

Arts and Communication

Career Field Technical Content Standards Document



Revised October 6, 2010

2007

with
Academic Content Standards in
English Language Arts, Mathematics, Science and Social Studies

Ohio | Board of Regents
Department of Education

Stark County College Tech Prep Consortium

The Stark County College Tech Prep consortium is comprised of representatives from local business and industry and the following educational institutions:

<i>Alliance City Schools</i>	<i>Minerva Local Schools</i>
<i>Brown Local Schools</i>	<i>North Canton City Schools</i>
<i>Canton City Schools</i>	<i>Northwest Local Schools</i>
<i>Canton Local Schools</i>	<i>Osnaburg Local Schools</i>
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<i>Jackson Local Schools</i>	<i>Plain Local Schools</i>
<i>Lake Local Schools</i>	<i>Sandy Valley Local Schools</i>
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<i>Marlington Local Schools</i>	<i>Stark State College of Technology</i>
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October 6, 2010**

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Foreword

The *Arts and Communication Career Field Technical Content Standards* are the curricular framework for career-technical education programs in arts and communication. This document reflects the career field framework outlined in Ohio Administrative Code 3301-61-03 (Criteria for Secondary Workforce Development Programs).

This document represents a collaborative effort of the following professional partners: the Ohio Department of Education's Office of Career-Technical Education, the College Tech Prep Curriculum Service Center at the University of Toledo and the Ohio Resource Center at The Ohio State University. Secondary and postsecondary educators, along with business professionals, also participated in the development of the technical content standards.

The *Arts and Communication Career Field Technical Content Standards* combine business standards (reflecting science, mathematics, English language arts and technology), academic content standards (English language arts, mathematics, science and social studies) and the business process framework to develop technical literacy in arts and communication. The Arts and Communication Career Field includes occupations that focus on journalism, broadcasting, graphics, performing arts and visual arts technologies. The Arts and Communication Career Field is comprised of three pathways leading to technically-based careers in:

- Media Arts;
- Performing Arts; and
- Visual Design and Imaging.

This document delineates competencies that outline the knowledge and skills needed for career success in the above three pathways. It includes a) core competencies that span the Arts and Communication Career Field addressing critical workplace skills, including technical skills; business processes; legal and ethical aspects; health and safety; and b) pathway competencies that describe specific occupational knowledge and skills.

In addition, benchmarks from the Ohio *English Language Arts Academic Content Standards*, the *Mathematics Academic Content Standards*, *Science Academic Content Standards* and the *Social Studies Academic Content Standards* have been embedded, outlining the language arts, mathematics, science and social studies knowledge and skills associated with specific technical competencies.

The Arts and Communication document seeks to provide the basis for educational programming that will foster the development of what Doug Bush, vice president and chief information officer, Intel Corporation, refers to as the "T-shaped" employee. The T-shaped employee combines broad knowledge, insight and understanding of business processes, academic attainment, and workplace readiness (the crossbar of the "T") with depth of knowledge and expertise in a career specialty (the post of the "T"). The T-shaped employee is needed to ensure that Ohio's arts and communications workforce of tomorrow is competitive in a global environment that requires specialized skills in a broader context aimed at the innovation of new products and services in an ever-changing economy.

This document forms the basis for the development of an integrated delivery system that provides opportunities for new and challenging programs and courses. It is hoped that the document will enhance and expand career-technical education and postsecondary degree programs in arts and communication and related fields.

The document is available on the Internet by typing “career field initiative” in the search box at www.education.ohio.gov.

Kathy Shibley
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Document created, 4.07

Acknowledgements

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Further acknowledgement is due to:

- David Burns, Executive Director, Secondary Education and Workforce Development, Ohio Department of Education;
- Kathy Shibley, Director, Office of Career-Technical Education, Ohio Department of Education;
- Rick Mangini, Associate Director, Office of Career-Technical Education, Ohio Department of Education; and
- Ike Kershaw, Assistant Director, Office of Career-Technical Education, Ohio Department of Education.

The individuals listed above provided vision and implementation support for the *Arts and Communication Career Field Technical Content Standards* and Ohio's arts and communication educational programs.

Also, special thanks are due to the following professional partners for this project:

- James Piper, Director, College Tech Prep Curriculum Services, University of Toledo;
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The people listed above contributed significant research, subject matter, writing and facilitation expertise to the development of the *Arts and Communication Career Field Technical Content Standards* document.

Development of Arts and Communication Career Field

The process for the development of the *Arts and Communication Career Field Technical Content Standards* began in October 2005 with the convening of a futuring panel and culminated in December 2006 with the work of a panel of business representatives and educators focusing on academic correlation. Over the course of 2005-06, numerous business representatives as well as secondary and postsecondary educators from across the state of Ohio took part in the formal development process. The following summarizes the various stages of the development process.

Futuring Panel

October 13, 2005

The Arts and Communication Futuring Panel brought together key business representatives from across the state to advise the Ohio Department of Education on future trends impacting the Arts and Communication Career Field and to suggest ways in which those trends could be incorporated into an *Arts and Communication Career Field Technical Content Standards* document.

Writing Panels

December – January 2006

Based on guidance provided by the futuring panel, writing panels met at various locations across the state, where they reviewed the career field, pathways and specializations and created a framework to develop standards.

Business Review Panel

Friday, April 21, 2006

A diverse group of Ohio arts and communication representatives participated on this panel. Drawn from various sectors and regions of the state, the panel members identified what arts and communication employees should know and be able to do in the arts and communication pathways. The panel built upon work outlined by the futuring and writing panels, identifying essential and recommended knowledge and skills.

Educator Review Panel

Thursday, May 11, 2006

This panel was composed of representatives from secondary and postsecondary institutions across Ohio. The panels determined *when* in the educational process (e.g., high school or college) competencies should be addressed and to *what depth*. In addition, the educator panel was asked to note questions on decisions made by the business review panel and formulate suggestions for additions, deletions and editorial changes to the draft document.

Stakeholder Review Panel

Wednesday, June 7, 2006

This panel brought together representatives from the business and educator review panels to address issues raised by educators in the May meeting. The stakeholder panel also reviewed the document to ensure that it provides a cohesive and deliverable set of competencies for arts and communication professionals at both secondary and postsecondary exit points. The panel provided a forum to ensure that the final document facilitates the seamless education of students interested in pursuing a career in arts and communications.

Academic Review Panel

Thursday and Friday, December 14-15, 2006

The academic review panel brought together business representatives, secondary and postsecondary technical educators with academic educators to identify benchmarks from the *Ohio Academic Content Standards for English Language Arts, Mathematics, Science and Social Studies* that are embedded within the technical competencies. This incorporation of academic content standards with career field technical content standards provides an opportunity for instructional integration of content, helping to contextualize learning for students and providing the basis for collaboration across disciplines.

Arts and Communication Career Field Technical Content Standards
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Philosophy and Principles for Implementation

Ohio Career Field Initiative

The overarching framework for Ohio career-technical education is outlined in the Ohio Revised Code and subsequent administrative rules, which specify career-technical programming based on 16 career fields. To view the full text of Administrative Rule 3301-61-03 (Criteria for Secondary Workforce Development Programs), go to: www.education.ohio.gov and type “CTE Administrative Rules Update” in the search box. These fields provide the framework for an Ohio career field initiative that seeks to foster the educational shift needed to respond to the needs of a rapidly changing global environment.

A career field is a “grouping of occupations and broad industries based on commonalities” (see www.careerclusters.org). Career fields are the basis for developing both broad and specialized technical content standards that serve as a framework for curriculum, instruction, assessment and program design, addressing the needs of an entire industry and business sector. Ohio’s 16 career fields align with national efforts to broaden career-technical education, integrate career-technical with academic study and reflect the workforce needs of today and tomorrow. For today’s students to be adequately prepared for tomorrow’s workforce, they must have an education that:

- **incorporates a broad, long-term conception of work in combination with the depth of specialization skills;**
Employees need a comprehensive understanding beyond a single occupational area. Occupationally focused programming needs to be provided in a larger context, so students can generalize learning, make connections between education and work, and adapt to changes in their careers. Workplace knowledge and skills are needed to prepare employees for collaborating and problem solving while contributing to the broader business process.
- **emphasizes the acquisition of strong academic knowledge and skills; and**
Academic skills provide the foundation for career success. The integration of academic content standards with career field technical content standards helps to contextualize learning for students, making mathematics, science and English language arts relevant to students as a means to an important end—success at work and in life.
- **facilitates high-school-to-postsecondary transitions.**
A lifetime of change means a lifetime of learning, including postsecondary education. Students need knowledge and skills for success in a variety of postsecondary options, including apprenticeships, industry credentialing through adult education, two- and four-year college degree programs, and graduate school.

Ohio Career Field Technical Content Standards

Career field technical content standards outline the knowledge and skills needed for success within a career field, multiple pathways and in some cases, areas of specialization. Validated by Ohio business and industry representatives in conjunction with Ohio educators, these standards form the basis for developing educational programming in Ohio secondary and postsecondary schools. The standards also serve as the framework for developing strong career pathways that connect secondary, adult and postsecondary education systems with the workplace.

While mirroring the diverse nature of each career field, all career field technical content standards documents will delineate competencies that outline the knowledge and skills that span the career field (core competencies), as well as those that relate to specific career field pathways (pathway competencies) and, in some cases, career field specialization (specialization competencies).

Additionally, academic benchmarks from Ohio's academic content standards for English Language Arts, mathematics, science and social studies are correlated with the career field technical content standards. The embedded benchmarks have been determined by business representatives and academic and technical educators from secondary and postsecondary institutions to be strongly related to specific knowledge and skills statements or competencies for the given career field.

Key features of Ohio Career Field Technical Content Standards include:

1. Broad as well as specialized technical competencies;
2. Embedded benchmarks for the Mathematics, Science and English Language Arts Academic Content Standards; and
3. Workplace readiness competencies (communications; safety, health and environment; problem solving and critical thinking; leadership, management and teamwork; information technology applications; ethics and legal responsibility; business processes; and career development and employability).

Career Pathways

A key component of the Ohio Career Field Initiative is a career pathway, which is a series of academic and technical career-focused course work and other learning experiences leading to a career specialty and to employment in a career field. Pathways facilitate a seamless transition from high school to postsecondary education (including apprenticeships, adult education, two- and four-year colleges, and graduate school) and from postsecondary education to the workplace.

To effectively facilitate the transition from secondary to postsecondary education and a career, high school career pathways should encompass:

1. Challenging technical course work in a chosen career field based on career field technical content standards;
2. Rigorous academics that meet Ohio's academic content standards and grade-level expectations;
3. Electives that relate to career objectives;
4. Instructional enhancements such as experiential and authentic learning opportunities (e.g. work-based learning, mentorships, internships) and career-technical student organization participation;
5. Opportunities (when appropriate) for program and student certification and licensure;
6. Preparation for transition to further study that includes college readiness and opportunities to earn college credit while in high school;
7. Preparation for transition to employment with advancement opportunities; and
8. Performance targets that include high school academic and technical testing/exit and postsecondary entry/placement requirements

For additional information on the Career Field Initiative, including Ohio Career Field Technical Content Standards and Career Pathways, go to www.education.ohio.gov and type "Career Field Initiative" in the search box.

Structure and Format

The *Arts and Communications Career Field Technical Content Standards* document is composed of a series of units, competencies and descriptors:

- *Units* are groupings of competencies sharing a common subject or theme;
- *Competencies* are specific knowledge and skill statements that outline the knowledge and skills needed for career success; and
- *Descriptors* follow each competency and serve to define what is meant by the related competency.

Also included in the document are selected benchmarks from the Ohio's Academic Content Standards for English Language Arts, Mathematics, Science and Social Studies, which correlate with specific technical competencies. This incorporation of academic content standards with career field technical content standards provides an opportunity for instructional integration of content, helping to contextualize learning for students and providing the basis for collaboration across disciplines.

Competencies that are common across the career field and/or are critical for success in the Arts and Communication Career Field are referred to as core competencies. These core competencies represent the sustaining characteristics of a career field and facilitate career readiness and long-term career success by:

- Providing the basis for effective collaboration, teamwork and communication across pathways;
- Laying the groundwork for successful transfer of knowledge and skills across pathways, thereby facilitating horizontal and vertical career success; and
- Equipping students and workers with the skills needed to transition to new and emerging careers throughout a working lifetime.

In the Arts and Communication document, core competencies include those focusing on:

- Career Exploration and Development;
- Personal Employability Traits;
- Business Processes;
- Legal and Ethical Aspects;
- Health and Safety; and
- Writing and Communications.

Pathway competencies are specific to one or several pathways within a larger career field. They differentiate the academic, technical and workplace knowledge and skills that are more specific than those that are relevant to the entire career field, yet they prepare students for multiple occupational specialties.

The *Arts and Communication Career Field Technical Content Standards* are built around three pathways:

- Media Arts;
- Performing Arts; and
- Visual Design and Imaging.

Core and pathway competencies form the basis for developing secondary and postsecondary programs, facilitating transition from one educational level to the next and to the workplace.

In the *Arts and Communication Career Field Technical Content Standards*, business representatives have designated competencies as *essential* or *recommended* within the pathway. Educators have designated *when* (by the end of the 12th grade and/or associate degree or apprenticeship) and *to what depth* (introduced, reinforced, proficient) competencies should be addressed. Definitions used to make these designations appear on the following page, followed by a sample competency illustrating the layout of an actual competency.

Definitions and Codes

Determined by Business, Industry and Labor (BIL)

Essential (E) Competency:

E = Competency is needed to ensure minimal level of employability. Entry-level employees (defined as graduates of an associate degree program) should be able to perform this competency for career success.

Recommended (R) Competency:

R = Competency should be included but is not essential for minimal level of employability or is related only to a subspecialty within a pathway.

