

The Pathway Knowledge and Skills Chart describes what all/most learners/workers need to know and be able to do to demonstrate competence within a career pathway. Following the pathway description, there are four sets of knowledge and skill expectations:

# PATHWAY DESCRIPTION

*Visual Arts Pathway:* Visual artists create art to communicate ideas, thoughts or feelings. They use a variety of methods—painting, sculpting or illustrating—and an assortment of materials, including oils, watercolors, acrylics, pastels, pencils, pen and ink, photography, plaster, clay and computers. Their works may be realistic, stylized or abstract and may depict objects, people, nature or events. Visual artists are generally categorized in two groups. Fine artists create art to satisfy their own need for self-expression. Illustrators and graphic designers, on the other hand, put their artistic skills at the service of commercial clients, such as major corporations; retail stores; and advertising, design and publishing firms.

# **A. FOUNDATIONAL ACADEMIC EXPECTATIONS**

All secondary students should meet their state's academic standards. All Essential Cluster and Pathway Knowledge and Skills are predicated on the assumption that foundational academic skills have been attained. Some knowledge and skill statements will further define critical linkages and applications of academics in the cluster and/or pathway.

A. Foundational Academic Expectations	
B. Essential Knowledge and Skills	
C. Cluster (Foundation) Knowledge and Skills	
D. Pathway Knowledge and Skills	

# **B. ESSENTIAL KNOWLEDGE AND SKILLS**

The following Essential Knowledge and Skill statements apply to careers in all clusters and pathways. Persons preparing for careers in this pathway should be able to demonstrate these skills in the context of this cluster and pathway.





<b>Essential Topic</b>	ACADEMIC FOUNDATIONS: Achieve additional academic knowledge and
ESS01	skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.
ESS01.01	Complete required training, education, and certification to prepare
	for employment in a particular career field.
ESS01.01.01	Identify training, education and certification requirements for occupational choice.
ESS01.01.02 ESS01.01.03	Participate in career-related training and/or degree programs. Pass certification tests to qualify for licensure and/or certification in chosen
	occupational area.
ESS01.02	Demonstrate language arts knowledge and skills required to
	pursue the full range of post-secondary education and career
	opportunities.
ESS01.02.01	Model behaviors that demonstrate active listening.
ESS01.02.02	Adapt language for audience, purpose, situation. (i.e. diction/structure, style).
ESS01.02.03	Organize oral and written information.
ESS01.02.04	Compose focused copy for a variety of written documents such as agendas, audio-visuals, bibliographies, drafts, forms/documents, notes, oral presentations, reports, and technical terminology.
ESS01.02.05	Edit copy to create focused written documents such as agendas, audio- visuals, bibliographies, drafts, forms/documents, notes, oral presentations, reports, and technical terminology.
ESS01.02.06	Comprehend key elements of oral and written information such as cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs, evaluation/critiques, mood, persuasive text, sequence, summaries, and technical subject matter.
ESS01.02.07	Evaluate oral and written information for accuracy, adequacy/sufficiency, appropriateness, clarity, conclusions/solutions, fact/opinion, propaganda, relevancy, validity, and relationship of ideas.
ESS01.02.08	Identify assumptions, purpose, outcomes/solutions, and propaganda techniques.
ESS01.02.09	Predict potential outcomes and/or solutions based on oral and written information regarding trends.
ESS01.02.10	Present formal and informal speeches including discussion, information requests, interpretation, and persuasive arguments.
ESS01.03	Demonstrate mathematics knowledge and skills required to pursue
	the full range of post-secondary education and career
	opportunities.
ESS01.03.01	Identify whole numbers, decimals, and fractions.
ESS01.03.02	Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication, and division.
ESS01.03.03	Demonstrate use of relational expressions such as equal to, not equal, greater than, less than, etc.



ESS01.03.04 Apply data and measurements to solve a problem. ESS01.03.05 Analyze Mathematical problem statements for missing and/or irrelevant data. ESS01.03.06 Construct charts/tables/graphs from functions and data. ESS01.03.07 Analyze data when interpreting operational documents. ESS01.04 Demonstrate science knowledge and skills required to pursue the full range of post-secondary and career education opportunities. ESS01.04.01 Evaluate scientific constructs including conclusions, conflicting data, controls, data, inferences, limitations, questions, sources of errors, and variables. ESS01.04.02 Apply scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions, and problem identification. COMMUNICATIONS: Use oral and written communication skills in creating, Essential Topic expressing and interpreting information and ideas including technical ESS02 terminology and information. ESS02.01 Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice. ESS02.01.01 Determine the most appropriate reading strategy for identifying the overarching purpose of a text (i.e., skimming, reading for detail, reading for meaning or critical analysis). ESS02.01.02 Demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions. ESS02.01.03 Select the reading strategy or strategies needed to fully comprehend the content within a written document (i.e., skimming, reading for detail, reading for meaning or critical analysis). Interpret information, data, and observations to apply information learned ESS02.01.04 from reading to actual practice. ESS02.01.05 Transcribe information, data, and observations to apply information learned from reading to actual practice. Communicate information, data, and observations to apply information ESS02.01.06 learned from reading to actual practice. ESS02.02 Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in the workplace. ESS02.02.01 Employ verbal skills when obtaining and conveying information. ESS02.02.02 Record information needed to present a report on a given topic or problem. ESS02.02.03 Write internal and external business correspondence that conveys and/or obtains information effectively. ESS02.02.04 Communicate with other employees to clarify workplace objectives.



ESS02.02.05	Communicate effectively with customers and employees to foster positive relationships.
ESS02.03	Locate, organize and reference written information from various
	sources to communicate with co-workers and clients/participants.
ESS02.03.01	Locate written information used to communicate with co-workers and customers.
ESS02.03.02 ESS02.03.03	Organize information to use in written and oral communications. Reference the sources of information.
ESS02.04	Evaluate and use information resources to accomplish specific
	occupational tasks.
ESS02.04.01	Use informational texts, Internet web sites, and/or technical materials to review and apply information sources for occupational tasks.
ESS02.04.02	Evaluate the reliability of information from informational texts, Internet Web sites, and/or technical materials and resources.
ESS02.05	Use correct grammar, punctuation and terminology to write and
	edit documents.
ESS02.05.01	Compose multi-paragraph documents clearly, succinctly, and accurately.
ESS02.05.02	Use descriptions of audience and purpose when preparing and editing written documents.
ESS02.05.03	Use correct grammar, spelling, punctuation, and capitalization when preparing written documents.
ESS02.06	Develop and deliver formal and informal presentations using
	appropriate media to engage and inform audiences.
ESS02.06.01	Prepare oral presentations to provide information for specific purposes and audiences.
ESS02.06.02	Identify support materials that will enhance an oral presentation.
ESS02.06.03	Prepare support materials that will enhance an oral presentation.
ESS02.06.04	Deliver an oral presentation that sustains listeners' attention and interest.
ESS02.06.05	Align presentation strategies to the intended audience.
ESS02.06.06	Implement multi-media strategies for presentations.
ESS02.07	Interpret verbal and nonverbal cues/behaviors to enhance
	communication with co-workers and clients/participants.
ESS02.07.01	Interpret verbal behaviors when communicating with clients and co- workers.
ESS02.07.02	Interpret nonverbal behaviors when communicating with clients and co- workers.
ESS02.08	Apply active listening skills to obtain and clarify information.
ESS02.08.01	Interpret a given verbal message/information.
ESS02.08.02	Respond with restatement and clarification techniques to clarify information.



