

Program Concentration:

Career Pathway:

Agribusiness Management

Course Title:

Basic Agricultural Science and Technology

Course Description: This course is the recommended foundation course for the Agribusiness Management Pathway. It is also the foundation course for the Agriscience Pathway that was approved by the Georgia Board of Education in September, 2006. The standards for this course can be found at:

http://www.georgiastandards.org/DMGetDocument.aspx/Basic%20Agricultural%20Science%20and%20Technology.pdf?p=6CC6799F8C1371F6906804E169EB8EEC6ABE99EA3D1A0594E485588F0D876418&Type=D

PROGRAM CONCENTRATION:

CAREER PATHWAY:

Agribusiness Management and Leadership

Course Description: The Agribusiness Management and Leadership course provides a foundation for students interested in pursuing a degree in agribusiness through post-secondary study or to enter the agribusiness industry upon graduation from high school. The student will demonstrate competence in the application of principles and practices of agribusiness management and leadership. The course will help students build a strong knowledge base of the agribusiness industry as they study agribusiness types, business management, financial analysis, communications, agricultural law, leadership and teamwork, ethics, and agricultural economics. Mastery of these standards through project-based learning and leadership development activities in the FFA and supervised agricultural experience program will help prepare students for post-secondary study or entry into agribusiness.

THE AGRIBUSINESS INDUSTRY

Students will examine the nature and scope of the agribusiness industry including products and services, business types and organization, and basic economics.

AG-AML-1. Students will analyze characteristics of the agribusiness industry.

- Explain the types of agribusiness and the products and services provided.
- b. Describe the importance of agribusinesses.
- Determine the location of agribusinesses in the U.S.
- d. Define the components of the free enterprise system as related to agribusiness.
- e. Explain the characteristics of capitalism as related to agribusiness.
- f. Trace the distribution of agribusiness products and services from farm to consumer.
- g. Describe how byproducts are utilized in agricultural production.



- h Describe how consumer preferences, demand, and issues affect agribusiness.
- Compare and contrast how the values of different cultures affect the production and marketing of agricultural products.
- j. Discuss governmental involvement in agribusiness.
- k. Define methods of forward contracting.

Academic Standards:

SSEIN2 The student will explain why countries sometimes erect trade barriers and sometimes advocate free trade

SSEF4 The student will compare and contrast different economic systems, and explain how they answer the three basic economic questions of what to produce, how to produce and for whom to produce.

SSEMI2 The student will explain how the Law of Demand, the Law of Supply, prices and profits work to determine production and distribution in a market economy.

SSEF5 The student will describe the roles of government in a market economy.

SSEMA3 The student will explain how the government uses fiscal policy to promote price stability, full employment and economic growth.

AG-AML-2. Students will compare and contrast agribusiness organization and ownership.

- a. Compare and contrast the types of agribusiness organizations and ownership.
- b. Compare ownership options related to agricultural operations.
- c. Examine the effects of risk in agribusiness related to type and organization.

Academic Standards:

SSEMI4 The student will explain the organization and role of business, and analyze the four types of market structures in the U.S. economy.

SSEPF5 The student will describe how insurance and other risk-management strategies protect against financial loss.

AG-AML-3. Students will examine basic principles of agricultural economics.

- a. Explain the laws of supply and demand in agribusiness
- b. Describe the conditions that exist in and contribute to shortages and surpluses.
- c. Diagram the supply and demand curves for various situations.
- d. Explain the law and application of the law of diminishing returns.
- e. Describe the basic economic measures of an agribusiness (net profit, total assets, etc.).



- f. Explain the concept and effects of competition in agribusiness.
- g. Explain the principle of economies of size.
- h. Calculate a simple depreciation schedule.

Academic Standards:

SSEMA1 The student will illustrate the means by which economic activity is measured.

SSEMI2 The student will explain how the Law of Demand, the Law of Supply, prices and profits work to determine production and distribution in a market economy.

SSEMI3 The student will explain how markets, prices and competition influence economic behavior.

SSEF1 The student will explain why limited productive resources and unlimited wants result in scarcity, opportunity costs and trade offs for individuals, businesses and governments.

AG-AML-4. Students will explore the factors involved in starting and operating an agribusiness.

- Define and describe the entrepreneurial concepts of business.
- b. Identify education and skills required of a business owner.
- c. Identify the personal characteristics of entrepreneurs.
- d. Explain factors in obtaining financing for a new business.
- e. Evaluate successful businesses to determine factors that lead to success.
- f. List the steps and factors involved in establishing an agribusiness.
- g. Develop a business plan for an agribusiness.

