways. The world is diverse, yet interdependent and globally connected, and the task of bringing the blessing of the "American dream" to all will require citizens with a new sense of purpose based on an adequate understanding of our American heritage, our cultural heritage, and our natural heritage.

Given the realities of today's world and the desire of U.S. citizens to carry the ideals of our republic into the future, it is necessary that we create a new vision for social studies. That vision must motivate us toward a commitment to extend the promise of education and citizenship to each and every person in the United States. That is, social studies should illuminate the essential connection among learning, democratic values, positive citizenship, and the abiding interrelationships within and between societies and their natural environments.

As a people, then, our first priority, our first public policy goal, must be to ensure our survival as a free nation through the development of students who appreciate their heritage and who can thoroughly assume the office of citizen. The informed social studies student understands and applies to personal and public experiences the content perspectives of the several academic fields of the social studies. Equally important, the informed social studies student exhibits the habits of mind and behavior of one who respects life (people and nature) and realizes the relationship between education and his or her responsibility to promote community well-being.

Our "We the People" republic is built upon the principle that the people occupy an important position in government—the office of citizen; thus, it is necessary that attention be paid to the education of those who assume this office. This civic culture of our nation is built upon four components: the legislature, the executive, the judicial, and the people. The three branches of government depend on the people (the fourth branch), who must develop the attributes of the enlightened citizen, i.e., individuals

...social studies should illuminate the essential connection among learning, democratic values, positive citizenship, and the abiding interrelationships within and between societies and their natural environments.

* Adapted from Expectations of Excellence: Curriculum Standards for Social Studies, NCSS, 1994.

who understand the rights and responsibilities of citizenship.

Citizens who take this office seriously are in touch with the cultural and natural heritage of the nation. They possess knowledge of the economic, political, environmental, and social factors that make up the human ecosystem in which all must function, and they understand its relationship to natural ecosystems. They understand the principles of the rule of law, legal limits to freedom, responsible stewardship of resources, and majority rule with protection for minority rights. They have informed geographical, temporal, and cultural perspectives. They possess the attitudes and behaviors that support fair play and cooperation. Without a conscious effort to teach these ideas, a free republic will not endure. Thus, DISCOVERING OUR HERITAGE organizes academic studies to facilitate active discovery and meaningful understanding of our remarkable American heritage.

Why the subtitle, A Community Collaborative Approach?

Across the United States today, schools face a number of complex problems and issues. Many of these stem from realities of our society that are manifested to a greater or lesser degree in every local community. A partial list of these realities includes:

- economic, social, and racial disparities
- unprecedented levels of media and marketing influence on youth
- disrupted families, broken homes, transient residency, and other such factors affecting the personal development and adjustment of children
- troublesome levels of peer pressure, discipline problems, and juvenile crime
- school funding shortages
- frequent public misunderstanding of the realities faced by schools, school administrators, and teachers
- politically-charged attempts to impose special-interest ideology upon school programs and policies
- in many parts of the U.S., increasing criticism and dissatisfaction with public schooling

This situation has prompted a new awareness of the importance of achieving and maintaining mutually supportive relationships between the school and the local community. Such relationships may be essential to the future of public schooling in America. Indeed, some experts suggest that only through improved school–community collaboration will many U.S. schools successfully manage the challenges of our time.

Of course, such expert opinion is old news to most administrators and teachers. In fact, every school promotes community involvement through parent-teacher organizations, school publicity, various community events, etc. However, the complex nature of many of today’s educational issues often requires a special approach for achieving a fully informed and broadly supportive community.

The DOH Community Collaborative is designed not only to ensure community commitment to DOH (see Part 3. Community commitment, page 26), but also to provide an ongoing mechanism for school–community dialogue, issue analysis, problem-solving, and overall educational support. In other words, DOH recognizes that opportunities for student growth are benefitted when a supportive learning climate exists in the community as well as in the school.

Too often, these opportunities go unrealized because problems such as those listed above lead to misunderstandings, hostilities, lawsuits, and other forms of conflict that can frustrate educators, disrupt communities, and generally stymie educational effectiveness.

The DOH Community Collaborative provides an alternative means of fostering communication, assessing needs, and working for consensus solutions—thereby helping to build stronger communities to support effective schools.

DOH recognizes that opportunities for student growth are benefitted when a supportive learning climate exists in the community as well as in the school.

*Why use social studies as the umbrella for integrated teaching? **

The DOH approach to integrating content can be organized under most subject areas, from science to language arts. However, social studies is an ideal umbrella for a number of reasons, beginning with its very definition. In 1992, the Board of Directors of the National Council for Social Studies (NCSS) adopted the following definition:

Social studies is the integrated study of the social studies and humanities to promote civic competence. Within the school program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences. The primary purpose of social studies is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.

There are two features of social studies that distinguish it from other school subjects and provide special instructional opportunities. First, social studies is diverse, encompassing a great range of potential content. When taught well, its content is drawn not only from its most direct foundational disciplines but also from the arts and humanities, mathematics and science, current events, and students' own interests and experiences. This content, however, is not treated simply as collections of miscellaneous information and activities, but rather is organized within a coherent citizen education curriculum. Second, the social understanding and civic efficacy goals of social studies place special responsibilities on teachers for addressing the ethical and social policy aspects of topics. When taught well, social studies engages students in the difficult process of confronting ethical and value-based dilemmas and encourages them to speculate, think critically, and make personal and

civic decisions based on information from multiple perspectives.

The NCSS identifies citizenship education as the primary purpose of K–12 social studies and notes that concern for the common good and citizen participation in public life are essential to the health of our democratic system. The NCSS states that effective social studies programs prepare young people to identify, understand, and work to solve problems facing our nation in an increasingly interdependent world. These programs are characterized by learning experiences that:

- foster individual and cultural identity along with understanding of the forces that hold society together or pull it apart;
- include observation of and participation in the school and community;
- address critical issues and the world as it is;
- prepare students to make decisions based on democratic principles; and
- lead to citizen participation in public affairs.

Curriculum components include knowledge, democratic values and beliefs, thinking skills, and social and civic participation skills. Knowledge refers to interpretations that students construct in response to their experiences in and out of school, but knowledge is not merely a fixed body of information transmitted for students to memorize. Teachers should also provide students with opportunities to think and communicate in ways that will help construct a working knowledge of subject content.

The content of social studies focuses on the world—near and far, social and civic, past, present, and future. Effective social studies teaching draws this content from the social studies foundational disciplines (such as geography, environment, government, and history) and links it with knowledge that students have acquired through life experiences and the media. It builds knowledge about the history and cultures of our nation and the world, geographical relationships, environmental processes, economic systems and procedures, social and political institutions, races, cultures, ecosystems, and institutions. From this knowledge base, exemplary programs help students to: 1) develop skills, concepts, and generalizations necessary to understand the sweep of human affairs; 2) appreciate the benefits of diversity and

* *Adapted from* Expectations of Excellence: Curriculum Standards for Social Studies, NCSS, 1994.

community, the value of widespread economic opportunity, and the contributions that people of both genders and the full range of ethnic, racial, and religious groups have made to our society; 3) become ready and willing to contribute to public policy formulation; and 4) acquire ways of managing conflict that are consistent with democratic procedures.

The fundamental values and beliefs taught in social studies are drawn from many sources, but especially from the Declaration of Independence and the United States Constitution with its Bill of Rights. These beliefs form the basic principles of our democratic constitutional order. They depend on such practices as due process, equal protection, free expression, and civic participation, and they have roots in the concepts of liberty, justice, equality, responsibility, diversity, and privacy.

Exemplary social studies programs do not indoctrinate students to accept these ideas blindly. Instead, they present knowledge about their historical derivation and contemporary application necessary to understand our society and its institutions. Teachers model fundamental democratic principles in their classrooms, discuss them as they relate to curriculum content and current events, and make them integral to the school's daily operations, e.g., through involving students in making decisions that affect them.

Exemplary social studies programs also prepare students to connect knowledge with beliefs and action using thinking skills that lead to rational behavior in social settings. These include the thinking skills involved in: 1) acquiring, organizing, interpreting, and communicating information; 2) processing data in order to investigate questions, develop knowledge, and draw conclusions; 3) generating and assessing alternative approaches to problems and making decisions that are both well informed and justified according to democratic principles; and 4) interacting with others and with the natural environment in responsible ways.

Involving students in the study of the natural environment can spark heightened interest and motivation for learning while also providing a basic understanding of natural systems and resources that are essential to life itself.

Why this emphasis on environmental education?

DOH emphasizes environmental education for reasons that can be summarized under two areas. First, there is a basic connection between nature, academic content, and student learning. Most academic subjects originated with someone investigating something about the natural world. This is clearly true of such subjects as mathematics, geography, and science. Today, we find that subjects such as history and social studies are increasingly understood in terms of the interrelationship of human societies and their natural surroundings. Likewise, the realm of nature has long been a source of special excitement and curiosity for children. Involving students in the study of the natural environment can spark heightened interest and motivation for learn-

ing while also providing a basic understanding of natural systems and resources that are essential to life itself. This has been demonstrated time and again by environmentally-oriented school programs across the nation (see References below).

Second, there is an essential connection between land and people. Alabama today is a land uniquely rich in natural qualities vital to our state—economically, socially, and environmentally. However, in the modern era of accelerating change, the natural environment is affected by many new pressures from human population growth and a host of related impacts. Alabama's natural qualities could become increasingly at risk unless future generations are sufficiently educated and prepared to make informed, ethical decisions regarding the state's natural resources, as well as local, national, and global environmental issues.

There is a growing consensus among Alabama teachers about the importance of the above concerns and about the need to coordinate existing environmental education resources to more effectively address these concerns. *DOH is responsive to the wishes of such teachers, many of whom feel that environmental education, instead of being optional or occa-*

sional in the classroom, should be central to the core curriculum throughout the school year.

DOH builds on social studies content in American history and geography to address multiple areas of student development. The program promotes students' personal, social, and academic growth, and develops responsible citizenship and an appreciation of the significant heritage of our democratic nation. This is done by emphasizing experiential learning, direct student involvement and study of real issues in the community, and close active collaboration between the school, parents, and the community at large.

DOH incorporates a thematic focus that is timely and especially suited to the rich heritage of our own state of Alabama. Just as the native American lands and waters were a fundamental aspect of the nation's settlement, DOH includes the study of natural resources as a fundamental aspect to understanding the development of American society. Thus, natural history and environmental themes are used for linking history, geography, science, math, and language arts into an interdisciplinary perspective of our American heritage.

An environmental premise for integrating subject matter is the adage that "the nature of life is nature." Most pursuits of society are ultimately dependent upon the life-supporting systems of nature. Likewise, understanding the systems of nature is of paramount importance for insuring a healthy future for our increasingly complex society.

A related premise for inviting school-community collaboration is reflected in the adage from Shakespeare: "One touch of nature makes the whole world kin." Respect for fellow humans is enhanced by nurturing respect for life in general. And life in general is enhanced by nurturing respect for the natural environment. Thus, student explorations within the community are geared to increase awareness of

the interdependency between our social, economic, and environmental needs.

DOH seeks to benefit Alabama's students, teachers, and communities by demonstrating the following:

- environmental education can provide a framework for interdisciplinary, experience-based learning and can do so as part of a sophisticated academic regimen covering the requirements of the classroom textbook(s) and the Alabama Course of Study.
- environmental education can provide a catalyst for making learning directly relevant and personally meaningful by involving students in the active study of the local community.
- available resources for environmental education can be arranged in a format that promotes an ongoing, organized use of existing programs and materials to better help teachers meet each learner's needs.
- enhanced community support for the school can be generated by implementing environmental education through a guided process of community collaboration.

References

- Hines, J.M., Hungerford, H.R., & Tomera, A.N. (1986). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *Journal of Environmental Education*, 18(2), 1-8.
- Hungerford, H.R., & Volk, T.L. (1990). Changing learner behavior through environmental education. *Journal of Environmental Education*, 21(3), 8-21.
- Smyth, J.C. (1983). The place of the environment in general education. *Environmentalist*, 3, 121-129.

Part 2

Program Design

There are many ways to design educational curricula. Review of materials from around the nation reveals a range of layouts, from the simple listing of topics in prescribed order to sophisticated arrangements of elaborate content and requisite instructional procedures. Likewise, from the teacher's perspective, this range of designs affords a corresponding range of usefulness to the teacher. Some designs provide little guidance to assist daily instructional planning. Other designs are so complex or excessive as to be impractical for easy use. DOH is designed, with the input of teachers, to provide both sufficient guidance for instructional planning and ample ease in application.

Rationale

DISCOVERING OUR HERITAGE arranges the many facets of academic studies into a unified approach infusing our natural heritage with our cultural heritage (see graphic “Unifying Approach” below). The subject of social studies is thereby understood in terms of four major elements—the land, the people, interrela-

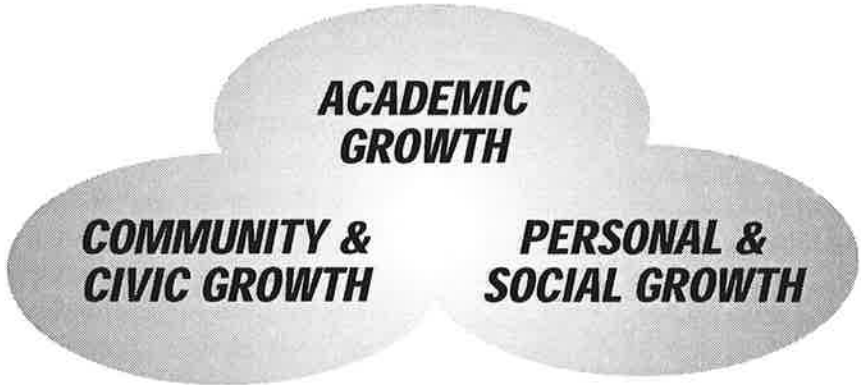
tionships, and change—around which required academic content is integrated. Likewise, DISCOVERING OUR HERITAGE is designed to enrich learning experiences and to promote “whole growth” development (see graphics, “Dimensions of Student Growth” and “Dynamics of Student Growth” on the next page).

UNIFYING APPROACH

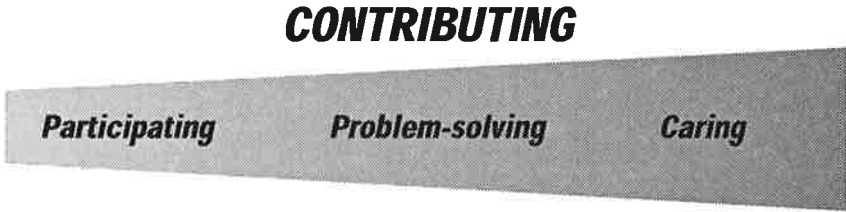
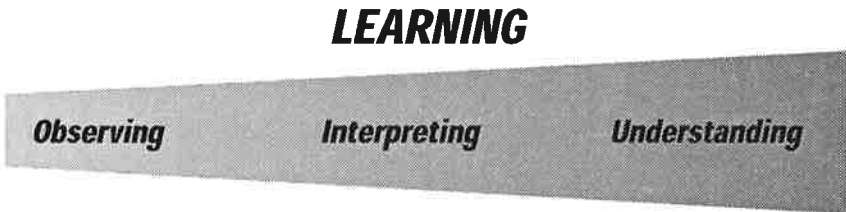
DISCOVERING OUR HERITAGE



DIMENSIONS OF STUDENT GROWTH



DYNAMICS OF STUDENT GROWTH



General sequence

The Alabama Course of Study (ACS) for social studies for grades K–6 divides content according to different aspects/periods of history and geography:

Kindergarten	Citizenship: Living in My World
Grade 1	History and Geography: Exploring My World
Grade 2	Interdependence: Making a Difference in My World
Grade 3	The Land and Its People
Grade 4	Alabama History and Geography
Grade 5	United States Studies: Beginnings to 1900
Grade 6	United States Studies: 1900 to the Present

Such division readily accommodates an approach to social studies that infuses cultural heritage with natural heritage. To facilitate this connection consis-

tently across grade levels, the DOH program for each grade is organized into units and sections with thematic overviews developed to help bridge content from unit to unit and from grade level to grade level. This provides: 1) a sequential order helpful for students to gain more meaningful understanding (see Appendix A: K–5 Yearly and Unit Overviews), and 2) a structure by which subject matter can be correlated with ACS for multiple subjects (see Appendix B: Content Integration Matrices).

As an example, the Alabama Course of Study for third grade social studies deals with the way people live or have lived in their natural environment at different times. To provide a framework for integrated study based on concepts and topics within such content, DOH divides the third grade school year into six units organized to follow Key Questions and Key Experiences of genuine interest to curious minds.