ESS02.09	Develop and interpret tables, charts, and figures to support written and oral communications.
ESS02.09.01	Create tables, charts, and figures to support written and oral communications.
ESS02.09.02	Interpret tables, charts, and figures used to support written and oral communication.
ESS02.10	Listen to and speak with diverse individuals to enhance
	communication skills.
ESS02.10.01	Apply factors and strategies for communicating with a diverse workforce.
ESS02.10.02	Demonstrate ability to communicate and resolve conflicts within a diverse workforce.
ESS02.11	Exhibit public relations skills to increase internal and external customer/client satisfaction.
ESS02.11.01	Communicate effectively when developing positive customer/client relationships.
Essential Topic ESS03	<b>PROBLEM-SOLVING AND CRITICAL THINKING:</b> Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.
ESS03.01	Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate).
ESS03.01.01	Identify common tasks that require employees to use problem-solving skills.
ESS03.01.02	Analyze elements of a problem to develop creative solutions.
ESS03.01.03	Describe the value of using problem-solving and critical thinking skills to improve a situation or process.
ESS03.01.04	Create ideas, proposals, and solutions to problems.
ESS03.01.05	Evaluate ideas, proposals, and solutions to problems.
ESS03.01.06	Use structured problem-solving methods when developing proposals and solutions.
ESS03.01.07	Generate new and creative ideas to solve problems by brainstorming possible solutions.
ESS03.01.08	Critically analyze information to determine value to the problem-solving task.
ESS03.01.09	Guide individuals through the process of recognizing concerns and making informed decisions.
ESS03.01.10	Identify alternatives using a variety of problem-solving and critical thinking skills.
ESS03.01.11	Evaluate alternatives using a variety of problem-solving and critical thinking skills.
ESS03.02	Employ critical thinking and interpersonal skills to resolve conflicts with staff and/or customers.



ESS03.02.01 ESS03.02.02 ESS03.02.03 ESS03.02.04 ESS03.02.05 ESS03.02.06 ESS03.03	<ul> <li>Analyze situations and behaviors that affect conflict management.</li> <li>Determine best options/outcomes for conflict resolution using critical thinking skills.</li> <li>Identify with others' feelings, needs, and concerns.</li> <li>Implement stress management techniques.</li> <li>Resolve conflicts with/for customers using conflict resolution skills.</li> <li>Implement conflict resolution skills to address staff issues/problems.</li> <li>Identify, write and monitor workplace performance goals to guide progress in assigned areas of responsibility and accountability.</li> </ul>
ESS03.03.01	Write realistic performance goals, objectives and action plans.
ESS03.03.02	Monitor performance goals and adjust as necessary.
ESS03.03.03	Recognize goal achievement using appropriate rewards in the workplace.
ESS03.03.04	Communicate goal achievement with managers and co-workers.
ESS03.04	Conduct technical research to gather information necessary for
	decision-making.
ESS03.04.01	Align the information gathered to the needs of the audience.
ESS03.04.02	Gather technical information and data using a variety of resources.
ESS03.04.03	Analyze information and data for value to the research objectives.
	Evaluate information and data to determine value to research objectives
ESS03.04.04	Evaluate information and data to determine value to research objectives.
	INFORMATION TECHNOLOGY APPLICATIONS: Use information
Essential Topic ESS04	
Essential Topic	<b>INFORMATION TECHNOLOGY APPLICATIONS:</b> Use information technology tools specific to the career cluster to access, manage, integrate, and
Essential Topic ESS04	<b>INFORMATION TECHNOLOGY APPLICATIONS:</b> Use information technology tools specific to the career cluster to access, manage, integrate, and create information.
Essential Topic ESS04	INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information. Use Personal Information Management (PIM) applications to
Essential Topic ESS04 ESS04.01	INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information. Use Personal Information Management (PIM) applications to increase workplace efficiency.
Essential Topic ESS04 ESS04.01 ESS04.01.01	INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information. Use Personal Information Management (PIM) applications to increase workplace efficiency. Manage personal schedules and contact information.
Essential Topic ESS04 ESS04.01 ESS04.01.01 ESS04.01.02	INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information. Use Personal Information Management (PIM) applications to increase workplace efficiency. Manage personal schedules and contact information. Create memos and notes.
Essot.01 ESS04.01 ESS04.01.01 ESS04.01.02 ESS04.02	INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information. Use Personal Information Management (PIM) applications to increase workplace efficiency. Manage personal schedules and contact information. Create memos and notes. Employ technological tools to expedite workflow. Use information technology tools to manage and perform work
Essential Topic ESS04 ESS04.01 ESS04.01.01 ESS04.01.02 ESS04.02 ESS04.02.01	<ul> <li>INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.</li> <li>Use Personal Information Management (PIM) applications to increase workplace efficiency.</li> <li>Manage personal schedules and contact information.</li> <li>Create memos and notes.</li> <li>Employ technological tools to expedite workflow.</li> <li>Use information technology tools to manage and perform work responsibilities.</li> </ul>
Essential Topic ESS04 ESS04.01 ESS04.01.01 ESS04.01.02 ESS04.02 ESS04.02.01	<ul> <li>INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.</li> <li>Use Personal Information Management (PIM) applications to increase workplace efficiency. Manage personal schedules and contact information. Create memos and notes.</li> <li>Employ technological tools to expedite workflow. Use information technology tools to manage and perform work responsibilities.</li> <li>Operate electronic mail applications to communicate within a workplace. Use email to share files and documents.</li> </ul>
Esso4.01 ESS04.01 ESS04.01.01 ESS04.01.02 ESS04.02 ESS04.02 ESS04.02.01 ESS04.03.01 ESS04.03.01 ESS04.03.02	<ul> <li>INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.</li> <li>Use Personal Information Management (PIM) applications to increase workplace efficiency.</li> <li>Manage personal schedules and contact information.</li> <li>Create memos and notes.</li> <li>Employ technological tools to expedite workflow.</li> <li>Use information technology tools to manage and perform work responsibilities.</li> <li>Operate electronic mail applications to communicate within a workplace.</li> <li>Use email to share files and documents.</li> <li>Identify the functions and purpose of email systems.</li> </ul>
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Esso4.01 ESS04.01 ESS04.01.01 ESS04.01.02 ESS04.02 ESS04.02.01 ESS04.03.01 ESS04.03.01 ESS04.03.02 ESS04.03.03	<ul> <li>INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information.</li> <li>Use Personal Information Management (PIM) applications to increase workplace efficiency.</li> <li>Manage personal schedules and contact information.</li> <li>Create memos and notes.</li> <li>Employ technological tools to expedite workflow.</li> <li>Use information technology tools to manage and perform work responsibilities.</li> <li>Operate electronic mail applications to communicate within a workplace.</li> <li>Use email to share files and documents.</li> <li>Identify the functions and purpose of email systems.</li> <li>Use email to communicate within and across organizations.</li> </ul>

- ESS04.04.03 Evaluate Internet resources for reliability and validity.
- ESS04.05 Operate writing and publishing applications to prepare business communications.



