



## NATIONAL COALITION FOR CORE ARTS STANDARDS

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### The Inclusion of Media Arts in Next Generation Arts Standards

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Submitted by

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# NCCAS Next Generation Arts Standards & Media Arts

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## **Introduction & Background**

The National Coalition for Core Arts Standards (NCCAS) has agreed to support the writing of national, voluntary media arts standards as part of the Next Generation Arts Standards Project. Recognizing the growing interest in and diversity of media arts as a new mode of expression within public education, NCCAS formed a team of media arts writers and leadership. NCCAS leadership is relying on the media arts writing team to create a set of standards that will be equal in rigor, breadth, and depth to those of dance, music, theatre, and visual arts, while simultaneously acknowledging that some aspects of media arts can be embedded within each of the traditional forms as an enrichment for knowing and understanding. Currently, media arts standards are included in the state standards of Minnesota and South Carolina, and in the district standards of New York City and Los Angeles. The writing team will use the research report, *A Review of Selected State Arts Standards*, to help guide them in their work. The report, one of five created in support of the project by NCCAS member, the College Board, is available as a PDF at <http://nccas.wikispaces.com>

In order to ground the effort to write standards for media arts, the NCCAS Leadership team formed a Media Arts Investigation Committee comprised of internal and external participants. Its primary charge was to explore the range, scope and capacities of media arts within public education and deliver a report of its findings to the NCCAS Leadership (see APPENDIX I).

Since the early 1970's, the growing interest in and use of technology in classroom instruction has gained even more momentum as a wide spectrum of creative activity in media arts has moved to the mainstream of education. This activity suggests the need for media arts standards which identify common expectations and help define the field. Some of the primary purposes for developing media arts standards are to promote:

- Academic achievement
- Artistic expression
- Arts and content integration
- Convergence literacy; media, information, technological, digital, virtual, emerging
- Creativity and imagination
- Making meaning; relevance
- Pedagogical integrity
- Social relevance and vitality
- Technological mastery; intermedia fluency
- Vocational/entrepreneurial proficiency

***“Our goal is to write media arts standards that will fully describe expectations for student learning in an art form that has the ability to serve as the nexus between the arts and other subjects in the curriculum,”***

*Pamela Paulson*

*Perpich Center for Arts Education  
in Minnesota*

***“Media Arts plays a pivotal role in putting a strong, versatile and creative culture at the heart of contemporary learning in today’s education for young minds, and is beautifully positioned to make artistic meaning in bold new ways on behalf of the arts.”***

*Richard W. Burrows*

*NCCAS Media Arts Leadership*

***“This is a visionary and forward thinking path for arts education. Artists who get technology, technologists who get art, managers who are creative and creatives who can manage are our future. Fail to include the full spectrum of skills, fail to treat media arts education as anything but a full partner, and get ready to find an explanation even a child can understand about why the rainbow is missing half its colors, and one for business people about why we are losing jobs to more colorful competitors.”***

*Randy Nelson, DreamWorks  
Animation*

***“Media arts products are powerful vehicles for learning that are highly captivating and influence much of what we think and do.”***

*Dain Olsen, ArtLab High School,  
Los Angeles, California*

***“Media arts is relevant to today’s students because it reflects our contemporary, global culture. It provides vehicles for all students to find success and enjoyment in learning and promotes critical thinking processes while engaging, real world activities that make the content more meaningful.”***

*John Hughes*

*Founder, Rhythm & Hues*

While general instructional technology continues at all levels of public education, there are increasingly new and vigorous experiences in media arts that include cinema, animation, sound imaging design, virtual design, interactive design, as well as multimedia and intermedia. This content may be unfamiliar to the general public, but practitioners are already involved in its instruction and students are already engaged by it. New media arts standards will bring focus and coherence to the wide variety of experiences in Pre-K through post-secondary education, ensuring student access to quality, comprehensive, standards-based media arts learning.

