

CHAPTER VI: STANDARD 3: UNIVERSAL FOUNDATION SKILLS/CAREER OPTIONS

3a. Foundation Skills

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

and

3b. Career Majors

Students who choose a career major will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

Our education system (kindergarten to postsecondary) is designed to help all students to acquire the knowledge and skills necessary to obtain and maintain gainful, career-sustaining employment through a structured continuum of integrated learning. With this premise in mind, the Secretary's Commission on Achieving Necessary Skills (SCANS)* identified three foundation-level skills and five critical competencies that *every student needs* for a productive life. The New York State Curriculum and Assessment Council developed a comprehensive list of "Essential Skills and Dispositions" which would be exhibited by a "person who is prepared to live well, to work productively, and to participate effectively in civic and political life in a democracy." It is crucial that *all students* demonstrate mastery of these foundation skills and critical competencies if they are to be successfully employed in a competitive global economy.

Standard 3 is divided into two parts. Standard 3a outlines performance indicators for all students. Standard 3b outlines career-oriented technical knowledge/skills required of students who select a career major while in high school and/or pursue a sequence in occupational education. Students who choose a career major program but do not choose to pursue a discipline-specific occupational education sequence would meet the standard through performance tasks such as those listed in the core level. Students who pursue a sequence in occupational education would meet the standard through performance tasks such as those described in the specialized and experiential levels. These sample performance tasks are not meant to be all encompassing, but rather serve as suggested ways through which the performance indicators can be met.

National Skill Standards are being developed for all career major areas. Currently available material is incorporated, as appropriate, into this Framework. The performance indicators for Standard 3b define the skills necessary for employment. They were developed in cooperation with business and industry representatives. Job specific industry standards, beyond those leading to entry-level employment, are not always addressed within this Framework, but are available to teachers from other educational and industry sources.

Career Major Panels are being convened by the State Education Department, Department of Labor and Department of Economic Development, to refine the skills necessary for employment in each career area. The Health Services Career Major Panel, consisting of 15 health care field representatives, has completed a draft document which includes necessary skills for employment in the health care field. The other five panels will begin working in the near future.

*SCANS was formed by the United States Department of Labor in collaboration with representation from business, industry, and education.

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

The global economy has changed the very nature of work. Individual jobs have been replaced by occupations requiring team efforts to meet world class standards. These occupations are composed of complex tasks that are constantly changing. To be successful in this environment students need a universal set of skills that they can apply in many different situations.

* TECHNOLOGY *

Elementary Level

Students will demonstrate an awareness of the different types of technology available to them and of how technology affects society. Evidence may include:

- selecting the appropriate technology for designing and creating a flyer for a school-sponsored event
- identifying examples of technology found at home, at school, and in a business environment
- choosing an occupation and researching how technology has changed that occupation.

Intermediate Level

Students will select and use appropriate technology to complete a task. Evidence may include:

- using a telecommunications service (e.g., Prodigy, CompuServe, America Online) to check current airline schedules and price information for a trip to another state or country
- using appropriate technology to present information in table/chart form
- using word processing software to make an inquiry to a business.

Commencement Level

Students will apply their knowledge of technology to identify and solve problems. Evidence may include:

- evaluating why a school or business facsimile (fax) machine is not working
- taking the proper steps to make an inoperative printer work
- designing a computer program to solve a business-related problem
- using a software program to compile and analyze statistical data and prepare a presentation for a group.

Performance Indicator—
Describes what students are expected to know and be able to do

Performance Task—
Sample activity through which students may demonstrate mastery of the performance indicator

*** PERSONAL QUALITIES ***

Elementary Level

Students will demonstrate the personal qualities that lead to responsible behavior. Evidence may include:

- arriving at school on time, completing assignments on time, and explaining why these behaviors would be important to an employer
- providing examples of people acting responsibly/irresponsibly in the community
- completing an inventory of personal strengths and selecting areas in which they would like to improve
- demonstrating positive behaviors in interactions in the classroom, (e.g., sharing resources, helping classmates).

Intermediate Level

Students will demonstrate an understanding of the relationship between individuals and society and will interact with others in a positive manner. Evidence may include:

- participating in a fund-raising activity in or out of school
- volunteering in a local charitable organization's activities
- working with other students on a group project to improve the school.

Commencement Level

Students will demonstrate leadership skills in setting goals, monitoring progress, and improving performance. Evidence may include:

- working with a local employer to establish a sales goal and devising a plan to reach that goal
- motivating other group members and demonstrating leadership skills in a student leadership organization or job experience
- giving and accepting constructive criticism in a group project.
- evaluating decisions for legal and ethical implications.

*** THINKING SKILLS***

Elementary Level

Students will use ideas and information to make decisions and solve problems related to accomplishing a task. Evidence may include:

- providing examples of ways to raise money for a school field trip
- solving a riddle, puzzle, or problem using written or oral instructions
- setting up a computer, monitor, and keyboard according to written or oral instructions.

Intermediate Level

Students will evaluate facts, solve advanced problems, and make decisions by applying logic and reasoning skills. Evidence may include:

- describing the best method to evaluate customer interest in the establishment of a new product line for a business
- describing the best method to evaluate student interest in the establishment of a new sport or club at school
- creating a hypothetical work schedule to ensure equity in employee hours and days worked
- sequencing facts in a logical order to solve a problem.

Commencement Level

Students will demonstrate the ability to organize and process information and the ability to apply skills in new ways. Evidence may include:

- providing examples of ways to alter a work schedule to allow for more job sharing
- evaluating a variety of options suggested, selecting an option, explaining the reason for the selection, and providing the best strategies for implementation
- recognizing a problem and designing steps to solve the problem.

* MANAGING INFORMATION *

Elementary Level

Students will describe the need for data and will obtain data to make decisions. Evidence may include:

- explaining the practical uses of weather forecasting data as it relates to the farm industry
- planning a school store and determining what items would sell best.

Intermediate Level

Students will select and communicate information in an appropriate format (e.g., oral, written, graphic, pictorial, multimedia). Evidence may include:

- preparing a financial report showing the annual revenue and expenses of a business or club for three years and presenting that information to a group
- designing a chart or graph to evaluate personal progress toward a goal or objective.

Commencement Level

Students will use technology to acquire, organize, and communicate information by entering, modifying, retrieving, and storing data. Evidence may include:

- constructing a computer-generated form to survey local employers for possible participation in a work-study program
- using graphics software to present survey findings to the student body
- collecting the necessary data from local employers to develop a speakers' bureau for their school
- using telecommunications software to access and communicate information
- constructing a computer-generated financial report for a business.

*** MANAGING RESOURCES ***

Elementary Level

Students will demonstrate an awareness of the knowledge, skills, abilities, and resources needed to complete a task. Evidence may include:

- describing the resources needed to take an inventory of the art supply cabinet in the classroom
- explaining the resources needed to build a simple item (e.g., footstool, sandbox).