ESS04.05.01 ESS04.05.02	Prepare simple documents and other business communications. Prepare reports and other business communications by integrating graphics and other non-text elements.
ESS04.05.03	Prepare complex multi-media publications.
ESS04.06	Operate presentation applications to prepare presentations.
ESS04.06.01	Prepare presentations for training, sales and information sharing.
ESS04.06.02	Deliver presentations with supporting materials.
ESS04.07	Employ spreadsheet applications to organize and manipulate data.
ESS04.07.01	Create a spreadsheet.
ESS04.07.02	Perform calculations and analyses on data using a spreadsheet.
ESS04.08	Employ database applications to manage data.
ESS04.08.01	Manipulate data elements.
ESS04.08.02	Manage interrelated data elements.
ESS04.08.03	Analyze interrelated data elements.
ESS04.08.04	Generate reports showing interrelated data elements.
ESS04.09	Employ collaborative/groupware applications to facilitate group
	work.
ESS04.09.01	Facilitate group work through management of shared schedule and contact information.
ESS04.09.02	Facilitate group work through management of shared files and online information.
ESS04.09.03	Facilitate group work through instant messaging or virtual meetings.
ESS04.10	Employ computer operations applications to manage work tasks.
ESS04.10.01	Manage computer operations.
ESS04.10.02	Manage file storage.
ESS04.10.03	Compress or alter files.
ESS04.11	Use computer-based equipment (containing embedded computers
	or processors) to control devices.
ESS04.11.01	Operate computer driven equipment and machines.
ESS04.11.02	Use installation and operation manuals.
ESS04.11.03	Troubleshoot computer driven equipment and machines.
ESS04.11.04	Access support as needed to maintain operation of computer driven
	equipment and machines.
	SYSTEMS: Understand roles within teams, work units, departments,
<b>Essential Topic</b>	organizations, inter-organizational systems, and the larger environment.
ESS05	Identify how key organizational systems affect organizational performance and the quality of products and services. Understand global context of industries and careers.
ESS05.01	Describe the nature and types of business organizations to build
	an understanding of the scope of organizations.
ESS05.01.01	List the types and functions of businesses.



	products and services.
ESS05.02	Implement quality control systems and practices to ensure quality
	business.
ESS05.01.03	Explain the functions and interactions of common departments within a
ESS05.01.02	Describe the types and functions of businesses.

ESS05.02.01 Describe quality control standards and practices common to the workplace.

Essential Topic ESS06 SAFETY, HEALTH AND ENVIRONMENTAL: Understand the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.

ESS06.01 Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.

- ESS06.01.01Assess workplace conditions with regard to safety and health.ESS06.01.02Align safety issues with appropriate safety standards to ensure a safe<br/>workplace/jobsite.
- ESS06.01.03 Identify safety hazards common to workplaces.
- ESS06.01.04 Identify safety precautions to maintain a safe worksite.
- ESS06.01.05 Select appropriate personal protective equipment as needed for a safe workplace/jobsite.
- ESS06.01.06 Inspect personal protective equipment commonly used for selected career pathway.
- ESS06.01.07 Use personal protective equipment according to manufacturer rules and regulations.
- ESS06.01.08 Employ a safety hierarchy and communication system within the workplace/jobsite.

ESS06.01.09 Implement safety precautions to maintain a safe worksite.

ESS06.02 Complete work tasks in accordance with employee rights and responsibilities and employers obligations to maintain workplace safety and health.

- ESS06.02.01 Identify rules and laws designed to promote safety and health in the workplace.
- ESS06.02.02 State the rationale of rules and laws designed to promote safety and health.
- ESS06.03 Employ emergency procedures as necessary to provide aid in workplace accidents.
  - ESS06.03.01 Use knowledge of First Aid procedures as necessary.
  - ESS06.03.02 Use knowledge of CPR procedures as necessary.
- ESS06.03.03 Use safety equipment as necessary.
- ESS06.04 Employ knowledge of response techniques to create a disaster and/or emergency response plan.



ESS06.04.01 Complete an assessment of an emergency and/or disaster situation. ESS06.04.02 Create an emergency and/or disaster plan.

Essential Topic ESS07 LEADERSHIP AND TEAMWORK: Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

- ESS07.01 Employ leadership skills to accomplish organizational goals and objectives.
  - ESS07.01.01 Analyze the various roles of leaders within organizations (e.g. contribute ideas; share in building an organization; act as role models to employees by adhering to company policies, procedures, and standards; promote the organization's vision; and mentor others).
  - ESS07.01.02 Exhibit traits such as empowerment, risk, communication, focusing on results, decision-making, problem solution, and investment in individuals when leading a group in solving a problem.
  - ESS07.01.03 Exhibit traits such as compassion, service, listening, coaching, developing others, team development, and understanding and appreciating others when acting as a manager of others in the workplace.
  - ESS07.01.04 Exhibit traits such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living, and change when interacting with others in general.
  - ESS07.01.05 Consider issues related to self, team, community, diversity, environment, and global awareness when leading others.
  - ESS07.01.06 Exhibit traits such as innovation, intuition, adaptation, life-long learning and coachability to develop leadership potential over time.
  - ESS07.01.07 Analyze leadership in relation to trust, positive attitude, integrity, and willingness to accept key responsibilities in a work situation.
  - ESS07.01.08 Describe observations of outstanding leaders using effective management styles.
  - ESS07.01.09 Participate in civic and community leadership and teamwork opportunities to enhance skills.

ESS07.02 Employ organizational and staff development skills to foster positive working relationships and accomplish organizational goals.

- ESS07.02.01 Implement organizational skills when facilitating others' work efforts.
- ESS07.02.02 Explain how to manage a staff that satisfies work demands while adhering to budget constraints.
- ESS07.02.03 Describe how staff growth and development to increase productivity and employee satisfaction.
- ESS07.02.04 Organize team involvement within a group environment.
- ESS07.02.05 Work with others to develop and gain commitment to team goals.
- ESS07.02.06 Distribute responsibility and work load fairly.
- ESS07.02.07 Model leadership and teamwork qualities to aid in employee morale.
- ESS07.02.08 Identify best practices for successful team functioning.