Example: Third Grade Key Questions

Unit I	<i>Who are we?</i> (school, community, state and national governments)
Unit II	<i>What is the natural environment?</i> (current economic and environmental effects on the global community)
Unit III	<i>Who were the Native Americans?</i> (Native Americans and their movements, culture, and government)
Unit IV	<i>Who were the early settlers?</i> (European and African peoples in America and their land uses)
Unit V	<i>How do we interact with the land?</i> (natural resources, rights and responsibilities of citizens)
Unit VI	<i>What things are changing?</i> (events and history, technology and the land, water, and communication)

Each unit involves a learning package utilizing numerous existing educational resources while centering around a Key Question and Key Experience(s), which guide students in their discovery of the American heritage—the land, the people, interrelationships, and change. This heritage is revealed through the emergence of American freedom and democracy in the scope of the program units.

Example: Third Grade Key Experiences

Unit I	Visit the county courthouse to see how elections are run.
Unit II	Invite a geologist or archaeologist to explore land changes in the local area and lead the class on a rock/fossil hunt.
Unit III	Organize a field trip to a Native American festival, reservation or powwow.
Unit IV	Take a field trip to a nearby early Alabama historic site, for example, Fort Conde (Mobile), Fort Toulouse (Wetumpka).
Unit V	Visit a basic industry that relates to the environment, for example, farm, foundry, mine, or quarry.
Unit VI	Visit a high technology industry—computer lab, telephone company, Internet service provider, television/radio station.

“Key Experiences” listed in DOH represent sample stem ideas only. For maximum learning value, selected experiences should be organized to ensure active student involvement in hands-on investigation and/or problem-solving. To arrange for assistance in designing and planning effective Key Experiences, contact: Wayne Strickland, DOH Outreach Coordinator, Alabama Wildlife Federation, P.O. Box 1109, Montgomery AL 36102; telephone (800) 822-WILD.

Content integration

DOH design provides a comprehensive framework of required content together with a prescribed arrangement of instructional resources.

SUBJECT/TOPIC INTEGRATION

DOH units and sections were extrapolated from the Alabama Course of Study and arranged so that required content and skills from each subject area can be integrated in a sequence that is developmentally and conceptually appropriate (see Appendix B for the complete set of K–5 Content Integration Matrices; see Appendix E for a sample matrix for Grade 6). However, instructional pacing and detail are best left to the discretion of the teacher, drawing upon the model units for guidance.

In *DISCOVERING OUR HERITAGE*, an essential connection is the relationship between our cultural heritage and our natural heritage, between people and the land—the natural environment. This relationship is noted at every opportunity. Practice will suggest other natural links to the environmental theme. In other words, each unit provides a conceptual orientation to help the teacher in deciding how subjects and activities will be assimilated. Teachers will likely benefit by remaining mindful of a few basic observations regarding primary subject areas:

Science. Many of the activities drawn from the various environmental resources utilized in the DOH program are heavily science-based. Therefore, maintaining sufficient science content should not be a problem.

Language Arts. The Alabama Course of Study for Language emphasizes general communication and language skills. The language arts are easily integrated into DOH, as the state curriculum encourages the teaching of skills in “meaningful context.” Also, during each unit, each child should read and report on several books. Of course, reading of almost any sort is to be encouraged, but also try to suggest books with environmental themes (broadly interpreted). Reading levels in the lower grades may be somewhat diverse, with some students reading at a very high level, so the teacher should keep a judicious eye on the students’ selection of books. Teachers are strongly encouraged

to integrate art and music instruction into the curriculum as appropriate and as much as possible.

Math. It is very important not to de-emphasize the math curriculum simply because it is sometimes difficult to integrate into environmental themes, although many topics of the Alabama Course of Study for Math are easily integrated into environmental themes. Still, it will be necessary on occasion to simply pause and teach a specific math lesson.

Geography. As a subject, geography is incorporated into the Alabama Course of Study for Social Studies. DOH emphasizes this important area by suggesting activities that enhance map and globe reading skills, timelines, charts, etc.

ACTIVITY/RESOURCE INTEGRATION

Activities and materials prescribed for each unit are selected to assist the integrated coverage of subject matter. Appendix C: Resources describes the three main categories from which resources have been selected and considered in developing DOH. Also, weekly sections of DOH sometimes list various materials and activities that are not referenced in Appendix C. These have been included at the suggestion of one or more project teachers who found such material useful in their particular teaching situations. DOH cannot officially endorse resources/materials that don’t comply with standards as described in Appendix C. However, such additional materials are occasionally listed in case they might serve to spark new ideas for stimulating creativity, cooperative learning, or career awareness.

Community Visitors and Resources. DOH recommends that, as appropriate, the class invites at least one visitor per week to present a program. These visitors may represent a pertinent career focus or might provide enrichment information (parents often qualify here as well). It is important that the children quickly establish standard hospitality procedures to deal with guests, including invitations, escorts, special behavior, thank-you notes, and general courtesies. Each child should rotate through the various duties so that everyone becomes proficient in these important social skills.

Class Projects. It is recommended that the class be involved in at least one major project that presents a grand summary concerning a unit or yearly focus. Done by students independently and/or in groups, the projects can take many forms: written report, oral report, press release, video, cassette recording, newspaper article, etc. One of the principle intentions of DOH is to encourage group process, the interaction between individuals, in small and large groups, with adults and with community organizations. Every effort should be made to encourage cooperative behavior, problem-solving and conflict-resolution. Toward this end, the class projects are very important.

Journal. During the year, each student should keep a journal. Time should be set aside each day for working in the journal. The journal is to help the students record their personal notes, reactions, sketches, and observations. The purpose here is to encourage creativity and introspection. This activity is not to be confused with a workbook.

Some suggestions for keeping this journal would be sketches of classmates, teacher, school staff, school building and grounds, students' homes, etc.; visitors' names, titles or positions, business name, and notes; field trip dates, locations, people met, observations; written stories and poetry; plants and animals' names, when and where seen, observations, and sketches; and personal reflections.

Evaluation. Since DOH is heavily weighted toward group and individual projects, personal experience and community involvement, some expansion of the usual student evaluation scheme is in order. Factual knowledge can still be evaluated by regular tests. In addition, it is suggested that students read a book each unit and submit a written book report. Their class and community involvement can be evaluated by examining the products of their group and individual projects. Their progress can also be monitored through their journal. Therefore, at the end of each grading period, each student's personal folder might include: tests, book reports, journal, and various project materials representative of his or her participation.

It is also useful for teachers to engage parents in providing regular feedback. This can serve several useful purposes, including informing the parents about what's coming up in the next unit, reminding them of the importance of their involvement in the

class, and providing parent-assessment of program progress across the year.

In addition to student performance in standard areas of academic achievement, DOH seeks to promote skill development in such areas as the following:

- map and globe skills
- brainstorming
- deductive reasoning
- reading
- predicting
- decision-making

The teacher should assess the student's progress through:

- observation
- testing
- individual participation
- parental feedback

GUIDING THOUGHTS

DISCOVERING OUR HERITAGE believes that environmental studies is a very useful and worthwhile means to strengthen basic academic studies and to insure a vigorous program of student performance in required content, skills, and intellectual growth. Environmental education is interpreted broadly, with a primary emphasis on involving children intimately with subject matter, personal experience, and the community. At every opportunity, community supporters, parents, and other local resources should be involved.

As connections are drawn between subject matter and community, whenever possible, children should read (books, periodicals, and encyclopedias), write and edit (reports, essays, works of personal expression, signs, and captions), use math and history in context, and understand and use science in their daily lives.

IDEALLY—

1. *Every day*, every student would have:
 - a DOH lesson/activity (this lesson, whether science or social studies, would be followed by a related language activity),
 - an additional science or social studies lesson (often a spin-off of a DOH activity),
 - a math lesson, where possible supporting the other subjects,
 - physical education,
 - individual reading and writing time, and
 - a formal period to work in the journal

2. *Every week*, the class would have:

- a speaker to visit the class,
- at least one video presenting visual information,
- an out-of-school or outdoor experience,
- a library experience,
- a geography lesson,
- a computer lesson,
- a music and art lesson, and
- a series of small group meetings followed by a group project

3. *Every unit*, the class would have:

- a key experience,
- a keynote visitor, and
- a class project, to which each child would contribute

However, DOH recognizes that teaching occurs in the real world of the daily school routine, with unexpected and continuing distractions and various curriculum requirements that are difficult to integrate. This reality can pose limitations, but it should not rob us of the intrigue of devoting a year to generally pondering our world and our place in it. Along the way and from time to time, we can expect to teach an old-fashioned math, grammar, or history lesson, and if life brings us a good teachable moment that is not “environmental,” we should take it. DOH, rather than being a rigid syllabus to be slavishly followed, is meant to serve as a conceptual framework that allows

the teacher freedom to pursue a good opportunity or idea as it occurs.

Finally, DOH is the product of many years of discussion and input from concerned educators. Among these educators, there is agreement that this model program should “aim high” in expectations for students, teachers, and the community; thus the extensive scope and regimen of the program. However, insofar as this program is oriented to overall educational improvement, it will be successful only if adjusted for proper fit and acceptance within each school. Therefore, to facilitate program adoption, DOH staff assistance is recommended for establishing the prescribed Community Collaborative and for conducting special teacher training (see Part 3. Ensuring Proper Program Fit for Your School and Appendix D: Organizing the Community Collaborative).

...insofar as this program is oriented to overall educational improvement, it will be successful only if adjusted for proper fit and acceptance within each school.

Supportive intent

In developing DOH, the hope of program staff is to provide Alabama with a program that is realistically doable in schools and communities throughout the

state. Therefore, DOH is designed with the intention that it be TRUE to several practical criteria:

Transportable.

The program can be adopted in any school. Existing literature is full of excellent education innovations, many starting from the grassroots level. These may work in one classroom or school but cannot be easily exported to other venues. Many fail the test of transportability because, in the end, they may require a special teacher with an unusual interest and personality, or a special physical resource that is not available elsewhere. If a program is to be successfully transported to a variety of Alabama schools, it must work even without these special conditions.

Receptive to the community.

DOH includes the noble and traditional arts of public schools—social skills, community values, patriotism, neighborliness, respect, tolerance, and stewardship. The community agrees to support DOH before it appears in the classroom. During the Community Collaborative process (see Appendix D), the local community is:

- familiarized with the program,
- asked to provide feedback on fitting the program to local resources, needs, and concerns, and
- invited to actively participate in the program across the school year.

Useful to teachers.

The program is easy to use. Many existing environmental curricula and lesson plans either require specialized study on the teachers' part, or they are so incidental to the daily academic regimen as to provide only optional, periodic activities. Most teachers simply lack the time to organize a complete academic curriculum around such materials. Therefore, DOH provides ready access to pre-planned sequential lessons that guide learning across the year. By paying particular attention to the needs of school/classroom administration, the program overlays the administrative environment without excessively disturbing the normal school day. (Nevertheless, there must be willingness on the part of the school administration to make allowances for the program.)

Educationally valid.

The program emphasizes basic and traditional educational topics—history, math, language arts, civics, and science—in a sound, balanced social studies curriculum with the primary goal of improving student academic performance.

Ensuring Proper Program Fit for Your School

There are certain instructional “realities” of the classroom that apply for most Alabama teachers. Typically, the daily teaching task is one of: a) covering selected material from the textbook or primary content source, b) addressing the requirements of the Alabama Course of Study, and c) where applicable, also meeting additional objectives of the local school system. The usual method of trying to attend to these different realities is via the teacher’s “lesson plan.” In developing lesson plans, the teacher often faces an additional reality, the reality that neither the textbook nor the Alabama Course of Study provides a comprehensive, academic-year program regularly incorporating important ingredients for learning such as:

- parent involvement
- community participation
- hands-on, real-world experiences
- genuine problem-solving
- environmental knowledge and awareness
- the use of available enrichment materials/resources
- effectively integrated subject matter
- a clear sense of educational purpose and whole growth outcomes
- an overall coherent body of knowledge grounded in conceptual understanding

In DOH, the many ingredients supportive of learning are linked together, providing a systematic program of practical design for practical use.

The teacher and the local school system must work toward including these ingredients. Sometimes there are constraints and demands that prohibit successful arrangement of such elements into a coherent academic-year plan. DOH provides a model framework for overcoming such constraints and for enabling a comprehensive, sequential plan for the year. In DOH, the many ingredients supportive of learning are linked together, providing a systematic program of practical design for practical use.

Determining whether DOH might be an appropriate fit for your school is a relatively easy process. The first step is to simply review existing school programs and requirements to see whether these already adequately address the scope of important educational needs. Secondly, you might wish to contact DOH program staff or teachers to discuss with those who have first-hand experience conducting DOH. In addition, some thought must be given to the necessity for clear understanding and commitment to DOH.

School commitment

Regardless of practical design, no program can fully succeed without open recognition of key assumptions. DOH asks that the school appreciate the importance of these listed below.

Assumption 1. A primary concern is to further the basic education of children under the guidance provided by the Alabama Course of Study and local policies and procedures. DOH is not intended as a radical educational tactic, but instead, is designed to teach basic skills—reading, history and civics, mathematics, and science—in the interesting and important setting provided by environmental studies.

Assumption 2. The faculty understands and welcomes DOH. No matter how noble and excellent, new programs will not work if forced on teachers who do not believe in them. It must be recognized that many motivated and sincere teachers may be hesitant and reluctant about accepting a new program. If the faculty is currently conducting an excellent and successful program, disrupting the existing program against the teacher's will is apt to be counterproductive. On the other hand, if the teacher believes the new program can improve or stimulate the existing one, then there is a much greater likelihood of success.

Assumption 3. The school administration is supportive. The school administration, including the principal, paid staff, librarian, volunteers, lunchroom and custodial personnel, and parent/teacher organizations, must be prepared to support any changes that might accompany a new program. For the most part, such changes associated with DOH will not be burdensome, but might, at times, be different from long-established custom. The principal should be the chief booster of the program because she/he must sell it to the parents and to the community. Parents are reluctant to have their children “experimented on” unless there is confirmation and support for a new program by the school administration. It is to be

expected that parents will require a certain amount of reassurance. The principal must be prepared to reassure the parents, sell the program to local groups and businesses, and back the teachers.

Assumption 4. The school district is supportive. The principal will need the backing of the superintendent and central staff for the same reasons outlined in Assumption 3.

Assumption 5. The school community is supportive. A major element for the success of any school program is community assistance and support. DOH is grounded in a process of school/community collaboration aimed at insuring this support.

Community commitment

DOH will be most successful in helping improve student performance when there is ample community commitment and support for the program. The Community Collaborative is the DOH name for a structured approach to guide community involvement in adapting and implementing the DOH program. Specific goals of the Collaborative are to familiarize diverse interest groups with the intent and design of the program, and to obtain their support and active participation in conducting the program. Beyond these goals, the Collaborative can also serve the broader roles of: a) increasing community understanding of the realities of public education, b) building consensus for the essential aims and activities of the school, c) strengthening general parent and community involvement with the school, and d) heightening the community sense of “ownership” for insuring the success of local schools.

There are a number of strategies that might be employed to accomplish a successful Collaborative. An important step is to arrange for the help of a meeting facilitator who is appropriately trained. DOH extends its commitment to Alabama schools and communities by offering assistance in organizing and conducting the Community Collaborative, see Appendix D.

Teacher preparation

DISCOVERING OUR HERITAGE is designed to incorporate a variety of special strategies and materials. Therefore, teachers may benefit from additional training. The DOH program can provide training programs to accommodate particular needs. Assistance is available for all areas related to the implementation of DOH including:

- identifying local resources
- using existing environmental education materials
- developing outdoor classrooms, nature trails, etc.
- maximizing parent involvement
- enhancing critical thinking and problem-solving skills
- conducting studies of the local community
- organizing field trip experiences
- involving local businesses, agencies, and other community organizations
- obtaining environmental information and resources
- examining environmental issues
- working productively with the Community Collaborative

Assistance can be arranged by contacting:

Wayne Strickland
DOH Outreach Coordinator
Alabama Wildlife Federation
(800) 822-WILD

Troubleshooting

DISCOVERING OUR HERITAGE, like any new program, may require a period of assimilation and adjustment at the outset. This is a time when the program might not be fully understood by some in the school or the community, possibly giving rise to a variety of concerns. A sampling of such concerns are addressed below, drawing upon actual questions encountered during program field testing in DOH pilot schools.

What if some aspects of DOH do not seem sufficiently detailed to meet every expectation for daily lesson planning?

As stated elsewhere in this guidebook, DOH is intended primarily to provide a framework for

organizing the school year. It is not intended to rob teachers of all freedom and flexibility in making personal decisions about learning objectives, teaching methods, and preferred resource materials. In fact, it is hoped that DOH will serve to stimulate thought and discussion about many ways to improve education.