Determined by Educator (EDU) Panel

Grade Level:

12	=	by the end of grade 12
AD	=	by the end of the associate degree program

Depth:

I	=	Introduce competency
R	=	Reinforce or add depth after introducing a competency OR after proficiency
P	=	Proficient or achievement of the competency; ability to apply knowledge of and/or perform the competency

Determined by Academic Review Panel

Correlated English Language Arts Academic Content Benchmarks

Benchmarks drawn from the *Ohio Academic Content Standards for English Language Arts* that have been determined to be embedded in corresponding technical competency

Correlated Mathematics Academic Content Benchmarks

Benchmarks drawn from the *Ohio Academic Content Standards for Mathematics* that have been determined to be embedded in the corresponding technical competency

Correlated Science Academic Content Benchmarks

Benchmarks drawn from the *Ohio Academic Content Standards for Science* that have been determined to be embedded in the corresponding technical competency

Correlated Social Studies Academic Content Benchmarks

Benchmarks drawn from the *Ohio Academic Content Standards for Social Studies* that have been determined to be embedded in the corresponding technical competency

Sample Competency

Unit 16: Writing and Communications

	Business, Industry and Labor	Secondary and Postsecondary Educator	Competency should be proficient by the end of 12 th grade and reinforced during the associate degree.
Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 16.2: Apply active listening skills to obtain and clarify information provided in oral communications.

Unit number

Descriptors:

- 16.2.1 Identify and apply active listening techniques one-to-one and in team/group meetings.
- 16.2.2 Interpret verbal cues and behaviors to enhance communication.
- 16.2.3 Interpret nonverbal cues and behaviors to enhance communication.
- 16.2.4 Paraphrase and repeat information to confirm understanding.
- 16.2.5 Record and summarize information in written notes.
- 16.2.6 Generate questions to seek or confirm understanding.

Competency number

Descriptor number

Correlated English Language Arts Academic Content Benchmark

- *Use a variety of strategies to enhance listening comprehension.* (Communication: Oral and Visual A, 8-10; Communication: Oral and Visual A, 11-12)

Benchmark from the
*English Language Arts
Academic Content
Standards*

Arts and Communication Definitions

Arts and Communication Career Field

Individuals working in this career field are visual educators, translators and conceptors often integrating a variety of expressive forms and crossing many disciplines.

Visual Design and Imaging Pathway

These artists, designers and printers work in two-dimensional and three-dimensional design and distribution and production environments, time-based and still media, analog and digital for commercial and noncommercial purposes.

Performing Arts Pathway

These artists and designers are involved in the performance, artistic and administrative production, and technology of music, dance and theatre.

Media Arts Pathway

Individuals working in media arts conceptualize, research, develop, record, edit and distribute multi-media content.

Arts and Communication Units

Page	Unit #	Unit
1	1	Career Exploration and Development
4	2	Personal Employability Traits
7	3	Business Processes
15	4	Health and Safety
18	5	Legal and Ethical Aspects
20	6	Visual Design
25	7	Digital Media Design
27	8	Layout
29	9	Prepress and Image Generation
31	10	Imaging Technologies
33	11	Screen Printing
34	12	Post Image Transfer
35	13	Acquire Moving or Still Images
40	14	Audio Production
42	15	Audio and Visual Editing
43	16	Writing and Communication
49	17	Influences on the Performing Arts
52	18	Movement and Dance
54	19	Music
56	20	Theatre
58	21	Technical Applications to Production or Design
60	22	Preparation for Performance

Arts and Communication Overview Chart

BIL: Determined by Industry, Industry and Labor (BIL) Panel

Essential Competency: E = Competency is needed to ensure minimal level of employability. Entry-level employees should be able to perform this competency without supervision.

Recommended Competency: R = Competency should be included but is not essential for minimal level of employability.

Determined by Educator (EDU) Panel

Grade Level:

12	=	by the end of grade 12
AD	=	by the end of the associate degree program

Depth:

I	=	Introduce competency
R	=	Reinforce, or add depth after introducing a competency, OR after proficiency
P	=	Proficient or achievement of the competency, ability to apply knowledge of and/or perform the competency

Competency	Performing Arts			Visual Design and Imaging			Media Arts		
	BIL	12	AD	BIL	12	AD	BIL	12	AD
Unit 1: Career Exploration and Development									
1.1 Explore career pathways in arts and communication.	E	P	R	E	I	P	E	P	R
1.2 Compare and contrast the performance skills of individuals in the media, visual and performing arts.	E	P	R	E	I	P	E	P	R
1.3 Examine the history, trends and current issues related to visual design and imaging, media and performing arts.	E	I	P	R	I	R	E	I	P
1.4 Explain the impact of government influence and public opinion on the arts.	E	I	P	R	I	R	E	I	P
Unit 2: Personal Employability Traits									
2.1 Demonstrate the ability to seek and apply for employment.	E	P	R	E	P	R	E	P	R
2.2 Demonstrate positive work behaviors and personal qualities.	E	P	R	E	P	R	E	P	R
2.3 Apply problem solving and critical thinking techniques to workplace situations.	E	P	R	E	I	P	E	P	R
2.4 Demonstrate the ability to lead or work on a team.	E	P	R	E	I	P	E	R	I

Competency	Performing Arts			Visual Design and Imaging			Media Arts		
	BIL	12	AD	BIL	12	AD	BIL	12	AD
Unit 3: Business Processes									
3.1 Explain basic economic principles.	E	I	P	E	I	P	E	I	P
3.2 Design a business plan.									
3.3 Examine written documents to direct the work.	R	I	R	E	I	P	R	I	I
3.4 Employ an inventory control system.	N/A			E	E	P	R	I	P
3.5 Apply marketing techniques.	E	I	P	E	I	P	R	I	P
3.6 Develop promotional materials.	E	I	P	E	I	P	E	I	P
3.7 Demonstrate customer service and sales techniques.	R	I	R	E	I	P	E	I	P
3.8 Analyze and evaluate business finances.									
3.9 Explain the major measures used to manage and improve performance.	R	I	R	E	I	P	R	I	I
3.10 Demonstrate the efficient use of technology.	E	P	R	E	I	P	E	P	R
Unit 4: Health and Safety									
4.1 Maintain general safety in accordance with established regulations, health standards and best practices.	E	P	R	E	P	R	E	P	R
4.2 Demonstrate ergonomic practices associated with the arts and communications industry.	E	P	R	E	I	P	E	P	R
4.3 Identify state, federal and local worker safety, health and environmental regulations in relation to arts and communications.	R	I	R	R	I	I	R	I	I
4.4 Handle hazardous materials in accordance with government regulations and health standards.	R	I	R	E	P	R	R	I	I
Unit 5: Legal and Ethical Aspects									
5.1 Explain the laws and regulations governing information gathering and media production.	E	I	P	E	P	R	E	P	R
5.2 Identify the influence of media, arts and performances on society.	E	I	P	E	I	P	E	P	R
5.3 Describe government regulations and codes.									
Unit 6: Visual Design									
6.1 Analyze the elements and principles of visual art forms.	R	I	R	E	I	P	E	I	P
6.2 Analyze the communicative effects of art elements.	R	I	R	E	I	P	E	I	P
6.3 Critique various elements of design.	R	I	R	E	I	P	E	I	P
6.4 Explain color theory and the use of color processes.	N/A			E	I	P	R	I	I
6.5 Assess art elements and principles of two-dimensional forms.	N/A			E	I	P	R	I	I
6.6 Analyze art elements and principles of three-dimensional forms.	R	I	R	E	I	P	R	I	I
6.7 Demonstrate basic art studio skills.	N/A			E	I	P	N/A		
6.8 Analyze web page parameters and usage.	N/A			E	I	P	E	I	P

Competency	Performing Arts			Visual Design and Imaging			Media Arts			
	BIL	12	AD	BIL	12	AD	BIL	12	AD	
Unit 7: Digital Media Design										
7.1	Assess multimedia applications of software and hardware for visual communication purposes.	R	I	R	E	P	R	E	P	R
7.2	Examine and apply visual style guidelines and design layouts.	N/A			E	P	R	E	P	R
7.3	Examine interactive multimedia products.	R	I	R	E	I	P	E	P	P
7.4	Analyze the effects of interactive multimedia on graphic design.	N/A			E	I	P	E	P	P
Unit 8: Layout										
8.1	Create visual layouts.	N/A			E	P	R	E	I	P
8.2	Assess typographical elements.	N/A			E	P	R	E	I	P
8.3	Utilize desktop publishing systems to design layouts.	N/A			E	I	P	R	I	P
Unit 9: Prepress and Image Generation										
9.1	Demonstrate image generation operations.	N/A			E	P	R	R	I	P
9.2	Preflight files.	N/A			E	I	P	N/A		
9.3	Analyze image carrier generation.	N/A			E	I	P	N/A		
9.4	Analyze color proofs for prepress operations.	N/A			E	I	P	N/A		
Unit 10: Imaging Technologies										
10.1	Set up substrate and image control systems for conventional printing and digital printing.	N/A			E	I	P	N/A		
10.2	Create printed images according to the customer's signed proof.	N/A			E	I	P	N/A		
Unit 11: Screen Printing										
11.1	Examine screen printing operations.	N/A			R	I	R	N/A		
11.2	Print final product.	N/A			R	I	R	N/A		
Unit 12: Post Image Transfer										
12.1	Evaluate post image transfer finishing methods.	N/A			E	P	R	N/A		
12.2	Identify specifications for finishing techniques.	N/A			E	I	P	N/A		
Unit 13: Acquire Moving and Still Images										
13.1	Apply principles of design and composition.	N/A			E	I	P	E	P	R
13.2	Analyze lighting requirements.	N/A			R	I	P	E	I	P
13.3	Demonstrate scanning techniques and procedures.	N/A			E	P	R	R	I	P
13.4	Calibrate equipment.	N/A			E	I	P	E	I	P
13.5	Organize a video or photo shoot.	R	I	R	E	I	P	E	P	P
13.6	Explain the history and evolution of image acquisition.	N/A			E	I	R	E	P	R
13.7	Acquire images.	N/A			E	I	P	E	P	R
13.8	Demonstrate techniques specific to acquiring images with video/film.	N/A			E	I	P	E	P	R

Competency	Performing Arts			Visual Design and Imaging			Media Arts		
	BIL	12	AD	BIL	12	AD	BIL	12	AD
13.9 Demonstrate post-capture image manipulation techniques.	N/A			E	P	R	E	I	P
Unit 14: Audio Production									
14.1 Explain the science of sound.	R	I	R	N/A			E	P	R
14.2 Demonstrate the processes and principles of capturing and recording audio.	R	I	R	R	I	I	E	P	R
14.3 Apply principles of manipulating audio.	N/A			R	I	I	R	I	P
14.4 Enhance an audio track with sound effects.	R	I	R	N/A			R	I	P
14.5 Apply audio dynamics by reinforcing, mixing and equalizing sound.	R	I	R	N/A			R	I	P
Unit 15: Audio and Visual Editing									
15.1 Identify the functions and equipment for editing.	N/A			N/A			E	P	R
15.2 Edit an audio and video product.	N/A			N/A			E	P	R
Unit 16: Writing and Communication									
16.1 Deliver formal and informal presentations that demonstrate organization and delivery skill.	E	P	R	E	P	R	E	P	R
16.2 Apply active listening skills to obtain and clarify information provided in oral communications.	E	P	R	E	P	R	E	P	R
16.3 Write coherent and focused documents.	E	P	R	E	P	R	E	P	R
16.4 Use appropriate grammar and spelling.	E	P	R	E	P	R	E	P	R
16.5 Use visual imagery to support communication.	E	P	R	E	P	R	E	P	R
16.6 Match a product to the audience.	E	P	R	E	I	P	E	P	R
16.7 Obtain information to use in writing a fact based story.	N/A			N/A			E	P	R
16.8 Develop a fact based story.	N/A			N/A			E	I	P
16.9 Develop scripts/libretti for communication.	E	I	P	N/A			E	I	P
Unit 17: Influences on the Performing Arts									
17.1 Describe the characteristics of music, dance and theatre from past and present cultures.	E	I	P	N/A			N/A		
17.2 Describe the influences on music, dance and theatre.	E	I	P	N/A			N/A		
17.3 Explore interrelationships of the music, dance and theatre disciplines.	E	I	P	N/A			N/A		
17.4 Recognize the financial influences on the performing arts.	E	I	P	N/A			N/A		
17.5 Recognize the stylistic diversity among the performing arts genres.	E	I	P	N/A			N/A		
Unit 18: Movement and dance									
18.1 Analyze basic movement concepts in movement and dance.	E	P	R	N/A			N/A		
18.2 Demonstrate the use of space, time and energy through movement and dance.	E	P	R	N/A			N/A		

Competency	Performing Arts			Visual Design and Imaging			Media Arts		
	BIL	12	AD	BIL	12	AD	BIL	12	AD
18.3 Demonstrate choreographic principles, processes and structures.	E	I	P	N/A			N/A		
18.4 Apply techniques required for ensemble performances.	R	I	R	N/A			N/A		
Unit 19: Music									
19.1 Recognize the elements of music through listening.	E	P	R	N/A			R	I	I
19.2 Read musical symbols.	E	P	R	N/A			N/A		
19.3 Perform instrumental or vocal music.	E	P	R	N/A			N/A		
19.4 Arrange and compose music.	E	I	P	N/A			N/A		
Unit 20: Theatre									
20.1 Demonstrate the physical and vocal dimensions of character.	E	P	R	N/A			R	I	I
20.2 Create and sustain a variety of believable multidimensional characters.	E	P	R	N/A			R	I	I
20.3 Demonstrate the process of creating a theatrical/video/audio production.	E	P	R	N/A			E	I	P
Unit 21: Technical Applications to Production or Design									
21.1 Analyze and create wardrobe, hair and makeup, sets, light, sound and props.	E	I	P	N/A			R	I	I
21.2 Analyze technical requirements for a production.	E	P	R	N/A			R	I	I
21.3 Stage a production.	E	I	P	N/A			R	I	P
Unit 22: Performance Preparation									
22.1 Prepare for the physical and vocal demands of performance.	E	P	R	N/A			R	I	I
22.2 Identify psychological issues pertaining to performance.	E	I	P	N/A			R	I	I
22.3 Demonstrate practice and rehearsal habits and techniques.	E	P	R	N/A			E	P	R
22.4 Demonstrate effective audition skills.	E	P	R	N/A			E	I	P
22.5 Use observation to communicate and connect with the audience and fellow performers.	E	P	R	N/A			E	I	P

Unit 1: Career Exploration and Development

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 1.1: Explore career pathways in arts and communication.