Intermediate Level

Students will understand the material and financial resources needed to accomplish tasks and activities. Evidence may include:

- developing a plan for a work experience (e.g., lawn mowing, snow removal, paper route) by formulating a budget, allocating equipment, and recording expenses and income

- creating and following a personal schedule to maximize the use of time.

Commencement Level

Students will allocate resources to complete a task. Evidence may include:

- planning a two-week activity that requires tasks to be divided among students or coworkers, including determining priorities and following time lines
- preparing a long-range budget for a school organization or hypothetical business
- completing multiple tasks for concurrent activities by adjusting personal schedules or negotiating deadlines
- working as a team to decide how resources should be allocated to accomplish a task.

*** INTERPERSONAL SKILLS ***

Elementary Level

Students will relate to people of different ages and from diverse backgrounds. Evidence may include:

- working cooperatively with peers to accomplish a task
- describing, as models, successful people of varied backgrounds
- displaying skills needed to resolve conflicts with other people
- explaining the importance of getting along with people in a work environment who are different from oneself.

Intermediate Level

Students will demonstrate the ability to work with others, present facts that support arguments, listen to dissenting points of view, and reach a shared decision. Evidence may include:

- expressing an opinion to a group and providing information to support that position
- reacting positively to constructive criticism
- working as a member of a team toward a common goal.

Commencement Level

Students will communicate effectively and help others to learn a new skill. Evidence may include:

- demonstrating how to respond effectively to a dissatisfied customer
- assisting in the teaching of an acquired skill in an elementary/ middle school class or business environment
- providing feedback to others in a group project.

*** SYSTEMS ***

Elementary Level

Students will demonstrate understanding of how a system operates and identify where to obtain information and resources within the system. Evidence may include:

- understanding the process used to order supplies for a school store or local business
- explaining the various components of the school system.

Intermediate Level

Students will understand the process of evaluating and modifying systems within an organization. Evidence may include:

- surveying teachers to develop modifications in the school's discipline policy
- observing how returns have been handled in a store over a period of time and developing strategies to improve the system.

Commencement Level

Students will demonstrate an understanding of how system performance relates to the goals, resources, and functions of an organization. Evidence may include:

- evaluating the roles or positions within an organization and making suggestions for improvement of the organization
- writing a proposal for ways a company can reduce expenses
- preparing an organizational chart for a club or business.

Elementary Level

Students will listen to and read the ideas of others and express themselves both orally and in writing; they will use basic mathematical concepts and computations to solve problems. Evidence may include:

- listening to and repeating simple directions
- reading a variety of materials and preparing a report
- following directions to power up a computer
- compiling an inventory of office equipment
- using probability to solve a problem or using a single statistic to make a prediction
- measuring an area for a swimming pool, basketball court, or employee work station.

Intermediate Level

Students will listen to and read the ideas of others and analyze what they hear and read; they will acquire and use information from a variety of sources; they will apply a combination of mathematical operations to solve problems in oral or written form. Evidence may include:

- following directions that involve a series of actions
- locating and using information on a wide range of topics from many different sources
- presenting an oral report to the class after investigating several career clusters
- recording data for a graph on the movement of the stock market or a particular stock
- exploring ways in which geometry is used in the real world
- solving basic problems involving integers, fractions, and decimals.

Commencement Level

Students will use a combination of techniques to read or listen to complex information and analyze what they hear or read; they will convey information confidently and coherently in written or oral form; they will analyze and solve mathematical problems requiring use of multiple computational skills. Evidence may include:

- gathering and using information presented in print and electronic sources to create a research report and database

- examining a case study to evaluate whether the information contained within it is adequate to support generalizations about the topic
- participating in debates, interviews, and panel discussions
- using word processing and desktop publishing software to present information on a sales campaign
- analyzing a company's balance sheet and income statement for proper industry ratios for assets, liabilities, and net income/loss
- ordering and pricing inventory appropriately as part of a work experience program.

STANDARD 3b. CAREER MAJORS

Students who choose a career major will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

*** BUSINESS/INFORMATION SYSTEMS ***

The general performance indicators and performance tasks for the Business/Information Systems career major convey knowledge and skill requirements essential for all Business/Information Systems occupational clusters (e.g., marketing, accounting, information processing). The performance indicators and tasks are classified within the general areas listed below:

1. Basic Business Understanding
2. Business-Related Technology
3. Information Management/Communication
4. Business Systems
5. Resource Management
6. Interpersonal Dynamics

Performance tasks such as those listed at the *core level* are for all students selecting a Business/Information Systems career major. Students who choose to intensify their study of Business/Information Systems will master performance tasks such as those listed at both the *specialized level* and the *experiential level*, which offer advanced study and hands-on experience, respectively. The three levels are designed to be progressive in nature and allow students who have opted to study a career major area to match the intensity of their program to their educational goals and plans.

1. Basic Business Understanding

Students will demonstrate an understanding of business, marketing, and economic concepts, perform business-related mathematical computations, and analyze/interpret business-related numerical and financial information. Evidence may include:

The Global Economy has broadened the playing field for competitors vying for a share of the world market. Businesses that can maintain a highly efficient work force, skilled in multiple aspects, will have a distinct advantage over other players.

Performance Indicator—
Describes what students are expected to know and be able to do

Core Level

Performance Task—
Sample activity through which students may demonstrate mastery of the performance indicator

- explaining the meaning of basic business and economics terms
- providing examples of typical problems (e.g., declining sales, outdated hardware) that could arise in a business and explaining how the steps in the decision making process would be used to solve such problems
- using spreadsheet software to forecast expenses for a business for three consecutive years
- interpreting a 10-year graph of the Gross National Product (GNP) or Gross Domestic Product (GDP).

Specialized Level

- explaining and interpreting advanced business and economics terms associated with their occupational cluster of study (e.g., reading and interpreting articles in business publications)
- developing a viable solution(s) for a case problem in a business simulation
- conducting a research project and making a presentation illustrating how the “law of supply and demand” is being applied in the local community
- using accounting or spreadsheet software to prepare an income statement and balance sheet for a simulated service business
- using appropriate software to produce several types of graphs (e.g., bar, pie) of the operating budget for the school district, the school store, or local business for each of the past five years and providing an analysis of the financial trends.

Experiential Level

- participating effectively with coworkers, supervisors, suppliers, customers, and others in an employment experience related to their occupational cluster of study
- solving problems/making decisions for a student-managed school store or for a business in which they are employed
- using application software to prepare purchase orders, record inventory received, and maintain accounts receivable/payable records for a business through a Cooperative Occupational Education Work Experience Program
- planning an itinerary, making reservations, and preparing a travel expense report for supervisors in a volunteer community service experience
- conducting research, preparing a chart, and making a presentation about the sales volume and market share for a local business.