ESS07.02.09	Explain best practices for successful team functioning.
ESS07.03	Employ teamwork skills to achieve collective goals and use team
	members' talents effectively.
ESS07.03.01	Work with others to achieve objectives in a timely manner.
ESS07.03.02	Promote the full involvement and use of team member's individual talents and skills.
ESS07.03.03	Employ conflict-management skills to facilitate solutions.
ESS07.03.04	Demonstrate teamwork skills through working cooperatively with co- workers, supervisory staff, and others, both in and out of the organization, to achieve particular tasks.
ESS07.03.05	Demonstrate teamwork processes that provide team building, consensus, continuous improvement, respect for the opinions of others, cooperation, adaptability, and conflict resolution.
ESS07.03.06	Develop plans to improve team performance.
ESS07.03.07	Demonstrate commitment to and a positive attitude toward team goals.
ESS07.03.08	Take responsibility for shared group and individual work tasks.
ESS07.03.09	Assist team members in completing their work.
ESS07.03.10	Adapt effectively to changes in projects and work activities.
ESS07.03.11	Negotiate effectively to arrive at decisions.
ESS07.04	Establish and maintain effective working relationships with all
	levels of personnel and other departments in order to accomplish
	objectives and tasks.
ESS07.04.01	Build effective working relationships using interpersonal skills.
ESS07.04.02	Use positive interpersonal skills to work cooperatively with co-workers
	representing different cultures, genders and backgrounds.
ESS07.04.03	Manage personal skills to accomplish assignments.
ESS07.04.04	Treat people with respect.
ESS07.04.05	Provide constructive praise and criticism.
ESS07.04.06	Demonstrate sensitivity to and value for diversity.
ESS07.04.07	Manage stress and control emotions.
ESS07.05	Conduct and participate in meetings to accomplish work tasks.
ESS07.05.01	Develop meeting goals, objectives and agenda.
ESS07.05.02	Assign responsibilities for preparing materials and leading discussions.
ESS07.05.03	Prepare materials for leading discussion.
ESS07.05.04	Assemble and distribute meeting materials.
ESS07.05.05	Conduct meeting to achieve objectives within scheduled time.
ESS07.05.06	Demonstrate effective communication skills in meetings.
ESS07.05.07	Produce meeting minutes including decisions and next steps.
ESS07.05.08	Use parliamentary procedure, as needed, to conduct meetings.
ESS07.06	Employ mentoring skills to inspire and teach others.
ESS07.06.01	Use motivational techniques to enhance performance in others.
ESS07.06.02	Provide guidance to enhance performance in others.



Essential Topic ESS08	ETHICS AND LEGAL RESPONSIBILITIES: Know and understand the importance of professional ethics and legal responsibilities.
ESS08.01	Apply ethical reasoning to a variety of workplace situations in order to make ethical decisions.
ESS08.01.01	Evaluate alternative responses to workplace situations based on legal responsibilities and employer policies.
ESS08.01.02	Evaluate alternative responses to workplace situations based on personal or professional ethical responsibilities.
ESS08.01.03	Identify personal and long-term workplace consequences of unethical or illegal behaviors.
ESS08.01.04	Explain personal and long-term workplace consequences of unethical or illegal behaviors.
ESS08.01.05	Determine the most appropriate response to workplace situations based on legal and ethical considerations.
ESS08.01.06	Explain the most appropriate response to workplace situations based on legal and ethical considerations.
ESS08.02	Interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations.
ESS08.02.01	Locate information on organizational policies in handbooks and manuals.
ESS08.02.02	Discuss how specific organizational policies and procedures influence a specific work situation.
Essential Topic ESS09	<b>EMPLOYABILITY AND CAREER DEVELOPMENT:</b> <i>Know and</i> <i>understand the importance of employability skills. Explore, plan, and effectively</i> <i>manage careers. Know and understand the importance of entrepreneurship</i> <i>skills.</i>
ESS09.01	Identify and demonstrate positive work behaviors and personal qualities needed to be employable.
ESS09.01.01	Demonstrate self-discipline, self-worth, positive attitude, and integrity in a work situation.
ESS09.01.02	Demonstrate flexibility and willingness to learn new knowledge and skills.
ESS09.01.03	Exhibit commitment to the organization.
ESS09.01.04	Identify how work varies with regard to site, from indoor confined spaces to outdoor areas, including aerial space and a variety of climatic and physical conditions.
ESS09.01.05	Apply communication strategies when adapting to a culturally diverse environment.
ESS09.01.06	Manage resources in relation to the position (i.e. budget, supplies, computer, etc).
ESS09.01.07	Identify positive work-qualities typically desired in each of the career cluster's pathways.



ESS09.01.08	Manage work roles and responsibilities to balance them with other life roles and responsibilities.
ESS09.02	Develop a personal career plan to meet career goals and
	objectives.
ESS09.02.01	Develop career goals and objectives as part of a plan for future career direction.
ESS09.02.02	Develop strategies to reach career objectives.
ESS09.03	Demonstrate skills related to seeking and applying for employment
	to find and obtain a desired job.
ESS09.03.01	Use multiple resources to locate job opportunities.
ESS09.03.02	Prepare a résumé.
ESS09.03.03	Prepare a letter of application.
ESS09.03.04	Complete an employment application.
ESS09.03.05	Interview for employment.
ESS09.03.06	List the standards and qualifications that must be met in order to enter a given industry.
ESS09.03.07	Employ critical thinking and decision-making skills to exhibit qualifications to a potential employer.
ESS09.04	Maintain a career portfolio to document knowledge, skills and
	experience in a career field.
ESS09.04.01	Select educational and work history highlights to include in a career portfolio.
ESS09.04.02	Produce a record of work experiences, licenses, certifications and products.
ESS09.04.03	Organize electronic or physical portfolio for use in demonstrating knowledge, skills and experiences.
ESS09.05	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match
	career goals.
ESS09.05.01	Compare employment opportunities to individual needs and career plan objectives.
ESS09.05.02	Evaluate employment opportunities based upon individual needs and career plan objectives.
ESS09.05.03	Demonstrate appropriate methods for accepting or rejecting employment offers.
ESS09.06	Identify and exhibit traits for retaining employment to maintain
	employment once secured.
ESS09.06.01	Model behaviors that demonstrate reliability and dependability.
ESS09.06.02	Maintain appropriate dress and behavior for the job to contribute to a safe and effective workplace/jobsite.
ESS09.06.03	Complete required employment forms and documentation such as I-9 form, work visa, W-4 and licensures to meet employment requirements.
ESS09.06.04	Summarize key activities necessary to retain a job in the industry.



ESS09.06.05	Identify positive work behaviors and personal qualities necessary to retain employment.
ESS09.07	Identify and explore career opportunities in one or more career pathways to build an understanding of the opportunities available in the cluster.
ESS09.07.01	Locate and identify career opportunities that appeal to personal career goals.
ESS09.07.02	Match personal interest and aptitudes to selected careers.
ESS09.08	Recognize and act upon requirements for career advancement to
	plan for continuing education and training.
ESS09.08.01	Identify opportunities for career advancement.
ESS09.08.02	Pursue education and training opportunities to acquire skills necessary for career advancement.
ESS09.08.03	Examine the organization and structure of various segments of the industry to prepare for career advancement.
ESS09.08.04	Research local and regional labor (workforce) market and job growth information to project potential for advancement.
ESS09.08.05	Manage employment relations to make career advancements.
ESS09.09	Continue professional development to keep current on relevant
	trends and information within the industry.
ESS09.09.01	Use self assessment, organizational priorities, journals, Internet sites, professional associations, peers and other resources to develop goals that address training, education and self-improvement issues.
ESS09.09.02	Read trade magazines and journals, manufacturers' catalogues, industry publications and Internet sites to keep current on industry trends.
ESS09.09.03	Participate in relevant conferences, workshops, mentoring activities and in- service training to stay current with recent changes in the field.
ESS09.10	Examine licensing, certification and credentialing requirements at
	the national, state and local levels to maintain compliance with
	industry requirements.
ESS09.10.01	Examine continuing education requirements related to licensing, certification, and credentialing requirements at the local, state and national levels for chosen occupation.
ESS09.10.02	Examine the procedures and paperwork involved in maintaining and updating licensure, certification and credentials for chosen occupation.
ESS09.10.03	Align ongoing licensing, certification and credentialing requirements to career plans and goals.
ESS09.11	Examine employment opportunities in entrepreneurship to
	consider entrepreneurship as an option for career planning.
ESS09.11.01	Describe the opportunities for entrepreneurship in a given industry.