Descriptors:

- 1.1.1 Explore specific arts and communications interests (e.g., shadowing, professional readings, community service, internship).
- 1.1.2 Identify education and licensing requirements needed for a career in arts and communications.
- 1.1.3 Identify the professional organizations and associations that directly affect a pathway of interest.

Correlated English Language Arts Academic Content Benchmarks

- *Apply reading comprehension strategies to understand grade-appropriate text.* (Reading Process A, 8-10; Reading Process A, 11-12)
- *Compile, organize and evaluate information, take notes and summarize findings.* (Research B, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Evaluate various means for citizens to take action on a particular issue.* (Citizenship Rights and Responsibilities A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 1.2: Compare and contrast the performance skills of individuals in the media, visual and performing arts.

Descriptors:

- 1.2.1 Identify the role and function of individuals in each pathway (technical and non-technical).
- 1.2.2 Identify the areas of specialization and related occupations.
- 1.2.3 Explore the types of work techniques, processes and procedures a typical individual in each pathway might be called on to perform.
- 1.2.4 Describe the education, training and certification required to work in each of the pathways.
- 1.2.5 Compare and contrast career lifestyles associated with different levels of employment.
- 1.2.6 Describe the interrelationships between creators, performers and technicians.
- 1.2.7 Describe the interrelationships between media, visual design and imaging and performing arts.

Correlated English Language Arts Academic Content Benchmarks

- *Formulate open-ended research questions suitable for investigation and adjust questions as necessary while research is conducted.* (Research A, 8-10)
- *Formulate open-ended research questions suitable for inquiry and investigation and adjust questions as necessary while research is conducted.* (Research A, 11-12)
- *Compile, organize and evaluate information, take notes and summarize findings.* (Research B, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Explain the use of a budget in making personal economic decisions and planning for the future.* (Economics E, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	R	I	R
Media Arts	E	I	P

Competency 1.3: Examine the history, trends and current issues related to visual design and imaging, media and performing arts.

Descriptors:

- 1.3.1 Trace the historical evolution and changing purposes of the arts.
- 1.3.2 Describe the impact of arts and communications on society.
- 1.3.3 Identify the current trends and issues impacting arts and communications.
- 1.3.4 Research history, politics, and policies related to the issues.
- 1.3.5 Determine the issues' effects on the industry.
- 1.3.6 Determine potential resolutions to the issues.

Correlated English Language Arts Academic Content Benchmarks

- *Formulate open-ended research questions suitable for investigation and adjust questions as necessary while research is conducted.* (Research A, 8-10)
- *Organize information from various resources and select appropriate sources to support central ideas, concepts and themes.* (Research C, 8-10)
- *Formulate open-ended research questions suitable for inquiry and investigation and adjust questions as necessary while research is conducted.* (Research A, 11-12)
- *Compile, organize and evaluate information, take notes and summarize findings.* (Research B, 11-12)

Correlated Social Studies Academic Content Benchmarks

- *Use historical interpretations to explain current issues.* (History B, 11-12)
- *Explain the role of diverse cultural institutions in shaping American society.* (People in Societies C, 11-12)
- *Critique data and information to determine the adequacy of support for conclusions.* (Social Studies Skills and Methods B, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	R	I	R
Media Arts	E	I	P

Competency 1.4: Explain the impact of government influence and public opinion on the arts.

Descriptors:

- 1.4.1 Cite examples of public opinion and/or cultural perspectives influencing a product, work of art or service.
- 1.4.2 Cite examples of how government funding influences a product, work of art or service.
- 1.4.3 Describe the evolution of cultural issues within a society that affect art forms and communication.
- 1.4.4 Describe how cultural issues influence government and its legislative actions toward the arts.

Correlated English Language Arts Academic Content Benchmarks

- *Formulate open-ended research questions suitable for investigation and adjust questions as necessary while research is conducted. (Research A, 8-10)*
- *Organize information from various resources and select appropriate sources to support central ideas, concepts and themes. (Research C, 8-10)*
- *Formulate open-ended research questions suitable for inquiry and investigation and adjust questions as necessary while research is conducted. (Research A, 11-12)*

Correlated Social Studies Academic Content Benchmarks

- *Explain the role of diverse cultural institutions in shaping American society. (People in Societies C, 11-12)*
- *Analyze the role of fiscal and regulatory policies in a mixed economy. (Economics D, 11-12)*
- *Evaluate, take and defend positions about issues concerning the alignment of the characteristics of American democracy with realities in the United States today. (Government A, 11-12)*

Unit 2: Personal Employability Traits

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 2.1: Demonstrate the ability to seek and apply for employment.

Descriptors:

- 2.1.1 Identify personal goals and objectives in concert with arts and communications.
- 2.1.2 Identify personal skill sets as they relate to arts and communications.
- 2.1.3 Research employers and the applicability of personal skill sets.
- 2.1.4 Maintain a resume, list of references and portfolio.
- 2.1.5 Compare and contrast employment opportunities.
- 2.1.6 Rehearse your interview/audition.
- 2.1.7 Interview/audition for employment.

Correlated English Language Arts Academic Content Benchmarks

- *Produce letters (e.g., business, letters to the editor, job applications) that follow the conventional style appropriate to the text and that include appropriate details and exclude extraneous details and inconsistencies. (Writing Applications C, 8-10)*
- *Produce functional documents that report, organize and convey information and ideas accurately, foresee readers' problems or misunderstandings and that include formatting techniques that are user friendly. (Writing Applications C, 11-12)*
- *Evaluate the usefulness and credibility of data and sources and synthesize information from multiple sources. (Research C, 11-12)*
- *Use a variety of strategies to enhance listening comprehension. (Communication: Oral and Visual A, 8-10; Communication: Oral and Visual A, 11-12)*
- *Select and use effective speaking strategies for a variety of audiences, situations and purposes. (Communication: Oral and Visual C, 11-12)*

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 2.2: Demonstrate positive work behaviors and personal qualities.

Descriptors:

- 2.2.1 Describe the importance of punctuality and attendance.
- 2.2.2 Demonstrate a positive work ethic (e.g., professionalism, passion, creativity, self-discipline, positive attitude and integrity, focus).
- 2.2.3 Describe common performance expectations for individuals.
- 2.2.4 Address diversity in relation to personnel issues.
- 2.2.5 Discuss the role that different values play in generating conflict.
- 2.2.6 Identify how the effects of substance abuse, mental health and disabilities impact conflict.

Correlated Social Studies Academic Content Benchmarks

- *Analyze how issues may be viewed differently by various cultural groups.* (People in Societies A, 11-12)
- *Work in groups to analyze an issue and make decisions.* (Social Studies Skills and Methods, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 2.3: Apply problem solving and critical thinking techniques to workplace situations.

Descriptors:

- 2.3.1 Define problem-solving methods.
- 2.3.2 Combine critical thinking and team-building skills to solve problems.
- 2.3.3 Apply the best solution to the problem.
- 2.3.4 Adjust plans/schedules to respond to unexpected events and conditions.
- 2.3.5 Evaluate the solution.

Correlated Mathematics Academic Content Benchmarks

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Science Academic Content Benchmark

- *Explain the ways in which the processes of technological design respond to the needs of society.* (Science and Technology A, 9-10)

Correlated Social Studies Academic Content Benchmark

- *Work in groups to analyze an issue and make decisions.* (Social Studies Skills and Methods D, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 2.4: Demonstrate the ability to lead or work on a team.

Descriptors:

- 2.4.1 Recognize the importance of teamwork and its impact.
- 2.4.2 Describe the interpersonal skills that contribute to positive leadership and teamwork.
- 2.4.3 Listen and speak effectively to contribute to group discussions and meetings.

- 2.4.4 Use motivational techniques to enhance performance in others.
- 2.4.5 Perform responsibly as a team member/leader.
- 2.4.6 Identify the basic psychological needs that motivate behavior (e.g., belonging, power, freedom).

Correlated English Language Arts Academic Content Benchmarks

- *Use a variety of strategies to enhance listening comprehension.* (Communication: Oral and Visual A, 8-10; Communication: Oral and Visual A, 11-12)
- *Select and use effective speaking strategies for a variety of audiences, situations, and purposes.* (Communication: Oral and Visual C, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Work in groups to analyze an issue and make decisions.* (Social Studies Skills and Methods D, 11-12)

Unit 3: Business Processes

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 3.1: Explain basic economic principles.

Descriptors:

- 3.1.1 Describe the essential nature of profitability and value.
- 3.1.2 Describe job costing with direct and indirect costs.
- 3.1.3 Explain basic economic concepts (e.g., supply, demand, price, cost, profit, value, cash flow).

Correlated Mathematics Academic Content Benchmarks

- Use algebraic representations, such as tables, graphs, expressions, functions and inequalities, to model and solve problem situations. (Patterns, Functions and Algebra D, 8-10)
- Apply mathematical knowledge and skills routinely in other content areas and practical situations. (Mathematical Processes B, 8-10)

Correlated Social Studies Academic Content Benchmark

- Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices. (Economics A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts			
Visual Design and Imaging			
Media Arts			

Competency 3.2: Design a business plan.

Descriptors:

- 3.2.1 Explain how work plans and budgets are used to allocate people and resources
- 3.2.2 Establish a mission statement.
- 3.2.3 Establish short- and long-term goals that impact organizational performance.
- 3.2.4 Identify types of businesses by their legal structures.
- 3.2.5 Identify organizational structures.
- 3.2.6 Identify and select the types and quantities of resources needed (e.g., capital, people, equipment, materials).
- 3.2.7 Create a plan that takes into account the aspects of scope, time, costs and specifications.
- 3.2.8 Describe the components of a business agreement.
- 3.2.9 Describe the components of a marketing plan.
- 3.2.10 Describe the components of a promotions plan.
- 3.2.11 Identify quality control points for the production.
- 3.2.12 Chart the process from pre-production through post-production.

Correlated English Language Arts Academic Content Benchmarks

- *Determine the usefulness of organizers and apply appropriate pre-writing tasks.* (Writing Processes B, 8-10)
- *Edit to improve sentence fluency, grammar and usage.* (Writing Processes D, 8-10)
- *Produce functional documents that report, organize and convey information and ideas accurately, foresee readers' problems or misunderstandings and that include formatting techniques that are user friendly.* (Writing Applications C, 11-12)
- *Evaluate the usefulness and credibility of data and sources.* (Research B, 8-10)

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Construct convincing arguments based on analysis of data and interpretation of graphs.* (Data Analysis and Probability F, 8-10)
- *Create and analyze tabular and graphical displays of data using appropriate tools, including spreadsheets and graphing calculators.* (Data Analysis and Probability A, 11-12)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices.* (Economics A, 11-12)
- *Identify factors which inhibit or spur economic growth and cause expansions or recessions.* (Economics B, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	R	I	I

Competency 3.3: Examine written documents to direct the work.

Descriptors:

- 3.3.1 Identify types of reports (e.g., quality assurance, shift turnover, schedules, preventive maintenance).
- 3.3.2 Interpret work orders, including change order requests.
- 3.3.3 Calculate job costs and prepare billing documents.
- 3.3.4 Apply concepts of tolerances and equivalency to specifications.
- 3.3.5 Describe the components of contract documents.

Correlated English Language Arts Academic Content Benchmarks

- *Demonstrate comprehension of print and electronic text by responding to questions (e.g., literal, inferential, evaluative and synthesizing).* (Reading Process B, 8-10; Reading Process B, 11-12)
- *Evaluate how features and characteristics make information accessible and usable and how structures help authors achieve their purposes.* (Reading Applications: Informational, Technical and Persuasive Text A, 8-10)

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices.* (Economics A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	E	P
Media Arts	R	I	P

Competency 3.4: Employ an inventory control system.

Descriptors:

- 3.4.1 Compare/contrast carrying an inventory versus a just-in-time (JIT) inventory system.
- 3.4.2 Describe procedures for accessing inventory.
- 3.4.3 Calculate inventory needs and describe ordering strategies.
- 3.4.4 Utilize technology to manage inventory.

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Create and analyze tabular and graphical displays of data using appropriate tools, including spreadsheets and graphing calculators.* (Data Analysis and Probability A, 11-12)
- *Connect statistical techniques to applications in workplace and consumer situations.* (Data Analysis and Probability D, 11-12)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	E	I	P
Media Arts	R	I	P

Competency 3.5: Apply marketing techniques.

Descriptors:

- 3.5.1 Differentiate between marketing, promotions and publicity.
- 3.5.2 Identify and evaluate methods of marketing products and services (e.g., Internet advertising, radio, television, print).
- 3.5.3 Identify and develop strategies for self-promotion and image enhancement.
- 3.5.4 Design and develop a professional portfolio and résumé.

- 3.5.5 Research products and service design(s).
- 3.5.6 Merchandise products and services.
- 3.5.7 Advertise products and services.
- 3.5.8 Conduct market research and analysis.
- 3.5.9 Explain the need for truthfulness in advertising.
- 3.5.10 Evaluate the impact of advertising and promotion on sales.