2. Business-Related Technology

Students will select, use, and troubleshoot hardware and software used in the processing of business transactions. Evidence may include:

Core Level

- using touch keyboarding techniques to produce business documents (e.g., letters, memorandums, reports)
- using the components of various business technologies (e.g., CPU, disk drive, CD-ROM, modem, fax machine, scanner)
- entering data into various technological systems using a variety of input devices (e.g., handwriting, keyboard, mouse, scanner, voice recognition)
- producing business documents and reports using appropriate technology (e.g., business letter/word processing; business graphs and charts/spreadsheet and graphics software; inventory control reports/hand-held bar code scanners)
- using word processing software to prepare a form letter and do a mail merge soliciting customers for a simulated business.

Specialized Level

- using advanced touch keyboarding techniques to produce complex business documents pertinent to their occupational cluster of study (e.g., purchase orders, newsletters)
- using and interpreting user manuals to set up and troubleshoot hardware devices and software programs
- integrating applications and files from various technologies/operating systems (hardware and software) to produce complex, business-quality products and documents (e.g., Apple OS files to MS-DOS files; integrating graphics into a newsletter)
- conducting a research project and providing a report about the various technologies used at a variety of local businesses.

Experiential Level

- using business-related hardware and software to process transactions in an employment setting related to the student's occupational program (e.g., using order processing technology for assisting customers in an auto parts store or CD-ROM software to identify retail outlets for customers)
- demonstrating the ability to set up, maintain, and troubleshoot a fax machine or computer system in a simulated or real employment environment

- using vendor “help lines” to solve business technology hardware and software problems in an employment or volunteer experience
- conducting a research project to determine the cost-effectiveness of recently upgraded production technology installed at their place of employment and making a presentation about the project using “state-of-the art” software and media tools
- conducting a study and writing a proposal to justify the expense of adding new business-related equipment to the school office (e.g., fax machine, electronic mail or voice mail system).

3. Information Management/Communication

Students will prepare, maintain, interpret/analyze, and transmit/ distribute information in a variety of formats while demonstrating the verbal, nonverbal, written, and technical/electronic communication skills essential for working in today’s service/information/ technological-based economy. Evidence may include:

Core Level

- composing and producing simple business documents (e.g., letters, memos, reports)
- preparing and delivering a three-minute oral presentation using at least one visual aid (e.g., marketing research report, stock market analysis)
- identifying and interpreting positive/negative facial expressions and other body language indicators
- identifying and explaining how and why specialized communication tools are used (e.g., voice mail, electronic mail, beepers, pagers)
- using simple electronic databases and spreadsheet information systems to manage a membership list or prepare a payroll ledger.

Specialized Level

- composing/producing a multipage, complex business memorandum or business sales letter
- preparing and delivering a persuasive sales presentation and effectively handling customer questions and objections in a simulated situation
- using specialized communication tools, such as voice and electronic mail systems, at typical business productivity standards
- participating in a business panel discussion on a business topic which will be critiqued for communication effectiveness.

Experiential Level

- using local, regional, national, and/or international telecommunication networks to obtain and/or communicate business information for a capstone project
- facilitating a panel discussion as part of an employment experience
- preparing and delivering a 10-minute oral presentation using a variety of visual aids in an employment or volunteer experience
- developing/producing complex, business-quality documents (e.g., business letters, inventory reports, financial/accounting reports, proposals, advertising/sales brochures) for a capstone business simulation, a work experience situation, or a community service project
- communicating effectively with coworkers and supervisors during an employment or volunteer experience
- participating in the public speaking competitive event at a local, State, regional, and/or national leadership conference of the Distributive Education Clubs of America (DECA) or Future Business Leaders of America (FBLA).

4. Business Systems

Students will demonstrate an understanding of business, social, and economic systems and subsystems and how they relate to and support each other. They will interact with various business systems and subsystems to process daily transactions. Evidence may include:

Core Level

- identifying and explaining the social, organizational, economic, business, and technological systems that stimulated the transition from an agricultural-based economy through an industrial-based economy to the current service-/information-/technological-based economy
- identifying and explaining aspects of basic systems that typically function in a business enterprise (e.g., administrative, financial, marketing)
- diagramming the components (input, processing, output, feedback) of a typical business system and explaining what documents/materials/products are used in each component (e.g., billing, legal, marketing)
- explaining and providing examples of the interrelationship of the free enterprise system and the marketing concept
- identifying basic features of the sole proprietorship, partnership, corporation, and franchise systems, and deciding which form of organization would be best for given situations.

Specialized Level

- analyzing the effects that changes in internal and external influences (e.g., human resources, suppliers, government, technology, customs/traditions) have on various business systems
- identifying, describing, and diagramming systems and subsystems associated with typical businesses in their occupational cluster of study
- planning, implementing, analyzing, and modifying systems and subsystems for a student-operated school store or business in which they are employed.

Experiential Level

- contributing to the effective operation of various systems and subsystems (e.g., office support system, data processing system, computer programming systems) during an employment experience
- developing a system/subsystem modification to enhance productivity during an internship experience in a community service organization
- starting a student-owned and -managed small business through the Junior Achievement program or other school-sponsored program.

5. Resource Management

Students will identify, organize, plan, and allocate resources (e.g., financial, materials/facilities, human, time). They will demonstrate the ability to manage their lives as students, contributing family members, productive workers, and self-sufficient individuals. Evidence may include:

Core Level

- explaining the need for and the steps incurred by a business in setting goals and priorities to meet company objectives
- identifying and discussing the process for constructing a simple operating budget for a specific purpose in a small business (e.g., advertising budget)
- listing and explaining various personal and business needs related to banking, investments, and insurance (e.g., personal checkbook, mutual funds, life insurance)
- explaining various paycheck deductions (e.g., federal and State taxes, FICA)
- opening and using personal savings and checking accounts
- developing a personal financial plan/budget for a particular purpose (e.g., bicycle, automobile, college).

Specialized Level

- participating on a team to develop a mission statement, goals, objectives, and an annual work plan for a DECA or FBLA chapter
- demonstrating through simulation how a business raises capital by selling stock
- visiting a bank and meeting with a business loan officer to discuss the process involved in applying for a small business start-up loan
- developing a simple budget proposal to refurbish and/or remodel an office or small retail business
- diagramming and explaining an organizational chart of a small corporation.

Experiential Level

- using application software to prepare a federal and State income tax return
- developing an operating budget for the year for a school-sponsored extracurricular organization or the DECA/FBLA chapters
- using calendar-type software to design a student work schedule for a student-operated school store or a business in which students are employed.

6. Interpersonal Dynamics

Students will exhibit interpersonal skills essential for success in the business world, demonstrate basic leadership abilities/skills, and function effectively as members of a work group or team. Evidence may include:

Core Level

- outlining essential personal attributes/attitudes for successful interpersonal relationships (e.g., appearance/cleanliness, integrity, punctuality, dedication/commitment)
- explaining the many benefits inherent in a business with a culturally diverse work force
- using a case study to illustrate how a business might use a team approach, flextime, or job sharing in its daily operations
- listing the key elements necessary to facilitate a business-related meeting
- teaching a classmate to reconcile a checking account or use telecommunications software
- participating in a mock job interview.