Educators who use DOH often applaud its design and appreciate the conceptual linkage provided in the Yearly Overviews and the Unit Overviews. They also welcome the suggested activities/resources that help incorporate environmental themes as a means of integrating content. Beyond this, many teachers will, of course, prefer to apply their own judgment in crafting specific objectives, identifying additional activities, etc. DOH, while supplying a frame of reference for overall educational improvement, recognizes that various aspects of the program may be altered to suit individual teacher needs.

What if some in your school or community believe that environmental education is more appropriately taught in science, rather than in social studies?

The “Program Purposes” comprising Part 1 of this guidebook explains the emphasis on environmental education to integrate learning under the umbrella of social studies. Certainly, the subject of science and the very process of scientific inquiry are essential to the overall pursuit of interpreting and understanding our world. Furthermore, the subject of science is especially meaningful to students when it is learned in an applied fashion, particularly when applied to real questions and concerns of society, i.e., when applied to social studies. In other words, science is fundamental to the DOH educational aims of whole student development and academic achievement.

What if school system policy prohibits field trips or other excursions like those identified in DOH Key Experiences?

Such restrictive policies are often in response to administrative realities. At issue may be questions of

Ensuring local acceptance of DOH is a major aim of The Community Collaborative.

liability, transportation access, or insufficient funds. In any case, this is a prime opportunity to engage the Community Collaborative in working with the school to do strategic problem-solving in the form of providing ample adult supervisors, needed funds, or other solutions. If all such efforts fail, the local community and the school site itself usually include settings for basic hands-on experiences. Here again, the Community Collaborative can help in various ways, from developing outdoor learning areas to arranging visits to places of historical or cultural interest in the community.

What if the school does not have the financial means of providing the array of resource materials indicated in DOH?

The happy truth is, DOH can be implemented with a few basic resources and materials that can be obtained from the local community or from DOH sponsors. Sure, some school systems can afford to purchase large supplies of supplemental resources. That's great, but it's not essential. Check with DOH staff for guidance.

What if the school already has ties with an environmental education program or environmental organization other than DOH?

This should pose no problem if timely steps are taken to involve all pertinent parties in a joint discussion about DOH. Remember, DOH was designed to include existing quality environmental programs and resources. Any environmental activity already underway at your school should easily mesh with DOH. Furthermore, it is quite possible that such activity/program has been formally identified as a recommended resource for use with DOH.

DOH is a flexible program and can be adjusted for most schools and classroom situations.

What if DOH seems appropriate for your school, but one or more key teachers are resistant?

Teacher acceptance of DOH is often a function of administrators' interest and enthusiasm for DOH, together with sufficient explanation of the program. Teachers who gain an accurate understanding of DOH (from participation in planning meetings, the Community Collaborative meetings, teacher training sessions, etc.) usually welcome the program. This is particularly the case once they understand that they can incorporate existing lesson plans and any favorite resources and materials they already use. Still, some teachers are committed to other meth-

ods and may prefer not to spend time with DOH, in which case, DOH should not be imposed on unwilling teachers. Perhaps such teachers might at least coordinate with DOH teachers to promote subject integration.

What if your school or classroom situation is such that you are concerned about possible difficulties managing students during DOH activities?

DOH is a flexible program and can be adjusted for most schools and classroom situations. Of course, some students who are unaccustomed to field trips and experiential learning outside the classroom might initially exhibit "unruly" behavior. This is not necessarily bad, as long as such behavior poses no danger or other extreme consequences. The main thing is to make sure that excursions and Key Experiences are deliberately structured for meaningful discovery (as per DOH resources/activities) and that all students are actively engaged in the planned learning activities. With time, most students, even those who are initially unruly, develop a genuine interest and motivation for active learning. And, of course, with improved interest comes improved motivation and improved performance.

Appendix A: K–5 Yearly and Unit Overviews

Kindergarten Yearly Overview

The Alabama Course of Study for Social Studies highlights major aims and considerations for the kindergarten grade level. This year is critical to furthering the child’s basic development in several areas. These include gaining a sense of appreciation for the community and the environment, relating to history, time, and change, and understanding the need for order, rules, and appropriate behavior. This year is also very important for establishing in children several key building blocks for learning. Chief among these is a spontaneous sense of curiosity. By arranging opportunities for genuine discovery, we can develop in children an internal motivation to explore, interpret, share, and communicate about the world around them. A priority concern for this year is to cultivate and nurture each child’s personal adjustment to the school setting so that each finds comfort and enjoyment in learning.

Kindergarten Unit I

Key Question: Where are we? “Children—welcome to a big new world!” For many children, the beginning of kindergarten is their first scary encounter away from such familiar settings as home and family. Of course, all kindergarten teachers are prepared to help children deal with this reality. So, for purposes of the DOH program, an additional concern is simply to cast much of children’s initial experiences in terms of genuine exploration and discovery. Unit I is our first opportunity to instill in children the capacity for being at ease and comfortable with examining the “big new world.” And here at the very beginning of the DOH program is a good place to establish a regular practice of involving parents and members of the DOH Community Collaborative, in any way feasible, to help in nurturing children’s comfort with school and curiosity for learning.

Important connections: The school is part of the local community, which is part of the state of Alabama, located in a part of the world we know as the United States. The school, the local community, the state, and

the nation each can be understood in terms of their respective people and natural settings.

Kindergarten Unit II

Key Question: How can we be good citizens? In Unit I, our aim was to establish initial comfort and curiosity with school and learning. Thus, the Unit I Key Question—Where are we?—is a ready question of genuine relevance for children beginning kindergarten. Unit II adds to this by providing another level of exploration to extend children’s understanding of self and community.

Important connections: Families, schools, and communities function best through caring and cooperation. Plants and animals are part of the community and require our care and stewardship.

Kindergarten Unit III

Key Question: How are people different? Now that children are gaining a sense of belonging to their school and community, Unit III introduces the fact that such shared communities also accommodate differences.

Important connections: Every person has individual/special traits and characteristics. Communities and cultures are enriched by diversity of peoples and natural settings.

Kindergarten Unit IV

Key Question: What is our history? Okay, if communities are characterized by people with different traits living in locations with different natural settings, how did this come about? Unit III introduces children to basic aspects of community history.

Important connections: Every person has individual differences as a product of individual/family history. Communities change and develop as a product of collective events involving people and their interactions with local natural settings over time.

Kindergarten Unit V

Key Question: How does our community work? Unit V steps off from Unit IV by examining basic aspects of how communities function. At this

point, children are introduced to primary elements and processes of community life.

Important connections: Most material needs are derived from nature/natural resources. A major reason people cooperate in communities is to be more effective in utilizing and managing resources.

Kindergarten Unit VI

Key Question: How do we affect the land? At this point, students should have a rudimentary sense of the community's history and should enjoy learning about how the community operates today. Unit VI introduces the idea of "the future."

Important connections: Communities change in ways related to the treatment and welfare of people and nature/natural resources. Communities can improve by thinking about how best to care for people and nature/natural resources.

Grade 1 Yearly Overview

First grade students are still in the developmental stages of establishing their sense of self and others and gaining an understanding of fundamental relationships about the world around them. Therefore, the first-grade year builds on the foundation of kindergarten experiences to broaden the child's comprehension of school, community, environment, and the interrelationships that apply. Learning should continue to emphasize active exploration of local surroundings as children add to their knowledge of pertinent history and geography, and expand their awareness of economic, cultural, and civic relationships. In many ways, these learning experiences will also introduce students to various rudimentary dimensions of social studies, science, language arts, and math. Thus, first-grade teachers have an early opportunity for alerting students to the real-world origins of academic studies and for orienting them to the "interdisciplinary" scope of life.

Grade 1 Unit I

Key Question: What does our community look like? The subjects of history and geography gain relevance when students are helped to explore their own local community, when they comprehend

the present-day features and relationships that have come about as a consequence of past events. Unit I provides students with such exploration geared to spark general curiosity for the further exploration and discovery provided in remaining units.

Important connections: The local community has a discernible character. It has a particular size, shape, and configuration. It is located in association with specific physical and natural features. The community has living populations of people, plants, and animals that each use the land and its resources in different ways.

Grade 1 Unit II

Key Question: How does our community work? The dynamics of human relationships form the basis of economic and civic life. Unit II links the functions of family to those of the school to those of the community. In each instance, these human pursuits are related to natural resources and natural systems.

Important connections: Families, schools, and communities function to provide essential needs for effective living. Each person has a role (at home, in the workplace, in the civic community) in helping with these functions. The basic needs of people (food, water, shelter, comfort, etc.) are similar to the needs of other creatures and are dependent on the natural environment.

Grade 1 Unit III

Key Question: How can I help my community? Each of the prior units is aimed at providing essential community awareness so that Unit III can begin to more actively engage students in related cooperative learning. Unit III provides an early opportunity to alert students to the reality that every community confronts situations and problems that must be solved. In this unit, we want to expand student realization that problem-solving can be a cooperative venture in a world that offers many resources and opportunities for creative solutions. This unit also provides the opportunity to conduct cooperative learning with particular emphasis on aspects of basic character development such as compassion, consideration, cooperation, honesty, and responsibility.

Important connections: Life presents exciting challenges in a world of remarkable natural variety and phenomena. Each person is a unique individual in this grand scheme and each has individual ideas and talents of potential value to community life.

Grade 1 Unit IV

Key Question: What makes our community special? At this point, students should have a general awareness of the major features of the local surroundings. To augment this awareness, Unit IV gives added attention to the “specialness” of these features. An important aim is to impress children with the wonder and significance of prominent landscape features, key businesses and industries, and the necessary role of various leadership positions in the community. Within this context, then, the school is once again examined for its special place in the community.

Important connections: The local community includes phenomena—natural and constructed—that are special in their presence/history/function. The school is an integral and interactive aspect of this wondrous setting.

Grade 1 Unit V

Key Question: How do people make our community special? Unit V shifts emphasis to now give added attention to the human and cultural wonder of the community. Through exploration of individual and cultural diversity, this unit offers an early opportunity to reinforce student understanding and appreciation for how people differ. On the other hand, the unit also provides an opportunity to underscore basic commonalities among people: 1) all people depend on the natural environment to live, 2) all cultures are a derivation of people interacting with the natural environment, 3) all cultures seek answers to profound questions dealing with the order and design of the world, and 4) all people have the human need for love, meaning, and purpose in their lives.

Important connections: Every community is a special mix of people each with their own significant traits, histories, and cultural heritages. Every community is strengthened as such differences join together in sharing common human needs and developing common traditions and customs.

Grade 1 Unit VI

Key Question: How is our community changing? People sometimes find a sense of security when things are stable, when there is sufficient sameness and predictability from day to day. But the irony of life is, the one thing that never changes is the fact that things are always changing. In a sense, this reality presents one of life’s more exciting chal-

lenges: How does the human psyche deal with change that significantly affects life and community? Of course, the philosophical dimensions of this challenge are largely inappropriate for first-grade discussions. Yet, young children are quite vulnerable to many kinds of change that can affect family and community. Unit VI offers an early opportunity to introduce the reality of change in a comfortable context of exploring the exciting wonders of the community. The aim is to further the child’s sense of curiosity and exploration and, thereby, to strengthen the capacity for dealing with change in positive ways.

Important connections: Community change is traceable across history. Change can bring positive effects and negative effects. People can maximize the positive and minimize the negative through thoughtful assessment and cooperation.

Grade 2 Yearly Overview

Second grade provides an opportunity to build upon the basic awareness gained in first grade and to give students an introductory exploration of several concepts related to being “American.” These include the concepts of democracy, government, freedom, human rights, and cultural and natural heritage. Many of the themes visited in first grade will be revisited in second grade but with new attention to appropriate terminology, governmental procedures, historical events/figures, scientific developments, etc. Second grade assists students in gaining an introductory understanding of the meaning and operation of American society while adding to their awareness of the realities of economics, geography, science, and technology. Second grade also presents an early opportunity to reinforce appreciation of the arts while linking the historical importance of the arts to the progress of human society.

Grade 2 Unit I

Key Question: What is democracy? A primary concern for Unit I is simply to establish in students a first-hand recognition of the often delicate interface between freedom and responsibility. A popular introductory strategy is to invite the class to develop its own set of rules for classroom conduct and procedure. Done correctly, this strategy helps

students quickly recognize the difficulties of establishing systematic government. Whatever the chosen approach, Unit I provides an appropriate occasion to impress upon students the unique values of effective democracy.

Important connections: Societies cannot function effectively without governmental order. American society operates according to a democratic government based on American values of freedom and individual liberty. Individual liberty must be balanced with individual responsibility.

Grade 2 Unit II

Key Question: How does geography affect me? Unit II is oriented to provide initial opportunities for “applied geography.” That is, students are assisted in conducting a closer examination of the relationships between local community life and local geography.

Important connections: Local geography determines local natural diversity and natural resource availability. Local natural resources and natural features affect economic activities. Responsible people conduct economic activities with responsible concern for the environment.

Grade 2 Unit III

Key Question: How do I use goods and services? “Economics” and “ecology” are both derived from the Greek stem word, *ecos*, which means “house.” Economics refers to the way we manage goods and services in our “house.” Ecology refers to the fundamental structure and function of the “house” itself. In other words, we pursue our economic livelihoods within the parameters of natural systems that make life itself possible. Unit III explores many locally relevant economic realities while underscoring our interdependence on natural systems and the need for conservation of natural resources.

Important connections: Economies are systems of producing and providing goods and services. Sustainable production of goods and services is contingent upon the conservation and sustainability of natural resources and natural systems.

Grade 2 Unit IV

Key Question: How am I affected by history? The history of American society is made locally relevant in Unit IV through student explorations of

family and local history. These explorations provide backdrop as the unit includes significant United States history that can be correlated to local events and people across time.

Important connections: The present is a product of the past. Scientific knowledge and technology are built upon the discoveries of the past. Present-day science continues to explore questions of meaning, order, and human advancement.

Grade 2 Unit V

Key Question: How does technology affect me? Unit V affords an opportunity to delineate a variety of key modes of societal endeavors, from transportation to natural resource management, with particular emphasis on the human trait of scientifically manipulating materials, nature, and the laws of physics to improve the human condition.

Important connections: Human beings demonstrate a unique capacity for technological invention. Technological advance has improved many areas of life for humans and nature. (At the teacher’s discretion, this unit might be an appropriate time to also note that technology can bring negative consequences.) The proper development and use of new technology is dependent upon thoughtful human judgment and responsibility.

Grade 2 Unit VI

Key Question: How have I benefitted from others? Unit VI seeks to provide appropriate closure for the year by returning students to matters of personal and family “well-being.” Previous units have explored a variety of defining aspects of life in American communities. In this unit, we explore relevant implications for how individuals, families, and communities benefit from the combined contributions of government, science, and the arts and humanities. An outcome of this unit is to instill basic pride in the community and the nation, grounded in an appreciation of the diverse cultural heritage that has contributed to American life.

Important connections: Historically, people with different family and cultural backgrounds have worked together in establishing American communities and American life. Historically, the contributions of different people and cultures have helped America grow and progress, scientifically and socially.

Grade 3 Yearly Overview

Third grade is geared to add to the foundational development and awareness provided in grades K–2. This year, appropriate content in such areas as history and geography is organized to follow exploratory themes that will prepare students for the intensified content of coming years. Students are taken to higher levels of conceptual understanding of governmental systems, natural systems, cultural development, interrelationships, and change. Students are introduced to new dimensions of global variation, new realms of contrasting and comparing, and greater involvement in classifying, interpreting, and communicating about the world. In a sense, this year is a final foundational year for later academic studies of Alabama history, U.S. history, and world history. For example, the learning experiences of third grade should give students sufficient contextual understanding to add greater meaningfulness to the fourth-grade focus on Alabama history. Of course, an important key to continued growth at this stage is to insure that each student enjoys sufficient personal success in both active exploration and academic/skill achievement. In this regard, the year offers a critical opportunity to concentrate special attention for students in need. Likewise, this year provides an opportunity for redoubled efforts to insure adequate parent involvement and community support.

Grade 3 Unit I

Key Question: Who are we? As with previous grades, students comprehend immediate relevance to learning when the year begins with local exploration. Once again, Unit I explores aspects of the school and community, but this year involves a deeper examination of the organizational and purposeful pursuits of various aspects of the community.

Important connections: Human societies and natural systems function according to organization and design. Human institutions draw meaning from the design and events occurring in the world.

Grade 3 Unit II

Key Question: What is the natural environment? A major aspect of the “design” of the world around us is referred to as the “natural environ-

ment.” Unit II examines the natural environment, beginning with an inventory of local features and expanding to consider larger natural systems. An important aim of this unit is to give students sufficient knowledge and familiarity with the native natural environment so as to better appreciate the natural/geographic influence on native peoples (to be covered in Unit III).

Important connections: The natural environment is multi-faceted and includes air, water, soils, geology, geography, forests, rivers, lakes, wetlands, plants, animals, and the larger cycles and ecosystems of nature. Native species of plants and animals became established over time as part of larger interdependent natural systems adapted to local geography and climate.