Essential Topic ESS10	<b>TECHNICAL SKILLS:</b> Use of technical knowledge and skills required to pursue careers in all career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster.
ESS10.01	Employ information management techniques and strategies in the workplace to assist in decision-making.
ESS10.01.01	Use information literacy skills when accessing, evaluating and disseminating information.
ESS10.01.02	Describe the nature and scope of information management.
ESS10.01.03	Maintain records to facilitate ongoing business operations.
ESS10.02	Employ planning and time management skills and tools to enhance
	results and complete work tasks.
ESS10.02.01	Develop goals and objectives.
ESS10.02.02	Prioritize tasks to be completed.
ESS10.02.03	Develop timelines using time management knowledge and skills.
ESS10.02.04	Use project-management skills to improve workflow and minimize costs.

# C. CLUSTER (FOUNDATION) KNOWLEDGE AND SKILLS

The following Cluster (Foundation) Knowledge and Skill statements apply to all careers in the Arts, A/V Technology and Communications Cluster. Persons preparing for careers in the Arts, A/V Technology and Communications Cluster should be able to demonstrate these skills in addition to those found on the Essential Knowledge and Skills Chart.

	A. Foundational Academic Expectations
	B. Essential Knowledge and Skills
	C. Cluster (Foundation) Knowledge and Skills
	D. Pathway Knowledge and Skills
Cluster Topic ARC01	ACADEMIC FOUNDATIONS: Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster.
	No additional statements in this topic beyond those found in the Essential Knowledge and Skills Chart.
Cluster Topic ARC02	<b>COMMUNICATIONS:</b> Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.
	No additional statements in this topic beyond those found in the Essential Knowledge and Skills Chart.
Cluster Topic ARC03	<b>PROBLEM-SOLVING AND CRITICAL THINKING:</b> Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation.



No additional statements in this topic beyond those found in the Essential Knowledge and Skills Chart.

Cluster Topic ARC04	INFORMATION TECHNOLOGY APPLICATIONS: Use information technology tools specific to the career cluster to access, manage, integrate, and create information. No additional statements in this topic beyond those found in the Essential Knowledge and Skills Chart.
Cluster Topic ARC05	<b>SYSTEMS:</b> Understand roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. Identify how key organizational systems affect organizational performance and the quality of products and services. Understand global context of industries and careers.
ARC05.01	Analyze and summarize the history and evolution of the arts, audio- video technology, and communications field to understand the current place the field holds within society and the economy.
ARC05.01.01	Summarize the history and impact of the arts and technologies on society.
Sample Indicators	Develop a timeline depicting the evolution of art, technology, media, and performance to the present time. Identify when the arts became a valued medium within society and how this influenced the arts.
ARC05.01.02	Identify positive and negative impacts of the arts on current society. Identify the beginnings of audio-video and communications technologies as valued media within society. Evaluate the influences on the evolution of art, technology, media, and
AN003.01.02	performance.
Sample Indicators	Identify the known influences on the evolution of art, technology, media and performance. Identify key factors that have impacted the evolution of the arts, communications, and audio-video technologies.
ARC05.01.03	Compare and contrast the different objectives for arts and communications
Sample Indicators	held by the general public and the industry at large. Analyze the objectives of the general public related to arts and communications.
	Examine the objectives of industries related to arts and communications operations. Interpret the similarities and differences between the objectives of the general public and the industries relating to arts and communications operations.
ARC05.01.04	Analyze current issues related to the arts, audio-video technologies, telecommunications, printing, and the media.
Sample Indicators	Identify the current, key, local and national issues for arts and communications technologies. Compare the similarities and differences in the issues currently affecting arts and communications technologies. Determine how these issues impact each area and the entire career cluster.



ARC05.02	Examine the various organizational structures adopted by groups within the arts, audio-video, technology, and communications field to understand the diversity and variety of functions within the industry.
ARC05.02.01	Summarize characteristics of the fluid and diverse nature of organizational structures within the arts, audio-video technology, printing, telecommunications, and media industries.
Sample Indicators	Explain the formal and informal organizational structures within each of these pathways. Illustrate the organizational structures in charts. Compare the organizational structures of the arts and other pathways for similarities and differences. Explain the meaning of diverse organizational structures and why these are important for
ARC05.03	the accomplishment of joint projects. Analyze the arts, audio-visual technology and communication industry's economic base in order to demonstrate an understanding of the economic factors influencing the industry as a whole.
ARC05.03.01	Analyze the industry's economic base pertinent to the arts and related technologies.
Sample Indicators	Evaluate how the visual and performing arts economically impacts current society. Evaluate how the technology industries economically impact current society. Describe how the arts have economically influenced the inception of the technology industry. Describe how the technologies industry has influenced the economic growth of the arts
ARC05.03.02	to the present time. Analyze the industry's business practices pertinent to the arts and related technologies.
Sample Indicators	Identify the basic business principles relative to the pathways in this career cluster. Examine the business practices amongst the diverse pathways in this career cluster for similarities and differences.
ARC05.03.03	Evaluate the role of the arts in business, technology, and the community.
Sample Indicators	Define the roles of the arts in business, technology, and the community as identified by society. Present the role that business expects from the arts in relation to economic development. Describe the rationale for technical aspects working with the arts and how this provides a mutual benefit. Illustrate roles that the community expects from the arts in relation to quality of life issues.
ARC05.04	Analyze and summarize evidence of interdependence between the technical and the artistic sides of this career cluster in order to demonstrate an understanding of the systems involved in the cluster.



ARC05.04.01	Summarize the features of the partnership technology and the arts have in developing presentations and productions.
Sample Indicators	Describe the impact that audio-video technology, printing, broadcasting, and journalism have on the development of presentations and productions.
	Analyze how technical areas and the arts partner to produce high quality presentations and productions.
ARC05.04.02	Analyze how the roles of creators, performers, technicians, and others are similar and different from one another.
Sample Indicators	Analyze the roles of creators, performers, technicians, and others involved in production, performance, and media to identify similarities and differences.
Sample Indicators	Analyze the skills required by both technical and artistic partners to provide audiences with quality works and productions.
ARC05.05	Design a presentation that illustrates the similarities and differences of the various roles.
ARC05.05	Analyze and summarize the formal and informal influences in the abstract and formal structures of business organizations within
	this cluster to demonstrate an understanding of the influences on
	holding careers in this field.
ARC05.05.01	Examine the influence government, public opinion, and diverse local and cultural perspectives may have upon visual arts, media communications, or performance as a business.
Sample Indicators	Define influences of government and cultural perspectives as they relate to media communications, visual arts or performance as a business.
	Define the influence of government regulations on media, audio-video productions, telecommunications, printing, and artistic authorship.
	Analyze a variety of persistent cultural issues and dilemmas within society that commonly affect how cultures are portrayed within art forms and communication.
	Evaluate how cultural issues and dilemmas within society influence government and public opinion and its effects on developing a successful business.
ARC05.05.02	Examine labor management processes and agreements generally used in
	the arts, audio-video technologies, telecommunications, printing, and media fields.
Sample Indicators	Define labor management processes and agreements used within each pathway. Identify common labor management processes and agreements used within this career cluster.
	Role play a labor management process as it relates to one area in each pathway in this career cluster.
	Identify issues that are handled in agreements between labor and management in one of the pathways for this cluster.
Cluster Topic ARC06	SAFETY, HEALTH AND ENVIRONMENTAL: Understand the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. Follow organizational policies and procedures and contribute to continuous improvement in performance and compliance.