Specialized Level

- interacting congenially, harmoniously, and effectively with co-members of a school club, community youth leadership organization, or business in which they are employed
- planning and implementing a meeting between class representatives and the principal to discuss concerns/needs of the class
- surveying the personnel policies of a business and developing a report on employee requirements/guidelines and penalties for violations
- interviewing students for positions in a simulated business
- teaching a ninth grade class how to read the stock page
- serving as a negotiator on behalf of the vice principal and students in the handling of student code-of-conduct violations.

Experiential Level

- participating in a job performance and attitude evaluation as part of an employment experience
- participating in the job interview competitive event at a local, State, regional, and/or national DECA or FBLA leadership conference
- facilitating a team or work group meeting during an employment or volunteer experience
- conducting a training session for new employees during an employment experience or in a student-operated school store.

*** HEALTH SERVICES ***

The Health Services career major provides information regarding the skills and knowledge needed for entry into the work force or for making career choices leading to postsecondary education or training. The areas of the Health Services career major discussed in this Framework are taken from the National Health Care Skill Standards Project (NHC-SSP). This project, funded by the U.S. Department of Education, was a collaborative endeavor of health services, labor, and the education community to “better prepare tomorrow’s health care workers.”

The seven key concepts, identified as National Skill Standards, specify the knowledge and skills needed by all levels of health care workers in order to provide high-quality health care. They are:

1. Academic Foundations
2. Health Systems
3. Health Maintenance
4. Legal and Ethical Responsibilities
5. Safety

6. Communication
7. Interpersonal Dynamics

Health care occupational clusters are broadly defined in the National Health Care Skill Standards Project as:

- Therapeutic - (including medicine, dentistry, nursing, pharmacy, rehabilitation)
- Diagnostic - (including medical laboratory, radiography, imaging)
- Information Services - (including medical records management, utilization review)
- General Services - (including housekeeping, food service, facility maintenance)

Performance tasks such as those listed at the *core level* are for all students selecting a Health Services career major. Students who choose to intensify their study of Health Services will master performance tasks such as those listed at both the *specialized level* and the *experiential level*, which offer advanced study and hands-on experience, respectively. The three levels are designed to be progressive in nature and allow students who have opted to study a career major area to match the intensity of their program to their educational goals and plans.

1. Academic Foundations

Students will apply knowledge/skills acquired in academic subjects to the health care environment. Evidence may include:

Core Level

- identifying and describing science concepts (anatomy and physiology, bio/chem, physics, growth/development) as they apply to biotechnology equipment and health care
- writing an essay describing the importance of understanding science concepts in health careers.

Specialized Level

- applying life sciences and mathematical concepts in a work site situation
- conducting laboratory tests on body fluid samples.

Experiential Level

- selecting a patient and relating his/her specific illness to science concepts that are involved
- regulating a computerized intravenous infusion pump to provide appropriate fluids for a hospitalized client.

Performance Indicator—
Describes what students are expected to know and be able to do

Performance Task—
Sample activity through which students may demonstrate mastery of the performance indicator

2. Health Systems

Students will understand the current health care system and its impact on health careers. Evidence may include:

Core Level

- listing services provided by the health care system
- touring a local general hospital and preparing a report of various services provided
- identifying social and economic factors that affect health care delivery
- explaining the relationship of economics and health care in our society.

Specialized Level

- describing the American free enterprise system and its effect on the health care system
- describing how social, political, or economic factors affect delivery of health care services in a health care agency.

Experiential Level

- preparing insurance forms for services rendered in a health facility
- participating in a debate involving current and proposed national health care policies.

3. Health Maintenance

Students will develop knowledge of the concept of optimal health and identify factors that affect health maintenance. Evidence may include:

Core Level

- describing the physical, mental, and social aspects of health and their interrelationship
- demonstrating good personal health habits to promote physical, mental, and social health
- making a list of their current physical activities and identifying how these activities contribute to optimal health
- describing their feelings of satisfaction with achieving success in school
- identifying specific community resources involved in the promotion of health

- discussing feelings resulting from school/group social involvement
- developing a plan for ideal physical, mental, and social health.

Specialized Level

- describing the effects of alcohol, tobacco, and drugs on health (physical, mental, and social)
- identifying and describing risk behaviors that can jeopardize optimal health
- researching the effects of stress on health
- explaining preventative health practices (e.g., stress management, good nutrition)
- analyzing the effects of risk behaviors for the individual, family, community, and world
- developing a plan that accommodates nutritional needs, stress management, and physical activity.

Experiential Level

- contacting community health agencies to determine the services provided, what speakers could address the class, and then inviting them
- measuring and reporting a client's vital signs or other indicators of health status
- accessing appropriate community resources to help resolve health problems for clients in a health services environment
- conducting classes for diabetic clients
- giving a presentation to an elementary school class about preventative health practices such as nutrition and stress management.

4. Legal and Ethical Responsibilities

Students will know the importance of performing their role in the health care system in accordance with laws, regulations, policies, ethics, and the rights of clients. Evidence may include:

Core Level

- demonstrating equitable treatment of all people
- differentiating between legal and ethical rules
- identifying and describing client rights and confidentiality
- obtaining and discussing the "Patient's Bill of Rights" from a local health care agency

- contrasting licensure and certification in a selected career area and discussing limitations of each
- developing a code of ethics for the class.

Specialized Level

- describing legal/ethical rules and responsibilities of workers within the health delivery system and determine what constitutes liability
- describing the consequences of legal and ethical wrongdoing in the health care field
- extracting legal documentation from a case study.

Experiential Level

- attending a malpractice hearing in a local court system
- demonstrating legal and ethical behavior in caring for clients with communicable diseases
- complying with legal requirements for documentation.

5. Safety

The student will identify safety hazards in a health care setting and prevent illness or injury through safe work practices. Evidence may include:

Core Level

- describing fire hazards and other safety hazards and their impact on the health care environment
- defining and discussing universal precautions and regulatory guidelines such as those developed by the Occupational Safety and Health Administration (OSHA)
- identifying principles of good body mechanics
- discussing procedures/protocols used in classroom emergencies
- listing general principles of first aid and their adaptation to the health care environment
- inviting a safety officer from a health care agency to speak to the class.

Specialized Level

- implementing methods of preventing accidents in classroom and work-site situations
- using principles of infection control according to OSHA requirements in simulated health care situations

- demonstrating specific first aid techniques
- citing examples of safety practices in a health care work site.

Experiential Level

- participating in a first aid competition in a local or State competitive events conference Health Occupations Students of America/Vocational Industrial Clubs of America (HOSA/VICA)
- completing a first aid course of study
- preventing accidents by using principles of body mechanics when caring for hospitalized clients
- wearing protective equipment while working with dental clients.

6. Communication

Students will communicate information in a variety of formats and media. Evidence may include:

Core Level

- using basic medical terminology appropriately
- discussing the importance of effective communication in the health care field
- accessing electronically produced information commonly used in a health care setting
- demonstrating differences between verbal and nonverbal communication and the impact on consumers of health care
- demonstrating various communication methods used to give and obtain information
- role playing effective communication involving health care workers
- communicating effectively in simulated health care settings.