Grade 3 Unit III

Key Question: Who were the Native Americans? Just as native plants and animals adapted to local geography and climate, Native Americans adapted to local geography, climate, plants, and animals. This, of course, is a core aspect of understanding Native American cultures. However, in this unit, perhaps the more exciting aspect is helping students, through reading, writing, and the arts, to comprehend the personal and human experiences of Native Americans. In addition to covering historical facts, an important aim is to provide students with a fundamental awareness of how native cultures viewed the world and their place in it.

Important connections: Many aspects of Native American cultures varied according to regional geographic influences. Native Americans lived in close daily contact with native natural surroundings. Native Americans shared many common beliefs derived from interpreting natural events.

Grade 3 Unit IV

Key Question: Who were the early settlers? As with Unit III, Unit IV covers essential factual information and also affords the opportunity to help students understand the human experiences of the settlers. For example, in addition to learning about where the settlers came from, students might gain from imagining the personal experiences of settlers and from considering the settlers’ views about the world. An important aim of Unit IV is to gently introduce students to the reality that the arrival of the settlers

represented more than simply a new people coming to a new land. The larger phenomenon to be understood is that this was a period of encounter between different cultures and different views of the world.

Important connections: The settlers came from a variety of lands, cultures, and backgrounds. Initially, most settlers were unacquainted with native American surroundings and native American peoples; thus, they experienced hardship in trying to adjust/adapt. Over time, the cultural ways of settlers mingled with cultural ways of Native Americans (sometimes resulting in conflicts, sometimes in cooperation).

Grade 3 Unit V

Key Question: How do we interact with the land? The previous unit should have added to students' comprehension of the historical connections between cultural development and regional geography/native natural surroundings. This important theme for social studies is also a basic point of understanding for science, i.e., that there are often direct cause-and-effect relationships between local physical/natural surroundings and the lifeways of local peoples. Put another way, our understanding, treatment, and management of the natural environment has direct implications for the manner and quality of our lives. Unit V takes students deeper into the exploration of the natural environment, now with a new emphasis given to our interdependence on nature and our responsibility for proper stewardship of nature.

Important connections: "The nature of life is nature." Practically everything we depend on for daily living is tied in some way to nature. Our rights to benefit from using nature also carry responsibilities for protecting nature, for conserving natural resources, and for sustaining environmental quality.

Grade 3 Unit VI

Key Question: What things are changing? The transition in America from the predominance of native cultures to the arrival of settlers to the emergence of a new nation has brought continuing changes in how people live, work, and make use of the natural environment. Unit VI introduces students to the reality of ever-occurring change in the larger context of societal change. While we want students to appreciate many aspects of life in earlier times, we also want them to comprehend the history

and events of ongoing change (in economies, transportation, technology, etc.) as part of the continuous pursuit of knowledge and human progress.

Important connections: The history of human civilization is a record of continuous change through the pursuit of new knowledge and technological improvement. Sometimes the consequences of change are positive, sometime negative. The human capacity for inducing change obligates us to think and act in responsible ways.

Grade 4 Yearly Overview

Fourth grade builds upon the knowledge and awareness gained in previous grades, to now focus mainly on Alabama the state. At this point, students' general awareness of history, geography, cultures, and the environment should provide a knowledge framework upon which to build a fairly broad understanding of our state, region to region, border to border, era to era. Of course, from time to time, it will still be meaningful to link important state history to the local history and, conversely, to pertinent national and world events. Still, by focusing mainly upon Alabama, fourth grade provides an especially manageable, locally-relevant opportunity to cultivate more holistic understandings of many important aspects of history and geography. This should be a particularly enriching year for students, as many activities in math, science, and language arts coalesce around the active exploration of their own state, from the mountains to the seashore and from the past to present. Every state can claim its special attributes, but few have the remarkable mix of history, geography, and natural landscapes as does Alabama. Fourth grade is our opportunity to accent this in a way that not only excites and motivates children in their academic studies, but also helps engender pride in our state and fulfillment of the human need for a sense of place.

Grade 4 Unit I

Key Question: Who are we and what is our geography? In Unit I, we underscore our identity as Alabamians living in an impressive natural region called Alabama. Students should be encouraged to share individual experiences they might have enjoyed in outdoor

areas of the state—parks, streams, farms, etc. Sharing and cooperative learning are important in Unit I to help set a tone of mutual respect, acceptance, and teamwork among students. They will soon be learning about times past when the inhabitants of Alabama were immersed in human conflict, often marked with pain, tragedy, and sorrow. As students develop a sense of place and pride in being Alabamians, we want this to stem from an accurate knowledge of Alabama history, but also with appreciation for present-day opportunities for cooperation rather than conflict among peoples.

Important connections: Alabama's landscapes are the result of immense geological events. Alabama is among the most naturally diverse states in the nation. Alabama communities and lifestyles are established in association with local geography and terrain.

Grade 4 Unit II

Key Question: Who were Alabama's early inhabitants? The chronological sequence of human history in Alabama is standard classroom fare. Unit II offers an early opportunity to ensure that this essential information regarding people, cultures, dates, and events is enhanced with ample attention to the relationships between such content and the natural settings and resources of Alabama.

Important connections: The geography and natural beauty of Alabama were instrumental in the arrival and survival of the earliest inhabitants of the region, from prehistoric times to the settlement period. The natural environment was integral to the development of the early economies, lifeways, and beliefs of Alabama's early inhabitants.

Grade 4 Unit III

Key Question: Who were the early Europeans? Unit III offers an initial opportunity to present chronological human history in association with the natural environment while also introducing pertinent relationships that set the stage for cultural conflict.

Important connections: Different cultures derive from different views of the world. When differing cultures locate in the same new territory, transitional periods of conflict and adjustment are sometimes predictable. Often these periods of transition result in changes to the status and use of native natural resources.

Grade 4 Unit IV

Key Question: What was Alabama like in the 19th century? Once again, chronological history provides a framework to instill deeper understandings. In concentrating on nineteenth-century Alabama history, we can, for example, accent the prevailing human struggle to master nature in ways useful for providing food and shelter. The nineteenth-century span from such economies as fur trade to agriculture to industry offers special opportunities for this. And, once again, various events—especially the Civil War—offer opportunities to explore the basis of human conflict.

Important connections: From the beginning to the end of the nineteenth century, Alabama was transformed from territory to statehood to contributing member of a growing nation.

Grade 4 Unit V

Key Question: What was Alabama like in the 20th century? Chronological history in the twentieth century takes us to a new span of economies from emerging industrial to advancing transportation to rapidly expanding and encompassing communication technology. Nevertheless, conflicts persist, but on larger scales and with far-reaching consequences. Life in Alabama during the twentieth century was significantly related to and affected by major events, not the least of which were international wars. Unit V is an early opportunity to begin “putting a human face” on history. This is the century of events that occurred during the lives of parents and grandparents.

Important connections: During the twentieth century, Alabama experienced substantial changes in many ways. Among these changes, education, social justice, and environmental quality were elevated to new levels of importance for progress in Alabama.

Grade 4 Unit VI

Key Question: What is Alabama's future? Unit VI takes students on an exploration of present-day realities—demographics, emerging economies, developing trends, etc.—while contemplating Alabama's future. Who knows what the future holds? With the world changing at an accelerating pace and with so many unpredictable variables in play, we would be foolish to bet on a definite prediction of what the future will be like. Unit VI is mainly an

opportunity to spark imaginative thinking while reinforcing learning about how our past affects our present, how daily life is dependent upon the natural environment, and how human beings hold the special capacity for responsible actions toward their fellow man and nature.

Important connections: Knowledge and information are important to future success. Understanding and cooperation are vital to future success. Ethics and responsibility are essential to future success.

Grade 5 Yearly Overview

The Alabama Course of Study for Social Studies has given fifth grade the heading “United States Studies,” reflecting the intent that students should learn about the multiple dimensions of our nation’s development. However, there will likely be the inclination, among many students and teachers, to think of this heading in the traditional way, i.e., that the official subject for fifth grade is *U.S. history*. And, indeed, fifth grade does follow the chronological history of U.S. development, from prehistoric time to 1900. (Sixth grade covers U.S. history from 1900 to the present.) But, of course, it doesn’t matter how we label the year; what matters most is how we conduct the year, how we engage students in the study of material that, in many ways, represents a giant leap forward into substantial academic content. Earlier grades have focused on who we are as individuals, schools, community, and state. Fifth grade offers the opportunity to give greater focus to who we are as a nation.

Chronological history provides the loom upon which to weave important understandings about the United States, and to do so in context with the four cornerstone elements of the DOH program—the land, the people, interrelationships, and change. Based upon successful learning in previous grades, students are now ready to add significantly to their awareness that the present is a product of the past, that to fully understand the present we must understand history. Students are now ready to greatly expand upon their recognition that our nation is the product of a diverse natural and cultural history. In other words, fifth grade offers us the grand opportunity to instill in students a life-long excitement for

“history” because history is actually the study of far more than names, dates, and events. The subject of history, particularly as it is central to the subject of social studies, is about who we are and why we are, where we have come from, and where we are headed. It is the vessel in which we make meaningful sense of science, art, music, and literature. This fifth-grade year of social studies is a primary opportunity to integrate multiple areas of required content through continued active exploration of the world around us.

Moreover, this fifth-grade year of social studies is important in other, profound ways. The world of human societies today is increasingly complex. There are many new opportunities for cooperation among peoples, but there are also many new possibilities for conflict. Meanwhile, accelerating change continues to bring unprecedented environmental consequences to our Earth. Major challenges for humankind include the need for greater environmental understanding and the need for greater understanding among nations and peoples. Such progress for the future can begin with giving our children a greater understanding of our American heritage. Toward this aim, Fifth Grade Unit Overviews are developed to help interpret chronological history in the context of our nation’s emerging cultural and national identity.

Grade 5 Unit I

Key Question: What was our country like before settlement? Looking far back in time, initial questions include: How did the American landscape come to be? Who were the first human inhabitants? How did early cultures change over time? These questions are investigated at the outset of Unit I where we overview the period of prehistory as one vast unrecorded era, an era that ends with the arrival of European explorers. Our curiosity is then shifted to such questions as: What was America like when the Europeans arrived? How did these new people survive in the strange, unfamiliar setting of the new world? How successful were the first attempts at settlement? The period of European exploration is an era when Native Americans were still dominant across the land. However, as the early European colonies became established, Native Americans were forever displaced, marking the end of this era. In Unit I, students should begin to comprehend that the recorded history of America has progressed from era to era, each stage marked by changes to life and

landscape, and by related conflicts with both human and environmental consequences.

Important connections: The native American landscape was uniquely rich and diverse in natural resources. The cultures of native peoples were greatly shaped through their interrelationships with the natural surroundings, which, in turn, were often affected by the activities of native cultures. Thousands of years of such native interrelationships underwent a new order of change with the arrival of Europeans.

Grade 5 Unit II

Key Question: How was America settled? Unit I concludes with the end of the era of America's dominance by native peoples; thus, a logical question for us is: What next? What led to the expansion of European settlements and the eventual emergence of a new nation? In Unit II, students are provided with opportunities to look at the early development of communities, economies, and philosophies affecting man and nature that gradually formed a new cultural identity and gave rise to the idea of American democracy.

Important connections: Early colonization, pioneering, and settlement periods represent a formative era in the nation's development, an era that would end with the Declaration of Independence and adoption of the U.S. Constitution.

Grade 5 Unit III

Key Question: How did the nation emerge? As the American colonies acquired an independent identity, their idea for a new government came into violent conflict with the old government of English rule. This conflict helped to crystallize a new concept of freedom as the basis of American democracy. The break with England and the establishment of a new nation was related to newly emerging ways of thinking about human nature and society. This new thinking was influenced, in part, by the tribal beliefs of Native Americans, and, in part, by the native American landscape.

Important connections: The doctrines of freedom and independence that gave official birth to our nation were the products of independent-minded people embracing the bountiful lands and resources of America. The emergence of the democratic nation of the United States began a new era for America and was a profound event in the course of world history.

Grade 5 Unit IV

Key Question: How did the nation grow? Following the Declaration of Independence, the nation extended its new wings of freedom upon the winds of continued economic and social change. Early in this era, there was land and open space aplenty. The spirit of freedom combined with abundant natural resources to spawn new growth as freedom was dispersed across the land to find its different niche in each region. With this expansion, there was new adventure with explorations into unmapped territories of the country. But there were also new conflicts, as territorial and regional differences gave rise to disputes over matters of social, economic, and governmental control.

Important connections: America's expansion was made possible by the abundant natural resources of the native land. America's regional economies and related cultures were necessarily linked to regional geography and resources.

Grade 5 Unit V

Key Question: Why was there a Civil War? As a tenet of government, American freedom remained in its youth for much of the nineteenth century and, in many ways, at the whim of regional differences. As environments and economies varied from the urban east to the agrarian south to the untamed west, so, too, the social norms of freedom varied. In the Civil War, conflict between armies was but part of a larger dynamic, the ongoing American struggle to refine the meaning of freedom. Events associated with the Civil War period reveal the human capacity for moral strength, moral frailty, and moral incongruity.

Important connections: The Civil War can be understood in terms of several factors—social, economic, and political—that were related to early regional differences and influenced by the human and social naivetes of a youthful nation. American democracy was able to progress as regional differences were orchestrated toward cooperation and consensus around common ideals of freedom. Major refinements to the idea of freedom came in the area of human equality.

Grade 5 Unit VI

Key Question: How did the nation expand westward? In Unit V, students see America apply a

mid-course adjustment to how freedom was understood on the human front, only then to witness freedom's unchecked impact on the environmental front. With the dissipation of sectionalism, the nation more easily expanded the freedoms of a free enterprise economy. Rapidly, the industrial age was fueled by a growing population with growing needs. Armed with the doctrine of Manifest Destiny, Americans reached across the western frontier to the Pacific, whereupon they paused to look back on their unchecked mistreatment of the nation's natural heritage. The resulting national call for conservation, for the wise and ethical treatment of natural resources, brought American economic, social, and environmental practices to a critical juncture. The nation began to realize that the freedom to use our resources must be balanced with a sense of responsibility for protecting them.

Important connections: The emergence of industrial America was made possible by the abundance of native natural resources. The combination of American democracy and American industrial and technological advance brought major transitions in communication, economic development, and social organization. An era of American youthfulness was waning as the nation began to mature and to acquire a sense of coast-to-coast national identity.

Grade 6

See Appendix E: Optional Development of a DOH Program for Grade 6.

