Learning Standards for Career Development and Occupational Studies at Three Levels

Standard 1: Career Development
Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.

Standard 2: Integrated Learning
Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.

Standard 3a: Universal Foundation Skills
Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

and

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.

CAREER PLAN as prescribed in these learning standards is intended to promote exploration and research into broad career areas of interest to individual students. Basic principles of career planning such as decision-making, self-evaluation, and goal setting have been integrated within the sample tasks. It is not the intent of these learning standards to limit options or narrowly define the educational preparation of students.

Standard 1—Career Development

Elementary	Intermediate
1. Students will learn about the changing nature of the workplace, the value of work to society, and the	

Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.

Commencement

1. Integrated learning encourages students to use essential academic concepts, facts, and procedures in applications related to life skills and the world of work. This approach allows students to see the usefulness of the concepts that they are being asked to learn and to understand their potential application in the world of work.

Students:

- **s:**

Standard 3a—Universal Foundation Skills

Elementary

Basic Skills

1. Basic skills include the ability to read, write, listen, and speak as well as perform arithmetical and mathematical functions.

Students:

- **listen to and read the ideas of others and express themselves both orally and in writing; they use basic mathematical concepts and computations to solve problems.**

This is evident, for example, when students:

listen to and repeat simple directions
read a variety of materials and prepare a report
follow directions to power up a computer
compile an inventory of office equipment
use probability to solve a problem or use a single statistic to make a prediction
measure an area for a swimming pool, basketball court, or employee work station.

Thinking Skills

2. Thinking skills lead to problem solving, experimenting, and focused observation and allow the application of knowledge to new and unfamiliar situations.

Students:

- **use ideas and information to make decisions and solve problems related to accomplishing a task.**

This is evident, for example, when students:

provide examples of ways to raise money for a school field trip
solve a riddle, puzzle, or problem, using written or oral instructions
set up a computer, a monitor, and a keyboard according to written or oral instructions.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles ( ).

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

Elementary

Personal Qualities

3. Personal qualities generally include competence in self-management and the ability to plan, organize, and take independent action.

Students:

- **demonstrate the personal qualities that lead to responsible behavior.**

This is evident, for example, when students:

arrive at school and complete assignments on time; explain why these behaviors would be important to an employer
provide examples of people acting responsibly/irresponsibly in the community
complete an inventory of personal strengths and select areas in which they would like to improve
demonstrate positive behaviors through interactions in the classroom (e.g., sharing resources, helping classmates).

Interpersonal Skills

4. Positive interpersonal qualities lead to teamwork and cooperation in large and small groups in family, social, and work situations.

Students:

- **relate to people of different ages and from diverse backgrounds.**

This is evident, for example, when students:

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

STANDARD 3a

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

Elementary

Managing Resources

7. Using resources includes the application of financial and human factors, and the elements of time and materials to successfully carry out a planned activity.

Students:

- **demonstrate an awareness of the knowledge, skills, abilities, and resources needed to complete a task.**

This is evident, for example, when students:

describe the resources needed to inventory the art supply cabinet in the classroom
explain the resources needed to build a simple item (e.g., footstool, sandbox).

Systems

8. Systems skills include the understanding of and ability to work within natural and constructed systems.

Students:

- **demonstrate understanding of how a system operates and identify where to obtain information and resources within the system.**

This is evident, for example, when students:

understand the process used to order supplies for a school store or local business
explain the various components of the school system.

STANDARD 3a

Standard 3a—Universal Foundation Skills

Intermediate

Basic Skills

1. Basic skills include the ability to read, write, listen, and speak as well as perform arithmetical and mathematical functions.

Students:

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

This is evident, for example, when students:

follow directions that involve a series of actions
locate and use information on a wide range of topics from many different sources
present an oral report to the class after investigating several career clusters
record data and prepare a graph on the movement of the stock market or a particular stock
explore ways in which geometry is used in everyday life
solve basic problems involving integers, fractions, and decimals.

Thinking Skills

2. Thinking skills lead to problem solving, experimenting, and focused observation and allow the application of knowledge to new and unfamiliar situations.

Students:

- **evaluate facts, solve advanced problems, and make decisions by applying logic and reasoning skills.**

This is evident, for example, when students:

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

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles ( ).

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

Intermediate

Personal Qualities

Interpersonal Skills

3. Personal qualities generally include competence in self-management and the ability to plan, organize, and take independent action.