### **What is Media Arts?**

Media arts is well known to us through popular forms of film, television, and digital graphics. Though these forms may appear as minor extensions of traditional arts and not worthy of establishing a new discipline, further examination reveals purely code-based and hybrid combinations that resist easy categorization. Recent developments in virtual design, interactive design, and augmented reality are able to immerse us in entirely different realms, where programmed phenomena can significantly alter and even totally replace actual experience. We must acknowledge that the traditional arts have less experience in representing or developing these very unique forms of aesthetic design. Media arts encompasses a broad range of forms, tools, processes, and genres that are evolving, and challenging to clearly delineate, yet media arts are recognizable and accessible to both to the novice and the expert.

Meanwhile, media arts is quickly becoming common and institutionalized under aesthetic categorizations. Post-secondary arts programs, arts organizations, and industries are now regularly incorporating media arts strategies. As one contemporary example of the growing interest in and acceptance of media arts, the National Endowment for the Arts recently funded game design development, and the market for video game design has already superseded film.

In this ever-changing and dynamic discipline, primary categories in media arts now include (for further explanation, see APPENDIX II):

- Moving Image – Cinema/Video/Animation – narrative, non-narrative, environmental, experimental
- Imaging Design – digital process-based imagery, code enhanced (e.g. the image has code embedded in it for interactive and adaptive purposes)
- Sound Design – digital process-based aural synthesis and engineering
- Interactive Design – web, game, sensory-tech, creative code
- Multimedia and Intermedia – additive and hybridizing mixtures
- Virtual Design – 3D, 4D, 5D (spatial, animated, non-linear, interactive) environments, structures and experiences

In contrast to the corporal elements of the traditional art forms, media arts produces work that can exist outside usual physical processes. Media arts in its many forms can be described as:

- serving a nexus-like, or intermediary position in education; media arts serves students both as a stand-alone art form and as a form that can integrate with and connect all the arts and other core content disciplines;
- capable of creating synthetic events and experiences that can be immediate and animated or “live” and transferred with exactness in representation;

- an integrative synthesizer; media arts brings together expansive varieties of content and forms for tailored and enhanced presentation across platforms (“transmedia”) and experiences (e.g. “augmented reality”);
- ultimately plastic and available to utter pliability; media arts can be reorganized infinitely
- inter-dimensional; media arts is immersive, virtual, and interactive and address merging and emerging dimensions.

Media arts can be viewed as a stand-alone art form with unique characteristics. Like other art forms, media arts 1) exists as a means of creative expression, 2) involves composition and creation, and 3) is characterized by its own history and cultural development. Within this new delineation, media arts can facilitate highly engaging projects that include a very broad range of interdisciplinary activities. For example, interactive game design alone includes visual composition, character design, story development, environmental design, game theory, spatial and temporal calculations, programming, script-writing, psychology, marketing, interactive motion physics, 3D surface rendering, and the content knowledge of a historical setting. The promise of media arts education is that its adaptive and integrative aspects can be utilized towards both the acquisition of content knowledge and enhanced creativity for students.

Artistic and aesthetic practices in media arts specifically provide students with the ability to discriminate and manage higher orders of sensory balance and social harmonics, which will be vital in our technologically complex transitions. Outcomes of media arts instruction are global in nature, as media arts unites communication, experience, and knowledge across cultures and times. Creating media arts standards is the first step in preparing students for academic and career success, cultural awareness, and social development. Media arts tools and methods will creatively and socially empower the entire spectrum of students within an increasingly media-centered culture. These are important components of 21<sup>st</sup> Century learning.

### **What Should Be Taught in Media Arts?**

Media arts is a unique medium of artistic expression that can also amplify and integrate the four traditional art forms by incorporating the technological advances of the contemporary world with an emerging skill set available to students and teachers. Media arts students cultivate both artistic abilities and technological skills that include the competencies to identify and orchestrate properties of a range of distinct and hybridizing forms and genres. Students should gain fluencies in the evolving languages of interfaces, mediation, codes, and conventions, as well as contingent issues of power, persuasion, and cross-cultural collaboration, thus empowering them to critically investigate and use the effects and possibilities of various media.