Appendix B: Content Integration Matrices

Kindergarten Social Studies Yearly Plan

Week	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>Where are we?</i>	<i>How can we be good citizens?</i>	<i>How are people different?</i>	<i>What is our history?</i>	<i>How does our community work?</i>	<i>How do we affect the land?</i>
1	School characteristics 5, 7	Proper behavior 6-7, 10-11	Uniqueness of individuals 34	Current events 7, 16, 33	Community workers 15, 21	Personal environment 10, 13, 18
2	School rules 6, 8, 15	Character traits 9, 12, 34-35	Similarities of people 7-8, 34-35	Children in other times 31, 36-37	Community products 3, 21, 23	Seasonal changes 3-4, 19
3	School building and grounds 1, 3, 16-17	Solving problems at home & school 7-8, 13, 33	Differences of people 7-8, 34-35	Communication 3, 21, 23, 28	Wants and needs 12, 23, 25, 34-35	Human interactions 10, 16, 19, 33
4	Home location 3, 16, 20	Interacting with others 11, 13, 33	Children in other cultures 1-4, 35	Transportation 3, 21, 23, 29	Producers and consumers 24, 26	Changes over time 16, 28-29, 31
5	Community location 2-4, 16-17	Personal changes over time 1, 3, 7, 30	Customs and traditions in other cultures 3, 33, 35	Important historical figures 32, 34	Product lifecycle 26-27, 37	Community change 7, 17, 26, 31
6	State location 2-3, 16-17	People of the community 14-16	Holidays in other cultures 3, 33, 35	Community changes 3-4, 14	Natural and produced resources 3, 16, 26	Future of the community 10, 13, 33

**The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.*

Kindergarten Science Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>Where are we?</i>	<i>How can we be good citizens?</i>	<i>How are people different?</i>	<i>What is our history?</i>	<i>How does our community work?</i>	<i>How do we affect the land?</i>
1	Diversity in our classroom 18, 20	Observing 4	Observing people 18–20	Observing nature 20–23	How our class works 20, 21	What is technology? 2, 11
2	What our school looks like inside 22	Grouping 4, 7	Differences in people 18–20	Patterns in nature 20	How our school works 9, 17	Technology at school and home 2, 11
3	What our school looks like outside 22	Connections 4–5	Differences in offspring 18–20	Scientists 8–9, 11	Needs of plants and animals 18, 21–23	Affecting animal food sources 1, 10, 21
4	What our homes look like 22	Guessing 4–5	Differences in homes 4	Science at home 20	Plant and animal houses 3, 23	Habitat loss 1, 7, 22, 23
5	What our community looks like 7, 10, 22	Making choices 2, 4, 7	How we react to seasons 15, 21, 25–26	Seasons and weather 15, 25–27	Plants and animals reactions to seasons 21, 25–26	Changes in matter 1, 12, 13
6	What our state looks like 7, 10, 22	Taking care of the world 3, 10–11	How we live in our world 10–11, 21	Earth's surface 24, 27	Survival of plants and animals 18, 20–22	Changes in the Earth 24–26

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Kindergarten Language Arts Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>Where are we?</i>	<i>How can we be good citizens?</i>	<i>How are people different?</i>	<i>What is our history?</i>	<i>How does our community work?</i>	<i>How do we affect the land?</i>
1	Describing our classroom 1, 7–8	Talking about & showing good behavior 7–8, 17	Describing people in our class 8–11	Describing what happens in our class 6, 8, 15	Describing the people who work in our school 9, 21	Drawing and describing our environment 5, 9–10, 23
2	Learning the rules 3, 5, 15	Listening to stories about people 8, 12, 21	Describing how people are alike 8–11	Listening to stories about children in the past 1, 3, 6, 12, 15, 22	Drawing the products from our community 9–10	Writing about the seasons 9, 13, 23
3	Drawing and talking about our school 3–4, 9, 11	Sharing how we solve problems at home and school 14–15	Describing how people are different 8–11	Drawing & describing ways we communicate 8–10, 18, 23	Describing wants and needs 7–8	Describing how people affect the land 13, 23
4	Sharing stories about our homes 1, 3–4, 7–8, 14	Showing how we play well with others 7–8, 14–16	Listening to stories about children from other cultures 1, 14, 18–22	Drawing and describing transportation 9–10, 23	Describing producers and consumers 7–9	Share changes we have seen in the land 13, 17
5	Drawing and talking about our community 8–11	Talking about how we change 12, 16–17	Sharing and listening to stories about traditions 1, 14, 18–22	Learning about historical figures 6, 12, 21	Drawing and describing a product lifecycle 9–10, 23	Write about how our community has grown 6, 9, 17, 23
6	Listening to stories about our state 6, 12, 14–15	Drawing people in our community 6, 9–10, 23	Learning about holidays in other countries 1, 14, 18–22	Describe how our community has changed 6, 8–9, 15	Learning about our natural resources 13, 21	Describe how our community will change 6, 17, 23

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Kindergarten Math Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	Where are we?	How can we be good citizens?	How are people different?	What is our history?	How does our community work?	How do we affect the land?
1	Count & graph things in our classroom 1-3, 7, 25	Count how often we behave 1, 2, 5-7	Count & graph people in our school 1-3, 7, 25	Describe sequences in current events 16	Describe how our class works in numbers 6, 12	Count & graph class activities 1-3, 7, 25
2	Count & graph things in our school 1-3, 7, 25	Describe the people in our class 13	Count & graph similarities in physical traits 1-3, 7, 25	Create patterns found in nature 9, 21-22	Classify products in our community 19-20	Count technology use at school and at home 1-5
3	Count & graph things in our community 1-3, 7, 25	Use numbers & words to describe problems 1-3, 6	Count & graph differences in physical traits 1-3, 7, 25	Collect & organize data about how we communicate 24	Identify & count what plants and animals need 1-5	Describe what people can do to help animals 12-13
4	Count & graph things in our home 1-3, 7, 25	Estimate and measure objects 1, 15	Describe children in other cultures 13	Collect & organize information about how we transport ourselves 24	Classify various animal homes 20	Describe changes in our community 16-17
5	Describe our location in the state 12	Measure how we grow 1, 17-18	Describe sequence of events in a tradition 16	Graph weather conditions 25	Match products to their containers 14	Measure changes in spatial arrangements 23
6	Describe location of our state in the U.S. 12	Describe locations in our community 12	Relate holiday decorations to geometric shapes 10-11	Measure our school yard 1, 8, 15	Match plants & animals to their survival needs 24	Collect & organize information about our community 24

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 1 Social Studies Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	<i>What does our community look like?</i>	<i>How does our community work?</i>	<i>How can I help my community?</i>	<i>What makes our community special?</i>	<i>How do people make our community special?</i>	<i>How is our community changing?</i>
1	Community location 1-2, 9	Family dynamics 4, 6-7	Classroom government 4	Geographic features 1-2, 9	Cultural diversity in the classroom 25, 31	Physical changes 10, 12
2	Physical features 1-2, 9-10	Classroom dynamics 4-6	Cooperation in class 4-5	Weather and climate 14	Cultural diversity in the community 25, 31	Geographic changes 14, 24
3	Physical size of the community 1-2	School and community leaders 8	Problem-solving 4-6	Local business and industry 16, 19-20	Origins of diversity 25, 31	Land use changes 9-11, 21
4	Population of the community 2-3	Exchange systems 17-19	Responsible actions—environment 6, 12-13	Community leaders 19	Historical figures 26	Cultural changes 23, 27-28, 30-31
5	Land use 10, 24	Interdependence of people 18-19	Responsible actions—people 13-14	Schools in the community	Traditions 28	Economic changes 15, 20
6	Comparison of other communities 1-3, 22, 24	Local services 15-17, 24	Holiday origins 19-20	Celebrations 28	Community diversity 4, 30-31	Environmental changes 12-13

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 1 Science Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What does our community look like?</i>	<i>How does our community work?</i>	<i>How can I help my community?</i>	<i>What makes our community special?</i>	<i>How do people make our community special?</i>	<i>How is our community changing?</i>
1	How big is our community? 7, 16–17	Science in the jobs our families have 9	Interactions of animals & the environment 15, 18	Animal niches 17–19	Observe people in our class 6, 14, 16–17	Predict how our community will change 1, 4, 18
2	Physical features of our community 17, 20	Physical changes in our community 20–21	Energy in our community 22	Weather in our community 2, 7, 21	Plant and animal diversity 15–16	Geographic changes 20–21
3	Sources of energy 4, 22	Seasonal jobs and activities in our community 21, 23	Our place in the Solar System 23	Observing the sky 4, 23	Interactions of plants and the environment 18–19	How technology changes things 1, 8–9
4	Plant and animal populations 15, 18–19	Plant and animal habitats 1, 4, 7, 10, 17	Characteristics of organisms 6, 16	Similarities and differences in plants & animals 15–16	Historical figures in science 9	Technology in daily life 8–9
5	Lifecycles of plants and animals 15–17	Interdependence 19, 22	Survival techniques of plants & animals 15, 22	Prehistoric plants and animals 15–16	Animal habits 1, 17–19	Environmental changes 10–11, 20, 22
6	Force and motion 3–4, 13	Speed and direction 3–4, 13	Seasons and holidays 14, 21	Our habitat 1, 16–18	Community survival 11, 19, 22	How can we make a difference? 1, 10–11, 22

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 1 Language Arts Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	What does our community look like?	How does our community work?	How can I help my community?	What makes our community special?	How do people make our community special?	How is our community changing?
1	Talking about where my community is 2-3, 7-8, 15	Talking about how my family works 2-3, 7-8	Talking, reading, and writing about class rules 1-5, 7-11	Drawing & talking about what the land looks like 2-3, 7-8, 15	Talking about how people in our class are special 17-22	Drawing & reading about how the land is changing 1-14
2	Drawing & talking about what my community looks like 2-3, 7-8, 15	Talking & writing about how my classroom works 1-3, 7-8, 11	Drawing, reading, & writing about cooperating in class 1-5, 7-11	Drawing & talking about weather and climate 2-3, 7-8, 15	Talking about how people in our community are special 17-22	Drawing & reading about how weather changes things 1-14
3	Drawing & talking about how big my community is 2-3, 7-8, 15	Talking, reading, & writing about my community leaders 1-5, 7-9, 11	Talking about problem-solving 2-3, 7-8, 15	Drawing & talking about what is made in my community 1-11, 16	Drawing, reading, talking about where people come from 6, 17-22	Drawing & reading about how people have changed the land 1-14
4	Drawing & talking about how many people live in my community 2-3, 7-8, 15	Talking about how I can get what I want 2-3, 7-8	Drawing/writing/talking about helping environment 9-11, 17-19	Talking about how our community leaders help us 1-2, 16, 19	Talking & reading about historical figures 6, 17, 22	Talking & reading about how people change the community 1-14
5	Reading & writing about how we use the land 1-5, 9	Drawing & talking about how I depend on people 1, 7-8, 19	Drawing/writing/talking about how I can help people 9-11, 17-19	Talking & writing about what our schools teach 1-2, 15-16	Drawing/talking/reading about animal habits 1-11, 17-20	Talking & reading about how businesses have changed 1-14
6	Talking & reading about other communities 2-3, 17	Talking/reading/writing about local services 1-3, 7-11	Drawing & reading about holiday origins 1-11, 17, 20	Drawing/talking/writing about community celebrations 9-11, 17-20	Talking about people who are different 1-11, 17-20	Oral reports about how the community has changed 1-2, 6, 17-20

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 1 Math Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What does our community look like?</i>	<i>How does our community work?</i>	<i>How can I help my community?</i>	<i>What makes our community special?</i>	<i>How do people make our community special?</i>	<i>How is our community changing?</i>
1	Count things in our community 1, 3, 5, 19	Create and explain a family tree 1-2, 27, 37	Voting in our classroom 1-3, 5-8, 12-14	Collect information about our community 48	Observe what people are wearing 3, 9-10, 44	Estimate and graph temperatures 38-41
2	Count physical features in our community 1, 3, 5, 19	Compare changes in our classroom 2, 8, 17, 37, 39	Measuring how we use energy at home 1-8, 37-40	Compare temperatures over time 40-41	Count and graph plants at school 11-16	Compare weights of soil and rocks 35
3	Calculate the size of our community 12-14, 19, 34	Draw planets and orbits 27-29, 31	Time our sky observations 27, 37-40	Counting clouds 9-10, 15-16	Locate on a map where we are from 34	Conduct an experiment on habitat change 49-51
4	Graph animals seen in our community 1-3, 11-13	Use money to buy things 17, 42-44	Create story problems about the environment 17-18, 23	Graph how we are alike and different 1-3, 11-13	Conduct an experiment like scientists 49-51	Count and graph technology in our lives 1-3, 11-13
5	Create story problems about land use 17-18, 23, 40	Carrying capacity of environments 1, 3, 7, 40, 48	Create habitats using geometric figures 21-22, 27-28, 31	Symmetry of plants and animals 29-30, 33	Create patterns using plants and animals 45	Calculate changes in cost of items 12-16, 42-43
6	Measure how far we are from other towns 2, 12, 32, 34	Describe how fast something moves 6, 17-18, 32	Chart our holidays on a calendar 37, 39-40	Chart our celebration on a calendar 37, 39-40	Compare capacities 28, 36, 48	List and categorize ways to save environment 17-18, 49-51

**The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.*

Grade 2 Social Studies Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	<i>What is democracy?</i>	<i>How does geography affect me?</i>	<i>How do I use goods and services?</i>	<i>How am I affected by history?</i>	<i>How does technology affect me?</i>	<i>How have I benefitted from others?</i>
1	Basic values and principles 7	Place of origin 9, 21	Role of government 13	Family history 21	Technology 20	Family culture—similarities 23, 28
2	Role of government 5	Local geography—recreation 9–11	Supply 14–15	Family traditions 21	Transportation 20	Family culture—differences 23, 28
3	Political parties 6	Local geography—business 9–10, 12	Demand 17	Family occupations 23	Communication 20	Community individuals 5, 9, 19
4	Rules 4	Local architecture 9	Food industry 16	Transportation 22	Agriculture 20	Significant individuals 5, 9, 19
5	Human rights 8	Geography and food 12	International trade 18	Events in U.S. history 24	Health care 20	Individuals in the arts 27
6	Human rights in other countries 8	People and the land 11	Conservation and resource management 19	Significant people 25	Conservation and resource management 19	Individuals in the humanities 27

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 2 Science Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What is democracy?</i>	<i>How does geography affect me?</i>	<i>How do I use goods and services?</i>	<i>How am I affected by history?</i>	<i>How does technology affect me?</i>	<i>How have I benefitted from others?</i>
1	Interactions and plants & animals 19–20, 23	The sun in the Solar System 18, 33, 45	Plant & animal survival—resource needs 19–20, 23–24	Animals past and present 21, 25	Technology in science 2, 8, 33–34	How plants are alike and different 19–20, 22
2	Changes in the environment 4, 7, 24, 31–32	Places animals play 4, 20, 23	Energy from the sun 17, 34	Animal physical characteristics 19	Moving people 11, 15–16	How animals are alike and different 19–20, 22
3	Diversity in plants and animals 4, 19–20	Places animals work 4, 20, 23	Forces 4, 7, 15–16	Animal behavioral characteristics 20	Talking with each other 20, 23	Animals in our community 19–20, 22
4	Rules of heredity 7, 22	Animal architecture 19–20, 23	Animals and their food 4, 19–20, 23	How things move 15–16	How things grow 1, 17, 19, 26–28	Scientists in our community 8–9
5	Plant and animal survival interactions 20	Growing seasons 28, 31–32, 34	Symbiosis 23	When is it too late? 10, 24	Technology and health 10–11	Science and art 9
6	Survival in the environment 19, 20, 24, 32	Places animals live 23, 26, 29–30	The seasons and holidays 34	Scientists of the past 8–9, 11	Saving the environment 10–11, 24	Science and literature 9

**The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.*

Grade 2 Language Arts Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What is democracy?</i>	<i>How does geography affect me?</i>	<i>How do I use goods and services?</i>	<i>How am I affected by history?</i>	<i>How does technology affect me?</i>	<i>How have I benefitted from others?</i>
1	Talking about America 1–10	Talking and writing about my birthplace 1, 6, 9, 17	Talking about government 8–9	Writing & talking about my family, interviewing 1–10, 17	Reading and talking about technology 13–15, 25	Writing & talking about my family culture—similarities 8–15
2	Talking about government 1–10	Reading and writing about local recreation 10–11, 17	Talking about supply 1–12	Writing & talking about my family history, interviewing 1–10, 17	Reading and talking about transportation 13–15, 25	Writing & talking about my family culture—differences 8–15
3	Talking and writing about politics 1–12	Reading and writing about local businesses 10–11, 17	Writing about demand 1–12	Writing & talking about my family traditions, interviewing 1–10, 17	Reading, talking, & writing about communication 13–15, 25	Oral presentations on community individuals 7, 9, 16–17, 19, 21
4	Talking and writing about rules 1–12	Drawing and describing local architecture 9, 16	Reading, writing, & talking about the food industry 1–12	Reading about transportation 22–25	Reading and talking about agriculture 13–15, 25	Talking about local people 19, 21
5	Talking and writing about rights 1–12, 17	Reading food labels 4, 13	Reading about trade in other countries 14, 18, 21	Reading about U.S. history 22–25	Reading and talking about health care 13–15, 25	Reading about famous people in the arts 16, 19–21
6	Reading & talking about rights in other countries 1–12, 18, 21	Writing about local jobs 6–7	Oral presentations on how I use goods & services 7, 9, 16	Oral presentations on conservation 7, 9, 16	Writing about nature 8–15	Oral presentations on how others have helped me 7, 9, 16, 19–21

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 2 Math Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What is democracy?</i>	<i>How does geography affect me?</i>	<i>How do I use goods and services?</i>	<i>How am I affected by history?</i>	<i>How does technology affect me?</i>	<i>How have I benefitted from others?</i>
1	Count the freedoms we have 1-3	Compare sizes of plants 29-30, 47	Total/categorize/graph the products we use & their cost 1-5, 7, 44-46	Make a timeline of family history 13-14	Total/categorize/graph technology in our school & its cost 1-5, 7	Observe how plants are alike and different 8, 37-38
2	Graph temperature changes 1-3, 40-41	Graph what we do for recreation & its cost 1-3, 40-46	Total the amount of milk the school buys and uses 1-15	Predict how animal physical characteristics help & hinder 8, 37-38	Calculate speed of vehicles 12-13, 21	Observe how animals are alike and different 8, 37-38
3	Total the number of plants & animals we see 1-7, 11, 13-14	Estimate how much land is used for farming 31, 36-37	Predict and measure how far things move 29, 34, 37-38	Total/categorize/graph jobs in our families & salary 1-5, 7, 44-46	Record in which ways and how much we talk 1-3	Estimate the community's population 7, 49
4	List the rules for adding and subtracting 1-2, 9, 11, 14	Relate architecture to geometric shapes 29-33	Total/categorize/graph foods we eat & their cost 1-5, 7, 44-46	Conduct an experiment about how things move 50-53	Conduct an experiment on how plants grow 50-53	Collect information on scientific measurements 49
5	Predict survival of plants & animals in various conditions 50-52	Mark the seasons on a calendar 42	Measure how far away some countries are from the U.S. 13-14, 37	Make a timeline of events in U.S. history 13, 47-48	Compare capacities in medicine volume 36, 39	Draw repeating patterns 47-48
6	Conduct an experiment to help a plant survive 50-52	Create word problems about land changes 35	Predict outcome of over-consumption 44-46	Add scientists to the timeline 13, 47-48	Collect info. on how technology helps resource management 49	Explore probability 53