Students:

- **demonstrate an understanding of the relationship between individuals and society and interact with others in a positive manner.**

Standard 3a—Universal Foundation Skills

Intermediate

Technology

5. Technology is the process and product of human skill and ingenuity in designing and creating things from available resources to satisfy personal and societal needs and wants.

Students:

- **select and use appropriate technology to complete a task.**

This is evident, for example, when students:

use a telecommunications service to check current airline schedules and price information for a trip to another state or country

use appropriate technology to present information in table/chart form

use word processing software to make an inquiry to a business

make a presentation explaining how technology has changed the work site.

Managing Information

6. Information management focuses on the ability to access and use information obtained from other people, community resources, and computer networks.

Students:

- **select and communicate information in an appropriate format (e.g., oral, written, graphic, pictorial, multimedia).**

This is evident, for example, when students:

prepare a financial report showing the annual revenue and expenses of a business or club for three years and presenting that information to a group

design a chart or graph to evaluate personal progress toward a goal or objective

collect the necessary data from local employers to develop a speakers' bureau for their school

given directions, correctly complete a job application.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles ( ).

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

Intermediate

Managing Resources Systems

7. Using resources includes the application of financial and human factors, and the elements of time and materials to successfully carry out a planned activity.

Students:

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

Commencement

Personal Qualities

Interpersonal Skills

3. Personal qualities generally include competence in self-management and the ability to plan, organize, and

Standard 3a—Universal Foundation Skills

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

Commencement

Managing Resources Systems

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.

Core

5. Resource Management

Students:

- **identify, organize, plan, and allocate resources (e.g., financial, materials/facilities, human, time) in demonstrating the ability to manage their lives as learners, contributing family members, globally competitive workers, and self-sufficient individuals.**

This is evident, for example, when students:

explain the need for and the steps incurred by a business in setting goals and priorities to meet company objectives
identify and discuss the process for constructing a simple operating budget for a specific purpose in a small business (e.g., advertising budget)
list and explain various personal and business needs related to banking, investments, and insurance (e.g., personal checkbook, mutual funds, life insurance)
explain various paycheck deductions (e.g., federal and State taxes, FICA)
open and use personal savings and checking accounts
assist Red Cross personnel in scheduling student volunteers for participation in a local blood donor event.

6. Interpersonal Dynamics

Students:

- **exhibit interpersonal skills essential for success in the multinational business world, demonstrate basic leadership abilities/skills, and function effectively as members of a work group or team.**

This is evident, for example, when students:

outline essential personal attributes/attitudes for successful interpersonal relationships (e.g., appearance/cleanliness, integrity, punctuality, dedication/commitment)
explain the many benefits inherent in a business with a culturally diverse workforce
demonstrate an understanding of how the traditions of various major cultures affect international business practices
use a case study to illustrate how a business might use a team approach, flextime, or job sharing in its daily operations
list the key elements necessary to facilitate a business-related meeting
teach a classmate how to reconcile a checking account or how to use telecommunications software
participate in a job interview.

STANDARD 3b

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.

Specialized

5. Resource Management

Students:

- **identify, organize, plan, and allocate resources (e.g., financial, materials/facilities, human, time) in demonstrating the ability to manage their lives as learners, contributing family members, globally competitive workers, and self-sufficient individuals.**

This is evident, for example, when students:

participate on a team to develop a mission statement, goals, objectives, and an annual work plan for a DECA or Future Business Leaders of America (FBLA) chapter
demonstrate through simulation how an individual business raises capital by selling stock
visit a bank and meet with a business loan officer to discuss the process involved in applying for a small business start-up loan
develop a simple budget proposal to refurnish and/or remodel an office or small retail business
diagram and explain an organizational chart of a small corporation
identify organizations, government agencies, and other resources that a small or medium-sized business might use to investigate international trade opportunities.

6. Interpersonal Dynamics

Students:

- **exhibit interpersonal skills essential for success in the multinational business world, demonstrate basic leadership abilities/skills, and function effectively as members of a work group or team.**

This is evident, for example, when students:

interact congenially, harmoniously, and effectively with comembers of a school club, community youth leadership organization, or business in which they are employed
plan and implement a meeting between class representatives and the principal to discuss concerns/needs of the class
survey the personnel policies of a business and develop a report on employer requirements/guidelines
interview students for positions in a simulated business
teach a ninth-grade class how to read the stock page
serve as a negotiator on behalf of the vice principal and students in the handling of student code-of-conduct violations
identify potential human relations problems/conflict areas in a company with a multinational workforce.