### **Next Steps**

1. The Media Arts Writing Team (See APPENDIX III) completes the media arts standards.
2. NCCAS Leadership reviews the media arts standards for rigor, breadth and depth and to confirm that they are of equal status to the dance, music, theatre and visual arts standards.
3. The development of secondary course codes consistent with and independent art form as well as an embedded practice within other art forms and across the curriculum. (SEE APPENDIX IV).

## APPENDICES

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## **APPENDIX I: Media Arts Investigation Committee**

A summary of the Media Arts Investigation Committee findings include:

- The ubiquity and cultural force of media in society at large is compelling evidence of the importance of media arts in the teaching and learning of students and points to rigorous standards to support this burgeoning field.
- Media arts encompasses a broad range of forms, tools, processes and genres which are sometimes nebulous, evolving and challenging to clearly delineate but are recognizable to the novice and the expert.
- The elements, principles, and conventions of media arts include those applicable to traditional arts disciplines, but also expand the spectrum to include skills that are technologically based, multi-disciplinary, and multimedia specific.
- Media arts is a unique medium of artistic expression that can amplify and integrate the four traditional art forms by incorporating the technological advances of the contemporary world with emerging skill sets available to students and teachers. Media arts students cultivate both artistic abilities and a technological aptitude. The media artist utilizes a fundamental understanding of the mediums of analog and digital media to integrate digital technologies with traditional forms of artistic expression. The arts are best positioned to take a leadership role in media arts for the benefit of the field and all students' social and cognitive development.
- "The challenge is, then, to find ways of adapting and modifying the curriculum and teaching practice to meet learners' growing needs in the emerging digital media context, rather than just to integrate new technology and media into the existing curriculum in order to ensure relevance or boost standards." - Cassie Hague and Ben Williamson, Futurelab, From "*Digital participation, digital literacy, and school subjects, A review of the policies, literature and evidence*".

### **Media Arts Investigation Members:**

1. Richard Burrows, Director of Arts Education, Los Angeles Unified School District (retired), Arts, Education & Community Strategist, Portland, Oregon, NCCAS Leadership Team
2. Ana Cardona, Michigan Department of Education, State Education Agency Directors of Arts Education (SEADAE) (retired)
3. Rhys Daunic, National Association for Media Literacy Education (NAMLE) Board Member, Director of The Media Spot
4. Lakita Edwards, National Endowment for the Arts, Arts Education Specialist, media arts
5. Amy Jensen, Associate Professor in the College of Fine Arts and Communications, Brigham Young University, Theatre and Media Education Program, Board Member, American Alliance for Theatre Ed, NCCAS Leadership Team
6. Richard Jewell, Michigan Media Educational Institute, Academic Development Director, Michigan Motion Picture Studios
7. AnnRenee Joseph, Washington Department of Education, SEADAE (retired)
8. Lynne Kingsley, Co-chair/Executive Director, American Alliance for Theatre and Education
9. Colleen Macklin, Center for Transformative Media, Design Director of PETLab (Prototyping Evaluation, Teaching and Learning Lab), Parsons School of Design
10. Marcia McCaffrey, Co-chair/State Education Agency Directors of Arts Education, National Expectations for Learning in Arts Education
11. Nancy Norwood, Perpich Center for the Arts
12. Pam Paulson, PhD, Perpich Center for the Arts, Senior Director of Policy, Perpich Center for Arts Education, NCCAS Leadership Team
13. Erin Reilly, New Media Literacies, Research Director, University of Southern California

14. Jon Winet, Director, The Digital Studio for the Public Humanities, The University of Iowa

## **APPENDIX II: Media Arts Limited Glossary – Categories and Terminology**

**Augmented Reality** is an overlay of multimedia information on top of the camera view of a situation.

**Convergence** (from Henry Jenkins's *Convergence Culture*) is the coming together of multiple forms of communications and media within digital realms, creating a new configuration or even unification of media.