Academic Standards:

ELAALRC2 The student participates in discussions related to curricular learning in all subject areas.

MM1D1 Students will determine the number of outcomes related to a given event.

SSEMI4 The student will explain the organization and role of business, and analyze the four types of market structures in the U.S. economy.

FINANCIAL MANAGEMENT

Students will explore the application of the principles of financial management to agribusiness operations and to their personal financial goals.

AG-AML-5. Students will develop agribusiness budgets and agricultural enterprise plans.

- a. Explain the types and uses of budgets.
- b. List the components of a budget.
- c. Develop partial and enterprise budgets.

Academic Standards:

ELAALRC3 The student acquires new vocabulary in each content area and uses it correctly.

MM1D1 Students will determine the number of outcomes related to a given event.

SSEIN1 The student will explain why individuals, businesses and governments trade goods and services.

AG-AML-6. Students will use cost and return analysis to determine the profitability of an agribusiness.

- a. Explain input-output relationships in agricultural production.
- b. Explain input-input relationships in agricultural production.
- c. Compute break-even costs.

Academic Standards:

MM1D2 Students will use the basic laws of probability.

SSEPF5 The student will describe how insurance and other risk-management strategies protect against financial loss.

SSEF6 The student will explain how productivity, economic growth and future standards of living are influenced by investment in factories, machinery, new technology and the health, education and training of people.

AG-AML-7. Students will develop a personal financial plan.

- a. Manage personal funds in a checking account.
- b. Create and manage a personal budget.
- c. Create a personal financial plan for retirement.
- d. Explain the types of personal credit and loans.

Academic Standards:

SSEPF1 The student will apply rational decision to the making of personal spending and savings choices.



SSEMI1 The student will describe how households, businesses and governments are interdependent and interact through flows of goods, services and money.

SSEPF2 The student will explain that banks and other financial institutions are businesses which channel funds from savers to investors.

AGRICULTURAL LAW AND ETHICS

The student will examine laws and ethical concerns that affect the agribusiness industry. Students will identify professional and ethical issues involved with agribusiness and the impact of laws and governmental regulations.

AG-AML-8. Students will investigate the relationship between ethics and law.

- a. Describe a person's responsibility under the law as it relates to business activities.
- b. Classify unethical and illegal conduct in business and related consequences.
- c. Describe federal laws dealing with fair business practices including competition, advertising, and pricing.
- d. List examples of how unethical behavior leads to government regulations.

Academic Standards:

SSCG7 The student will describe how thoughtful and effective participation in civic life is characterized by obeying the law, paying taxes, serving on a jury, participating in the political process, performing public service, registering for military duty, being informed about current issues, and respecting differing opinions.

AG-AML-9. Students will identify the characteristics of common government agencies and the programs they offer related to agribusiness.

- a. Identify government agencies associated with agribusiness.
- b. Define the farm bill and interpret data found within a given U.S. Farm Bill.
- c. Identify and explain government programs and policies that affect agriculture.
- d. Determine positive and negative effects of using government programs to supplement agricultural production.
- e. Explain the purpose, use, and effect of government subsidies and grants.

Academic Standards:

SS-EF-5 The student will describe the roles of government in a market economy.

SS-CG-11 The student will describe the influence of lobbyists (business, labor, professional organizations) and special interest groups on the legislative process.

SSCG7 The student will describe how thoughtful and effective participation in civic life is characterized by obeying the law, paying taxes, serving on a jury, participating in the political process, performing public service, registering for military duty, being informed about current issues, and respecting differing opinions.

AG-AML-10. Students will identify common legal agreements and documents as they relate to agribusiness.

- a. Explain common legal documents in business such as mortgages, promissory notes, security agreements, stock certificates, deeds, titles, leases, and tax forms.
- b. Explain the difference between leasing and owning agribusiness facilities and equipment.
- c. Evaluate the types and amounts of insurance needed in an agribusiness.
- d. Explain legal liabilities of a business owner or organization.

Academic Standards:

BCS-LEB-21 The student analyzes insurance ethics and insurance fraud.

SSCG7 The student will describe how thoughtful and effective participation in civic life is characterized by obeying the law, paying taxes, serving on a jury, participating in the political process, performing public service, registering for military duty, being informed about current i ssues, and respecting differing opinions.

AG-AML-11. Students will appraise the effect income taxes and other withholdings have on an agribusiness.