STANDARD 3b

Standard 3bÑCareer Majors

Experiential
Business/Information Systems

1. Basic Business Understanding

Students:

- demonstrate an understanding of business, marketing, and multinational economic concepts, perform business-related mathematical computations, and analyze/interpret business-related numerical information.

This is evident, for example, when students:

participate effectively with coworkers, supervisors, suppliers, customers, and others in an employment experience related to their occupational cluster of study
solve problems/make decisions for a business in which they are employed or for a student-managed school store
use application software to prepare purchase orders, record inventory received, and maintain accounts receivable/payable records for a business through a Cooperative Occupational Education or a General Education Work Experience Program
plan an itinerary, make reservations, and prepare a travel expense report for supervisors in a volunteer community service experience
conduct research, prepare a chart, and make a presentation about the sales volume and market share for a local business
evaluate and compare the overall effectiveness of global marketing plans for several companies in the community conducting international business
develop a business plan for an international business venture based on an analysis of current economic statistics.

2. Business-Related Technology

Students:

- select, apply, and troubleshoot hardware and software used in the processing of business transactions.

This is evident, for example, when students:

use business-related hardware and software to process transactions in an employment setting related to the studentÕs occupational program (e.g., order-processing technology to assist customers in an auto parts store or CD-ROM software to identi - fy retail outlets for customers)
demonstrate the ability to set up, maintain, and troubleshoot a fax machine or computer system in a simulated or real employment environment
use vendor Òhelp linesÓ to solve business technology hardware and software problems in an employment or volunteer experience
conduct a research project to determine the cost-effectiveness of recently upgraded production technology installed at their place of employment, and make a presentation about the project, using state-of-the-art software and media tools
conduct a study and write 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 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.

Experiential

5. Resource Management

Students:

- identify, organize, plan, and allocate resources (e.g., financial, materials/facilities, human, time) in demonstrating the ability to manage their lives as learners, contributing family members, globally competitive workers, and self-sufficient individuals.

This is evident, for example, when students:

use application software to prepare federal and State income tax returns
develop an operating budget for the year for a school-sponsored extracurricular organization or the DECA or FBLA chapters
use calendar-type software to design a student work schedule for a student-operated school store or a business in which students are employed through a Cooperative Occupational Education or a General Education Work Experience Program
assist in planning a conference for a business or community service organization.

6. Interpersonal Dynamics

Students:

- exhibit interpersonal skills essential for success in the multinational business world, demonstrate basic leader ship abilities/skills, and function effectively as members of a work group or team.

This is evident, for example, when students:

participate in a job performance and attitude evaluation as part of an employment experience
participate in the job interview competitive event at a local, State, regional, and/or national DECA or FBLA leadership conference
facilitate a team or work group meeting during an employment Tj ET EMC /lBuncti4ua18002 Tc 7.68DC Q q 14.86 780wor2 Tc es524te q 14.86 780wn w

Standard 3bÑCareer Majors

Core
Health Services

1. Academic Foundations

Students:
- ¥ apply knowledge/skills acquired in academic subjects to the health care environment.

This is evident, for example, when students:

identify and describe science concepts (anatomy and physiology, biology, chemistry, physics, growth/development) as they apply to biotechnology equipment and health care
write an essay describing the importance of understanding science concepts in health careers
perform mathematical conversions of temperature readings.

2. Health Care Systems

Students:
- ¥ understand the current health care system and its impact on health careers.

This is evident, for example, when students:

list services provided by the health care system
tour a local general hospital and prepare a report of various services provided
identify social and economic factors that affect health care delivery
explain the relationship of economics and health care in our society.

3. Health Maintenance

Students:
- ¥ develop knowledge of the concept of optimal health and identify factors that affect health maintenance.

This is evident, for example, when students:

describe the physical, mental, and social aspects of health and their interrelationship
demonstrate good personal health habits to promote physical, mental, and social health
make a list of their current physical activities and identify how these activities contribute to optimal health
identify specific community resources involved in the promotion of health
discuss feelings resulting from school/group social involvement
develop an individual plan for ideal physical, mental, and social health.