Specialized Level

- demonstrating ability to assess the level of understanding of others
- using appropriate medical terminology in work-related situations
- demonstrating ability to ask for clarification as necessary and to report/record accurately information in a work-related situation.

Experiential Level

- recording results of serological examinations
- adapting communication to the individual needs of a client within the health care system
- responding to concerns and fears of a nursing home client.

7. Interpersonal Dynamics

Students will interact effectively and sensitively with all other members of the health care team in order to provide high-quality client care. Evidence may include:

Core Level

- working cooperatively in a group and respecting the diversity of classmates
- role-playing team membership skills (e.g., cooperation, leadership, and listening) and applying them to the health care hierarchy
- discussing the impact of client diversity on health care.

Specialized Level

- demonstrating the ability to assume the role of leader, recorder, and team member in a health care work setting
- inviting a health care manager to speak on sensitivity to all individuals in the health care environment.

Commencement Level

- interacting effectively with clients, coworkers, and supervisors in a health care-related situation
- dealing with differences in opinion in work-related situations by showing respect for the point of view of others.

*** ENGINEERING/TECHNOLOGIES ***

The general performance indicators and performance tasks that follow convey knowledge and skill requirements essential for all occupational clusters within the Engineering/Technologies career major area. The performance indicators and tasks are classified within the general areas listed below:

1. Foundation Development
2. Technology
3. Engineering/Industrial Processes

Performance tasks such as those listed at the *core level* are for all students selecting an Engineering/Technologies career major. Students who choose to intensify their study of Engineering/Technologies will master performance tasks such as those listed at both the *specialized level* and the *experiential level*, which offer advanced study and hands-on experience, respectively. The three levels are designed to be progressive in nature and allow students who have opted to study a career major area to match the intensity of their program to their educational goals and plans.

1. Foundation Development

Students will develop practical understanding of engineering technology through reading, writing, sample problem solving, and employment experiences.

Performance Indicator—
Describes what students are expected to know and be able to do

Core Level

- understanding labor and working condition laws as per OSHA rules and regulations
- using materials, tools, instruments, equipment, and procedures safely in a laboratory
- researching and recording data through use of computerized information services such as the Internet and World Wide Web
- using general carpentry related vocabulary to order building materials for a simple construction job
- using simple engineering-related mathematical/scientific concepts, construct a simple series parallel electrical circuit
- providing examples of simple problems that managers/employees need to solve and explaining the steps in the problem-solving process.

Performance Task—
Sample activity through which students may demonstrate mastery of the performance indicator

Specialized Level

- engaging in biomedical laboratory activities, such as use of living material, construction of devices, use of working models, charts, graphs, technical drawings, sketches and illustrations, mathematical equations, and computer simulations
- finding and applying mathematical/scientific formulas necessary to calculate electrical resistance, aerodynamic lift, torque
- retrieving automotive engine data specifications using industry computerized data retrieval systems
- participating in various competitive events at a local, State, or national VICA (Vocational Industrial Clubs of America) conference.

Experiential Level

- conversing intelligently and effectively with industry representatives and employers/employees, using technical language associated with the occupational cluster of study
- applying complex computational procedures and concepts used in setting up an assembly line
- explaining the causes and physiological effects of working in a high paced manufacturing assembly line.

2. Technology

Students will demonstrate how all types of engineering/technical organizations, equipment (hardware/software), and well-trained human resources assist and expedite the production/distribution of goods and services. Evidence may include:

Core Level

- identifying the components of a system (input, process, output, monitor, comparison) and being able to draw a labeled model in block diagram form indicating how the system components are linked
- identifying and using software programs for specific applications such as word processing, database management, graphics, and telecommunications
- demonstrating how a person can use sensory experience to monitor the output of some technological systems (e.g., toaster, traffic control, heating, smoothness of a finish, stereo system, food quality)
- demonstrating how subsystems can be used as comparison devices (e.g., thermostat, photocell switch, sonar focusing in cameras)
- explaining the relationship of rapidly changing technology to global competition and jobs
- describing specific jobs that have been created or made obsolete by emerging technologies
- describing an educational program appropriate to the requirements for one job, such as technician, engineer, or technology education teacher
- identifying transferable skills that might be necessary for continued employment

- describing the impact of technological advance upon society (e.g., organ transplants, nuclear power, acid rain)
- using the computer and a variety of input devices (e.g., handwriting, keyboard, mouse, stylus, scanner, voice) as tools to process information and to assist in making decisions.

Specialized Level

- using materials, tools, instruments, equipment, and procedures safely in a laboratory to model technological systems in a range of engineering, technical, and/or trade occupations
- identifying resources needed for specific energy conversion processes
- assembling a computer-controlled technological system
- programming, or inputting an existing program, and operating a computer-based system to follow a sequence of steps or instructions
- creating block diagrams, sketches, and drawings of original technological systems that include the system monitor and control components
- identifying and explaining the components of various technologies used in the engineering/technical environment (e.g., torque meters, meteorological maps, optical disks, frequency counters).

Experiential Level

- demonstrating ability to set up, maintain, and repair various machines, hardware, and devices using a variety of resources (e.g., manuals, vendor hotlines, electronic equipment) and adhering to all safety rules and regulations
- demonstrating ability to accomplish high-level engineering/technical tasks through a variety of experiences (e.g., computer simulations, capstone projects, community-based projects, work-based experiences)
- using computers to design simple systems from engineering sketches
- following industrial/shop safety procedures.

3. Engineering/Industrial Processes

Students will demonstrate knowledge of planning, product development and utilization, and evaluation that meets the needs of industry. Evidence may include:

Core Level

- relating the fundamental principles of flight to aircraft performance

- understanding and applying simple engineering-related mathematical concepts and interpreting numerical data from computerized automotive engine diagnostic equipment.

Specialized Level

- applying the decision making/problem-solving process to develop solutions for a labor relations dispute
- diagnosing an automotive engine problem
- reading and interpreting technical manuals to determine the location of an automotive electrical fault.

Experiential Level

- applying complex computational procedures and concepts necessary for managing a construction worksite
- constructing manufacturing design diagrams using CADD equipment in an employment setting
- using mathematical concepts to calculate fuel consumption for a planned flight
- writing a report on safety procedures regarding the disposal of hazardous waste found on the worksite.

*** HUMAN AND PUBLIC SERVICES ***

The general performance indicators and performance tasks for the Human and Public Services career major convey knowledge and skill requirements essential for all occupational clusters. The performance indicators and tasks are classified within the general areas listed below:

1. Ethical/Legal Responsibilities
2. Communication
3. Sanitation
4. Human Growth and Development
5. Interpersonal Dynamics
6. Safety
7. Thinking/Problem Solving
8. Personal Resource Management
9. Wellness

Performance tasks such as those listed at the *core level* are for all students selecting a Human and Public Services career major. Students who choose to intensify their study of Human and Public Services will master performance tasks such as those listed at both the *specialized level* and the *experiential level*, which offer advanced study and hands-on experience, respectively. The three levels are designed to be progressive in nature and allow students who have opted to study a career major area to match the intensity of their program to their educational goals and plans. Quality and customer service must be stressed in the development of knowledge and skills in each of the areas.