ARC06.01	Maintain safe and healthful working conditions by completing work
	tasks in accordance with rights and applicable responsibilities in a
	arts, audio-visual technology and communications work
	environment to protect employees' well being.

ARC06.01.01 Sample Indicators	Assess workplace conditions with regard to safety and health. Identify the types of risk of injury/illness at work.
	Identify those who are susceptible to risk of injury/illness at work.
	Describe ways to positively impact occupational safety and health.
	Describe ways to positively impact occupational safety and health.
ARC06.01.02	State the implications and rationale for various rules and laws designed to
	promote safety and health may have on a work environment.
Sample Indicators	Identify key rights of employees related to occupational safety and health.
	Identify the responsibilities of employers related to occupational safety and health.
_	Explain the role of government agencies in providing a safe workplace.
ARC06.02	Assess and control methods to reduce sources of office and
	worksite accident hazards common in the arts, audio-visual
	technology and communications industry in order to promote a
	safe and accident free working environment.
ARC06.02.01	Demonstrate completion of a variety of methods to prevent and correct
	common hazards.
Sample Indicators	Identify and describe common hazards in the workplace.
	Identify and describe major sources of information about hazards in the workplace (e.g., MSDS, work procedures, exposure control plans, training materials, labels, and signage).
	Identify sources of combustible/flammable materials, fire and emergencies to establish a fire safe environment.
	Interpret safety signs and symbols.
ARC06.02.02	Demonstrate personal and group health and safety practices.
Sample Indicators	Identify procedures necessary for maintaining a safe work area.
	Identify methods to correct common hazards.
	Identify methods for disposing of hazardous materials.
	Demonstrate principals of safe physical movement to avoid slips, trips, and spills.
	Inspect and use protective equipment (PPE).
ARC06.03	Examine and summarize the responsibilities various entities have
	for promoting a safe and healthy work environment in order to
	understanding the roles involved in maintaining acceptable
	conditions in the arts, technology and communications field.
ARC06.03.01	Summarize the individual employee's responsibility for maintaining health and safety in contrast to a supervisor or others.
Sample Indicators	Examine the situations in this career cluster where individuals work independently and are responsible for their own health.



	Identify the responsibilities an individual has for implementing health practices in relation to electrical and mechanical equipment. Identify the individual's responsibilities for safe and healthful practices when dealing with stage equipment, artist tools, and mechanical equipment. Design a plan for maintaining individual health for work in various pathways within the
	cluster.
ARC06.03.02	Illustrate situations that demonstrate compliance with OSHA safety regulations and practices related to this cluster.
Sample Indicators	Define the OSHA safety regulations related to this cluster. Classify critical safety issues and practices identified by OSHA in relation to pathways in this cluster.
ARC06.03.03	Demonstrate using safety procedures required in a specific pathway in this cluster. Apply MSDS and Hazardous Materials procedures related to handling and disposing of chemicals.
Sample Indicators	Analyze health problems that can result from unsafe exposure to chemicals. Demonstrate the use of knowledge and skills for safe and healthful use of chemicals in various processes in the arts, graphic arts, photography, and technical areas of this career cluster.
ARC06.03.04	Apply Hazardous Materials practices in relation to fire and water hazards, electrical coding, and right-to-know laws regarding hazards.
Sample Indicators	Exhibit knowledge of Hazardous Materials practices. Demonstrate the use of Hazardous Materials practices related to activities in the career cluster.
ARC06.04	Examine and summarize safety related problems that may result from working with electrical circuits used in this cluster to demonstrate a broad understanding of health and safety concerns.
ARC06.04.01	Demonstrate safe work habits and procedures for application of electricity and static discharge in relation to all technologies in the career cluster.
Sample Indicators	Exhibit proper grounding techniques. Identify potential electrical hazards on the work site or set. Demonstrate how to apply CPR and first aid in relation to electrical shock. Demonstrate basic procedures for safely working with electricity.
ARC06.05	Apply safety procedures in operating equipment commonly used within the career pathways involved in this cluster to demonstrate a broad understanding of important safety practices.
ARC06.05.01 Sample Indicators ARC06.05.02	Demonstrate the ability to set and use a ladder. Set a ladder safely, both with and without equipment. Demonstrate safety procedures for operating aerial systems. Utilize safety procedures to operate an aerial system without individuals on the
Sample Indicators ARC06.05.03	equipment. Demonstrate safety procedures when involved with heights.
Sample Indicators	Demonstrate how to safely climb poles using steps, gaffs, scaffolding, and ladders.



ARC06.05.04 Sample Indicators ARC06.06	<ul> <li>Apply the safety practices related to printing and graphic arts, telecommunications, performing arts, visual arts, and broadcasting. Illustrate the safety practices required in the control room for broadcasting; in a theater with props, sets, costumes, make-up, and lighting; in graphic arts with presses and duplicators; and in telecommunications.</li> <li>Examine and summarize the life style implications and physical demands required by work activities common in the arts, audio/visual, technology and communications cluster to demonstrate an broad perspective regarding the nature of work in the industry.</li> </ul>
ARC06.06.01	Summarize the physical preparation needed to maintain the work activities of pathways in this career cluster.
Sample Indicators	Demonstrate a warm-up process to prepare the body for various performing arts.
	Demonstrate body mechanics that prevent strain on various parts of the body and voice. Illustrate how to recognize stress as a potential safety factor to the body in various movements. Demonstrate ergonomic movements related to artistic performance and technical
ARC06.06.02	equipment use. Summarize life style choices required to maintain the work activities of the pathways in this career cluster.
Sample Indicators	Apply knowledge of nutrition to meet the body's needs to supply the physical activity required by careers in this cluster.
	Interpret the impact of choices regarding nutrition, stress, exercise, and alternative decisions on an individual's ability to sustain a career in performance.
ARC06.07	Demonstrate personal safety habits and procedures while on work-
	related assignments in various locations beyond the business site
	to ensure personal safety and well-being.
ARC06.07.01	Apply personal safety practices required for various pathways within this career cluster.
Sample Indicators	Determine the personal safety practices required when gathering news where potential health and safety hazards exist. Practice responding to personal safety concerns "on-location," including dangerous wildlife, terrain, extreme weather, or violence.
ARC06.07.02	Apply safety rules related to motor vehicles and other equipment. Apply the safety practices required for working away, "on-location," or in an open environment.
Sample Indicators	Demonstrate safety practices for environmental elements specific to "on-location" settings, stage sets, graphic and visual arts development, and field work in journalism, telecommunications, or broadcasting.
Cluster Topic ARC07	LEADERSHIP AND TEAMWORK: Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.
	No additional statements in this topic beyond those found in the Essential Knowledge and Skills Chart.