4. Legal and Ethical Responsibilities

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

This is evident, for example, when students:

demonstrate equitable treatment of all people
differentiate between legal and ethical rules
identify and describe client rights and confidentiality
obtain and discuss the ÒPatientÕs Bill of RightsÓ from a local health care agency
contrast licensure and certification in a selected career area and discuss limitations of each
develop a code of ethics for the class.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles ( ).

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.

Core

5. Safety

Students:

- identify safety hazards in a health care setting and prevent illness or injury through safe work practices.

Standard 3b—Career Majors

Specialized
Health Services

1. Academic Foundations

Students:
- **apply knowledge/skills acquired in academic subjects to the health care environment.**

This is evident, for example, when students:

apply life sciences and mathematical concepts in a work-site situation
conduct laboratory tests on body fluid samples
write an informative, persuasive essay on a health care topic
research and discuss different cultural responses to health and illness.

2. Health Care Systems

Students:
- **understand the current health care system and its impact on health careers.**

This is evident, for example, when students:

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

3. Health Maintenance

Students:
- **develop knowledge of the concept of optimal health and identify factors that affect health maintenance.**

This is evident, for example, when students:

describe the effects of alcohol, tobacco, and drugs on health (physical, mental, and social)
identify and describe risk behaviors that can jeopardize optimal health
research the effects of stress on health
explain preventative health practices (e.g., stress management, good nutrition)
analyze the effects of risk behaviors for the individual, family, community, and world
develop a plan that accommodates nutritional needs, stress management, and physical activity.

4. Legal and Ethical Responsibilities

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

This is evident, for example, when students:

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

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles ( ).

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.

Specialized

5. Safety

Students:

- ¥ identify safety hazards in a health care setting and prevent illness or injury through safe work practices.

This is evident, for example, when students:

implement methods of preventing accidents in classroom and work-site situations
use principles of infection control according to OSHA requirements in simulated health care situations
complete a first aid course
cite examples of safe practices in a health care work site.

6. Communications

Students:

- ¥ communicate information in a variety of formats and media.

This is evident, for example, when students:

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

7. Interpersonal Dynamics

Students:

- ¥ interact effectively and sensitively with all other members of the health care team in order to provide high-quality client care.

This is evident, for example, when students:

demonstrate the ability to assume the role of leader, recorder, and team member in a health care work setting.

8. Technical Skills

Students:

- ¥ identify procedures within their scope of practice and job description and perform them accurately in a timely fashion.

This is evident, for example, when students:

provide direct care for clients in a health care setting
use equipment and instruments according to manufacturer guidelines and facility policy and procedure
organize assignments and their own work.

Standard 3bÑCareer Majors

Experiential
Health Services

1. Academic Foundations

Students:
- ¥ apply knowledge/skills acquired in academic subjects to the health care environment.

This is evident, for example, when students:

select a patient and relate his/her specific illness to science concepts that are involved
compute medication dosages.

2. Health Care Systems

Students:
- ¥ understand the current health care system and its impact on health careers.

This is evident, for example, when students:

prepare insurance forms for services rendered in a health facility
participate in a debate involving current and proposed national health care policies.

3. Health Maintenance

Students:
- ¥ develop knowledge of the concept of optimal health and identify factors that affect health maintenance.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles ( ).

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.

Experiential

5. Safety

Students:

- ¥ identify safety hazards in a health care setting and prevent illness or injury through safe work practices.

This is evident, for example, when students:

participate in a first aid competition in a local or State competitive events conference of Health Occupations Students of America or Vocational Industrial Clubs of America (HOSA/VICA)
demonstrate specific first aid techniques
prevent accidents by using principles of body mechanics when caring for hospitalized clients
wear protective equipment while working with dental clients
handle specimens and chemicals appropriately.

6. Communications

Students:

- ¥ communicate information in a variety of formats and media.

This is evident, for example, when students:

record results of serological examinations
adapt communication to the individual needs of a client within the health care system
respond to concerns and fears of a nursing home client.

7. Interpersonal Dynamics

Students:

- ¥ interact effectively and sensitively with all other members of the health care team in order to provide high-quality client care.

This is evident, for example, when students:

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

8. Technical Skills

Students:

- ¥ identify procedures within their scope of practice and job description and perform them accurately in a timely fashion.

This is evident, for example, when students:

recognize abnormal results and take action consistent with level of training and scope of practice
monitor and evaluate work to ensure continuous improvement.