1. Ethical/Legal Responsibilities

Students will demonstrate professional, ethical, and legal responsibilities to customers. Evidence may include:

Performance Indicator—
Describes what students are expected to know and be able to do

Core Level

- defining ethics and confidentiality in the classroom, home, community, and workplace
- developing and implementing a code of ethics for the classroom and potential work environment
- treating all people equally and respecting the diversity and special needs of customers.

Performance Task—
Sample activity through which students may demonstrate mastery of the performance indicator

Specialized Level

- describing ethical wrongdoing and breach of confidentiality as related to workplace behavior in the food service industry
- advocating equal treatment of all people and striving to reach all people at their own level regardless of their limitations
- assuring confidentiality of data while using current technology in the classroom and/or workplace
- analyzing and distinguishing between various classifications and designations of offenses under local, county, State, and federal laws (e.g., misdemeanors, felonies, violations).

Experiential Level

- exhibiting positive behaviors such as reliability, integrity, and responsibility, and abiding by agency expectations for personal conduct
- providing equitable treatment for all consumers of child care services
- obtaining a permit to operate a food concession for a student leadership activity.

2. Communication

Students will demonstrate effective communication skills needed to meet the expectations of human and public services consumers. Evidence may include:

Core Level

- describing the communication process
- demonstrating listening skills
- demonstrating skill in oral and written communication

- **demonstrating and using alternative communication techniques, such as sign language, pictures, and technology**
- **demonstrating differences between verbal and nonverbal communication**
- **exhibiting correct use of current communication technology.**

Specialized Level

- **identifying the purposes of communication in elder care services and factors that influence the communication process**
- **preparing and delivering presentations, using creativity and initiative to seek the most effective resources**
- **identifying the impact of electronic communication on FBI agents**
- **using interactive electronic communication effectively to contact coworkers regarding scheduling a meeting**
- **participating in the Illustrated Talk STAR event (Students Taking Action for Recognition) at a local, State, or national Future Homemakers of America (FHA) leadership conference**
- **seeking the most effective tools to communicate with social services customers in order that all might benefit from services**
- **writing technical communications in a clear, concise, and legible manner for use in public and private security occupations.**

Experiential Level

- **exhibiting an awareness of multicultural needs of customers of elder care services**
- **demonstrating creativity and initiative to use alternative resources to communicate effectively with social services customers**
- **knowing and using the correct terminology and procedures necessary for effective inter- and intra-workplace communication (e.g., internal and external food service customers)**
- **using current technology to communicate effectively with coworkers, supervisors, and consumers**
- **using interactive electronic communication to contact a public official regarding a policy issue.**
- **practicing the proper use of standard communication equipment as used in the law enforcement and security fields (e.g., radio, fax, electronic mail)**

3. Sanitation

Students will demonstrate a knowledge of the principles of sanitation which may be used to prevent the transmission of disease-producing microorganisms from one person/object to another. Evidence may include:

Core Level

- modeling behaviors that demonstrate understanding of basic principles of sanitation
- recognizing the importance of developing good habits of personal hygiene.

Specialized Level

- exhibiting sanitation methods needed to prevent the spread of disease in the environment
- demonstrating specific practices used to prevent the spread of disease in the laboratory setting.

Experiential Level

- employing sanitation principles as they relate to food handling and human care
- practicing all safety and sanitation procedures required by New York State Board Standards for hair cutting.

4. Human Growth and Development

Students will understand the process of human growth and development and its influence on client needs. Evidence may include:

Core Level

- identifying the stages of the life cycle and/or skill level abilities of customers of human and public services
- identifying and developing processes as needed to serve customers based upon their cognitive, social, emotional, and physical development.

Specialized Level

- describing stages of the life cycle (prenatal, infancy, childhood, adolescence, adult middle age, elderly)
- demonstrating basic techniques for appropriate care of a toddler.

Experiential Level

- developing a plan to open a child care center with special consideration of program goals, child development, sequential learning concepts, and program evaluation
- applying the concept of nurturing to human and public services occupations by volunteering to work in a child care facility
- participating in the Little Friends STAR event at a local, State or national FHA leadership conference.

5. Interpersonal Dynamics

Students will demonstrate how to interact effectively and sensitively with others. Evidence may include:

Core Level

- working cooperatively in a group
- understanding the importance of accepting individual diversity and special needs.

Specialized Level

- demonstrating effective interpersonal speaking and listening skills
- demonstrating effective interpersonal communication using a variety of tools
- approaching difficulties in personal and/or work-related situations with respect for others' points of view
- examining the Americans With Disabilities Act and discussing implications for private security law enforcement.

Experiential Level

- observing and discussing interdependent relationships and cooperative behaviors between employer/employee, employee/ employee, and employer/consumer
- demonstrating and providing services to customers, using a variety of approaches that indicate an understanding of human nature
- contributing to a positive environment which enables all groups to be productive and fulfilled
- solving group problems effectively in work-related situations
- participating in the Food Service STAR event at a local, State, or national FHA leadership conference
- demonstrating diligence, patience, empathy, and tenacity when serving all private security/law enforcement customers.

6. Safety

Students will be able to provide safe environments for others. Evidence may include:

Core Level

- identifying safety hazards in the home, workplace, and other environments
- anticipating fire hazards through an awareness of dangerous conditions.

Specialized Level

- correcting safety hazards in personal and/or work environments
- explaining potential workplace safety hazards to others.

Experiential Level

- developing and following procedures to provide a safe environment in a child care facility
- developing ideas for improving existing evacuation procedures for a local child care facility.

7. Thinking/Problem Solving

Students will solve problems, set goals, and make decisions in order to provide services to best meet the needs of others. Evidence may include:

Core Level

- identifying steps in critical thinking and goal-setting processes
- identifying steps in problem solving
- demonstrating the application of personal problem-solving skills
- identifying and using a variety of methods, tools, and resources to meet the needs of customers.

Specialized Level

- making informed decisions and setting goals as they relate to self, family, and workplace
- determining the effects on the customer and/or environment of personal habits and making appropriate adjustments in habits.

Experiential Level

- applying critical thinking and goal-setting processes in a variety of human and public services occupational situations
- applying a problem-solving process and taking reasoned action to meet consumer and client needs.

8. Personal Resource Management

Students will be able to apply personal and resource management skills. Evidence may include:

Core Level

- identifying multiple demands of family members' roles and suggesting strategies to balance work and family roles
- describing qualities critical to workers in human and public services careers
- recognizing the importance of personal time management
- describing the need for personal money-management skills
- identifying resources available to the individual to facilitate self-employment.