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)
- *Produce functional documents that report, organize and convey information and ideas accurately, foresee readers’ problems or misunderstandings and that include formatting techniques that are user friendly.* (Writing Applications C, 11-12)
- *Evaluate the usefulness and credibility of data and sources and synthesize information from multiple sources.* (Research C, 11-12)
- *Analyze the techniques used by speakers and media to influence an audience, and evaluate the effect this has on the credibility of a speaker or media message.* (Communication: Oral and Visual B, 8-10)

Correlated Mathematics Academic Content Benchmarks

- *Create and analyze tabular and graphical displays of data using appropriate tools, including spreadsheets and graphing calculators.* (Data Analysis and Probability A, 11-12)
- *Design and perform a statistical experiment, simulation or study; collect and interpret data; and use descriptive statistics to communicate and support predictions and conclusions.* (Data Analysis and Probability C, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 3.6: Develop promotional materials.

Descriptors:

- 3.6.1 Identify and develop strategies for self-promotion and image enhancement.
- 3.6.2 Identify the different types of pre- and post-promotional materials.
- 3.6.3 Identify effective promotional strategies based on target audience.
- 3.6.4 Utilize persuasive language and imagery.
- 3.6.5 Research supporting materials.
- 3.6.6 Research and utilize discipline-specific language.
- 3.6.7 Utilize appropriate technology.

Correlated English Language Arts Academic Content Benchmarks

- *Recognize the importance and function of figurative language.* (Acquisition of Vocabulary C, 8-10)
- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)

- *Identify examples of rhetorical devices and valid and invalid inferences, and explain how authors use these devices to achieve their purposes and reach their intended audiences. (Reading Applications: Informational, Technical and Persuasive Text B, 8-10)*
- *Use a range of strategies to elaborate and persuade when appropriate, including appeal to logic, use of personal anecdotes, examples, beliefs, expert opinions or cause-effect reasoning. (Writing Applications E, 11-12)*
- *Give persuasive presentations that structure ideas and arguments in a logical fashion, clarify and defend positions with relevant evidence and anticipate and address the audience’s concerns. (Communication: Oral and Visual D, 11-12)*

Correlated Mathematics Academic Content Benchmarks

- *Construct convincing arguments based on analysis of data and interpretation of graphs. (Data Analysis and Probability F, 8-10)*
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner. (Mathematical Processes H, 8-10)*
- *Assess the adequacy and reliability of information available to solve a problem. (Mathematical Processes C, 11-12)*

Correlated Social Studies Academic Content Benchmarks

- *Analyze how issues may be viewed differently by various cultural groups. (People in Societies A, 11-12)*

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 3.7: Demonstrate customer service and sales techniques.

Descriptors:

- 3.7.1 Identify internal and external customer needs.
- 3.7.2 Describe the relationship between meeting customer needs and profitability.
- 3.7.3 Build and develop customer relationships.
- 3.7.4 Identify key components to organize a sale.
- 3.7.5 Conduct sales presentation.
- 3.7.6 Develop sales goals and incentive programs.
- 3.7.7 Provide post-sale service.
- 3.7.8 Handle customer complaints.
- 3.7.9 Prospect new customers.

Correlated English Language Arts Academic Content Benchmarks

- *Formulate open-ended research questions suitable for inquiry and investigation and adjust questions as necessary while research is conducted. (Research A, 11-12)*
- *Use a variety of strategies to enhance listening comprehension. (Communication: Oral and Visual A, 8-10; Communication: Oral and Visual A, 11-12)*
- *Give presentations using a variety of delivery methods, visual displays and technology. (Communication: Oral and Visual G, 8-10; Communication: Oral and Visual F, 11-12)*

- *Select and use effective speaking strategies for a variety of audiences, situations and purposes.* (Communication C, 11-12)
- *Give persuasive presentations that structure ideas and arguments in a logical fashion, clarify and defend positions with relevant evidence and anticipate and address the audience’s concerns.* (Communication: Oral and Visual D, 11-12)

Correlated Mathematics Academic Content Benchmarks

- *Construct convincing arguments based on analysis of data and interpretation of graphs.* (Data Analysis and Probability F, 8-10)
- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Analyze how issues may be viewed differently by various cultural groups.* (People in Societies A 11-12)
- *Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices.* (Economics A, 11-12)
- *Work in groups to analyze an issue and make decisions.* (Social Studies Skills and Methods D, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts			
Visual Design and Imaging			
Media Arts			

Competency 3.8: Analyze and evaluate business finances.

Descriptors:

- 3.8.1 Budget resources (e.g., capital, human, financial, time).
- 3.8.2 Manage assets for optimal utilization.
- 3.8.3 Manage risk of liabilities.
- 3.8.4 Evaluate credit uses and options.
- 3.8.5 Analyze investment options (e.g., buy, lease, finance, risk).
- 3.8.6 Interpret financial statements (e.g., balance sheet, profit/loss statement, cash flow statement).
- 3.8.7 Compare and contrast depreciation methods.
- 3.8.8 Determine cost of doing business.
- 3.8.9 Manage cash flow.

Correlated English Language Arts Academic Content Benchmark

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Translate information from one representation (words, table, graph or equation) to another representation of a relation or function.* (Patterns, Functions and Algebra C, 8-10)
- *Use algebraic representations, such as tables, graphs, expressions, functions and inequalities, to model and solve problem situations.* (Patterns, Functions and Algebra D, 8-10)
- *Construct convincing arguments based on analysis of data and interpretation of graphs.* (Data Analysis and Probability F, 8-10)
- *Create and analyze tabular and graphical displays of data using appropriate tools, including spreadsheets and graphing calculators.* (Data Analysis and Probability A, 11-12)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Social Studies Academic Content Benchmark

- *Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices.* (Economics A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	R	I	I

Competency 3.9: Explain the major measures used to manage and improve performance.

Descriptors:

- 3.9.1 Describe the measures for financial performance (e.g., profitability, cost reduction, asset utilization).
- 3.9.2 Describe the measures for market performance (e.g., customer, sales/service growth).
- 3.9.3 Describe the measures for service and internal operations performance (e.g., customer satisfaction, service quality, cycle time).
- 3.9.4 Describe performance measures related to health, safety and environmental compliance (e.g., audit findings, emissions, lost time accidents).
- 3.9.5 Benchmark performance against competitors and the general industry.

Correlated English Language Arts Academic Content Benchmark

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)

Correlated Mathematics Academic Content Benchmarks

- *Use algebraic representations, such as tables, graphs, expressions, functions and inequalities, to model and solve problem situations.* (Patterns, Functions and Algebra D, 8-10)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Social Studies Academic Content Benchmark

- *Identify factors which inhibit or spur economic growth and cause expansions or recessions.* (Economics B, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 3.10: Demonstrate the efficient use of technology.

Descriptors:

- 3.10.1 Operate office technology (e.g., email, fax, phones, personal information managers).
- 3.10.2 Create documents using a computer (e.g., text document, spreadsheet, database).
- 3.10.3 Access and conduct research using the Internet.
- 3.10.4 Access client/customer/product information from an electronic database.
- 3.10.5 Create documents using graphics and publishing software.
- 3.10.6 Perform calculations and analysis on data.

Correlated English Language Arts Academic Content Benchmarks

- *Apply reading comprehension strategies to understand grade-appropriate text.* (Reading Process A, 8-10; Reading Process A, 11-12)
- *Produce functional documents that report, organize and convey information and ideas accurately, foresee readers' problems or misunderstandings and that include formatting techniques that are user friendly.* (Writing Applications C, 11-12)

Correlated Mathematics Academic Content Benchmarks

- *Create and analyze tabular and graphical displays of data using appropriate tools, including spreadsheets and graphing calculators.* (Data Analysis and Probability A, 11-12)
- *Use descriptive statistics to analyze and summarize data, including measures of center, dispersion, correlation and variability.* (Data Analysis and Probability B, 11-12)

Unit 4: Health and Safety

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 4.1: Maintain general safety in accordance with established regulations, health standards and best practices.

Descriptors:

- 4.1.1 Identify and select personal protective equipment (e.g., hearing protection, respirators, eye protection).
- 4.1.2 Identify potential hazards (e.g., hair, jewelry, clothing) and corrective measures.
- 4.1.3 Select and implement procedures for protection from falls (e.g., harnesses, scaffolding, ladders, nets).
- 4.1.4 Identify dangerous electrical situations that necessitate disconnecting switches and using lock-out/tag-out procedures.
- 4.1.5 Identify signs and symbols that indicate the location of emergency exits and fixtures (e.g., flush showers, eye wash fountains, fire alarms).
- 4.1.6 Maintain work areas in accordance with standards for cleanliness and safety.
- 4.1.7 Describe how to operate fire extinguishers and match their use to classes of fires.
- 4.1.8 Describe symptoms of exposure to health-threatening environments (e.g., air contamination, noise, vibrations, harshness).
- 4.1.9 Identify the safety issues related to working “on location” (e.g., dangerous wildlife, terrain, environment, violence).

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)
- *Use appropriate self-monitoring strategies for comprehension.* (Reading Process C, 8-10; Reading Process C, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 4.2: Demonstrate ergonomic practices associated with the arts and communication industry.

Descriptors:

- 4.2.1 Demonstrate appropriate body mechanics to prevent repetitive motion and stress injuries.
- 4.2.2 Demonstrate appropriate body mechanics in lifting and moving heavy objects.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	R	E	P
Media Arts	R	E	P

Competency 4.3: Identify state, federal and local worker safety, health and environmental regulations in relation to arts and communications.

Descriptors:

- 4.3.1 Recognize critical safety issues and practices identified by the Occupational Safety and Health Act (OSHA).
- 4.3.2 Recognize Bureau of Workers' Compensation (BWC) regulations.
- 4.3.3 Recognize Environmental Protection Agency (EPA) regulations.

Correlated English Language Arts Academic Content Benchmarks

- *Use context clues and text structures to determine the meaning of new vocabulary.* (Acquisition of Vocabulary A, 8-10)
- *Use appropriate self-monitoring strategies for comprehension.* (Reading Process C, 8-10; Reading Process C, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Evaluate, take and defend positions about issues concerning the alignment of the characteristics of American democracy with realities in the United States today.* (Government A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	P	R
Media Arts	R	I	I

Competency 4.4: Handle hazardous materials in accordance with government regulations and health standards.

Descriptors:

- 4.4.1 Describe precautions required when using toxic or flammable materials.
- 4.4.2 Identify types of hazardous materials and storage procedures.
- 4.4.3 Interpret container label precautions.
- 4.4.4 Interpret material safety data sheets (MSDS).
- 4.4.5 Dispose of hazardous materials in accordance with government regulations.

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)
- *Demonstrate comprehension of print and electronic text by responding to questions (e.g., literal, inferential, evaluative and synthesizing).* (Reading Process B, 8-10; Reading Process B, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Evaluate, take and defend positions about issues concerning the alignment of the characteristics of American democracy with realities in the United States today. (Government A, 11-12)*

Unit 5: Legal and Ethical Aspects

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 5.1: Explain the laws and regulations governing information gathering and media production.

Descriptors:

- 5.1.1 Specify copyright laws designed to protect publications, performances and artistic creations.
- 5.1.2 Identify steps for securing permission to use copyrighted materials.
- 5.1.3 Explain how credit is given for use of copyrighted materials.
- 5.1.4 Define what original content is and when credit does not need to be given.
- 5.1.5 Identify consequences if formal permission is not secured.
- 5.1.6 Identify the process by which a creator obtains a copyright.
- 5.1.7 Identify components of the First Amendment, Federal Communications Commission (FCC) regulations, Freedom of Information Act and state statutes as they pertain to work in arts and communications.
- 5.1.8 Identify legal responsibilities covered under libel and privacy laws.

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)
- *Apply reading comprehension strategies to understand grade-appropriate text.* (Reading Process A, 8-10; Reading Process A, 11-12)

Correlated Social Studies Academic Content Benchmarks

- *Evaluate, take and defend positions about issues concerning the alignment of the characteristics of American democracy with realities in the United States today.* (Government A, 11-12)
- *Explain how the U. S. Constitution has evolved including its philosophical foundations, amendments, and court interpretations.* (Government B, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 5.2: Identify the influence of media, arts and performances on society.

Descriptors:

- 5.2.1 Describe the degree of influence the visual design and imaging, media and performing arts have on individuals and society.
- 5.2.2 Identify political and societal events and actions instigated by media, print and the performing arts.

- 5.2.3 Reference workplace behaviors to professional codes of ethics (e.g., Society of Professional Journalism).
- 5.2.4 Assess the implications of ethical and unethical behavior (e.g., plagiarism, confidentiality, use of anonymous sources).

Correlated English Language Arts Academic Content Benchmarks

- *Apply reading comprehension strategies to understand grade-appropriate text.* (Reading Process A, 8-10; Reading Process A, 11-12)
- *Organize information from various resources and select appropriate sources to support central ideas, concepts and themes.* (Research C, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Use historical interpretations to explain current events.* (History A, 11-12)
- *Explain the role of diverse cultural institutions in shaping American society.* (People in Societies C, 11-12)
- *Evaluate various means for citizens to take action on a particular issue.* (Citizenship Rights and Responsibilities A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts			
Visual Design and Imaging			
Media Arts			

Competency 5.3: Describe government regulations and codes.

Descriptors:

- 5.3.1 Identify the process for obtaining local, county and state permits for building structures, sets and communication regulations.
- 5.3.2 Identify legal responsibilities specified by labor, employment and tax laws.
- 5.3.3 Describe the interrelationships among local, state and national codes.

Correlated English Language Arts Academic Content Benchmark

- *Demonstrate comprehension of print and electronic text by responding to questions (e.g., literal, inferential, evaluative and synthesizing).* (Reading Process B, 8-10; Reading Process B, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Evaluate, take and defend positions about issues concerning the alignment of the characteristics of American democracy with realities in the United States today.* (Government A, 11-12)

Unit 6: Visual Design

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 6.1: Analyze the elements and principles of visual art forms.