STANDARD 3b

Standard 3bÑCareer Majors

Core
Engineering/Technologies

1. Foundation Development

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

This is evident, for example, when students:

research current labor and working condition laws as per OSHA rules and regulations
use materials, tools, instruments, equipment, and procedures safely in a laboratory
research and record data through use of computerized information services such as the Internet and World Wide Web
use general carpentry-related vocabulary to order building materials for a simple construction job
use simple engineering-related mathematical/scientific concepts to construct a simple series/parallel electrical circuit
provide examples of simple problems that managers/employees need to solve, and explain the steps in the problem-solving process
describe how ethics are applied in the world of work.

2. Technology

Students:
- 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.

This is evident, for example, when students:

identify the components of a system (input, process, output, monitor, comparison) and draw a labeled model in block use general car- ,ai29cesearch current labor a2a4cons, equ mtudemC dD < /TD ineeblem-ss, ouem

3. Engineering/Industrial Processes

Students:
- demonstrate knowledge of planning, product development and utilization, and evaluation that meets the needs of industry.

This is evident, for example, when students:

relate the fundamental principles of flight to aircraft performance
apply simple engineering-related mathematical concepts and interpret numerical data from computerized automotive engine diagnostic equipment
demonstrate a basic understanding of troubleshooting and repair of electrical failures in refrigerators and freezers
plan sequence of part layout based upon blueprint information.

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.

Specialized

Engineering/Technologies

1. Foundation Development

Students:

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

This is evident, for example, when students:

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

2. Technology

Students:

- ¥ 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.

This is evident, for example, when students:

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

3. Engineering/Industrial Processes

Students:

- ¥ demonstrate knowledge of planning, product development and utilization, and evaluation that meets the needs of industry.

This is evident, for example, when students:

apply the decision-making/problem-solving process to develop solutions for a labor relations dispute
diagnose computer hardware failure, using appropriate software and electronic testing equipment
read and interpret technical manuals to determine the location of an automotive electrical fault
lay out a building foundation, using a transit
install a basic 220-volt line in a newly framed section of a house
diagnose an automotive engine problem.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles ( ).

STANDARD 3b

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.

STANDARD 3b

Standard 3bÑCareer Majors

Core
Human and Public Services

1. Ethical/Legal Responsibilities

Students:
- ¥ demonstrate professional, ethical, and legal responsibilities toward customers.

This is evident, for example, when students:

define ethics and confidentiality in the classroom, home, community, and workplace
develop and implement a code of ethics for the classroom and potential work environment
treat all people equally and respect the diversity and special needs of customers.

2. Communication

Students:
- ¥ demonstrate effective communication skills needed to meet the expectations of human and public services consumers.

This is evident, for example, when students:

demonstrate listening skills
demonstrate skill in oral and written communication
use alternative and current communication techniques, such as sign language, pictures, and technology
demonstrate differences between verbal and nonverbal communication.

3. Sanitation

Students:
- ¥ demonstrate a knowledge of the principles of sanitation used to prevent the transmission of disease-producing microorganisms from one person/object to another.

This is evident, for example, when students:

model behaviors that demonstrate understanding of basic principles of sanitation
recognize the importance of developing good habits of personal hygiene.

4. Human Growth and Development

Students:
- ¥ understand the process of human growth and development and its influence on client needs.

This is evident, for example, when students:

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

5. Interpersonal Dynamics

Students:
- ¥ demonstrate how to interact effectively and sensitively with others.

This is evident, for example, when students:

work cooperatively in a group
understand the importance of accepting individual differences and special needs.

6. Safety

Students:
- ¥ provide safe environments for others.

This is evident, for example, when students:

identify safety hazards in the home, workplace, and other environments
anticipate fire hazards through an awareness of dangerous conditions and take preventive measures.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles ( ).

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.

Core

7. Thinking/Problem Solving

Students:

- ¥ solve problems, set goals, and make decisions in order to provide services to best meet the needs of others.

This is evident, for example, when students:

identify steps in critical thinking and goal-setting processes
identify steps in 0 7.68 a27.71-0.ru order to whe -0.-001 Tc 7employm order to -varietyBT /method7 Ttoo17 Tc 0 T* our EMC / orde needs of oMCID 7 >>

Standard 3bÑCareer Majors

Specialized
Human and Public Services

1. Ethical/Legal Responsibilities

Students:

- ¥ demonstrate professional, ethical, and legal responsibilities toward customers.