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 3 Social Studies Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	<i>Who are we?</i>	<i>What is the natural environment?</i>	<i>Who were the Native Americans?</i>	<i>Who were the early settlers?</i>	<i>How do we interact with the land?</i>	<i>What things are changing?</i>
1	Classroom and school	Natural environment today 4	Geography and Native Americans 54	European settlers' movement to America 14	Natural resources 16	Events and history 20
2	Community producers and consumers 23, 24	Natural environment in prehistoric times 5	Different groups of Native Americans 6	African peoples' movement to America 14	Interdependence 16	Careers 21
3	Local government 23-25	Rivers 4, 16-17	Movements of Native Americans 7	Settlements and natural environment 11	Economics 17	Public safety 26
4	State government 23-25	Landforms 4, 16, 18	Natural environment and Native Americans 8, 13	Land use by Europeans 14	Rights of citizens 18	Technology and the land 28
5	National government 23-25	Natural regions 4, 16, 18	Culture of Native Americans 9	Early forms of government 12	Responsibilities of citizens 18	Technology and the water 28
6	Patriotic symbols 27	Natural wildlife 4, 16, 18	Governments of Native Americans 10	Lives of Europeans and Africans 15	Construction locations 19	Technology and communication 28

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 3 Science Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>Who are we?</i>	<i>What is the natural environment?</i>	<i>Who were the Native Americans?</i>	<i>Who were the early settlers?</i>	<i>How do we interact with the land?</i>	<i>What things are changing?</i>
1	Matter 10–11	Environmental conditions and survival 30	Earth and its moon 38	Observable properties of matter 10–11	Energy 19, 23	Science, technology, and society 9
2	How species survive 30	Fossils 20, 27	Telescopes and astronomy 40, 42–43	Planet movement 38–39	Relationship of air, water, & soil to life on Earth 33–36	Science careers 9
3	Plant structure and function 24	Water cycle 33	Moon phases 38	Atmosphere 33–37	Human dependence on plants 28–30	Technology to improve products 9, 17–18, 41
4	Classification of plants 25	Rocks and minerals 32	Seasons 39	Human effect on the land 9, 30	Protecting plants 30	Science, technology, and land 9, 18
5	How plants satisfy needs 26	Natural forces 34–36	Mixtures and solutions 12–13	Human dependence on plants 28–30	Recycling 31	Science, technology, and water 9, 18
6	Plant lifestyles 29	Helpful and harmful effects of plants 28	Heat 20–22	Recycling plants 31	Gravity and motion 29, 31	Science, technology, and communication 9, 41

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 3 Language Arts Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>Who are we?</i>	<i>What is the natural environment?</i>	<i>Who were the Native Americans?</i>	<i>Who were the early settlers?</i>	<i>How do we interact with the land?</i>	<i>What things are changing?</i>
1	List jobs (chores) 28–29	Watch video and write about environment 12, 20–30	Listen to literature about Native Americans 1, 3, 12, 14	Listen to literature about European settlers 1, 3, 12, 14	Research/ write about energy sources 13, 16, 18, 20–30	Read about important historical events 13, 18, 20–30
2	Listen to stories about plant dependence 1, 3, 5, 12	Read about dinosaurs 8, 10, 13	Read literature about Native Americans 9, 14–15	Read about African slaves 9, 14–15	Create poster about interdependence 16, 18	Research & write about science careers 13, 16, 18, 20–30
3	Collect news stories about local government 13, 18	Diagram and explain the water cycle 12, 18, 27	Write poems about Native Americans 14, 20–24	Write about life in early settlements 20–30	List and describe plants eaten for a week 28, 30	Describe how transportation has changed 20–30
4	Identify state representative districts in Alabama 13, 18	Describe rocks and minerals 32–33, 35	Create songs about Native Americans 14–15, 17, 32	Write about land use by settlers 20–30	Create plan to protect endangered plants/animals 20–30	Read, research, and write about land technology 1–35
5	Read about Washington D.C. & U.S. government 8, 10, 13	Write poems about Native Americans 20–30	Create skits about Native Americans 17–18, 24	Research early forms of government 18, 32	Create recycling plan 20–30	Read, research, and write about water technology 1–35
6	Class government campaigns and elections 12	Write about introduced plants 20–30	Perform skits about Native Americans 33–35	Read about lives of settlers 9, 15	Write about local construction 20–30	Read, research, and write about communication technology 1–35

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 3 Math Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>Who are we?</i>	<i>What is the natural environment?</i>	<i>Who were the Native Americans?</i>	<i>Who were the early settlers?</i>	<i>How do we interact with the land?</i>	<i>What things are changing?</i>
1	Graph jobs students do 1, 15, 53	Draw a map of local community 35-37	Identify Native American reservations on map 35-37	Draw European settlers' routes to U.S. 35-37	Predict and record temperature 37, 40-41	Mark historical events on calendar 46
2	Graph endangered & threatened animals in Alabama 1, 15, 53	Create geologic timeline 16, 46	Label distances to planets 38-39	Draw African peoples' routes to U.S. 35-37	Graph ways we use air, soil, and water 53	Graph science careers by discipline 53
3	Diagram local government structure 29	Predict and record rainfall 53-55	Draw and record moon phases 43, 46, 53, 55	Draw and label layers of atmosphere with temperatures 39-40	Determine value of plants eaten for a week 21-23, 53, 55	Graph speeds of different modes of transportation 53
4	Graph plants in the school yard 1, 15, 53	Draw crystal shapes 35-37	Use calendar to identify length of seasons 46	Measure temperature over grass and asphalt 40, 53, 55	Design a garden 17, 29-30, 33	Compare crop yield now and then 15
5	Add how much money is spent on lunch 21-23	Measure and record wind speed 53-55	List things that mix or dissolve 53	Diagram early forms of government 29	Start a class/school recycling program 53	Graph how much water is used at home 53
6	Draw patriotic symbols 32-34	Estimate cost of damage caused by introduced plants 4, 21, 23	Measure temperature in sun and shade 40, 53-55	Measure how tall trees are 35-37, 39	Estimate amount of space in local construction 4, 35-36	Measure distances of forms of communication 39

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 4 Social Studies Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	Who are we and what is our geography?	Who were Alabama's early inhabitants?	Who were the early Europeans?	What was Alabama like in the 19th century?	What was Alabama like in the 20th century?	What is Alabama's future?
1	School location	Gathering prehistoric and historical data 6	The Spanish 12	Geography and settlements 17–18	Voting rights and famous Alabamians 34, 36, 45	Economy—technology and tourism 46
2	Community location	Prehistoric Native Americans 7	The French 12	Statehood 19–21	Technological advances & economic conditions 35, 37	Economy—agriculture 46
3	Mountains 4–5	Impact of European contact 8	The British 12	Plantation life 22–23	WWI and the Great Depression 38–39	Economy—river systems 47
4	Valleys 4–5	Native Americans of Alabama—culture 9–10	Conflict with Native Americans 13	Civil War and Reconstruction 24–28	WWII 40	Effect of population growth on cities and roads 49
5	Bodies of water 4–5	Native Americans of Alabama—government and economy 9	Creek Wars 14	Industry, trade, and education 29–30, 32	State and local government 42, 44	Effect of population growth on demographics 49
6	Landform regions 4–5	Native Americans of Alabama—contributions 11	European dominance over Native Americans 15	Aspects of society 33	Civil Rights 43–44	Effect of population growth on natural resources 49

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 4 Science Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	<i>Who are we and what is our geography?</i>	<i>Who were Alabama's early inhabitants?</i>	<i>Who were the early Europeans?</i>	<i>What was Alabama like in the 19th century?</i>	<i>What was Alabama like in the 20th century?</i>	<i>What is Alabama's future?</i>
1	Change processes 32	Scientific investigation skills 1-8	Properties of matter 10	Earth's rotation 35-37	Forms of energy 31	Relationship of science, technology, & society 9
2	Natural and human changes 34	Animal structures & function 23	Changes in matter 12-13	Moon and tides 35-37, 40	Gas and electric cars 13-14	How technology improves products 9, 38
3	Geologic features of mountains 33	Impact of weather on animals 28-29	Force and speed 14	Earth's relative size 36, 40	Conductors and nonconductors 19	Keeping rivers clean 29-30
4	Geologic features of valleys 33	Behavior of living things 22, 25	Distance and force strength 13	The sun and the Solar System 31, 35, 39-40	Circuits 17-18, 20	Animal populations 25, 28
5	Geologic features of bodies of water 33	Species' interdependence 28-29	Introduced animal species in Alabama 22, 24, 28	Stars, planets, and moons 36, 40	Sound 21	Heredity 26-27
6	Geologic features of landform regions 33	Alabama plants, animals, tree planting 24-27	Impact & control of introduced animal species 22, 24, 28	Celestial movements 37, 39-40	Light 15-16	Resource depletion and recycling 30

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 4 Language Arts Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	Who are we and what is our geography?	Who were Alabama's early inhabitants?	Who were the early Europeans?	What was Alabama like in the 19th century?	What was Alabama like in the 20th century?	What is Alabama's future?
1	Listen to stories about change 1, 3, 5, 12	Describe an animal's behavior 21-23, 25-30	Research Spanish settlers 13, 18-19, 31	Write as a settler deciding where to live 20, 30	Research efficiency of forms of energy 19, 20-32	Create a travel brochure of Alabama 19, 20-32
2	Read stories about storms 1-5, 8, 10	Listen to stories about Native Americans 1, 3, 5, 12, 15	Research French settlers 13, 18-19, 31	Write a poem about the moon 20, 30	Write about old and new cars 20, 32	Write about a day in the life of a farmer 19, 20-32
3	Write a poem about a mountain 21, 23	Read/watch the weather report for a week 11-13	Research British settlers 13, 18-19, 31	Describe life on a plantation 20, 30	Write a poem about losing a job 20, 32	Research how to keep rivers clean 19, 33-35
4	Write a story about valleys 21-23, 25, 30	Write about Native American culture 15, 21-23, 25, 32	Role-play conflicts between settlers & Native Americans 33-35	Write a letter home as a Confederate soldier 20, 30	Interview a WWII veteran 12, 21	Research populations and growth in Alabama cities 19
5	Read poetry about rivers and oceans 1-5, 8, 10	Plan tree planting project 11, 13, 19	Photo essay of introduced species 19	Write about planets 20, 30	Plan skit about Civil Rights 19	Write a goodbye letter to a friend 20-32
6	Write about local landforms 21-23, 25-30	Write a news article about the tree planting 21-23, 25-30	Make a commercial about introduced species 19, 31, 33-35	Draw a mural of the Solar System 19	Perform skit about Civil Rights 33-35	Write a poem about no more animals 20-32

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 4 Math Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	<i>Who are we and what is our geography?</i>	<i>Who were Alabama's early inhabitants?</i>	<i>Who were the early Europeans?</i>	<i>What was Alabama like in the 19th century?</i>	<i>What was Alabama like in the 20th century?</i>	<i>What is Alabama's future?</i>
1	Locate school on city map 48	Observe and record an animal's behavior 60	Weigh same size, different property items 40-41, 60	Calculate passage of time 51-52	Record electricity used at home each day 10-11, 60	Calculate benefits of tourism to Alabama 34-37
2	Locate community on state map 48	Create geologic timeline 51-52, 60	Measure temperature of heating water 40, 60-61	Track moon phases 52, 60	Compare power of new and old cars 15-16	Estimate future agriculture production 15-16
3	Graph heights of mountains in Alabama 40, 48, 60	Measure and record rainfall, temperature 40-41, 60	Record motion of ball with various forces 11, 15-16, 60	Compare Earth to other celestial spheres 15-16	Test various items for conductivity 15, 60	Calculate value of goods transported on rivers 34-37
4	Determine value of local farm land 34-37	Observe and record an animal's behavior 15-16, 60	Record strength & direction of magnetic pull 11, 15-16, 60	Add distances to planets from Earth 10	Graph casualties by country 60	Measure miles of interstate highways in Alabama 39-41
5	Measure length of Alabama rivers 39-40, 48	Determine carrying capacity of an area 15-16, 60	Locate origin of introduced species on map 48	Compare temperatures of stars and planets 10, 60	Calculate cost and time to produce skit 15-16, 34-37	Calculate carrying capacity of community 15-16, 60
6	Calculate area of landform regions 40, 50, 60	Calculate space a tree needs 15-16, 50	Estimate cost of control of introduced species 34-37	Draw constellations using geometric figures 42-44	Measure shadows at various times of day 39-41	Calculate savings of recycling 34-37, 60

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 5 Social Studies Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What was our country like before settlement?</i>	<i>How was America settled?</i>	<i>How did the nation emerge?</i>	<i>How did the nation grow?</i>	<i>Why was there a Civil War?</i>	<i>How did the nation expand westward?</i>
1	Natural environment of North America 4	Jamestown and early settlements 11, 13	Social factors in the American Revolution 20	Significant individuals 26	Activists and campaign issues 40–41	Westward expansion 47, 49–50
2	Migration and settlement 5	French and Indian War 12	Groups involved in the American Revolution 21	U.S. Constitution and the Bill of Rights 27–29, 31	Causes of the Civil War 42	Natural environment and exploration 48
3	Culture of Native Americans 6–7	Government and law in colonial America 14, 16	Political and social differences 22	War of 1812 32–33	Anaconda Plan 43	Railroads 51
4	Age of Discovery 8	Social changes and trade routes 15, 17	Declaration of Independence 23	Explorations—1750s–1800s 34–36	Significant features of the Civil War 44	Exploration and Native Americans 52
5	Impact of Europeans on Native Americans 9	Emergence of American culture 18	American Independence writings 24	Technology changes 37	Reconstruction 45	Spanish-American War 53
6	English settlements 10	African culture 19	Important people and events 25	Sectionalism and major struggles 38–39	Cultural influences of the Civil War 46	Major changes in America—1870–1900 54

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 5 Science Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What was our country like before settlement?</i>	<i>How was America settled?</i>	<i>How did the nation emerge?</i>	<i>How did the nation grow?</i>	<i>Why was there a Civil War?</i>	<i>How did the nation expand westward?</i>
1	Spheres of the Earth 27	Cells 21–22	Chemical changes 10	Ocean and the water cycle 28, 30	The sun 14, 30, 33	Geologic features of the Earth 27–31
2	Populations 23	Cell life processes 21–22	Energy and energy transfer 15–17	Ocean features 24, 28	Star patterns 33	Human activities and the ecosystem 23–25
3	Fossils 18	Tissues 19	Forms of energy 13–17	Ocean currents 28	The Solar System 32–34	Begin science-based project 1–9
4	Ecosystems 24	Organs 19	Forms of energy 13–17	Ocean composition 28	Seasons 30	Recycling 9
5	Impact of the environment on Native Americans 25–26	Organ systems 19	Gravity 11	Ocean populations 24, 26, 28	Moon and tides 29	Technology and products 9
6	Classification 20	Survival relationships 25	Simple machines 12	Ocean food chains and webs 24, 26, 28	Environmental relationships 23	Technology and products 9

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 5 Language Arts Yearly Plan

<i>Week</i>	<i>Unit I</i>	<i>Unit II</i>	<i>Unit III</i>	<i>Unit IV</i>	<i>Unit V</i>	<i>Unit VI</i>
	<i>What was our country like before settlement?</i>	<i>How was America settled?</i>	<i>How did the nation emerge?</i>	<i>How did the nation grow?</i>	<i>Why was there a Civil War?</i>	<i>How did the nation expand westward?</i>
1	Write about the natural environment in 1600s & today 22–31	Describe parts of a cell 22–31	Dramatize events that caused American Revolution 34–36	Research significant individuals 14, 21, 25	Research American activists 14, 21, 25	Write about the frontier environment 22–31
2	Read about early migrations 10, 16	Write about cell life processes 22–31	Describe relationships of groups in the American Revolution 22–31	Write about ocean features 22–31	Debate causes of Civil War 13–15	Plan a trip by wagon 14, 21
3	Read about Native American culture 10, 16	Read about colonial America 9–10, 16, 20	Write about energy consumption 22–31	Write about sailing 22–31	Explain the effect of the Anaconda Plan 33–34	Plan project 14, 21
4	Read about the Age of Discovery 10, 14, 16	Write about trade routes 22–31	Write about energy conservation 22–31	Relate geography and exploration 21, 25	Relate geography and Civil War battles 21, 25	Research Native American conservation efforts 14–15, 21
5	Write about how Native Americans depended on environment 22–31	Read about early American culture 9–10, 16, 20	Read about American Independence 9–10, 16, 20	Research ocean technology 14–15, 21	Write a point-of-view poem about Reconstruction 22–31	Research war technology advances 14–15, 21
6	Describe English interactions in North America 34–36	Create skit of American and African cultures 9–10, 16, 20	Write about early inventions 22–31	Create weather program about hurricanes 34–36	Dramatize cultural influences of the Civil War 34–36	Research industrial technology advances 14–15, 21