- a. Analyze the importance of managing income taxes.
- b. Complete an e-z income tax return.
- c. Complete documents necessary to receive a paycheck (W-4, etc.).
- d. Explain payroll deductions.
- e. Distinguish between tax deductible and non-tax deductible business expenses.
- f. Create a strategy to minimize taxes and maximize income.

Academic Standards:

MM-1A-3 Students will solve simple equations

SSCG7 The student will describe how thoughtful and effective participation in civic life is characterized by obeying the law, paying taxes, serving on a jury, participating in the political process, performing public service, registering for military duty, being informed about current issues, and respecting differing opinions.

LEADERSHIP

The student will explore and implement a plan of personal development including communication techniques and citizenship and leadership skills and the application of those skills to the agribusiness industry.

AG-AML-12. Students will plan and implement a program of personal development.

- a. Explore the value of a positive self-concept.
- b. Employ techniques to raise their self-concept as well as their followers.



- c. Demonstrate the appropriate attitude for leadership success.
- d. Utilize methods to solve problems and make decisions.
- e. Identify personal goals and establish a leadership plan.
- f. Explain the value of time management.

Academic Standards:

ELA9(10, 11, 12) LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

AG-AML-13. Students will apply communications techniques in agribusiness.

- a. Explain the importance of communication skills in agribusiness.
- b. Discuss different forms of communication skills in agribusiness.
- c. Practice communication skills by giving prepared and extemporaneous speeches.
- d. Demonstrate communication techniques in agricultural careers.

Academic Standards:

ELA9 (10,11,12)LSV2 The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

ELAALRL1 The student demonstrates comprehension by identifying evidence (e.g., diction, imagery, point of view, figurative language, symbolism, plot events and main ideas) in a variety of texts representative of different genres (e.g., poetry, prose [short story, novel, essay, editorial, biography], and drama) and using this evidence as the basis for interpretation.

ELA9 (10, 11, 12)W3 The student uses research and technology to support writing.

AG-AML-14. Students will practice human resource management methods for leading individuals and groups to understand the importance, types, and processes of effective team-building.

- a. Discuss the importance and function of teams in agribusiness.
- b. Explain the value of democratic leadership in teamwork, organizations, etc.
- c. Demonstrate proper steps in effective conflict resolution.
- d. Demonstrate the use of parliamentary procedure.
- e. Explain the major leadership styles (authoritarian and democratic).
- f. Identify the major personality types and problem solving styles of individuals.
- g. Explain the value of a team with diverse abilities, personality types, and problem solving styles.



Academic Standards:

ELA9 (10, 11, 12) LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

SSCG1 The student will demonstrate knowledge of the political philosophies that shaped the development of United States constitutional government.

AG-AML-15. Students will explore the importance of community relations and public service.

- a. Describe the meaning and importance of public service and citizenship.
- b. Define the qualities of a good citizen.
- c. Develop a personal and organizational plan for service.
- d. Serve others and the community.
- e. Implement a project in community and public service.

AG-AML-16. Students will become oriented to the comprehensive program of agricultural education, learn to work safely in the agriculture lab and work sites, demonstrate selected competencies in leadership through the FFA and agricultural industry organizations, and develop plans for a supervised agricultural experience program (SAEP).

- Explain the role of the Agriculture Education program and the FFA in personal development.
- b. Demonstrate knowledge learned through a Supervised Agricultural Experience Program (SAEP).
- c. Develop leadership and personal development skills through participation in the FFA.
- d. Explore career opportunities in agriscience through the FFA and Agriculture Education Program.
- e. Explore the professional agricultural organizations associated with the course content.

Academic Standards:

ELA9 (10, 11, 12) LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

SSCG7 The student will describe how thoughtful and effective participation in civic life is characterized by obeying the law, paying taxes, serving on a jury, participating in the political process, performing public service, registering for military duty, being informed about current issues, and respecting differing opinions.



Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal learning. Students encounter a variety of informational as well as fictional texts, and they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in *context*.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

CTAE-RC-1 Students will enhance reading in all curriculum areas by: Reading in All Curriculum Areas

- -Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
- -Read both informational and fictional texts in a variety of genres and modes of discourse.
- -Read technical texts related to various subject areas.

Discussing Books

- -Discuss messages and themes from books in all subject areas.
- -Respond to a variety of texts in multiple modes of discourse.
- -Relate messages and themes from one subject area to messages and themes in another area.
- -Evaluate the merit of texts in every subject discipline.
- -Examine author's purpose in writing.
- -Recognize the features of disciplinary texts.