Specialized Level

- demonstrating ways to balance work and family roles (e.g., strategies to reduce work and family conflicts)
- conducting a self-evaluation to identify personal qualities compatible with a career in the appearance enhancement industry
- explaining factors that lead to successful money management in the appearance enhancement industry
- describing how a knowledge of available resources and their use enables an individual to become independent/self-sufficient.

Experiential Level

- employing effective coping strategies for self and others to handle developmental or situational changes
- describing cost-effective strategies in a human and public services career
- implementing strategies to avoid waste in the appearance enhancement industry (e.g., duplication of services, damage to equipment)
- putting to use effective coping strategies when handling stressful situations.

9. Wellness

Students exhibit and promote a positive image of wellness. Evidence may include:

Core Level

- knowing the food groups as described in the food pyramid and using this information to plan nutritious meals
- practicing good personal habits to promote physical, mental, and social health
- describing the physical, mental, and social aspects of health and their interrelationship
- describing techniques for coping with and managing stress in the home, school, work, and community environment
- developing proactive and healthy responses to changes in one's life and an attitude that will foster positive mental growth.

Specialized Level

- planning diets for human and public service customers that take into account nutritional needs as described in the food pyramid
- adapting menus for special dietary needs and making them acceptable in a variety of cultural situations.

Experiential Level

- applying nutritional concepts to meet the needs of human and public service customers
- demonstrating the ability to access appropriate community resources to help resolve health problems for clients in a human services environment
- using personal resources and skills to cope with change and other stresses in the work, school, home, and community environment.

*** NATURAL AND AGRICULTURAL SCIENCES ***

Educational experiences in Natural and Agricultural Sciences include the development of human relations, citizenship and leadership skills, and the reinforcement of basic communication, computation, and problem-solving skills that are essential to work and life. Accordingly, secondary school Natural and Agricultural Sciences programs are comprised of three essential components: classroom instruction, supervised work experience, and youth leadership training activities. Each contributes to a successful program.

The general performance indicators and performance tasks for the Natural and Agricultural Sciences career major convey knowledge and

skill requirements essential for all occupational clusters. The performance indicators and tasks are classified within the general areas listed below:

1. Basic Agriculture Foundation Development
2. Agriculture Related Technology
3. Information Management and Communication
4. Agriculture Business Systems
5. Resource Management
6. Interpersonal Dynamics
7. Safety

Performance tasks such as those listed at the *core level* are for all students selecting a Natural and Agricultural Sciences career major. Students who choose to intensify their study of Natural and Agricultural Sciences will master performance tasks such as those listed at both the *specialized level* and the *experiential level*, which offer advanced study and hands-on experience, respectively. The three levels are designed to be progressive in nature and allow students who have opted to study a career major area to match the intensity of their program to their educational goals and plans.

Performance Indicator—
Describes what students are expected to know and be able to do

1. Basic Agriculture Foundation Development

Students will demonstrate a solid base of knowledge and skills in Natural and Agricultural Sciences. Evidence may include:

Performance Task—
Sample activity through which students may demonstrate mastery of the performance indicator

Core Level

- explaining knowledge and skills necessary for a broad range of careers in Natural and Agricultural Sciences
- explaining the meaning of agricultural business, science, and technology terms
- using simple agricultural-related mathematical concepts and interpreting data in agricultural-related applications (e.g., profit/loss, inventory, income/expense)
- using simple agricultural-related science concepts and interpreting data (e.g., wise use of natural resources, basic plant and animal nutrition, and principles affecting growth and reproduction)
- explaining the concept of social, ethical, and legal responsibility, especially as it relates to agriculture and ecology
- providing examples of simple problems that managers/employees need to solve and explaining the steps in the problem-solving process.

Specialized Level

- identifying and demonstrating a knowledge of animals, plants, tools, and equipment involved in the student's agriculture program
- using computer software to apply mathematical formulas necessary for normal agricultural business operations (e.g., calculating

proportions, discounts, income/expenses, inventory, and net worth)

- applying a knowledge of science to understand the principles of keeping plants and animals healthy, growing, and reproducing; applying basic biological principles and techniques to increase production efficiency
- explaining the need for a balanced ecological environment
- applying the decision making/problem-solving process to develop solutions for simulated agricultural business problems.

Experiential Level

- communicating and working with others in school/laboratory simulations, work-based activities, agricultural experience programs, and FFA activities
- applying computer technology and concepts necessary for managing/working in a typical agricultural enterprise related to the occupational cluster of study (e.g., interpretation of markets and marketing data to make decisions on production in the agricultural industry)
- developing policies for internal business use in complying with social, legal, ethical, and privacy requirements (e.g., personnel, safety)
- using decision making/problem-solving skills to assist a local business/organization to develop a plan for protecting an area in a flood plain through conservation
- applying concepts of safety essential to individuals and society when directing the use of hazardous materials (e.g., maintain emergency protection areas, specialized equipment and clothing).

2. Agriculture Related Technology

Students will demonstrate the ability to use technology to assist in production and distribution of food goods and services of today's agricultural industries. Evidence may include:

Core Level

- identifying the components of technologies used in the agricultural business environment (e.g., mechanical, chemical, biological, informational)
- selecting appropriate agricultural software for specific applications
- developing the application of specific agricultural technology to a selected agricultural career (e.g., biotechnology).

Specialized Level

- demonstrating knowledge of agricultural technologies to monitor the progress of a plant reproduction activity
- using computer software to calculate animal rations
- completing a comprehensive agricultural business research project, using appropriate technologies to collect, assess, analyze, synthesize, and present research findings
- providing rationale for use of technology while considering economic factors in a job or project (e.g., calculation of time required for equipment and software).

Experiential Level

- demonstrating the ability to set up, maintain, and repair various agricultural-related technological devices, using a variety of resources (e.g., manuals, vendor help lines, training courses or use of computer technology)
- applying technological knowledge and skills from the core and specialized levels using hands-on learning experiences in more than one situation (e.g., work-based experiences in gathering pollen and hand pollinating plants).

3. Information Management and Communication

Students will prepare, maintain, interpret, and disseminate quantitative and qualitative pieces of information relating to the Natural and Agricultural Sciences. Evidence may include:

Core Level

- describing the communication process
- demonstrating listening skills
- demonstrating skill in oral and written communication (e.g., prepare a speech and enter an FFA local public speaking contest)
- signifying differences between verbal and nonverbal communication
- using a computer to compose, input, format, and print simple business letters, memos, reports, and agricultural marketing information
- preparing and delivering a three-minute oral presentation (using natural or computer-generated voice), using at least one visual aid for a specific agricultural purpose (e.g., agricultural-related research report, sales presentation)
- identifying positive/negative facial expressions and other body language indicators

- using various communications tools, including telephone, fax machine, voice mail, electronic mail, and the Internet.