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Grade 5 Math Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	What was our country like before settlement?	How was America settled?	How did the nation emerge?	How did the nation grow?	Why was there a Civil War?	How did the nation expand westward?
1	Calculate change in land use since 1600 18, 22	Create scale model of Jamestown 25, 32	Record physical & chemical changes in making butter 19	Calculate amount of rain falling on school 19	Graph temperature during the day 43-45	Draw and measure frontier routes 21, 26, 43-45
2	Draw and measure migration routes 21, 26, 43-45	Calculate cell reproduction rate 19	Calculate rate of temperature change 19, 43-45	Calculate area covered by oceans 19, 22	Calculate economic advantages & disadvantages for North & South 19	Calculate $t = r/d$ for various modes of travel 19
3	Estimate amount of natural resources in 1600 43-45	Draw & measure land area of colonial America 21, 26, 43-45	Calculate energy consumption then and now 19	Record directions of ocean currents 43-45	Create scale model of Solar System 32	Calculate power then and now 19
4	Draw and measure explorer routes 21, 26, 43-45	Draw and measure trade routes 21, 26, 43-45	Calculate energy conservation then and now 19	Graph sea water components 43-45	Graph casualties by battle 43-45	Research monetary benefits of recycling 47
5	Graph numbers of settlements in different areas 49	Research and graph cost of organ transplants 19, 43-45	Graph population by state 43-44	Calculate area covered by fishing nets 19, 22	Chart moon phases and tides 19, 43-45	Calculate change in power of old weapons 19
6	Classify early settlers 19, 26, 28	Graph number of Africans by state 43-45	Create timeline of scientists and inventions 19, 43-45	Plan, time, & edit weather program 43-49	Create scale model of a plantation 25, 32	Estimate economic benefits from industrial technology 19

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Appendix C: Resources

Part I. Primary Activity Resources

Being a flexible program, DOH can accommodate a variety of activity resources. However, teachers are strongly encouraged to make sure that all primary resources are consistent with recognized standards for quality and effectiveness. If you have primary resources in mind other than those listed below, contact: Wayne Strickland c/o AWF or Dr. Doug Phillips c/o AMNH for assistance in determining their consistency with national standards.

The following resources are incorporated as primary materials for DOH because:

- these materials are widely accepted and highly rated by master teachers and environmental educators,
- these materials are consistent with nationally recommended guidelines for accuracy, balance, and effectiveness in helping teachers include environmental education as a regular component of instruction,
- these materials have been specifically correlated with academic requirements of the Alabama Course of Study, and
- parent organizations of these materials have worked closely in the development of DOH and are committed to effective environmental education in support of overall educational improvement and student success—personally, civically, and academically.

Alabama's Environmental Legacy: A Series of Classroom Activities, Guide, and Resource Directory for Grades K–2 and 3–5. Legacy, Inc., 1997.

Legacy, Partners in Environmental Education, Inc.
P.O. Box 3813
Montgomery AL 36109
(800) 240–5115

Aquatic Project WILD, see Project WILD Aquatic Education Activity Guide.

Discovering Alabama, a public television series hosted and produced by Dr. Doug Phillips for Alabama Public Television and the Alabama Museum of Natural History; over 40 titles with Teacher's

Guides. AMNH, 1985–.

Discovering Alabama
Alabama Museum of Natural History
University of Alabama
Box 870340
Tuscaloosa AL 35487–0340
(205) 348–2039

Project Learning Tree: Environmental Education Pre K–8 Activity Guide. 3d edition. American Forest Foundation, 1995.

Project Learning Tree
Alabama Forestry Association
555 Alabama Street
Montgomery AL 36104

Project WET: Curriculum and Activity Guide. The Watercourse; Western Regional Environmental Education Council, 1995.

Project WILD
Alabama Department of Conservation &
Natural Resources
64 N. Union Street
Montgomery AL 36130
(334) 242–3623

Project WILD Activity Guide. 2d edition. Western Regional Environmental Education Council, 1992.

Project WILD
Alabama Department of Conservation &
Natural Resources
64 N. Union Street
Montgomery AL 36130
(334) 242–3623

Project WILD Aquatic Education Activity Guide. 2d edition. Western Regional Environmental Education Council, 1992.

Project WILD
Alabama Department of Conservation &
Natural Resources
64 N. Union Street
Montgomery AL 36130
(334) 242–3623

Water Sourcebook: A Series of Classroom Activities for Grades K-2 and 3-5. Legacy, Inc., 1994.

Legacy, Partners in Environmental Education, Inc.
P.O. Box 3813
Montgomery AL 36109
(800) 240-5115

Part II. Supplemental Resources

The following is a partial listing of resources considered supplemental because they have been recommended by DOH teachers as potential sources of information and activities. Many of these materials are not environmentally-based and most have not been officially evaluated for consistency with national environmental education standards. Likewise, these materials have not been formally correlated to requirements of the Alabama Course of Study.

In keeping with DOH policy, teachers are encouraged to take care in choosing supplemental materials that are consistent with recognized standards for quality, accuracy, and balance. Of course, materials that do not meet such standards are sometimes helpful in developing critical thinking skills and students' abilities to analyze biases or inaccuracies that might apply. Here again, assistance can be obtained by contacting Wayne Strickland or Dr. Phillips.

Agriculture in the Classroom: Alabama Treasures by Jacquelyn Autrey et al. Agriculture in the Classroom Foundation, Inc., 1987

Alabama Department of Agriculture &
Industries
P.O. Box 336
Montgomery AL 36109-0336

Acorn Naturalists. Resources for the trail and classroom; free catalogue.

17300 East 17th Street, #J-236
Tustin CA 92680
(800) 422-8886

Alabama Forest Resources Center

660 Adams Avenue
Montgomery AL 36130

Alabama Geographic Alliance
Department of Geography
Jacksonville State University
Jacksonville AL 36265
(800) 346-5444

Alabama Heritage Magazine

Box 870342
The University of Alabama
Tuscaloosa AL 35487-0342
(205) 348-7467

Alabama Museum of Natural History

Box 870340
Smith Hall
The University of Alabama
Tuscaloosa AL 35487-0340
(205) 348-7550

Alabama Natural Heritage Program

Alabama Department of Conservation and
Natural Resources
64 N. Union Street
Montgomery AL 36130

Alabama PALS Litter Education Activity Guide

340 North Hull
Montgomery AL 36104
(334) 263-7737

America's Private Land: A Geography of Hope.
U.S.D.A., 1996

U.S.D.A.
Natural Resource Conservation Service
Washington DC 20250
(800) 245-6340

Anniston Museum of Natural History

P.O. Box 1587
Anniston AL 36202-1587
(256) 237-6766

APT Classroom. A complete listing of APT programs suitable for classroom use is available.

Alabama Public Television
2112 11th Avenue South, Suite 400
Birmingham AL 35205-2884
(800) 239-5233

Audubon Society Field Guide series

Big Book of Everything: Social Studies,
edited by Rosemary Alexander. Educational
Instructor Publications, 1986

Creative Science Experiences for the Young Child
by Imogene Foret and Joy MacKenzie. Incentive
Publications, Inc., 1973

Environmental Education

American Forest Foundation
1111 19th Street, NW
Washington DC 20036

Ft. Toulouse/Jackson Educational Activities

Ft. Toulouse/Ft. Jackson Historic Site
2521 West Ft. Toulouse Road
Wetumpka, AL 36093

Geological Survey of Alabama
P.O. Box 869999
The University of Alabama
Tuscaloosa AL 35486-9999
(205) 349-2852

Geological Society of America
P.O. Box 9140
Boulder CO 80301-9140
(303) 447-2020; (800) 472-1988
www.geosociety.org

Global Learning and Observation to Benefit the
Environment (*The Globe*), a series of activities and
investigations about the earth and global
environmental systems for teachers and students.

The Globe Program
744 Jackson Place NW
Washington DC 20503
(800) 858-9947

Golden Press and Western Publishing Company
field guide series (now Golden Books)

Instant Kids Books: Martin Luther King
111 W Blanche St.
Mansfield OH 44903
www.InstantKidsBooks.com

*The Kingfisher Young Discoverers Encyclopedia of
Facts and Experiments*, available from Barnes &
Noble, Borders, www.amazon.com or
www.booksense.com

Learning about Communities. Prepared by the
Educational Research Council of America.
Allyn and Bacon, 1982

Magic School Bus, series. Scholastic Inc.

The Mailbox and *The Mailbox Superbook*, series.
One book each for Preschool through Grade 5.
Greensboro, NC: Education Center, 1998.
www.themailbox.com

Multiple Intelligences: Teaching for Success.
The New City School, Inc., 1997.

Nature Conservancy of Alabama
Pepper Place
2821C 2nd Avenue S.
Birmingham AL 35233

Nature Link, Wildlife Education Series
Alabama Wildlife Federation
P.O. Box 1109
Montgomery AL 36102
(800) 822-WILD

Nature's Way series
Center for Environmental Research & Service
Troy State University
Troy AL 36082

Outdoor Classrooms on School Sites. U.S.
Department of Agriculture, Soil Conservation
Service, 1980.

Peterson Field Guide series, Houghton Mifflin Co.

*Pollution Prevention: A Common Sense Solution to a
Complex Problem*—video.

Discovering Alabama
Alabama Museum of Natural History
University of Alabama
Box 870340
Tuscaloosa AL 35487-0340
(205) 348-2039

Project CATE, Conservation Action Through Education, a series of CD-ROMs.

Project CATE
P.O. Box 123
Mobile AL 36601
(334) 694-6247

Public Broadcasting Service, Inc. Various series, e.g., *The American Experience* and the Dallas County (TX) Community College American History series, as well as other educational programs.

PBS Videos
1320 Braddock Place
Alexandria VA 22314
(800) 344-3337

Ranger Rick's NatureScope, series.
National Wildlife Federation, 1985-.

National Wildlife Federation
1400 16th Street NW
Washington DC 20036-2266

School Yard Habitat Information Kit, item #79948

Alabama Wildlife Federation
P.O. Box 1109
Montgomery AL 36102
(800) 822-WILD

Simon & Schuster's Field Guide series

Teacher's Manual for Outdoor Classrooms—How to Plan, Develop, and Use Them. U.S. Department of Agriculture, Soil Conservation Service, 1979.

Teaching about the Environment: A Resource Guide for Getting Started in Environmental Education. Alabama Wildlife Federation, 1997.

Alabama Wildlife Federation
P.O. Box 1109
Montgomery AL 36102
(800) 822-WILD

Thematic Units Collections, Carson Dellosa Publishing Company

Time-Life Videos

P.O. Box 85060
Richmond VA 23285-5060
www.timelife.com

U.S. Department of the Interior
Fish and Wildlife Service
Division of Ecological Services
P.O. Drawer 1190
Daphne AL 36526

U.S. Geological Survey
Dept. P
601 National Center
Reston VA 22092
(703) 648-7440

Waste—A Hidden Resource...Activity Guide, published by the Tennessee Valley Association

What a Web Site! United States Department of Agriculture, Center for Nutrition Policy and Promotion. www.usda.gov/fcs/cnpp

WOW! The Wonders of Wetlands, an Educator's Guide. Environmental Concern, Inc. and The Watercourse, 1995.

Acorn Naturalists
17300 East 17th Street, #J-236
Tustin CA 92680
(800) 422-8886

Part III. Additional Materials for General Consideration

The following materials represent a sampling of suggested readings for teachers who might wish to explore various perspectives from different areas—the environment, history, science, society, educational philosophy, teaching methodology—pertinent to adopting and implementing DOH. These materials typically do not include instructional resources or activities. They are intended mainly for the teachers' personal enrichment/development.

The first book on the list, *A Sand County Almanac*, is considered the "bible" of conservation philosophy among outdoor enthusiasts. The conservation ethic espoused by author Aldo Leopold is central to the DOH aim of imbuing students with an ethic of environmental stewardship. The other materials—listed in alphabetical order—are a potpourri of suggestions from DOH staff and teachers. You are invited to add your own suggestions to this list.

Leopold, Aldo. *A Sand County Almanac*. Oxford University Press, 1949.

Abrams Planetarium. *Sky Calendar*. Michigan State University.

Alabama Atlas & Gazetteer. DeLorme Publishing, 1998.

Bartram, William. *Travels*. Francis Harper (Ed.), naturalist's edition. University of Georgia Press, 1998.

Borland, Hal. *A History of American Wildlife*. National Wildlife Federation, 1975.

Brown, Lester, Christopher Flavin, and Hilary French (Eds.). *State of the World 1999: A Worldwatch Institute Report on Progress Toward a Sustainable Society*. W.W. Norton & Co., 1999.

Duncan, Dayton and Ken Burns. *Lewis & Clark: The Journey of the Corps of Discovery, An Illustrated History*. Alfred A. Knopf, 1998.

Field, William. *Make a Movie that Tells a Story: Using a Home Camcorder...and Other Stuff You Already Own*. William Field, 2000. (P.O. Drawer 1549, Tuscaloosa AL 35403)

Glasser, William. *The Quality School: Managing Students without Coercion*. 2d ed. HarperCollins, 1992.

Goldfarb, Theodore D. *Taking Sides: Clashing Views on Controversial Environmental Issues*. 6th ed. Duskin Publishing Group, Inc., 1995.

Harker, Donald F. and Elizabeth Ungar Natter. *Where We Live: A Citizen's Guide to Conducting a Community Environmental Inventory*. Island Press, 1995.

Hawken, Paul. *The Ecology of Commerce: A Declaration of Sustainability*. Harper, 1994.

Hirsch Jr., E.D. (Ed.). *What your [Kindergarten through Sixth] Grader Needs to Know: Fundamentals*

of a Good [K-6th] Grade Education. Core Knowledge Series; separate book for each grade. Delta Books, 1993.

Hudson, Charles M. *Knights of Spain, Warriors of the Sun: Hernando de Soto and the South's Ancient Chiefdoms*. University of Georgia Press, 1997.

Hudson, Charles M. *The Southeastern Indians*. University of Tennessee Press, 1976.

Hyams, Edward. *Soil & Civilization*. Harper Colophon Books, 1976.

Kellert, Stephen R. *The Value of Life: Biological Diversity and Human Society*. Island Press, 1996.

McQuillan, Alan G. and Ashley L. Preston (Eds.). *Globally and Locally: Seeking a Middle Path to Sustainable Development*. University Press of America, 1998.

Owsley, Frank. *Struggle for the Gulf Borderlands: The Creek War and the Battle of New Orleans, 1812-1815*. University of Alabama Press, 2000.

Pierson, George Wilson. *Tocqueville in America*. Johns Hopkins University Press, 1938; paperback edition, 1996.

Read, William A. *Indian Place Names in Alabama*. University of Alabama Press, 1984.

Rogers, William W., Richard D. Ward, Leah Rawls Atkins, and J. Wayne Flynt. *Alabama: The History of a Deep South State*. University of Alabama Press, 1994.

Schlichter, Carol L. and W. Ross Palmer (Eds.). *Thinking Smart: A Primer of the Talents Unlimited Model*. Creative Learning Press, Inc., 1993.

Tarnas, Richard. *The Passion of the Western Mind: Understanding the Ideas that have Shaped our World View*. Ballantine Books, 1991.

Taylor, Alan. *American Colonies*. Viking Penguin, 2001.

Thayer, Robert. *Gray World, Green Heart: Technology, Nature, and the Sustainable Landscape*. Wiley, 1994.

Tocqueville, Alexis de. *Democracy in America*. Edited and abridged by Richard D. Heffner. Penguin Books, 1956.

Torricelli, Robert and Andrew Carroll (Eds.). *In Our Own Words: Extraordinary Speeches of the American Century*. Pocket Books, 1999.

Trimble, Stephen (Ed.). *Words from the Land: Encounters with Natural History Writing*. Peregrine Smith Books, 1988.

Watts, May Theilgaard. *Reading the Landscape of America*. Revised and expanded edition. Collier Macmillan Publishers, 1975.

Whimbey, Arthur and Jack Lochhead. *Problem Solving & Comprehension*. 4th ed. Lawrence Erlbaum Assoc., 1986.