This is evident, for example, when students:

describe ethical wrongdoing and breach of confidentiality as related to workplace behavior in the food service industry
advocate equal treatment of all people and strive to reach all people at their own level regardless of their limitations
assure confidentiality of data while using current technology in the classroom and/or workplace
analyze and distinguish between various classifications and designations of offenses under local, county, State, and federal laws (e.g., violations, misdemeanors, felonies)
participate in a work-based learning program for students inter - ested in the legal profession.

2 Public Services

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.

Specialized

7. Thinking/Problem Solving

Students:

- ¥ solve problems, set goals, and make decisions in order to provide services to best meet the needs of others.

This is evident, for example, when students:

make informed decisions and set goals as they relate to self, family, and workplace
determine the effects on the customer and/or environment of personal habits and make appropriate adjustments in habits.

8. Personal Resource Management

Students:

- ¥ apply personal and resource management skills.

This is evident, for example, when students:

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

9. Wellness

Students:

- ¥ exhibit and promote a positive image of wellness.

This is evident, for example, when students:

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

STANDARD 3b

Standard 3bÑCareer Majors

Experiential
Human and Public Services

1. Ethical/Legal Responsibilities

Students:

- ¥ demonstrate professional, ethical, and legal responsibilities toward customers.

This is evident, for example, when students:

exhibit positive behaviors such as reliability, integrity, and

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.

Experiential

6. Safety

Students:

- ¥ provide safe environments for others.

This is evident, for example, when students:

develop and follow procedures to provide a safe environment in a child care facility
develop ideas for improving existing evacuation procedures for a local child care facility.

7. Thinking/Problem Solving

Students:

- ¥ solve problems, set goals, and make decisions in order to provide services to best meet the needs of others.

This is evident, for example, when students:

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

8. Personal Resource Management

Students:

- ¥ apply personal and resource management skills.

This is evident, for example, when students:

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

9. Wellness

Students:

- ¥ exhibit and promote a positive image of wellness.

This is evident, for example, when students:

apply nutritional concepts to meet the needs of human and public service customers
demonstrate the ability to access appropriate community resources to help resolve health problems for clients in a human services 7.68 77.26 1ices

Standard 3bÑCareer Majors

Core
Natural and Agricultural Sciences

1. Basic Agriculture Foundation Development

Students:
- ¥ demonstrate a solid base of knowledge and skills in natural and agricultural sciences.

This is evident, for example, when students:

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

2. Agriculture-Related Technology

Students:
- ¥ demonstrate the ability to use technology to assist in production and distribution of food goods and services of todayÕs agricultural industries.

This is evident, for example, when students:

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

3. Information Management and Communication

Students:
- ¥ prepare, maintain, interpret, and disseminate quantitative and qualitative pieces of information relating to the natural and agricultural sciences.

This is evident, for example, when students:

describe the communication process
demonstrate listening skills
demonstrate skill in oral and written communication (e.g., prepare a speech and enter an FFA local public speaking contest)
signify differences between verbal and nonverbal communication
use a computer to compose, input, format, and print simple business letters, memos, reports, and agricultural marketing information
prepare and deliver 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)
identify positive/negative facial expressions and other body language indicators
use various communications tools including telephone, fax machine, voice mail, electronic mail, and the Internet.

4. Agriculture Business Systems

Students:
- ¥ demonstrate an understanding of the interrelationship between agricultural businesses and organizations designed to produce products, services, and information.

This is evident, for example, when students:

identify and describe social, organizational, and technological systems that have resulted from the increased efficiency of the agricultural sector (e.g., agricultural demographics, production, environmental issues)
identify 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 and governmental regulations)
diagram the major components of a typical agricultural system (e.g., pesticide management, supplemental irrigation, animal and aquatic nutrition, animal and aquatic health)
understand 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
categorize agricultural businesses as either production, distribution, or service enterprises and identify distinguishing systems characteristics of each
identify and explain different systems of agricultural business ownership (e.g., proprietorship, partnership, corporation, cooperative, franchise, limited partnership, joint venture).

STANDARD 3b

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles ( ).

Standard 3bÑCareer Majors

Specialized
Natural and Agricultural Sciences

1. Basic Agriculture Foundation Development

Students:
- demonstrate a solid base of knowledge and skills in natural and agricultural sciences.