Descriptors:

- 6.1.1 Apply critical thinking skills to evaluate works of art.
- 6.1.2 Identify art elements, including line, color, shape and texture in various media.
- 6.1.3 Identify use of primary, secondary and complementary colors in various media.
- 6.1.4 Define tint, shade, hue and value in relation to color theory.
- 6.1.5 Identify standard geometric shapes used in construction and design layout.
- 6.1.6 Compare samples of work that use contrast, unity and emphasis.

Correlated Mathematics Academic Content Benchmarks

- *Formally define geometric figures.* (Geometry and Spatial Sense A, 8-10)
- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 6.2: Analyze the communicative effects of art elements.

Descriptors:

- 6.2.1 Identify the effects communicated by various types of lines, including straight, curved, horizontal, vertical and diagonal.
- 6.2.2 Identify messages or meanings that colors communicate in various cultures.
- 6.2.3 Compare asymmetrical and symmetrical images communicating balance.
- 6.2.4 Compare repetition and pattern in fabric and other applications that communicate rhythm.
- 6.2.5 Examine use of contrasting or unusual proportion to communicate ideas in various artworks.

Correlated Mathematics Academic Content Benchmarks

- *Describe and apply the properties of similar and congruent figures; and justify conjectures involving similarity and congruence.* (Geometry and Spatial Sense B, 8-10)
- *Recognize and apply angle relationships in situations involving intersecting lines, perpendicular lines and parallel lines.* (Geometry and Spatial Sense C, 8-10)

Correlated Social Studies Academic Content Benchmark

- *Explain how the character and meaning of a place reflect a society's economics, politics, social values, ideology and culture.* (Geography A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 6.3: Critique various elements of design.

Descriptors:

- 6.3.1 Define the principles of design (e.g., emphasis, unity, balance, proportion, rhythm).
- 6.3.2 Create simple and complex compositions emphasizing mastery.
- 6.3.3 Design compositions that demonstrate competence in the use of positive and negative space, dominance, sub dominance and subordinates, formal balance, unity, repetition and informal balance.
- 6.3.4 Assess compositions that are a value study, a texture study, a design in contrast and continuous tone designs in high and low key.

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)
- *Apply knowledge of roots, affixes and phrases to aid understanding of content area vocabulary.* (Acquisition of Vocabulary D, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	R	I	I

Competency 6.4: Explain color theory and the use of color processes.

Descriptors:

- 6.4.1 Explain fundamental color perception theory (e.g., reflection, frequencies, metamerism, electromagnetic spectrum, incident light, refraction factors).
- 6.4.2 Analyze color space (e.g., Munsell’s design relationship between chroma, value and hue).
- 6.4.3 Describe color models.
- 6.4.4 Analyze gamut variations.
- 6.4.5 Compare and contrast additive and subtractive color theory (e.g., red, green, blue [RGB], cyan, magenta, yellow, black [CMYK]).

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Vocabulary F, 8-10; Vocabulary E, 11-12)
- *Apply knowledge of roots, affixes and phrases to aid understanding of content area vocabulary.* (Vocabulary D, 11-12)

Correlated Mathematics Academic Content Benchmarks

- *Use algebraic representations, such as tables, graphs, expressions, functions and inequalities, to model and solve problem situations. (Patterns, Functions and Algebra D, 8-10)*
- *Apply mathematical knowledge and skills routinely in other content areas and practical situations. (Mathematical Processes B, 8-10)*

Correlated Science Academic Content Benchmarks

- *Describe the identifiable physical properties of substances (e.g., color, hardness, conductivity, density, concentration and ductility). Explain how changes in these properties can occur without changing the chemical nature of the substance. (Physical Sciences C, 9-10)*
- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter. (Physical Sciences G, 9-10)*

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	R	I	I

Competency 6.5: Assess art elements and principles of two-dimensional forms.

Descriptors:

- 6.5.1 Apply elements of art, including line, color, shape and texture.
- 6.5.2 Render a skeletal image with muscle mass.
- 6.5.3 Demonstrate drawing in one-point, two-point and multi-point perspective.
- 6.5.4 Create work by applying color using pencils, markers, airbrush, dry media, water-based media, oil-based media or software.
- 6.5.5 Create work that demonstrates shape, volume, depth and dimension.
- 6.5.6 Create actual and implied texture.
- 6.5.7 Prepare print surface and print medium.
- 6.5.8 Create forms using elements and using principles of design.

Correlated Mathematics Academic Content Benchmark

- *Draw and construct representations of two- and three-dimensional geometric objects using a variety of tools, such as straightedge, compass and technology. (Geometry and Spatial Sense E, 8-10)*

Correlated Science Academic Content Benchmarks

- *Describe the identifiable physical properties of substances (e.g., color, hardness, conductivity, density, concentration and ductility). Explain how changes in these properties can occur without changing the chemical nature of the substance. (Physical Sciences C, 9-10)*

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	R	I	I

Competency 6.6: Analyze art elements and principles of three-dimensional forms.

Descriptors:

- 6.6.1 Apply elements of art, including line, color, shape and texture.
- 6.6.2 Discuss the use of symmetry or asymmetry and geometric shape.
- 6.6.3 Analyze techniques that produce various texture in media (e.g., clay, wax, wood, metal).
- 6.6.4 Assess the characteristics of mediums (e.g., design, construction, use, maintenance, care of product).

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	N/A		

Competency 6.7: Demonstrate basic art studio skills.

Descriptors:

- 6.7.1 Perform basic measurement functions.
- 6.7.2 Use and maintain drawing instruments.
- 6.7.3 Perform basic mechanical drawing skills.
- 6.7.4 Perform basic cutting functions using standard cutting devices.
- 6.7.5 Adhere/bond various media.

Correlated Mathematics Academic Content Benchmarks

- *Estimate and compute various attributes, including length, angle measure, area, surface area and volume, to a specified level of precision.* (Measurement E, 8-10)
- *Draw and construct representations of two- and three-dimensional geometric objects using a variety of tools, such as straightedge, compass and technology.* (Geometry and Spatial Sense E, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 6.8: Analyze Web page parameters and usage.

Descriptors:

- 6.8.1 Differentiate between a client and a server.
- 6.8.2 Explain the role of browsers in reading files on the World Wide Web.
- 6.8.3 Identify how different browsers affect the look of a Web page.
- 6.8.4 Compare and contrast the features and functions of software editors available for designing Web pages.

- 6.8.5 Explain how bandwidths affect data transmission.
- 6.8.6 Compare the advantages and disadvantages of running an in-house server vs. using a service provider.

Correlated Mathematics Academic Content Benchmark

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Correlated Social Studies Academic Content Benchmark

- *Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices.* (Economics A, 11-12)

Unit 7: Digital Media Design

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 7.1: Assess multimedia applications of software and hardware for the purposes of visual communications.

Descriptors:

- 7.1.1 Examine industrial standard tools, capabilities and interface elements.
- 7.1.2 Create and import media and place on timeline.
- 7.1.3 Export media in the appropriate format for delivery.
- 7.1.4 Select software to match the project.
- 7.1.5 Recognize how processor speed, Random Access Memory (RAM), monitor resolution and media storage affect development and use of multimedia projects.

Correlated Mathematics Academic Content Benchmarks

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)
- *Apply mathematical modeling to workplace and consumer situations, including problem formulation, identification of a mathematical model, interpretation of solution within the model, and validation to original problem situation.* (Mathematical Processes J, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 7.2: Examine and apply visual style guidelines and design layouts.

Descriptors:

- 7.2.1 Integrate special effects techniques with digital photography imagery.
- 7.2.2 Describe how the technical limitations of the medium affect content and style.
- 7.2.3 Define color-editing capabilities.
- 7.2.4 Enhance images.
- 7.2.5 Design within an established style guide.

Correlated English Language Arts Academic Content Benchmark

- *Apply reading comprehension strategies to understand grade-appropriate text.* (Reading Process A, 8-10; Reading Process A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	E	P	P

Competency 7.3: Examine interactive multimedia products.

Descriptors:

- 7.3.1 Identify the media elements to be used (e.g., sound, video, graphics, text, animation).
- 7.3.2 Identify characteristics of interactive media presentations.
- 7.3.3 Identify value scripts and storyboards to communicate ideas.
- 7.3.4 Identify media elements used to produce interactive multimedia.

Correlated English Language Arts Academic Content Benchmark

- *Analyze the techniques used by speakers and media to influence an audience, and evaluate the effect this has on the credibility of a speaker or media message.* (Communication: Oral and Visual B, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 7.4: Analyze the effects of interactive multimedia on graphic design.

Descriptors:

- 7.4.1 Identify the media elements (e.g., sound, video, graphics, text, animation).
- 7.4.2 Identify characteristics of interactive media presentations.
- 7.4.3 Analyze the elements of theme.

Correlated English Language Arts Academic Content Benchmark

- *Analyze the techniques used by speakers and media to influence an audience, and evaluate the effect this has on the credibility of a speaker or media message.* (Communication: Oral and Visual B, 8-10)

Unit 8: Layout

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	P	R
Media Arts	E	I	P

Competency 8.1: Create visual layouts.

Descriptors:

- 8.1.1 Identify the basic principles of design (e.g., unity, contrast, page proportion, balance).
- 8.1.2 Compare and contrast thumbnail and rough sketches and discuss their importance.
- 8.1.3 Create and analyze a comprehensive layout.
- 8.1.4 Create single-color and multi-color layouts using images and various impositions and formats.
- 8.1.5 Utilize color theory in design.
- 8.1.6 Change contrast using tint screens and shading techniques.

Correlated Science Academic Content Benchmarks

- *Describe the identifiable physical properties of substances (e.g., color, hardness, conductivity, density, concentration and ductility). Explain how changes in these properties can occur without changing the chemical nature of the substance. (Physical Sciences C, 9-10)*
- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter. (Physical Sciences G, 9-10)*

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	P	R
Media Arts	E	I	P

Competency 8.2: Assess typographical elements.

Descriptors:

- 8.2.1 Identify typography fundamentals (e.g., kerning, typefaces, leading, readability).
- 8.2.2 Describe the differences between various font types (e.g., True Type, PostScript).
- 8.2.3 Explain the point system of measurement and its application.
- 8.2.4 Evaluate copy fitting requirements.
- 8.2.5 Compare and contrast font management applications.
- 8.2.6 Describe typography's effects on message delivery and aesthetics.

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary. (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)*
- *Apply knowledge of roots, affixes and phrases to aid understanding of content area vocabulary. (Acquisition of Vocabulary D, 11-12)*

Correlated Mathematics Academic Content Benchmarks

- *Apply various measurement scales to describe phenomena and solve problems.* (Measurement B, 11-12)
- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	R	I	P

Competency 8.3: Utilize desktop publishing systems to design layouts.

Descriptors:

- 8.3.1 Demonstrate file management operations.
- 8.3.2 Compare and contrast page layout programs.
- 8.3.3 Demonstrate raster and vector applications.
- 8.3.4 Utilize the elements of layout (e.g., color, font, text graphics, frames, headings).
- 8.3.5 Convert resolution factors for desired output.
- 8.3.6 Embed color profiling.
- 8.3.7 Explain Red, Green, Blue (RGB) versus Cyan, Magenta, Yellow, Black (CMYK) workflow.
- 8.3.8 Calibrate a computer monitor.
- 8.3.9 Use a file compression utility for file transfer or storage.
- 8.3.10 Demonstrate repurposing files for multiple applications.

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Recognize and apply angle relationships in situations involving intersecting lines, perpendicular lines and parallel lines.* (Geometry and Spatial Sense C, 8-10)
- *Draw and construct representations of two- and three-dimensional geometric objects using a variety of tools, such as straightedge, compass and technology.* (Geometry and Spatial Sense E, 8-10)

Correlated Science Academic Content Benchmarks

- *Describe the identifiable physical properties of substances (e.g., color, hardness, conductivity, density, concentration and ductility). Explain how changes in these properties can occur without changing the chemical nature of the substance.* (Physical Sciences C, 9-10)
- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Unit 9: Prepress and Image Generation

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	R	I	P

Competency 9.1: Demonstrate image generation operations.

Descriptors:

- 9.1.1 Describe file formats (e.g., Tag Image File Format [TIFF], Joint Photographic Experts Group [JPEG], Portable Document Format [PDF]).
- 9.1.2 Apply color management and color models.
- 9.1.3 Manage output factors (e.g., resolution, file management, device specific).
- 9.1.4 Utilize register marks, color bars, page information, etc.
- 9.1.5 Analyze the relationship between emulsions and exposure.

Correlated Mathematics Academic Content Benchmark

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)

Correlated Science Academic Content Benchmark

- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	P	R
Media Arts	N/A		

Competency 9.2: Preflight files.

Descriptors:

- 9.2.1 Proofread layout.
- 9.2.2 Examine page format (e.g., columns, text wrap).
- 9.2.3 Ensure embedded fonts.
- 9.2.4 Check links to graphic elements.
- 9.2.5 Examine file format for export.
- 9.2.6 Adjust trapping for correct color overlap.

Correlated English Language Arts Academic Content Benchmark

- *Apply editing strategies to eliminate slang and improve conventions.* (Writing Processes D, 11-12)

Correlated Mathematics Academic Content Benchmark

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	N/A		

Competency 9.3: Analyze image carrier generation.

Descriptors:

- 9.3.1 Compare and contrast image carrier generation methods (e.g., computer to plate, film based, screen, flexography).
- 9.3.2 Demonstrate making an image carrier.
- 9.3.3 Analyze image carrier materials.
- 9.3.4 Describe page description languages (e.g., PostScript, common printer language).
- 9.3.5 Utilize raster image processor (RIP) software.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	N/A		

Competency 9.4: Analyze color proofs for prepress operations.