Wilkinson, Loren. *Earth Keeping: Christian Stewardship of Natural Resources*. William B. Eerdmans Publ. Co., 1980.

Wilson, Edward O. *Biophilia*. Harvard University Press, 1984.

Winn, William W. *The Old Beloved Path*. Chattahoochee Indian Heritage Assoc., 1992.

Appendix D: Organizing the Community Collaborative

The Community Collaborative is a guided approach to promoting community involvement in the adoption of the DOH program. Specific goals of the Collaborative are to familiarize community groups with the intent and design of the DOH program and to gain their active support in conducting the program. Beyond these goals, the Community Collaborative can also serve the broader roles of:

- increasing community understanding of the realities of public education,
- building consensus for the essential aims and activities of the school,
- strengthening parent and community involvement with the school, and
- heightening the community sense of “ownership” for insuring the success of local schools.

There are a number of group-process strategies that might be employed to accomplish a successful Collaborative. A relatively simple strategy is offered below.

1. Form a Community Collaborative Steering Committee to include the school principal, a teacher who will be using DOH, a parent, and perhaps an appropriate staff member from the system Board of Education. If possible, it would be good to include student representation as well.

2. Have the Steering Committee select a representative group of people from the diversity of community “stakeholders” in education. The aim is to establish a group of several dozen people who have an active interest in education, who are willing to serve on the Collaborative, and who include diverse representation, i.e., from business, government, and the general public; from key interest areas such as civic clubs, churches, agriculture, scientific and professional organizations; and from those with active outreach to schools such as environmental organizations, sportsmen groups, parent associations, and possibly other educational assistance programs.

3. Prepare handouts or overhead transparencies featuring aspects of DOH, the school, and/or other concerns you deem appropriate for visual presentation to the Collaborative. This could include discussion of ways you wish to invite community participation through instructional or material support. For example, you might develop a list of specific labor, materials, or equipment you determine are needed to assist successful implementation of DOH. Plan and schedule an initial Community Collaborative meeting. Be sure to test your meeting plan with an advance trial run.

4. Conduct the initial Community Collaborative meeting as follows:

a. Begin the meeting with a welcome from the principal and Steering Committee. Briefly announce school plans to implement DOH, which, at times, will include student exploration/study of the local community. Explain that the program (and the students) will benefit greatly from Collaborative input in adapting the program to best meet common, local concerns and to promote active community participation.

b. Briefly relate that many Americans have expressed discontent with public education today and that many people believe the nation’s schools are facing significant “problems.” Acknowledge that similar views likely exist within your community. Explain that any program to improve education should be responsive to local views about the problems/needs confronting our schools. Ask participants to think quietly for a moment and consider what they personally believe are the major problems with schools/education today. Then ask that each person write down a list of those problems. (Be sure to have a supply of paper and pens/pencils available.)

c. After allowing several minutes for participants to make their individual lists, arrange small groups of 4–6 people per group and have members of each group compare and discuss their listed problems. Have each group work for 15–20 minutes to reach consensus on 5 priority problems about which all members of the small group agree are among the “most serious.”

d. Record each group’s 5 priority problems on a flip easel or blackboard for all to see. Then, if time allows, reduce any duplication by combining similar or repeated items to produce one overall list representing every distinctive priority problem identified.

e. Conduct a brainstorming session to generate “solutions” to education’s major problems. Try to elicit everyone’s ideas and be sure to record all suggestions on the blackboard or flip easel.

f. Present an overview of the DOH program and explain that its general purpose is to help address needs for *overall educational improvement*.

g. Discuss the need for community support of the program, then spend the final por-

tion of the meeting soliciting ideas for active community support/participation to insure program success. (If sufficient time is available, this is often best accomplished by having participants first work in their small groups, after which each group’s ideas/strategies are compiled into one overall list. A quicker option is to conduct another brainstorm session.)

h. After identifying and discussing ways to achieve community support/involvement, ask participants if they will agree to serve as a formal “Community Collaborative” for ongoing assistance to the program. Be sure to get names, addresses, and phone numbers from those who accept.

Established correctly, the Community Collaborative can help the school and the DOH program in a variety of ways, from building general public support to providing specific resources and direct instructional assistance. A key ingredient for ensuring a successful Community Collaborative is the use of a trained meeting facilitator. To request information about a trained facilitator or to arrange facilitator training, contact: Dr. Doug Phillips, DOH Program Director, Alabama Museum of Natural History, Box 870340, Tuscaloosa AL 35487–0340, or telephone: (205) 348–3553 or 348–2039.

Appendix E: Optional Development of a DOH Program for Grade 6

Many elementary schools today include kindergarten through fifth grade. Sixth grade, on the other hand, is organized variously: as part of single- and multi-grade schools, as part of middle schools, and as part of a junior high system. For this reason, DISCOVERING OUR HERITAGE provides for the optional development of a sixth grade component. Participating DOH schools are encouraged to follow up DOH fifth grade with a symmetrical treatment of the second half of American history. Below is offered a suggested Yearly Overview, Key Questions, and Key Experiences.

Sixth Grade Yearly Overview

In sixth grade, students continue to explore our American heritage from 1900 to the present, a period synonymous with the time of modern memory. Some Americans who were alive in the early years of the 20th century are still living today. This might include members of local family and community, providing opportunities for a variety of “living history” encounters with individuals who experienced major events in this period of history, a period of alternating upheaval and human progress together with accelerating change.

Prior to the 20th century, conflicts affecting the course of the nation were internal. But as America entered an era of growing assuredness and emerging industrial might, the country saw its freedom challenged by external forces.

The first major external challenge to America, World War I, was also the first major conflict involving the enhanced destructive power of the industrial age. It was a war of big machines and unprecedented killing, suffering, and anguish. Though America did not lose the physical conflict, disillusionment from the experience resulted in a diminished national spirit. Reaching deep into our faith in freedom and democracy, the nation struggled to rebound from the spiritual and economic strain of the 1920s and 30s, only to face another external challenge. World War II was a clash of bigger, better machines, and provided

a dramatic hint at what some have suggested is a defining problem for modern technological society: “If we can think of it, we must build it. If we build it, we must use it.”

Following World War II, America’s industrial and technological successes opened up new realms of freedom. In little more than a decade, the attention of our society shifted from combat to television, from war-time rationing to the excited pursuit of new material wealth. But with the booming economic success for part of our society, the disparity experienced by other parts of our society was accentuated. A new wave of social, economic, and environmental discord developed, and again the nation struggled over the democratic ideal of freedom, a struggle compounded by troubles elsewhere in the world. The civil rights and environmental movements of the 1960s and 1970s were affected by American concern over communism, the strain of the Cold War, and the United States’s involvement in Vietnam. By the end of the Vietnam War, many Americans felt a new sense of disillusionment with their government, even as the nation continued into a period of rapidly expanding technology and space exploration. In recent decades, the decline of communistic powers and the increase of global trade and communication have heralded an age of new hope for democratic progress in the world. However, this is also a time of heightened unrest, internally and internationally, as differing economic, social, and religious ideologies find new means of assertiveness through the advancing technologies and communication systems of today.

Important connections: The continued success of modern America, made possible by abundant natural resources, enabled the transition to the technological age. The combination of American democracy and American industrial and technological growth has, on the one hand, been a profound step forward in the course of human history. On the other hand, it has brought new economic, social, political, and environmental problems. Among the complexities of these new problems, American democracy and freedom are likely to undergo new challenges.

ACS Social Studies Yearly Theme:
United States Studies: 1900 to the Present

- Unit I** What was life like in the U.S. during the early 20th century? (ACS: 1900–1928)
- Unit II** What happened to affect the nation between the early 20th century and the advance of such modern technology as automobiles and radio? (ACS: 1929–1945)
- Unit III** How did the nation change and develop during the expanding popularity of television, highway systems, air travel, and other conveniences of the mid–20th century? (ACS: 1945–1969)
- Unit IV** How did the nation change and develop during the period of technological advance stemming from the space age? (ACS: 1970–recent decades)
- Unit V** What has happened to affect our nation during the lives of school parents? (ACS: recent decades)
- Unit VI** What is happening to affect our nation during the lives of the students? (ACS: present times)

DOH Sixth Grade Key Experiences

- Unit I** Tour State Capitol, city and county government buildings, cemetery, history museums, historic sites.
- Unit II** Visit a park or national forest with a structure built by the Civilian Conservation Corps (CCC); a lock and dam on a river or a sawmill; visit one of the military museums in Mobile, Montgomery, or Huntsville.
- Unit III** Tour an active military base such as Maxwell AFB or Ft. Rucker; tour civil rights sites in Birmingham, Selma, or Montgomery.
- Unit IV** Visit the Space Center and Science Museums in Mobile and Huntsville, McWane Center in Birmingham, a University research facility.

- Unit V** Invite parents to suggest ideas and help plan field trips/experiences as appropriate for this unit.
- Unit VI** Invite students to suggest ideas and help plan field trips/experiences as appropriate for this unit.

Suggested Steps for Local Development of a DOH Program for Sixth Grade

The opportunity to develop your own sixth grade DOH program can be an enjoyable challenge. Project staff are eager to work with schools that would like to pursue this opportunity. Meanwhile, the following is a simple step-wise approach to serve as a general guide.

Step 1: Examine the Alabama Course of Study (ACS) for Social Studies at your grade level and examine the textbook(s) and/or other materials required by your school system. Ask yourself whether these materials are sufficient in delivering learning that is conceptually organized for the school year and that is amply relevant, meaningful, and engaging for students.

Step 2: Ask yourself whether the ACS and the textbook(s) sufficiently incorporate such important ingredients as the following:

- parent involvement
- community participation
- genuine problem-solving
- hands-on, real-world experiences
- effectively integrated subject matter
- environmental knowledge and awareness
- the use of available enrichment materials/resources
- a clear sense of educational purpose and whole growth outcomes
- an overall coherent body of knowledge grounded in conceptual understanding

Step 3: Assess your school's situation and related program requirements (including existing teaching methods and lesson plans) and check to see whether these adequately address the full scope of important educational concerns/needs.

Step 4: Pretend for a moment that you can ignore existing problems, constraints, and demands that interfere with effective teaching/learning. Imagine you are free to organize your year into a comprehensive unit-by-unit teacher's roadmap, an overall plan that integrates content, experiences, and resources so as to make the program more relevant, more meaningful, and more coherent for students, for parents, and for you, the teacher. And imagine you are able to obtain whatever school or community assistance that may be needed to implement this ideal program/plan. Sketch an outline of how you would design/structure this ideal curriculum across the full year.

Step 5: Imagine that you can obtain the assistance of a support team from the community to work with you and your school in problem-solving the various needs, difficulties, and constraints that might hinder the implementation of your ideal program. And imagine you and your support team can find innovative solutions to overcome just about any barrier, from resource and funding needs to personnel and logistical support.

Step 6: After completing Steps 1–5, consider whether your present teaching situation meets the various features/aspects of an ideal program. If so, stop here. You're probably already teaching from a conceptually-organized approach that incorporates environmental education to augment such important factors as hands-on experiences, content integration, real-world relevance, and local community connections. However, if you determine that there is room for improvement in your existing program, then you might wish to examine DOH as a possible guide in helping design an integrated program suitable for your situation. For consultation in program design, contact: Dr. Doug Phillips, DOH Program Director, Alabama Museum of Natural History, P.O. Box 870340, Tuscaloosa AL 35487-0340; telephone: (205) 348-3553 or 348-2039; fax: (205) 348-4219. For assistance in locating funding resources, establishment of the Community Collaborative, and/or for special in-service training, contact: Wayne Strickland, DOH Outreach Coordinator, Alabama Wildlife Federation, P.O. Box 1109, Montgomery AL 36102; telephone (800) 822-WILD.

Grade 6 Social Studies Yearly Plan

Week	Unit I	Unit II	Unit III	Unit IV	Unit V	Unit VI
	<i>What was life like in the U.S. during the early 20th century? (ACS: 1900–1928)</i>	<i>What happened to affect the nation between the early 20th century and the advance of such modern technology as automobiles and radio? (ACS: 1929–1945)</i>	<i>How did the nation change and develop during the expanding popularity of television, highway systems, air travel, and other conveniences of the mid-20th century? (ACS: 1945–1969)</i>	<i>How did the nation change and develop during the period of technological advance stemming from the space age? (ACS: 1970–recent decades)</i>	<i>What has happened to affect our nation during the lives of school parents? (ACS: recent decades)</i>	<i>What is happening to affect our nation during the lives of the students? (ACS: present times)</i>
1	End of the frontier 4-6	Warfare 9 Great Depression 19, 20	Changes after WWII 28	Recent Presidents 35	Warfare 38, 40, 42	Warfare 38, 40, 42
2	WWI 7-8	Automobiles 11 Disasters and conflict 21-22	1950s culture 29	The New Frontier 37	Automobiles and rapid transit 40, 42	Automobiles and rapid transit 40, 42
3	Leaders and significant people 10, 18	Communication 11 The New Deal 23	The Cold War 30	Economic decision-making 38	Communication 40, 42	Communication 40, 42
4	Amendments and political geography 12-13	Business 11 WWII begins 24-25	Presidential domestic policies 31	Humans changing the environment 39	Business 38, 40, 42	Business 38, 40, 42
5	Cities, industry, and natural resources 14	Aviation 11 WWII military strategies 26	Civil Rights 32	Immigration 41	Aviation 37, 40, 42	Aviation 37, 40, 42
6	Populations and movement 15-17	Households 11 WWII impact on U.S. 27	Vietnam 33	Social issues 42	Environmental 39, 40, 42	Environmental 39, 40, 42

*The numbers in bold correspond to the current (2001) Alabama Course of Study for the respective grade and subject.

Appendix F: Integrating Career Awareness into DOH

Below is a list of the 71 different careers listed in the Community Visitors and Resources section of *DISCOVERING OUR HERITAGE*, spanning K–5, although not all careers are represented in each grade level. At the end of this list are some suggested activities you can do with your students to integrate career awareness into your teaching. Feel free to add to the lists of questions in Suggestions 3–5 below.

anthropologist	cotton farmer	janitor	recreation director
architect	county administrator	judge	scientist
art teacher	doctor	librarian	sea captain
artist	electrician	logger	secretary
astronomer	environmentalist	mayor	senator/representative
attorney	farmer	meteorologist	soil conservationist
banker	firefighter	museum curator	superintendent of schools
beekeeper	forest ranger	newspaper reporter/ editor	supervisor of elections
biologist	game & fish department officer	nurse	teacher
bus driver	genealogist	nutritionist	technology supervisor (school)
business person	geologist	paleontologist	telephone technician
cafeteria supervisor	grocer	park ranger	TV broadcaster
campaign manager	guidance counselor	pilot	urban planner
carpenter	health department person	plant nursery worker	veterinarian
cattle farmer	historian	police officer	waste management worker
city council person	horticulturist	postal worker	zookeeper
commercial fisher	hydrologist	principal	zoologist
conservationist		railroad engineer	
contractor			

Suggestions

1. When you plan to invite a speaker to your classroom, make sure that you involve the students in the planning. About a week ahead of time, explain who is coming and what the person will talk about. In small groups, have students generate questions about the topic. Share the group questions and compile a list from these. Send this list of questions to the speaker. This will help the speaker know what particular interests the students have about the topic.

2. After the visit, have students work in small groups and list the most interesting/useful/unusual thing they learned from the speaker. Give each group an index card on which to note their ideas. Send the speaker a thank-you note and enclose the students' lists and examples of student art work generated by the visit.

3. Have students choose careers to research. They can do this individually or cooperatively. Some of the questions they may want answered about a career are:

- What education is required?
- What is the salary range?
- What are the main tasks and responsibilities?
- Where is the job mainly done, e.g., indoors, outdoors, office, factory?
- How many people in the local community work in this career field?
- What is the best part of the job?
- What is a typical day like? What does the person do?
- Is the job different at different times of the year?
- How do people in this career help the environment?

4. Have students interview people in different careers. Below are some sample questions they might ask either in a letter or during a site visit. Also see questions in Suggestion 5 below.

- How long have you had this career?
- Did you do anything else before you chose this career?
- How did you get interested in this career?
- What kind of education do you need for this career?
- What do you do in a typical day on your job?
- What is the best part of your job?
- What is the most difficult part of your job?
- What kinds of computers or some other special technology are used in your job?
- Do you get to travel? If so, where do you go?
- How many people work with you?
- Do you do any special projects where you work with other people?
If so, what are they?
- What do you do in your job that helps the environment?

5. Let the students visit a work site or office of an individual with a particular career. They may know a family member or a friend they can visit. After the visit, students should write up at least the following. This may be combined with interview questions depending on the time the student spends at the site or office.

- Who did you visit?
- Where was the location?
- What career did you see being performed?
- What were some of the things you saw the person doing?
- Did the job look hard or easy? Explain your answer.
- Do you think you would like to have a career in this field? If not, why not?