Cluster Topic ARC08	ETHICS AND LEGAL RESPONSIBILITIES: Know and understand the importance of professional ethics and legal responsibilities.
ARC08.01	Exhibit ethical conduct in writing, creating, printing, broadcasting, and performing to uphold high standards for behavior in the industry.
ARC08.01.01	Analyze ethical principles of decision-making related to clients, customers, fellow workers, and others.
Sample Indicators	Define professional code of ethics.
	Examine the professional code of ethics (e.g., Society of Professional Journalism).
ARC08.01.02	Identify consequences of non-ethical decision-making on short and long term reputation. Analyze ethical conduct that provides proper credit to those whose ideas and content have been used.
Sample Indicators	Illustrate how credit is given for use of copyright materials. Identify the consequences in historical examples of both ethical and unethical conduct related to the use of intellectual property. Identify current concerns about consumer ethics related to the music and the video industries. Identify ethical and unethical conduct in a given work situation.
ARC08.01.03	Analyze ethical standards that apply to the delivery of quality performance
Sample Indicators	and products. Define ethical standards. Examine the problems related to maintaining ethical standards in situations without a clear standard.
ARC08.01.04	Identify ethics involved in the degree of influence media, arts, and performance have upon individuals. Identify the degree of influence of print, broadcast media, arts, and performance in a
Sample Indicators	given situation. Evaluate historic political events and actions instigated through the use of media, print, art, and performance.
ARC08.01.05 Sample Indicators	Describe why responsibility for ethical influence is a key issue related to this cluster. Identify the proper use of proprietary information. Define proprietary information.
	Describe how proprietary information is a concern related to careers in this cluster. Evaluate situations to judge the extent to which information is proprietary and whether or not it can be used.
ARC08.02	Analyze and apply laws affecting arts, technology and
	communication enterprises to maintain up-to-date compliance with key regulations influencing the industry.
ARC08.02.01	Analyze the copyright laws in relation to seeking formal permission to use materials.
Sample Indicators	Identify steps for securing permission to use copyrighted materials. Exhibit how credit is given for use of copyrighted materials.
	Define what is original content and when credit does not need to be given.



	Identify the benefits of copyright laws.
	Identify consequences if formal permission is not secured.
ARC08.02.02	Analyze contracts for potential work in career pathways within this cluster.
Sample Indicators	Examine different types of contracts.
	Interpret various types of contracts.
ARC08.02.03	Identify essential elements a contract needs to contain for protection of both parties. Analyze state, county, and city codes related to decisions affecting work in this cluster.
Sample Indicators	Identify processes required to obtain local, county, and state permits for building structures and sets, and installing communications mechanisms in various site locations. Describe relevant statutes for this cluster.
	Identify agencies and organizations that oversee and enforce these statutes.
ARC08.02.04	Identify assistance professional organizations offer for securing permits. Analyze the First Amendment, FCC, the Freedom of Information Act, libel laws, and other regulations for compliance issues relevant to this cluster.
Sample Indicators	Describe the intent and relationship of the First Amendment to this cluster. Identify FCC Regulations, the Freedom of Information Act, and state statutes and liability laws pertaining to work in this cluster.
	Identify court cases related to this cluster that preserve business and individual rights. Interpret how The Freedom of Information Act affects workers in this cluster. Illustrate instances when the intent of the First Amendment was preserved in recent times.
ARC08.02.05	Analyze the liabilities associated with productions and performances, media, and telecommunications installations.
Sample Indicators	Define the term liabilities.
	Identify examples of potential situations that could pose legal liabilities.
	Analyze the risk level for work situations related to this cluster.
Cluster Topic ARC09	<b>EMPLOYABILITY AND CAREER DEVELOPMENT:</b> <i>Know and</i> <i>understand the importance of employability skills. Explore, plan, and effectively</i> <i>manage careers. Know and understand the importance of entrepreneurship</i> <i>skills.</i>
ARC09.01	Explain written organizational policies, rules and procedures common to careers in arts, AV, technology and communication
	fields to help employees perform their jobs.
ARC09.01.01	Locate appropriate information on organizational policies in handbooks and manuals.
Sample Indicators	Identify the contents of various organizational publications. Select the appropriate document (s) as reference for a given situation.
ARC09.01.02	Discuss how specific organizational policies and rules influence a specific work situation. Locate and identify specific organizational policy, rule or procedure to assist with a given
Sample Indicators	situation.



	Explain specific organizational policy, rule or procedure to improve a given situation.
ARC09.03	Identify, examine and select career opportunities in one or more
	arts, AV, technology and communication related career pathways in order to explore career options.
ARC09.03.01 Sample Indicators	Locate career opportunities that appeal to personal career goals. Locate and interpret career information for at least one career cluster.
	Identify job requirements for career pathways.
	Identify educational and credentialing requirements for career cluster and pathways.
ARC09.03.02	Match personal interests and aptitudes to selected careers.
Sample Indicators	Identify personal interests and aptitudes.
	Identify job requirements and characteristics of selected careers. Compare personal interests and aptitudes with job requirements and characteristics of
	career selected. Modify career goals based on results of personal interests and aptitudes with career
	requirements and characteristics.
	TECHNICAL SKILLS: Use the technical knowledge and skills required to
Cluster Topic	pursue the targeted careers for all pathways in the career cluster, including
ARC10	knowledge of design, operation, and maintenance of technological systems critical to the career cluster.
ARC10.01	Demonstrate the use of technical knowledge and skills that relate
	to pathways in this cluster to allow for mobility among numerous
	career options within the family of related occupations.
ARC10.01.01	State how various pathways within the cluster work together to generate
	productions, media, and other activities.
Sample Indicators	Identify work activities associated with a variety of the cluster pathways required for a theater production, film, television broadcast, or arts event.
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	Generate a production, media, or other event, and identify the interrelated activities and skill requirements associated with various pathways in this cluster.
ARC10.01.02	Identify pathways with common knowledge and skills that provide a worker
	with the potential for mobility. Compare the pathways for common knowledge and skills, and produce a crosswalk of
Sample Indicators	related career potential.
	Identify the pathways with the most discrete knowledge and skills, and compare the potential for career crosswalks.
ARC10.02	Summarize knowledge of the systems within various pathways
	contained in the cluster to keep abreast of new technological
	advancements and tools important to work in this industry.
ARC10.02.01	Analyze the technological systems that are apparent within the various pathways in this cluster.
	Compare the organizational structures of businesses in each of the pathways in this
Sample Indicators	cluster.
	Identify the technological systems and their effects on the pathways in this cluster.



ARC10.02.02Predict and highlight technological advancements for several pathways to illustrate the<br/>effect on work in careers in this cluster.ARC10.02.02Research the impact of potential new technology advancements related to<br/>this cluster in the future.<br/>Develop a research paper, media production, or other event to demonstrate the impact<br/>of technology on careers in this cluster for the future.<br/>Evaluate the business opportunities in this cluster and identify how these will be<br/>impacted by technological advancements and systems.<br/>Identify the technological changes in the past five years that have affected the skill<br/>requirements for workers in this cluster.

# **D. PATHWAY KNOWLEDGE AND SKILLS**

The following knowledge and skill statements apply to all careers in the Visual Arts Pathway.