Descriptors:

- 9.4.1 Identify color shift, dot gain, trapping and gray balance.
- 9.4.2 Identify color correction factors.
- 9.4.3 Identify and analyze quality control devices (e.g., densitometer, spectrophotometer).

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)
- *Apply knowledge of roots, affixes and phrases to aid understanding of content area vocabulary.* (Acquisition of Vocabulary D, 11-12)

Correlated Mathematics Academic Content Benchmark

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Correlated Science Academic Content Benchmark

- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Unit 10: Imaging Technologies

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	N/A		

Competency 10.1: Set up substrate and image control systems for conventional printing and digital printing.

Descriptors:

- 10.1.1 Explain fundamental color perception theory (e.g., reflection, frequencies, metamerism, electromagnetic spectrum, incident light, refraction factors).
- 10.1.2 Describe transport pathways.
- 10.1.3 Analyze color matching specifications (e.g., Pantone system).
- 10.1.4 Maintain conductivity and pH levels for conventional printing.
- 10.1.5 Maintain image density and coverage.
- 10.1.6 Preserve image carrier.
- 10.1.7 Set up and adjust register systems.
- 10.1.8 Compare and contrast image transfer methods.
- 10.1.9 Analyze drying methods (e.g., heat, oxidation, Ultraviolet-UV, additives, infrared).
- 10.1.10 Apply variable data techniques (e.g., four color, two color, one color).

Correlated English Language Arts Academic Content Benchmarks

- *Apply knowledge of roots, affixes and phrases to aid understanding of content area vocabulary.* (Acquisition of Vocabulary D, 11-12)
- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)

Correlated Mathematics Academic Content Benchmark

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Correlated Science Academic Content Benchmark

- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	N/A		

Competency 10.2: Create printed images according to the customer's signed proof.

Descriptors:

- 10.2.1 Compare and contrast color density between proof and press sheet
- 10.2.2 Interpret color bars.

- 10.2.3 Analyze the effects of single-color and multiple-color output on various substrates.
- 10.2.4 Analyze the effects of process color output on various substrates.
- 10.2.5 Analyze and maintain print quality.
- 10.2.6 Create and evaluate the copy (e.g., registration, color density).

Correlated Mathematics Academic Content Benchmark

- *Translate information from one representation (words, table, graph or equation) to another representation of a relation or function. (Patterns, Functions and Algebra C, 8-10)*

Unit 11: Screen Printing

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	R	I	R
Media Arts	N/A		

Competency 11.1: Examine screen printing operations.

Descriptors:

- 11.1.1 Identify the basic functions of a screen printing system
- 11.1.2 Identify substrates used in screen printing.
- 11.1.3 Describe the factors that determine the quality of the impression (e.g., angle, pressure, speed, composition).
- 11.1.4 Describe innovations to screen printing operations (e.g., automatic presses, drying systems, curable ink technologies).

Correlated Mathematics Academic Content Benchmark

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)

Correlated Science Academic Content Benchmarks

- *Describe the identifiable physical properties of substances (e.g., color, hardness, conductivity, density, concentration and ductility). Explain how changes in these properties can occur without changing the chemical nature of the substance.* (Physical Sciences C, 9-10)
- *Explain that science and technology are interdependent; each drives the other.* (Science and Technology B, 9-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	R	I	R
Media Arts	N/A		

Competency 11.2: Print final product.

Descriptors:

- 11.2.1 Analyze image carrier materials.
- 11.2.2 Create screen print.
- 11.2.3 Compare and contrast drying methods (e.g., heat, oxidation, ultraviolet [UV], additives, infrared).
- 11.2.4 Describe the importance of reclaiming screens.
- 11.2.5 Identify disposal procedures for reclaiming waste materials.

Correlated Science Academic Content Benchmark

- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Unit 12: Post Image Transfer

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	P	R
Media Arts	N/A		

Competency 12.1: Evaluate post image transfer finishing methods.

Descriptors:

- 12.1.1 Identify post image transfer finishing requirements.
- 12.1.2 Describe and identify inline-finishing systems.
- 12.1.3 Describe and identify offline-finishing systems.
- 12.1.4 Identify finishing calculation requirements (e.g., diagrams, formulas, dummies).

Correlated Mathematics Academic Content Benchmark

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	N/A		

Competency 12.2: Identify specifications for finishing techniques.

Descriptors:

- 12.2.1 Explain specifications for folding and utilizing imposition dummies.
- 12.2.2 Identify tolerances for folding.
- 12.2.3 Explain specifications for scoring and perforating.
- 12.2.4 Identify tolerances for drilling/die cutting requirements.
- 12.2.5 Identify requirements for saddle and flat stitching.
- 12.2.6 Identify requirements for perfect binding.
- 12.2.7 Identify requirements for padding.
- 12.2.8 Identify requirements for specialty finishing techniques (e.g., thermography, General Binding Corporation [GBC] binding, wire/spiral binding).
- 12.2.9 Interpret cutting strategies and estimates.

Correlated English Language Arts Academic Content Benchmarks

- *Apply knowledge of roots, affixes and phrases to aid understanding of content area vocabulary.* (Acquisition of Vocabulary D, 11-12)
- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)

Correlated Mathematics Academic Content Benchmark

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)

Unit 13: Acquire Moving and Still Images

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 13.1: Apply principles of design and composition.

Descriptors:

- 13.1.1 Explain the use of texture, color, shape and balance.
- 13.1.2 Demonstrate the importance of compositional techniques including “rule of thirds,” “crossing the line (180 degree rule),” framing and aspect ratio.
- 13.1.3 Describe the importance of continuity (e.g., actions of the actors, placement of props, costuming, lighting).
- 13.1.4 Demonstrate the use of camera angles (e.g., the impact of camera position, relationship between the camera and the subject).
- 13.1.5 Describe techniques for perspective (i.e., creating the illusion of depth).

Correlated Mathematics Academic Content Benchmarks

- *Recognize and apply angle relationships in situations involving intersecting lines, perpendicular lines and parallel lines.* (Geometry and Spatial Sense C, 8-10)
- *Draw and construct representations of two- and three-dimensional geometric objects using a variety of tools, such as straightedge, compass and technology.* (Geometry and Spatial Sense E, 8-10)
- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	R	I	P
Media Arts	E	I	P

Competency 13.2: Analyze lighting requirements.

Descriptors:

- 13.2.1 Apply the principles of light (e.g., color, temperature).
- 13.2.2 Select and place lighting equipment for various lighting effects.
- 13.2.3 Manipulate light (e.g., light direction, gels, strobes, filters, scrims).
- 13.2.4 Compare and contrast lighting used for various productions.
- 13.2.5 Demonstrate lighting techniques (e.g., three point lighting, bounce lighting, on-camera lighting).
- 13.2.6 Measure light levels.
- 13.2.7 Describe the characteristics of light (e.g., hard light, soft light, incident light).

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Estimate and compute various attributes, including length, angle measure, area, surface area and volume, to a specified level of precision.* (Measurement E, 8-10)

Correlated Science Academic Content Benchmark

- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	R	I	P

Competency 13.3: Demonstrate scanning techniques and procedures.

Descriptors:

- 13.3.1 Describe the scanning process.
- 13.3.2 Describe the relationship between lines per inch (LPI) and dots per inch (DPI).
- 13.3.3 Identify the relationship between resolution and file size.
- 13.3.4 Manipulate input functions and calibration (e.g., descreening, gama, resolution).
- 13.3.5 Demonstrate saving images in various modes, resolutions and formats.

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Estimate and compute various attributes, including length, angle measure, area, surface area and volume, to a specified level of precision.* (Measurement E, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	P	R
Media Arts	E	I	P

Competency 13.4: Calibrate equipment.

Descriptors:

- 13.4.1 Describe the effects of light on color and image control.
- 13.4.2 Calibrate for monitoring equipment (e.g., vectorscopes, waveform monitors, preview and program monitors).
- 13.4.3 Calibrate a camera (e.g., white balance, f/stop, iris, camera control unit).
- 13.4.4 Calibrate photographer's printers.

Correlated Mathematics Academic Content Benchmark

- *Apply various measurement scales to describe phenomena and solve problems.* (Measurement B, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	E	I	P
Media Arts	R	I	P

Competency 13.5: Organize a video or photo shoot.

Descriptors:

- 13.5.1 Analyze the elements, function and physical layout of the location.
- 13.5.2 Demonstrate production design (e.g., visualization, set design, blocking).
- 13.5.3 Apply principles for staging multiple subjects.
- 13.5.4 Support a production with graphics, scenery, set pieces and prop design.

Correlated Mathematics Academic Content Benchmark

- *Recognize and apply angle relationships in situations involving intersecting lines, perpendicular lines and parallel lines.* (Geometry and Spatial Sense C, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	R	I	R
Media Arts	E	P	R

Competency 13.6: Explain the history and evolution of image acquisition.

Descriptors:

- 13.6.1 Compare and contrast formats.
- 13.6.2 Distinguish between analog and digital video formats.
- 13.6.3 Compare and contrast the basic operating systems used to deliver the basic formats.
- 13.6.4 Describe historic and marketplace developments related to image capture.

Correlated Social Studies Academic Content Benchmarks

- *Use historical interpretations to explain current issues.* (History B, 11-12)
- *Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices.* (Economics A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 13.7: Acquire images.

Descriptors:

- 13.7.1 Compare and contrast methods of image capture.
- 13.7.2 Select media.
- 13.7.3 Determine production format to match intended end use.
- 13.7.4 Compare and contrast filter types.
- 13.7.5 Frame and maintain picture composition.
- 13.7.6 Focus and adjust images.
- 13.7.7 Manage exposure, depth of field and compression of space.
- 13.7.8 Import, store and retrieve images.
- 13.7.9 Identify atypical capturing situations (e.g., underwater shots, macro shots).

Correlated Mathematics Academic Content Benchmarks

- *Estimate and compute various attributes, including length, angle measure, area, surface area and volume, to a specified level of precision.* (Measurement E, 8-10)
- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	P
Media Arts	E	P	R

Competency 13.8: Demonstrate techniques specific to acquiring images with video/film.

Descriptors:

- 13.8.1 Demonstrate camera control (e.g., pan, tilt, zoom, dolly).
- 13.8.2 Apply single- and multi-camera production techniques.
- 13.8.3 Demonstrate camera motion control equipment (e.g., cranes, dollies, tripods).
- 13.8.4 Apply techniques for slow-motion and fast-motion.
- 13.8.5 Integrate image capture with the post production process.

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Recognize and apply angle relationships in situations involving intersecting lines, perpendicular lines and parallel lines.* (Geometry and Spatial Sense C, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	E	I	R
Media Arts	E	I	P

Competency 13.9: Demonstrate post-capture image manipulation techniques.

Descriptors:

- 13.9.1 Demonstrate color balancing techniques.
- 13.9.2 Demonstrate sizing/cropping techniques.

- 13.9.3 Demonstrate image enhancement and digital retouching techniques.
13.9.4 Demonstrate digital file management techniques.

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)
- *Estimate and compute various attributes, including length, angle measure, area, surface area and volume, to a specified level of precision.* (Measurement E, 8-10)

Unit 14: Audio Production

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	N/A		
Media Arts	E	P	R

Competency 14.1: Explain the science of sound.

Descriptors:

- 14.1.1 Explain how the acoustics affect the sound we hear.
- 14.1.2 Define the properties of sound.
- 14.1.3 Explain the transduction of sound (i.e., how sound energy is converted into electrical energy, resistance, balanced vs. unbalanced lines).
- 14.1.4 Compare and contrast the difference between measured and perceived sound.

Correlated Mathematics Academic Content Benchmark

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Correlated Science Academic Content Benchmark

- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	R	I	I
Media Arts	E	P	R

Competency 14.2: Demonstrate the processes and principles of capturing and recording audio.

Descriptors:

- 14.2.1 Distinguish between audio formats.
- 14.2.2 Trace the process of audio recording and processing.
- 14.2.3 Compare and contrast microphone properties with their intended use (e.g., handheld, condenser, wireless, dynamic).
- 14.2.4 Position microphones according to their directional characteristics.
- 14.2.5 Identify external devices and the hardware needed to capture and record audio.
- 14.2.6 Select storage media that corresponds to editing requirements.

Correlated Mathematics Academic Content Benchmarks

- *Estimate and compute various attributes, including length, angle measure, area, surface area and volume, to a specified level of precision.* (Measurement E, 8-10)
- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	R	I	I
Media Arts	R	I	P

Competency 14.3: Apply principles of manipulating audio.

Descriptors:

- 14.3.1 Apply the principles of compression and limiting.
- 14.3.2 Apply the principles of buffering.
- 14.3.3 Demonstrate audio synchronization with other audio or video.
- 14.3.4 Differentiate between linear and non-linear transfers.

Correlated Mathematics Academic Content Benchmarks

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)

Correlated Science Academic Content Benchmarks

- *Demonstrate that waves (e.g., sound, seismic, water and light) have energy and waves can transfer energy when they interact with matter.* (Physical Sciences G, 9-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	N/A		
Media Arts	R	I	P

Competency 14.4: Enhance an audio track with sound effects.

Descriptors:

- 14.4.1 Identify the types of sound effects (e.g., foley, ambient sound).
- 14.4.2 Match sound with the desired effect.
- 14.4.3 Incorporate sound effects into a recording or live performance (e.g., ambient/incident sound, foley sounds, voice-over, music).

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	N/A		
Media Arts	R	I	P

Competency 14.5: Apply audio dynamics by reinforcing, mixing and equalizing sound.

Descriptors:

- 14.5.1 Reinforce sound to match the needs of the environment (e.g., acoustics, room size).
- 14.5.2 Select and place audio amplifiers, speakers and monitors for planned effect.
- 14.5.3 Apply mixing techniques that maintain quality of product (e.g., virtual mix, compatible mix for television, music and effects mix).
- 14.5.4 Apply techniques for equalizing sound.