Building Vocabulary Knowledge

- -Demonstrate an understanding of contextual vocabulary in various subjects.
- -Use content vocabulary in writing and speaking.
- -Explore understanding of new words found in subject area texts.



Establishing Context

- -Explore life experiences related to subject area content.
- -Discuss in both writing and speaking how certain words are subject area related.
- -Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

Marketing Agricultural Products and Services

Course Description: The Marketing Agricultural Products and Services course provides the foundation for students interested in pursuing a degree in agribusiness through post-secondary study or to enter the agribusiness industry upon graduation from high school. The student will demonstrate competence in the application of the principles and practices of marketing in agribusiness. The course will help students build a strong knowledge base of the agribusiness industry as they study methods and strategies of marketing agricultural products and services, principles of salesmanship, customer service, business organization, advertising, event planning, channels of distribution, investment analysis, finance, entrepreneurship, technology, communications, and economics. Mastery of these standards through project-based learning and leadership development activities in the FFA and the supervised agricultural experience program will help prepare students for post-secondary study or entry into agribusiness.

SELLING AGRICULTURAL PRODUCTS AND SERVICES

Students will examine the basic principles of sales and marketing agricultural products and services. Students will study the organizations and structures and interpersonal relationships involved in sales.

AG-MKT-1. Students will analyze the basic methods and strategies of agricultural marketing.

- a. Determine how the supply of agricultural products and agricultural industries change to meet the demand of consumers.
- b. Assess global agricultural sales and export and import practices.
- c. Examine the role of government in the sales and subsidization of agricultural products.
- d. Demonstrate the use of online marketing.
- e. Analyze the data from prices, sales, and market futures.



Academic Standards:

SSEMI2 The student will explain how the Law of Demand, the Law of Supply, prices and profits work to determine production and distribution in a market economy.

SSEF5 The student will describe the roles of government in a market economy.

SSWH21 The student will analyze globalization in the contemporary world.

AG-MKT-2. Students will demonstrate principles of salesmanship and customer service.

- a. Describe the attributes needed to become an effective sales person.
- b. Demonstrate skills of an effective customer service person.
- c. Identify the steps in conducting and completing a sale.
- d. Demonstrate effective communication skills needed to develop positive working relationships in agribusiness.
- e. Explain ethics in agribusiness.
- f. Demonstrate techniques used to present information to groups.
- g. Compare and contrast agricultural sales techniques.

Academic Standards:

ELA10LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

ELA11LSV2 The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

ELA8LSV2 The student listens to and views various forms of text and media in order to gather and share information, persuade others, and express and understand ideas. The student will select and critically analyze messages using rubrics as assessment tools.

AG-MKT-3. Students will evaluate agricultural business organizations and interpersonal networks.

- a. Explain how interpersonal relationships and networking can further business relationships.
- b. Examine the scope of sales and trade organizations and how they are designed to promote a product.
- c. Determine the benefits of participation in trade organizations.
- d. Evaluate the benefits of participation in community and professional organizations.

Academic Standards:

SSCG11 The student will describe the influence of lobbyists (business, labor, professional organizations) and special interest groups on the legislative process.

SSEF3 The student will explain how specialization and voluntary exchange between buyers and sellers increase the satisfaction of both parties.

MARKETING AND PROMOTING AGRICULTURAL PRODUCTS AND SERVICES

Students will explore methods of promoting and marketing agricultural products including advertising, event planning and promotion, and other marketing strategies. Students will study the effect of imports and exports on marketing agricultural products and services.

AG-MKT-4. Students will conduct agricultural product and service market research.

- a. Calculate the profit from marketing an agricultural product or service.
- b. Conduct and interpret surveys to provide data for demand of agricultural products and services.
- c. Develop a value-added product or service that will meet the needs of consumers.
- d. Research trends in the marketability of agricultural products and services.

Academic Standards:

MM2P1 Students will solve problems (using appropriate technology).

SSEPF1 The student will apply rational decision to the making of personal spending and savings choices.

AG-MKT-5. Students will demonstrate advertising and promotion techniques for agricultural products and services.

- a. Explain the importance of promoting agricultural products and services.
- b. Demonstrate procedures in merchandising agricultural products or services.
- c. Develop an advertising plan for an agricultural product, business, or service.

Academic Standards:

ELA10RC4 The student establishes a context for information acquired by reading across subject areas.

AG-MKT-6. Students will develop and implement marketing strategies and plans.

- a. Describe the purpose and importance of marketing.
- b. Describe types of agricultural markets.
- c. Evaluate marketing strategies for agricultural products and services.
- d. Apply benefit/cost analysis to marketing agricultural products and services.
- e. Develop a marketing plan for agricultural products and services.