Specialized Level

- conducting research and writing an extensive agricultural-related report integrating both text and graphics
- developing and producing complex agricultural-related documents (e.g., production and marketing reports, inventory reports, budgets/financial statements, advertising/sales materials), using appropriate manual and electronic tools
- preparing for and participating in a panel discussion on an agricultural issue which will be videotaped and critiqued
- using sophisticated communications equipment to send and receive agricultural communications/correspondence regionally, nationally, and internationally (e.g., telephone, fax, electronic mail)
- using local and wide area communications networks to obtain and exchange agricultural information on a regional, national, and international basis (e.g., the Internet)
- preparing an agriculture presentation using multimedia hardware/software effectively to integrate graphics, audio, and video to present to a community organization.

Experiential Level

- applying the core and specialized level skills of information management and communications knowledge through a variety of experiences, such as school/laboratory simulations, community-based projects, work-based activities, and agricultural experience programs.

4. Agricultural Business Systems

Students will demonstrate an understanding of the interrelationship between agricultural businesses and organizations designed to produce products, services, and information. Evidence may include:

Core Level

- identifying and describing social, organizational, and technological systems that have resulted from the increased efficiency of the agricultural sector (e.g., agricultural demographics, production, environmental issues)
- identifying the major systems that typically are found in the agricultural business sector (e.g., aquatic and animal production, lawn and greens maintenance, crop production, marketing, governmental regulations, sales and distribution)

- diagramming the major components of a typical agricultural system (e.g., pesticide management, supplemental irrigation, animal and aquatic nutrition, animal and aquatic health)
- understanding that the purpose of agricultural business organizations is to satisfy the demands of consumers within the constraints of governmental regulations and moral obligations as well as to operate at a profit
- categorizing agricultural businesses as either production, distribution, or service enterprises and identifying distinguishing systems characteristics of each
- identifying and explaining different systems of agricultural business ownership (e.g., proprietorship, partnership, corporation, cooperative, franchise, limited partnership, joint venture).

Specialized Level

- identifying and explaining how agricultural business systems can be affected by internal and external conditions (e.g., change in resources, supply and demand, risk, government controls, technology, social customs, consumer preferences and weather)
- demonstrating an understanding of the various subsystems within an agricultural enterprise and their interrelationship and interdependence (e.g., finance, procurement, international trade, environmental issues, production operations).

Experiential Level

- identifying the various organizations with regulatory responsibilities for an agricultural enterprise area in which students have expressed a career interest (e.g., USDA, New York State Agriculture and Markets, SCS, ASC, OSHA)
- designing or modifying a system for a particular need within a community business/organization related to a chosen occupational cluster (e.g., establishing hydroponic system for plant production)
- applying core and specialized level skills and knowledge of systems in a variety of experiences (e.g., school/laboratory simulations, capstone projects, community-based projects, work-based activities, and agricultural experience programs).

5. Resource Management

Students will demonstrate the ability to manage personal time, business, and financial resources. Evidence may include:

Core Level

- identifying types of resources available
- identifying the need for the basic skills of planning, organizing, and setting goals and priorities in a business

- explaining importance of time management
- identifying the uses agricultural businesses make of human, capital, natural, and information resources and explaining how these resources interrelate to make the organization's products and/or services more valuable
- identifying the basic components of budget preparation in an agricultural business and developing an awareness of banking services, the use of credit, and various components of money-management skills.

Specialized Level

- developing a mission statement, a set of goals and objectives, and an operating structure for a simulated or real agricultural business
- conducting a self-evaluation to identify personal compatibility with the agricultural career field selected for study
- describing the steps involved in starting a small business (e.g., lawn care—researching of the number of homes in a community, average income level, equipment necessary, feasibility of business success)
- researching and exploring careers, identifying the steps in the job selection process, and refining human relations skills
- identifying various sources of income and investments, categorizing expenses, using a variety of banking services, and identifying the various resources for consumer protection
- working with agencies serving agriculture (e.g., Department of Agriculture, Agriculture and Markets, Environmental Conservation).

Experiential Level

- identifying, prioritizing, and continually updating occupational goals and developing a plan to achieve those goals
- describing cost-effective strategies in developing and maintaining personnel (e.g., providing housing, food, and financial incentives for employees)
- developing a job search portfolio which might include a resume, interviewing strategies, employment opportunities, education and training requirements, compensation desired, etc.
- opening a checking account and using bank services, developing a financial plan that will help achieve goals, obtaining credit and preparing federal and State agricultural income tax returns, and using consumer protection agencies

- working with agricultural agencies involving cooperatives and government
- designing an employee work schedule to use human resources effectively (e.g., scheduling dates for lawn care applications).

6. Interpersonal Dynamics

Students will demonstrate the interpersonal skills and abilities needed to function within a sophisticated and sometimes complicated agricultural environment. Evidence may include:

Core Level

- recognizing the essential personal requirements for working in an agricultural business (e.g., appearance, integrity, punctuality, dedication, commitment)
- reporting on the benefits of cultural diversity in the workforce
- interacting with other students in a meeting to discuss an agricultural-related topic
- recognizing the value of the team approach in solving problems.

Specialized Level

- understanding how an agricultural business uses a team approach to solve problems and operate the business
- surveying the personnel policies of a local agricultural enterprise and identifying employee requirements, and personnel standards
- participating in local, State, and national FFA meetings or contests
- demonstrating understanding of and sensitivity to working in a multicultural workforce (e.g., customs, beliefs, language, family life of migrant workers).

Experiential Level

- applying core and specialized levels of knowledge and skills through a variety of experiences with others (e.g., school/laboratory simulations, student leadership organization activities (FFA), community-based projects, work-based activities, and agricultural experience programs)
- identifying and employing coping strategies in handling developmental changes for self and others
- demonstrating the ability to teach/train a coworker in the use of computer software to establish and maintain a harvesting work schedule.

7. Safety

Students will demonstrate awareness of the importance of safety and accident prevention in all agricultural situations. Evidence may include:

Core Level

- recognizing that agricultural jobs are among the highest in incidence of accidents
- identifying safety hazards present in agricultural situations and knowing the safety precautions required to prevent accidents
- identifying potential safety hazards
- describing mechanical hazards
- describing chemical hazards

Specialized Level

- interpreting information and correctly applying it for safe agricultural product use
- identifying potential hazards in personal and work-related environments
- developing safety rules for use in an agricultural class, shop, business, and laboratory
- describing and using the class, shop, and laboratory safety rules and regulations.

Experiential Level

- applying the core and specialized levels of knowledge and skills through a variety of experiences (e.g., school/laboratory simulation, student leadership organization activities (FFA), community-based projects, work-based activities, and agricultural experience programs)
- identifying potential hazards to oneself and others in an agricultural-related environment
- demonstrating practices which will prevent accidents
- describing the appropriate State and national laws that pertain to agricultural safety
- developing solutions to correct safety hazards
- being prepared to make timely and accurate decisions in the event of an accident
- establishing a safety program for an agricultural enterprise.

*** ARTS/HUMANITIES ***

The two existing draft Frameworks—Arts and English Language Arts—are currently being reviewed by educators at all levels, parents, and community members.

In addition, career major panels, required by the school-to-work legislation, will address standards in all career majors. These reviews will provide feedback which will be the basis for expanding the Arts/Humanities section of this Framework.