Unit 15: Audio and Visual Editing

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	N/A		
Media Arts	E	P	R

Competency 15.1: Identify the functions and equipment for editing.

Descriptors:

- 15.1.1 Describe the editing process for audio and visual productions.
 15.1.2 Describe linear and nonlinear editing systems and online and offline editing systems.
 15.1.3 Compare and contrast digital editing systems.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	N/A		
Media Arts	E	P	R

Competency 15.2: Edit an audio and visual product.

Descriptors:

- 15.2.1 Identify the need to edit audio and visual products (e.g., communication of the message, continuity, forming a convincing message, viewpoint).
 15.2.2 Capture media for editing.
 15.2.3 Organize clips (e.g., file management, file names, storage areas, back-up files).
 15.2.4 Demonstrate editing techniques (e.g., transitions, cutting points, order of shots, continuity editing).
 15.2.5 Demonstrate special effects for video (e.g., filters, keying, image control).
 15.2.6 Determine audio needs (e.g., filtering, ambient sound, sound effects).
 15.2.7 Synchronize audio tracks with video tracks and other audio tracks.
 15.2.8 Analyze and adjust video and audio files (e.g., exposure, white balance, audio level).
 15.2.9 Create graphics for audio-visual products (e.g., titles, still images, music/sound).
 15.2.10 Export final product (e.g., print to video, DVD, video file).

Correlated English Language Arts Academic Content Benchmarks

- *Apply reading comprehension strategies to understand grade-appropriate text.* (Reading Process A, 8-10; Reading Process A, 11-12)
- *Use appropriate self-monitoring strategies for comprehension.* (Reading Process C, 8-10; Reading Process C, 11-12)

Correlated Mathematics Academic Content Benchmark

- *Write and solve real-world, multi-step problems involving money, elapsed time and temperature, and verify reasonableness of solutions.* (Measurement F, 8-10)

Unit 16: Writing and Communication

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 16.1: Deliver formal and informal presentations that demonstrate organization and delivery skill.

Descriptors:

- 16.1.1 Demonstrate use of context appropriate grammar, diction and sentence structure.
- 16.1.2 Communicate main ideas and supporting facts to achieve purpose of communication.
- 16.1.3 Use appropriate technology to enhance clarity and persuasiveness.
- 16.1.4 Use proper organization and structure to achieve coherence.
- 16.1.5 Use technical terms, references and quoted material properly.
- 16.1.6 Engage an audience using appropriate vocal variety and gestures.

Correlated English Language Arts Academic Content Benchmarks

- *Use style guides to produce oral and written reports that give proper credit for sources (e.g., words, ideas, images and information) and include an acceptable format for source acknowledgement. (Research D, 8-10; Research D, 11-12))*
- *Demonstrate an understanding of effective speaking strategies by selecting appropriate language and adjusting presentation techniques. (Communication: Oral and Visual D, 8-10)*
- *Give informational presentations that present ideas in a logical sequence, include relevant facts and details from multiple sources and use a consistent organizational structure. (Communication: Oral and Visual E, 8-10)*
- *Give presentations using a variety of delivery methods, visual displays and technology. (Communication: Oral and Visual G, 8-10)*

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 16.2: Apply active listening skills to obtain and clarify information provided in oral communications.

Descriptors:

- 16.2.1 Identify and apply active listening techniques one-to-one and in team/group meetings.
- 16.2.2 Interpret verbal cues and behaviors to enhance communication.
- 16.2.3 Interpret nonverbal cues and behaviors to enhance communication.
- 16.2.4 Paraphrase and repeat information to confirm understanding.
- 16.2.5 Record and summarize information in written notes.
- 16.2.6 Generate questions to seek or confirm understanding.

Correlated English Language Arts Academic Content Benchmarks

- *Use a variety of strategies to enhance listening comprehension.* (Communication: Oral and Visual A, 8-10; Communication: Oral and Visual A, 11-12)
- *Evaluate the content and purpose of a presentation by analyzing the language and delivery choices made by a speaker.* (Communication: Oral and Visual C, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 16.3: Write coherent and focused documents.

Descriptors:

- 16.3.1 Use various note-taking techniques to summarize main ideas.
- 16.3.2 Structure ideas and arguments in an organized manner, which are supported by relevant documentation and/or examples.
- 16.3.3 Write messages using language that is appropriate for the intended audience and purpose.
- 16.3.4 Use correct spelling, grammar, capitalization and punctuation.
- 16.3.5 Identify positions from relevant research and resources.
- 16.3.6 Calculate and interpret descriptive statistics to communicate and support predictions and conclusions.
- 16.3.7 Utilize tables, charts and graphs to clarify textual explanations and support arguments.

Correlated English Language Arts Academic Content Benchmarks

- *Use a variety of strategies to revise content, organization and style, and to improve word choice, sentence variety, clarity and consistency of writing.* (Writing Processes C, 11-12)
- *Apply editing strategies to eliminate slang and improve conventions.* (Writing Processes D, 11-12)
- *Prepare writing for publication that follows an appropriate format and uses a variety of techniques to enhance the final product.* (Writing Processes F, 11-12)
- *Use documented textual evidence to justify interpretations of literature or to support a research topic.* (Writing Applications D, 8-10)
- *Produce informational essays or reports that establish a clear and distinctive perspective on the subject, include relevant perspectives, take into account the validity and reliability of sources and provide a clear sense of closure.* (Writing Applications D, 11-12)

Correlated Mathematics Academic Content Benchmarks

- *Construct convincing arguments based on analysis of data and interpretation of graphs.* (Data Analysis and Probability F, 8-10)
- *Create and analyze tabular and graphical displays of data using appropriate tools, including spreadsheets and graphing calculators.* (Data Analysis and Probability A, 11-12)
- *Use descriptive statistics to analyze and summarize data, including measures of center, dispersion, correlation and variability.* (Data Analysis and Probability B, 11-12)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Science Academic Content Benchmark

- *Participate in and apply the processes of scientific investigation to create models and to design, conduct, evaluate and communicate the results of these investigations.* (Scientific Inquiry A, 9-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 16.4: Use appropriate grammar and spelling.

Descriptors:

- 16.4.1 Use proper sentence structure.
- 16.4.2 Use appropriate punctuation.
- 16.4.3 Verify spelling through research and computer applications.
- 16.4.4 Describe when and how to use direct, indirect and partial quotes with proper attribution.

Correlated English Language Arts Academic Content Benchmarks

- *Apply editing strategies to eliminate slang and improve conventions.* (Writing Processes D, 11-12)
- *Use style guides to produce oral and written reports that give proper credit for sources (e.g., words, ideas, images and information) and include an acceptable format for source acknowledgement.* (Research D, 8-10; Research D, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	P	R
Media Arts	E	P	R

Competency 16.5: Use visual imagery to support communication.

Descriptors:

- 16.5.1 Explain how visual imagery supports the development of stories.
- 16.5.2 Cite examples of when visual imagery and captions become the whole story.
- 16.5.3 Describe instances where visual imagery is not necessary.

Correlated English Language Arts Academic Content Benchmark

- *Analyze whether graphics supplement textual information and promote the author's purpose.* (Reading Applications: Informational, Technical and Persuasive Text C, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	E	I	P
Media Arts	E	I	P

Competency 16.6: Match a product to the audience.

Descriptors:

- 16.6.1 Identify the existing and target audiences.
- 16.6.2 Explain how audience demographics impact pre-production planning.
- 16.6.3 Examine audience response (e.g., ratings, demographics, surveys).

Correlated English Language Arts Academic Content Benchmarks

- *Formulate open-ended research questions suitable for investigation and adjust questions as necessary while research is conducted.* (Research A, 8-10)
- *Formulate open-ended research questions suitable for inquiry and investigation and adjust questions as necessary while research is conducted.* (Research A, 11-12)
- *Evaluate the usefulness and credibility of data and sources and synthesize information from multiple sources.* (Research C, 11-12)

Correlated Mathematics Academic Content Benchmarks

- *Construct convincing arguments based on analysis of data and interpretation of graphs.* (Data Analysis and Probability F, 8-10)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Analyze how issues may be viewed differently by various cultural groups.* (People in Societies A, 11-12)
- *Critique data and information to determine the adequacy of support for conclusions.* (Social Studies Skills and Methods B, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	N/A		
Media Arts	E	P	R

Competency 16.7: Obtain information to use in writing a fact-based story.

Descriptors:

- 16.7.1 Explain the characteristics of a potential fact-based story (e.g., timeliness, effect, proximity).
- 16.7.2 Identify potential sources for a story's background (e.g., community calendar of events, police and fire communications, wire services, verifiable Internet sources, news services, interviews).

- 16.7.3 Describe considerations for setting up an interview (e.g., who, what, when, where, why and how questions).
- 16.7.4 Arrange and interview a source.
- 16.7.5 Define off-the-record information.
- 16.7.6 Identify research strategies, sources and rights to public records.
- 16.7.7 Check information for validity.

Correlated English Language Arts Academic Content Benchmarks

- *Formulate writing ideas, and identify a topic appropriate to the purpose and audience.* (Writing Processes A, 8-10; Writing Processes A, 11-12)
- *Compile, organize and evaluate information, take notes and summarize findings.* (Research B, 11-12)
- *Use a variety of strategies to enhance listening comprehension.* (Communication: Oral and Visual A, 8-10; Communication: Oral and Visual A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	N/A		
Visual Design and Imaging	N/A	P	R
Media Arts	E	I	P

Competency 16.8: Develop a fact based story.

Descriptors:

- 16.8.1 Describe the importance of being concise and focusing on the central point of the story.
- 16.8.2 Remain objective and use strong verbs.
- 16.8.3 Identify language to avoid (e.g., adjectives, adverbs, slang, jargon, euphemisms).
- 16.8.4 Explain how “who, what, when, where, why and how” can be structured into leads.
- 16.8.5 Describe guidelines for effective leads (e.g., concise, unusual, localized, strong action verbs).
- 16.8.6 Recognize common lead errors (e.g., agenda leads, label leads, lists, exaggerations).
- 16.8.7 Compare and contrast body styles (e.g., inverted-pyramid, hourglass, focus, narrative).
- 16.8.8 Illustrate examples of transition words and their function.
- 16.8.9 Describe specialized stories (e.g., brights, roundups, sidebars).
- 16.8.10 Describe types of feature stories (e.g., personality, historical, adventure, medical).
- 16.8.11 Describe public affairs reporting (e.g., crime, accidents, local government, courts).

Correlated English Language Arts Academic Content Benchmarks

- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)
- *Use revision strategies to improve the style, variety of sentence structure, clarity of the controlling idea, logic, effectiveness of word choice and transitions between paragraphs, passages or ideas.* (Writing Processes C, 8-10)
- *Produce informational essays or reports that establish a clear and distinctive perspective on the subject, include relevant perspectives, take into account the validity and reliability of sources and provide a clear sense of closure.* (Writing Applications D, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	E	P	R

Competency 16.9: Develop scripts/libretti for communication.

Descriptors:

- 16.9.1 Identify purposes of the script/libretto.
- 16.9.2 Identify the types of scripts/libretto.
- 16.9.3 Identify script elements and techniques.
- 16.9.4 Describe storyboarding technique.
- 16.9.5 Edit scripts/libretti (e.g., spelling, grammar, peer review, client and/or artistic approval).
- 16.9.6 Write for the ease of the performer or speaker and the context of the presentation (e.g., phonetic spelling, hyphenate, spell-out numbers, words rather than abbreviations).

Correlated English Language Arts Academic Content Benchmarks

- *Analyze the use of a genre to express a theme or topic* (Reading Applications: Literary Text E, 8-10)
- *Apply tools to judge the quality of writing.* (Writing Processes E, 8-10; Writing Processes E, 11-12)
- *Prepare writing for publication that follows an appropriate format and uses a variety of techniques to enhance the final product.* (Writing Processes F, 11-12)

Unit 17: Influences on the Performing Arts

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 17.1: Describe the characteristics of music, dance and theatre from past and present cultures.

Descriptors:

- 17.1.1 Compare and contrast similar themes and their various historical, social and cultural interpretations.
- 17.1.2 Compare and contrast the elements of works from different time periods.
- 17.1.3 Compare and contrast time periods, cultures, socioeconomic and geographic influences.
- 17.1.4 Analyze performances from various historic periods (e.g., stylistic details, manner of performance, understanding the “time” in which it was created, artistic intent).
- 17.1.5 Identify scientific concepts important to the study of music, dance and theatre (e.g., anatomy, physiology, awareness of space, time, matter).
- 17.1.6 Compare and contrast selections from various artists and describe the distinguishing characteristics of their work.

Correlated Social Studies Academic Content Benchmarks

- *Use historical interpretations to explain current issues.* (History B, 11-12)
- *Analyze how issues may be viewed differently by various cultural groups.* (People in Societies A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 17.2: Describe the influences on music, dance and theatre.

Descriptors:

- 17.2.1 Analyze the cultural, social, political and technological influences on an artist.
- 17.2.2 Describe the influence of gender, class, ethnicity and culture within music, dance and theatre.
- 17.2.3 Analyze the relationship between form and function in different cultures.
- 17.2.4 Identify the contribution and influence of significant artists.
- 17.2.5 Analyze the impact of major artistic periods.
- 17.2.6 Explain the impact of government policy on music, dance and theatre.

Correlated English Language Arts Academic Content Benchmark

- *Compile, organize and evaluate information, take notes and summarize findings.* (Research B, 11-12)
- *Organize information from various resources and select appropriate sources to support central ideas, concepts and themes.* (Research C, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Use historical interpretations to explain current issues.* (History B, 11-12)
- *Analyze how issues may be viewed differently by various cultural groups.* (People in Societies A, 11-12)
- *Identify the causes of political, economic and social oppression and analyze ways individuals, organizations and countries respond to resulting conflicts.* (People in Societies B, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 17.3: Explore interrelationships among the music, dance and theatre disciplines.