This is evident, for example, when students:

identify and demonstrate a knowledge of animals, plants, tools, and equipment in the studentÕs agricultural program
use computer software to apply mathematical formulas necessary for normal agricultural business operations (e.g., calculating proportions, discounts, income/expenses, inventory, and net worth)
apply 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
explain the need for a balanced ecological environment
apply the decision-making/problem-solving process to develop solutions for simulated agricultural business problems.

2. Agriculture-Related Technology

Students:
- demonstrate the ability to use technology to assist in

Students who choose a career major will acquire the career-specific technical

Standard 3bÑCareer Majors

Experiential
Natural and Agricultural Sciences

1. Basic Agriculture Foundation Development

Students:
- ¥ demonstrate a solid base of knowledge and skills in natural and agricultural sciences.

This is evident, for example, when students:

communicate and work with others in school/laboratory simulations, work-based activities, agricultural experience programs, and FFA activities
apply 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)
develop policies for internal business use in complying with social, legal, ethical, and privacy requirements (e.g., personnel, safety)
use 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
apply 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)
identify the appropriate education required to enter a variety of careers in agriculture.

2. Agriculture-Related Technology

Students:
- ¥ demonstrate the ability to use technology to assist in production and distribution of food goods and services of todayÕs agricultural industries.

This is evident, for example, when students:

demonstrate 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 computer technology)
apply 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, calibrating a fertilizer spreader).

3. Information Management and Communication

Students:
- ¥ prepare, maintain, interpret, and disseminate quantitative and qualitative pieces of information relating to the natural and agricultural sciences.

This is evident, for example, when students:

apply 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. Agriculture Business Systems

Students:
- ¥ demonstrate an understanding of the interrelationship between agricultural businesses and organizations designed to produce products, services, and information.

This is evident, for example, when students:

identify the various organizations with regulatory responsibilities for an agricultural enterprise area in which students have expressed a career interest (e.g., USDA, State Agriculture and Markets, Soil Conservation Services (SCS), ASC, OSHA)
design or modify 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)
apply core- and specialized-level skills and knowledge of sys - tems in a variety of experiences (e.g., school/laboratory simula - tions, capstone projects, community-based projects, work-based activities, and agricultural experience programs).

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles ( ).

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.

Experiential

5. Resource Management

Students:

Standard 3bÑCareer Majors

Career areasÑdance, music, theatre, visual arts, and writingÑin the creative and performing arts receive some attention in performance indicators, sample tasks, and student work referenced in Learning Standards publica - tions for The Arts, English Language Arts, and Health, Physical Education, and Family and Consumer Sciences .

The key ideas, performance indicators, and sample performance tasks contained in this document serve as the basis for developing a career major program in Arts/Humanities. Additional expectations for sequence options in dance, music, theatre, and visual arts can be found in the Learning Standards for The Arts.

Core
Arts/Humanities

1. Foundations

Students:
- ¥ demonstrate a solid base of knowledge/skills in one or more of the disciplines and the related professions of visual art, dance, music, theater, and humanities.

This is evident, for example, when students:
- create a series of drawings that demonstrate competency in a wide range of media: acrylics, charcoal, clay, ink, pastel, photography, prints, serigraphy, electronic media, visual communication
- design and produce an original garment. The quality of the gar - ment verifies knowledge of construction techniques and fashion design skills
- perform a solo in one or more of the following genres: ballet, ethnic dance, folk, jazz or modern
- prepare and perform a solo or duet at a New York State School Music Association (NYSSMA) Evaluation Festival at levels III, IV or V
- utilize vocabulary related to various types of writing and edit their own writing using proofreading symbols and the basic forms of revision: addition, deletion, substitution, rearrangement
- create a costume plot with rough sketches for a small cast play, illuminating the differences in the characters of the play
- compose a melody that reflects the mood of a four-line poem and exhibits knowledge of the basic elements of music, e.g., rhythm and melody
- know how to work safely with hazardous materials and equipment.

2. Communication

Students:
- ¥ demonstrate the reading, writing, listening, speaking, graphic and multimedia skills necessary to participate effectively in one or more of the arts/humanities professions.

STANDARD 3b

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles ( ).

Standard 3bÑCareer Majors

Specialized
Arts/Humanities

1. Foundations

Students:

¥ demonstrate a solid base of knowledge/skills in one or more of the disciplines and the related professions of visual arts, dance, music, theater, and humanities.