Academic Standards:

ELA10RC4 The student establishes a context for information acquired by reading across subject areas.

MM2P1 Students will solve problems (using appropriate technology).

AG-MKT-7. Students will explore the channels of distribution of agricultural products and services.

- a. Compare different market channels for agricultural products and services.
- b. Describe the effects of trade agreements on agribusiness decisions.
- c. Investigate systems for storing and transporting agricultural products.

Academic Standards:

ELA10RC4 The student establishes a context for information acquired by reading across subject areas.

SSEIN1 The student will explain why individuals, businesses, and governments trade goods and services.

FINANCING AN AGRIBUSINESS

Students will analyze methods of financing and financial management of agribusiness enterprises.

AG-MKT-8. Students will explain banking and lending practices associated with the agribusiness industry.

- Analyze and select sources of agricultural credit.
- b. Prepare a loan application.
- c. Create an amortization table.

Academic Standards:

MM1P1 Students will solve problems using appropriate technology.

SSEPF4 The student will evaluate the costs and benefits of using credit.

AG-MKT-9. Students will evaluate and reduce risk in agribusiness.

- a. Identify financial risks in agribusiness.
- b. Select types of insurance for an agribusiness.
- c. Implement risk reduction strategies.

Academic Standards:

SSEPF5 The student will describe how insurance and other risk-management strategies protect against financial loss.

MM1P4 Students will make connections among mathematical ideas and to other disciplines.

AG-MKT-10. Students will conduct an investment analysis for an agribusiness.

- a. Define investment analysis and its components.
- b. Differentiate between types of investment analysis.
- c. Utilize investment analysis in making investment decisions.

Academic Standards:

SSEPF1 The student will apply rational decision making to personal spending and saving choices.

MM1P4 Students will make connections among mathematical ideas and to other disciplines.

TECHNOLOGY

Students will apply computer technology to marketing agricultural products and services.

AG-MKT-11. Students will utilize basic computer programs, systems, and technology in marketing agricultural products and services.

- a. Explain the use of computers, software, and other technology in agribusiness.
- b. Prepare a business letter using a word processing program.
- c. Create a database of clients using a spreadsheet or database program.
- d. Prepare a sales demonstration using presentation software.
- e. Use a spreadsheet template to prepare financial statements.

Academic Standards:

ELA12W3 The student uses research and technology to support writing.

PERSONAL DEVELOPMENT

Students will implement a plan for personal development including communications, citizenship, and leadership skills.

AG-MKT-12. Students will become oriented to the comprehensive program of agricultural education, learn to work safely in the agriculture lab and work sites, demonstrate selected competencies in leadership through the FFA and agricultural industry organizations, and develop plans for a supervised agricultural experience program (SAEP).

- Explain the role of the Agriculture Education program and the FFA in personal development.
- b. Demonstrate knowledge learned through a Supervised Agricultural Experience Program (SAEP).
- c. Develop leadership and personal development skills through participation in the FFA.
- d. Explore career opportunities in agriscience through the FFA and Agriculture Education Program.
- e. Explore the professional agricultural organizations associated with the course content.

Academic Standards:

ELA9 (10, 11, 12) LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

SSCG7 The student will describe how thoughtful and effective participation in civic life is characterized by obeying the law, paying taxes, serving on a jury, participating in the political process, performing public service, registering for military duty, being informed about current issues, and respecting differing opinions.

Reading Across the Curriculum

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After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal learning. Students encounter a variety of informational as well as fictional texts, and they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in *context*.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

CTAE-RC-1 Students will enhance reading in all curriculum areas by:



Reading in All Curriculum Areas

- -Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
- -Read both informational and fictional texts in a variety of genres and modes of discourse.
- -Read technical texts related to various subject areas.

Discussing Books

- -Discuss messages and themes from books in all subject areas.
- -Respond to a variety of texts in multiple modes of discourse.
- -Relate messages and themes from one subject area to messages and themes in another area.
- -Evaluate the merit of texts in every subject discipline.
- -Examine author's purpose in writing.
- -Recognize the features of disciplinary texts.

Building Vocabulary Knowledge

- -Demonstrate an understanding of contextual vocabulary in various subjects.
- -Use content vocabulary in writing and speaking.
- -Explore understanding of new words found in subject area texts.

Establishing Context

- -Explore life experiences related to subject area content.
- -Discuss in both writing and speaking how certain words are subject area related.
- -Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.