Descriptors:

- 17.3.1 Compare and contrast the role of the creator with the role of the performer.
- 17.3.2 Explore the similarities among technical fields of music, dance and theatre.
- 17.3.3 Identify examples of current performers using music, dance and theatre in combination.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 17.4: Recognize the financial influences on the performing arts.

Descriptors:

- 17.4.1 Recognize funding opportunities from individuals, corporations, foundations, and governments on the local, state and national levels.
- 17.4.2 Compare and contrast professional with community production.
- 17.4.3 Describe the role of finances in the funding of arts associations.

Correlated Mathematics Academic Content Benchmarks

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)
- *Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.* (Mathematical Processes H, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Analyze how scarcity of productive resources affects supply, demand, inflation and economic choices.* (Economics A, 11-12)
- *Identify factors which inhibit or spur economic growth and cause expansions or recessions.* (Economics B, 11-12)
- *Analyze the role of fiscal and regulatory policies in a mixed economy.* (Economics D, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 17.5: Recognize the stylistic diversity among the performing arts genres.

Descriptors:

- 17.5.1 Describe the various genres in the discipline.
- 17.5.2 Explain the contemporary trends.
- 17.5.3 Compare and contrast the diversity between genres.

Correlated English Language Arts Academic Content Benchmark

- *Use multiple resources to enhance comprehension of vocabulary.* (Vocabulary F, 8-10; Vocabulary E, 11-12)

Unit 18: Movement and Dance

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 18.1: Analyze basic movement concepts in movement and dance.

Descriptors:

- 18.1.1 Apply appropriate alignment, isolation, strength, flexibility, agility and coordination in locomotor and non-locomotor movements.
- 18.1.2 Demonstrate various examples of movement and dance technique.
- 18.1.3 Employ exercises that build strength, flexibility, agility and coordination in locomotor and non-locomotor movement.
- 18.1.4 Demonstrate body projection while performing dance skills.
- 18.1.5 Demonstrate aesthetic awareness, expression and movement dynamics.
- 18.1.6 Perform a movement and dance sequence from memory.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 18.2: Demonstrate the use of space, time and energy through movement and dance.

Descriptors:

- 18.2.1 Demonstrate the use of a performance space.
- 18.2.2 Demonstrate uses of space and dynamics in terms of solo and ensemble performance.
- 18.2.3 Compare and contrast rhythm and musicality.
- 18.2.4 Listen to and identify patterns in music.
- 18.2.5 Apply various patterns in music to basic dance movements.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 18.3: Demonstrate choreographic principles, processes and structures.

Descriptors:

- 18.3.1 Apply principles of contrast and transition.
- 18.3.2 Apply processes of reordering and chance.
- 18.3.3 Demonstrate processes of improvisation.
- 18.3.4 Demonstrate a variety of structures in classical and contemporary forms.
- 18.3.5 Perform dances from a variety of genres.
- 18.3.6 Demonstrate the differences between abstract and narrative movements.

- 18.3.7 Utilize various forms of dance notation.
 18.3.8 Create a movement sequence that incorporates dance techniques and choreographic principles.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	R	I	R
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 18.4: Apply techniques required for ensemble performances.

Descriptors:

- 18.4.1 Demonstrate unified ensemble movement.
 18.4.2 Perform complementary and contrasting forms in an ensemble.
 18.4.3 Demonstrate through partnering techniques the use of balance, counter-balance and the support of weight.

Unit 19: Music

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	R	I	I

Competency 19.1: Recognize the elements of music through listening.

Descriptors:

- 19.1.1 Identify pitch, interval, triads, chords, voice leading and harmonic progressions.
- 19.1.2 Identify the relationship between melodies and their accompanying harmonic progressions.
- 19.1.3 Identify the tonality of work.
- 19.1.4 Identify the rhythmic pattern of a piece of music.
- 19.1.5 Identify texture and form.
- 19.1.6 Describe different instrumental and vocal timbres.
- 19.1.7 Identify matching pitches from two or more sources.

Correlated English Language Arts Academic Content Benchmarks

- *Apply knowledge of roots, affixes and phrases to aid understanding of content area vocabulary.* (Acquisition of Vocabulary D, 11-12)
- *Use multiple resources to enhance comprehension of vocabulary.* (Acquisition of Vocabulary F, 8-10; Acquisition of Vocabulary E, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 19.2: Read musical symbols.

Descriptors:

- 19.2.1 Identify music notational symbols.
- 19.2.2 Demonstrate solfege system or other sight reading systems.
- 19.2.3 Identify major, minor and modal tonalities.
- 19.2.4 Read rhythms in various meters.
- 19.2.5 Interpret articulations, dynamics, expressive symbols and terms.

Correlated Mathematics Academic Content Benchmark

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 19.3: Perform instrumental or vocal music.

Descriptors:

- 19.3.1 Identify and describe different styles of instrumental and vocal music.
- 19.3.2 Identify theme, key, tempo and mood.
- 19.3.3 Identify the elements of music that produce an expressive effect.
- 19.3.4 Perform the range of expressive effects and artistic expressions.
- 19.3.5 Translate the printed page into a performance.
- 19.3.6 Demonstrate solo/ensemble skills of balance, intonation, rhythmic unity and phrasing.
- 19.3.7 Respond to the cues of a conductor or section leader.
- 19.3.8 Perform with attention to pitch and rhythmic accuracy.
- 19.3.9 Improvise over given chord progressions and symbols.
- 19.3.10 Determine the correct technique required for characteristic tone production including posture, breath support, hand position, embouchure and vocal placement.
- 19.3.11 Demonstrate the ability to maintain a steady beat.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	N/A		

Competency 19.4: Arrange and compose music.

Descriptors:

- 19.4.1 Analyze compositions (e.g., form, harmony, rhythm).
- 19.4.2 Transpose musical notation.
- 19.4.3 Compose and score a musical composition.
- 19.4.4 Apply notation and sequencing technology.

Correlated Mathematics Academic Content Benchmark

- *Estimate, compute and solve problems involving real numbers, including ratio, proportion and percent, and explain solutions.* (Number, Number Sense and Operations G, 8-10)

Unit 20: Theatre

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	R	I	I

Competency 20.1: Demonstrate the physical and vocal dimensions of character.

Descriptors:

- 20.1.1 Identify the different vocal and physical attributes that a character may possess.
- 20.1.2 Describe a variety of physical and vocal characteristics associated with different theatrical styles.
- 20.1.3 Analyze the physical, social and psychological dimensions of a character.
- 20.1.4 Manipulate vocal qualities, posture, movement and language to express a variety of characters.

Correlated English Language Arts Academic Content Benchmark

- *Analyze and evaluate the five elements (e.g., plot, character, setting, point of view and theme) in literary text* (Reading Applications: Literary Text A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	R	I	I

Competency 20.2: Create and sustain a variety of believable, multidimensional characters.

Descriptors:

- 20.2.1 Perform a scene or monologue where the actor creates a character.
- 20.2.2 Sustain a character as an actor in an ensemble rehearsal and performance.
- 20.2.3 Identify and execute a score of action for a character.
- 20.2.4 Identify different social contexts of character relationships, classes and situations.

Correlated English Language Arts Academic Content Benchmarks

- *Apply reading comprehension strategies to understand grade-appropriate texts.* (Reading Process A, 8-10; Reading Process A, 11-12)
- *Analyze interactions between characters in literary text and how the interactions affect the plot.* (Reading Applications: Literary Text A, 8-10)
- *Explain ways characters confront similar situations and conflict.* (Reading Applications: Literary Text B, 11-12)
- *Select and use effective speaking strategies for a variety of audiences, situations and purposes.* (Communication: Oral and Visual C, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Analyze how issues may be viewed differently by various cultural groups.* (People in Societies A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	E	I	P

Competency 20.3: Demonstrate the process of creating a theatrical/video/audio production.

Descriptors:

- 20.3.1 Identify the stages in the production process.
- 20.3.2 Describe the function and responsibilities of individuals involved in creating, planning and producing a production.
- 20.3.3 Describe the director's responsibilities and various strategies for working with performers and production staff.
- 20.3.4 Select, cast, block and direct a scene for performance.
- 20.3.5 Select a play, screenplay or radio play for production.
- 20.3.6 Explain why one style of performance is more appropriate to a given story or message than another style.
- 20.3.7 Identify different social context in terms of place and time.
- 20.3.8 Apply the principles of composition to create an effective stage picture.

Correlated English Language Arts Academic Content Benchmarks

- *Demonstrate comprehension of print and electronic text by responding to questions (e.g., literal, inferential, evaluative and synthesizing).* (Reading Process B, 8-10; Reading Process B, 11-12)
- *Use appropriate self-monitoring strategies for comprehension.* (Reading Process C, 8-10; Reading Process C, 11-12)
- *Analyze the use of a genre to express a theme or topic.* (Reading Applications: Literary Text E, 8-10)

Unit 21: Technical Applications to Production or Design

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	R	I	I

Competency 21.1: Analyze and create wardrobe, hair and makeup, sets, light, sound and props.

Descriptors:

- 21.1.1 Identify the basic components of a set design.
- 21.1.2 Determine wardrobes, hair/wig and makeup needed to create a character.
- 21.1.3 Contrast the similarities and differences between cultural and historical periods through wardrobe, set, hair, makeup and prop design.
- 21.1.4 Apply wardrobe, hair/wig, make-up application and set and prop design to convey the mood, character, historical context and social status of a character.
- 21.1.5 Compare and contrast the features of props and their real life counterparts.

Correlated Mathematics Academic Content Benchmark

- *Apply mathematical knowledge and skills routinely in other content areas and practical situations.* (Mathematical Processes B, 8-10)

Correlated Social Studies Academic Content Benchmarks

- *Use historical interpretations to explain current issues.* (History B, 11-12)
- *Analyze how issues may be viewed differently by various cultural groups.* (People in Societies A, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	R	I	I

Competency 21.2: Analyze technical requirements for a production.

Descriptors:

- 21.2.1 Demonstrate and describe the function of the technical equipment available for a production.
- 21.2.2 Explain how design elements convey mood, character and context to a scene.
- 21.2.3 Analyze the design elements of a production.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	R	I	P

Competency 21.3: Stage a production.

Descriptors

- 21.3.1 Identify the steps in the production process from inception to completion.
- 21.3.2 Analyze the elements, function and physical layout of the location.
- 21.3.3 Demonstrate production design (e.g., visualization, set design, blocking).
- 21.3.4 Apply principles for staging multiple subjects.
- 21.3.5 Support a production with graphics, scenery, set pieces and prop design.

Unit 22: Preparation for a Performance

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	R	I	I

Competency 22.1: Prepare for the physical/vocal demands of performance.

Descriptors:

- 22.1.1 Demonstrate the warmup process to prepare for a performance.
- 22.1.2 Demonstrate the techniques that prevent strain on various parts of the body and/or voice.
- 22.1.3 Identify physical stress as a potential risk factor to the body's various movements.
- 22.1.4 Identify anatomy and physiology as they relate to the performing arts.
- 22.1.5 Predict the physical requirements of a performance.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	I	P
Visual Design and Imaging	N/A		
Media Arts	R	I	I

Competency 22.2: Identify psychological issues pertaining to performance.

Descriptors:

- 22.2.1 Describe stresses and their impacts on performance (e.g., performance anxiety, rejection).
- 22.2.2 Identify methods and approaches to manage and relieve anxieties.
- 22.2.3 Identify strategies to resolve artistic conflict.

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	E	P	R

Competency 22.3: Demonstrate practice/rehearsal habits and techniques.

Descriptors:

- 22.3.1 Identify and apply a variety of effective practice/rehearsal skills.
- 22.3.2 Establish and rehearse each stage of skill development.
- 22.3.3 Identify problems and weaknesses in a performance.
- 22.3.4 Anticipate rehearsal demands with appropriate physical and mental preparation.
- 22.3.5 Demonstrate the professional characteristics needed as an actor to achieve an ensemble in rehearsal and performance.

Correlated English Language Arts Academic Content Benchmark

- *Select and use effective speaking strategies for a variety of audiences, situations and purposes.*
(Communication: Oral and Visual C, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	E	I	P

Competency 22.4: Demonstrate effective audition skills.

Descriptors:

- 22.4.1 Describe the elements of an audition appearance.
- 22.4.2 Explore the various audition formats for the discipline.
- 22.4.3 Identify the requirements of the company or individual holding the audition.
- 22.4.4 Anticipate audition demands with appropriate physical and mental preparation.
- 22.4.5 Select the appropriate audition material (e.g., for individual, audience, production).

Correlated English Language Arts Academic Content Benchmarks

- *Compile, organize and evaluate information, take notes and summarize findings.* (Research B, 11-12)
- *Select and use effective speaking strategies for a variety of audiences, situations and purposes.* (Communication: Oral and Visual C, 11-12)

Pathway	BIL	EDU: 12	EDU: AD
Performing Arts	E	P	R
Visual Design and Imaging	N/A		
Media Arts	E	I	P

Competency 22.5: Use observation to communicate and connect with the audience and fellow performers.

Descriptors:

- 22.5.1 Evaluate the role of the audience.
- 22.5.2 Participate as an audience member and describe the theatrical elements.
- 22.5.3 Critique a performance.
- 22.5.4 Observe and describe interactions among the performers.
- 22.5.5 Establish and convey a professional rapport with fellow performers.

Correlated English Language Arts Academic Content Benchmarks

- *Evaluate the content and purpose of a presentation by analyzing the language and delivery choices made by a speaker.* (Communication: Oral and Visual C, 8-10)
- *Select and use effective speaking strategies for a variety of audiences, situations and purposes.* (Communication: Oral and Visual C, 11-12)

Correlated Social Studies Academic Content Benchmark

- *Work in groups to analyze an issue and make decisions.* (Social Studies Skills and Methods D, 11-12)