This is evident, for example, when students:

integrate the knowledge/skills acquired during core level to cre - ate examples uniquely applicable to a design specialization: book, electronic media, fashion, film, graphic, interior, and tex - tile

execute descriptive, accurate drawings based on observation of six structures or natural objects, annotating the function(s) of each

apply techniques of perspective and technical drawing to render a survey of furniture styles, past and present

study the decorative arts rooms of a museum or store and dupli - cate the color and texture of floor, wall, and furniture coverings in watercolor

use an electronic keyboard and computer to compose and print out a sixteen-measure composition

demonstrate understanding of a literary work by creating a book jacket for it

direct a one-act play demonstrating awareness of blocking, pac - ing, dramatic structure and thematic intent

perform a solo or duet with a professional orchestra or university school of music.

STANDARD 3b

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (¥).
Sample tasks are identified by triangles (

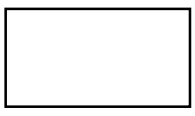
Students who choose a career major will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

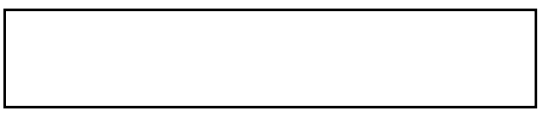
Specialized

4. Personal Qualities

Students:

- demonstrate the skills necessary to function and interact effectively in a variety of settings with the arts/humanities.





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.

Experiential

4. Personal Qualities

Students:

- **demonstrate the skills necessary to function and interact effectively in a variety of settings within the arts/humanities.**

This is evident, for example, when students:

work collaboratively in leadership roles and as members of a team
provide evidence of high personal standards through exhibitions, performances or portfolios that are recognized as excellent by the profession
display diligence and perseverance in the face of unpleasant tasks
demonstrate adaptable, cooperative, empathetic, enthusiastic, eqalitarian, polite, and responsible behavior in a work group or job setting
understand the range of possibilities within the career field, determine where their skills and abilities fit within that range, and make plans for further study
practice creative approaches to conflict resolution
show behaviors that comply with social, legal, and ethical requirements of the arts, broadcasting, journalism, and publishing
exemplify positive attitudes toward their work, the workplace, and authority figures.

5. Creative Processes and Practices

Students:

- **demonstrate a repertoire of experience when presenting an exhibition, performance, portfolio, or publication.**

This is evident, for example, when students:

decide upon direction for a new body of work based on a review and reflection on their portfolio
create a product that crosses traditional disciplines, integrating knowledge acquired in school, at work, or at home
clarify ideas by comparing and contrasting, classifying, sequencing, uncovering assumptions, reasoning and drawing conclusions, comprehending part/whole relationships
create original works that demonstrate that they are adventurous, courageous, curious, imaginative, independent, and inventive
defend and/or explain their creative process, practice, and product
generate alternative possibilities and solutions to a real life problem
utilize their portfolios and journals as a means for perpetual self-assessment and the ultimate attainment of current workplace standards.

6. Making Results Public

Students:

- **create an ongoing portfolio that demonstrates the competencies and creative processes delineated in the preceding key ideas.**

This is evident, for example, when students:

develop a commencement portfolio containing evidence of creative growth and mastery of entry level occupational skills
produce a professional quality literary/art magazine using a variety of skills: layout, typography, editing, paste-up, proofreading, illustration, photography
produce a professional quality news magazine broadcast that combines research, sequencing, and interpretive skills
create and/or produce a professional quality theatrical production using a repertoire of skills: improvisation, scene work, character development, costume, stage and lighting, funding, marketing, promoting
display original art, craft, design, graphics, manuscripts, poetry or scores in a library or other public setting
create and produce a professional standard dance performance using a repertoire of skills: choreography, costume, lighting, and stage design, directing, marketing and promotion
create and produce a professional standard musical event, using a repertoire of skills: performing, funding, marketing, promotion
create and produce a professional standard art exhibition using a repertoire of skills: mounting, curating, hanging, labeling, lighting, funding, marketing and promotion.

STANDARD 3b

Samples of Student Work

The samples of student work included in this section are intended to begin the process of articulating the performance standards at each level of achievement. This collection is not yet adequate for that purpose in either numbers or scope of examples. As New York State continues to collect work samples from the schools for inclusion in the document, we expect a much clearer understanding of the performance standards to be evident.

Neither are these samples presented as models of excellence. They vary in degree of achievement. Some are "acceptable"; others "more proficient." All are meant to provide examples of the kind of work students might produce to demonstrate progress toward the standard.