A. Foundational Academic Expectations B. Essential Knowledge and Skills

C. Cluster (Foundation) Knowledge and Skills

D. Pathway Knowledge and Skills

Pathway Topic ARPF01	VISUAL ARTS
ARPF01.01	Research the scope of career opportunities and qualifications in the Visual Arts Pathway to build an understanding of careers
	opportunities and options.
ARPF01.01.01	Examine the numerous career paths within visual arts to discover personal preferences.
Sample Indicators	Explore the careers of artists who create visual arts—fine art, commercial art, graphic art, public art, environmental art, etc.
	Explore careers of visual arts designers—interior designers, architects, fashion designers, textile artists, glass and ceramics artists, photo-journalists, etc.
	Explore the careers of those who manage, exhibit, and sell visual art works.
	Explore the careers of art curators, collectors, evaluators, and critics.
	Explore careers in art education—teachers, administrators, staff in museums, galleries, schools, and arts organizations; authors, illustrators, photographers, etc. Identify the preferred career opportunities.
ARPF01.01.02	Identify required knowledge and skills, education opportunities, and lifestyles associated with different levels of employment in visual arts careers and related career fields.
Sample Indicators	Detail job description, qualifications, and requirements for several careers of interest. Match interests and abilities to career preferences.
ARPF01.01.03	Compare the advantages and disadvantages of working independently and of working for others.
Sample Indicators	Review the knowledge and skills necessary to create, maintain, and promote a career as a visual artist. Research the knowledge and skills involved in owning an art-related business.



	Research the qualifications and skills necessary to entry-level, skilled level, and supervisory level jobs in arts facilities, schools, organizations, and businesses. Research the art market, evaluating works, formulating prices, writing contracts, purchasing and insuring works. Conclude which type of employment provides the best working conditions to suit
ARPF01.01.04	personal preferences, characteristics, and values. Communicate with others the purpose of artwork, artists' intentions and the way the process and materials used in visual arts help to achieve them.
Sample Indicators	
	Articulate the purposes of several pieces of artwork in different media.
	Describe how the choice of materials and medium affect communication of a message.
	Compare artworks communicating a variety of artists' intentions including aesthetic appeal, functional design, self-expression, exploration of materials, documentation, etc.
ARPF01.02	Research the history and evolution of visual arts and their role
	within society to demonstrate a broad understanding of themes
	and trends in the pathway.
ARPF01.02.01	Compare the changing purposes served by visual arts throughout history.
Sample Indicators	Identify the purposes of visual arts historically, by examining works from various time periods.
·	Compare examples of artwork from various periods that serve communal, social, religious, or political functions.
	Compare examples of artwork that document events and communicate information or ideas with those that arouse emotion by expressing feelings, experiences, or values.
ARPF01.02.02	Analyze the opportunities for communication through the visual arts. Describe contemporary and historical social issues and how they are communicated
Sample Indicators	through content, form, and function in the visual arts. Describe contemporary and historical arts issues and how they are communicated through the visual arts.
	Identify how works of visual artists communicate the ideas of their culture and religion.
	Analyze the use of symbols in the visual arts of diverse cultures.
ARPF01.02.03	Evaluate works of art using critical thinking skills.
Sample Indicators	Describe various approaches for evaluating visual arts from historical, cultural, and content viewpoints.
	Examine the evaluative process in terms of ethics, aesthetics, and social context. Describe ways to build aesthetic awareness and appreciation of art in a specific audience.
	Define interpretation and how to develop and support ideas. Develop analysis of art works derived from the descriptive elements, including form, medium, style, and subject matter.
	Relate the descriptive elements and analysis to current, historical, social, and cultural contexts.
ARPF01.02.04	Present written and oral evaluations of visual art works.
Sample Indicators	Apply a critical method of evaluation to a work of art, resulting in a written report.



	Form interpretations through analysis of the structural elements, subject matter, and contextual data regarding a work of art.
	Communicate an oral or written defense for judgment of an artwork.
	Assess the value and purpose of criticism in terms of author and audience, including aesthetic, social, cultural, and historical contexts.
ARPF01.02.05	Defend written and oral evaluations of visual art works.
ARPF01.02.06	Analyze the development of tools and technologies employed in the visual
	arts.
Sample Indicators	Compare current visual arts technologies with those of 50 years ago.
ARPF01.02.07	Explain the affect of tools and technologies on the evolution of the visual arts.
ARPF01.03	Analyze elements and principles of the visual arts and what they
	communicate to demonstrate an understanding of this art form as
	a means to express ideas.
ARPF01.03.01	Analyze the elements and principles of art applied to visual art forms.
Sample Indicators	Identify art elements, including line, color, shape, and texture in various media.
Campio malcatoro	Identify use of primary, secondary, and complementary colors in various media.
	Define tint, shade, hue, and value in relation to color theory.
	Identify standard geometric shapes used in construction and design layout.
	Compare samples of work that use contrast, unity, and emphasis.
ARPF01.03.02	Analyze the communicative effects of art elements.
	Identify the effects communicated by various types of line, including straight, curved,
Sample Indicators	horizontal, vertical, and diagonal.
	Identify messages or meanings that colors communicate in various cultures.
	Compare asymmetrical and symmetrical images communicating balance.
	Compare repetition and pattern in fabric and other applications that communicate rhythm.
	Examine use of contrasting or unusual proportion to communicate ideas in various
	artworks.
ARPF01.04	Analyze and create two- and three-dimensional art forms from
	various media in the visual arts to demonstrate readiness for a
	career in the visual arts.
ARPF01.04.01	Analyze art elements and principles of two-dimensional works of visual art
	in various media, including drawing, print making, and computer software.
	Apply elements of art, including line, color, shape, and texture to create art forms in
Sample Indicators	
	Demonstrate anatomical figure drawing.
	Demonstrate drawing in one-point, two-point, and multi-point perspective. Create a work of art by applying color using pencils, markers, airbrush, dry media, water-
	based media, oil-based media, or computer software.
	Create work that demonstrates shape, volume, depth, and dimension.
	Demonstrate techniques that create actual and implied texture.
	Practice printmaking in various media.
	Prepare print surface and print medium.
	Demonstrate design principles in developing a project such as a brochure, logo, label, or textile design.



ARPF01.04.02	Apply art elements and principles to photographic works of visual art in both
	traditional and digital photographic media.
Sample Indicators	Compare photographic media from traditional and digital processes.
	Produce a photograph using a camera with film, such as a 35mm SLR.
	Comprehend the processes used to develop photographic film, both color and black and white.
	Demonstrate the use of all darkroom equipment and processes.
	Identify paper characteristics in finished prints, and procedures for mounting, matting, and framing.
	Exhibit knowledge of photo imaging using a digital camera.
	Produce a variety of digital images using computer software.
ARPF01.04.03	Analyze multimedia applications of software/hardware for the purposes of
	visual communications.
	Examine digital animation tools, capabilities, and interface elements, such as those in
Sample Indicators	Adobe After Effects.
	Create and import artwork and place on timeline to produce two-dimensional animations.
	Export animations as animated GIF files and include in a web page.
	Exhibit knowledge of graphic design and related software.
	Apply elements and principles of art to use of computer software.
	Create examples of computer graphics in commercial applications.
ARPF01.04.04	Analyze art elements and principles of three-dimensional forms of visual art in various media.
	Apply elements of art, including line, color, shape, and texture to create three-
Sample Indicators	dimensional art forms in various media.
	Discuss the use of symmetry or asymmetry, and geometric shape in the construction of sculpture.
	Demonstrate techniques that produce various textures in clay, wax, wood, and metal.
	Assess the characteristics of textiles as a medium, including design, construction, use, maintenance, and care of textile products.
	Analyze the use of art elements and principles in architecture, interior design, and environmental art.
	Assess the purposes of public art and what it communicates.