**Embodied** is of or pertaining to the body.

**Imaging design** refers to digital process-based image production, whereby light is captured through cameras, processed, and conveyed through computer-based formats. This would include digital photography, software-based image manipulation, network distribution and screen presentation. Emerging forms include interactive, information embedded, and immersive imagery.

**Interactive design** is the practice of designing sensorimotor, reactive digital products, environments, systems, and services. In addition to already mentioned interactive entries above, it encompasses the following: interface design, web design, digital and video game design, creative code, programmed/networked art, and emerging forms of reactive and responsive technologies that foster new hybrids such as “dance midi” and “motion capture”.

**Immersive** media texts provide environmental, full-sensory, full-surround experiences. They suspend the viewer within a synthetic, altered environment

**Intermedia** are inter-disciplinary arts that occur between genres, that are unlimited by categories and delineations. Media arts examples would include digital installation art, interactive installations, multimedia theatre, performance video, musical video sculpture, laptop orchestras, transmedia storytelling, experience design, etc.

**Mediate** refers to being conveyed, experienced, or known through media processes and technologies.

**Moving Image - Cinema** may refer to chemical-based film, motion pictures or movies, filmmaking, all forms of video, and cinema 4D, which is a 3D graphics application. It is a series of still or moving images. It is produced by recording photographic images with cameras, or by creating images using animation techniques or visual effects. They are made up of a series of individual images called frames or images are shown rapidly in succession. The illusion the viewer has that motion is occurring is called “persistence of vision.” This form has integrated sound as a primary element and is now commonly 3 dimensional. Alternative and emerging forms include the following: video art, video projection backdrops, video sculpture, video environments for various entertainment and communal spaces, interactive video, ambient video, simulcast video, music video, musical video, and video jockeying (playing musical samples and processes in live, improvisational situations).

**Moving Image - Animation** is the rapid display of a sequence of images of 2-D or 3-D artwork or model positions to create an illusion of movement. It can be created and demonstrated in many ways, such as in a motion picture or video program. The vast majority of video advertisements incorporate some form of animation. Other common and emerging forms include the following: motion design or motion graphics, interactive animation for game graphics, flash rendering of reactive interface design for the web, interactive and sound responsive animation, stop-motion, animatics (a still image cinematic form), internet advertising, etc.

**Sound design** is digital process-based sound production, whereby sound waves are captured, processed and conveyed through computer-based formats. This would include digital recording, software manipulation, network distribution, and digital presentation. Sound design is used in a broad range of multimedia. This includes emerging forms of sound art and interactive sound hybrids.

**Multimedia** refers to media and content that is a combination of different media forms. The term can be used as a noun (a medium with multiple content forms) or as an adjective describing a medium as having multiple content forms. The term is used in contrast to media, which falls within communications and can be purely informational and utilitarian in nature. Multimedia includes a combination of text, audio, still images, animation, video, or interactive content forms.

**Virtual design** is 2D - 5D (4D = + movement, 5D = + non-linear, interactive movement) computer based design of synthetic forms and surfaces, objects, structures and environments. It is common to the fields of industrial design, interior design, landscape design, architecture, set design, experience design, virtual reality, and the emerging form of augmented reality, which provides layers of information over one's actual perception of an environment. It is beginning to incorporate new sensory aspects including "haptics", whereby one is tactically connected with virtual environments. The olfactory component is being developed as well.

APPENDIX III: NCCAS Media Arts Writing Team Members

Dain Olsen, Chair, ArtLAB High School, Los Angeles Unified School District  
Jay Davis, Ambassador School of Global Leadership, Los Angeles Unified School District  
Steven Goodman, Educational Video Center, New York City  
Scot Hockman, South Carolina Department of Education, Columbia, South Carolina  
Jeremy Holien, Perpich Center for Arts Education, Golden Valley, Minnesota  
Anne Kornfeld, Newcomers High School, Long Island, New York  
Colleen Macklin, Parsons New School for Design, Brooklyn, New York  
Bradley Moss, Maple Mountain High School, Springville, Utah  
Michele Nelson, Los Angeles Unified School District  
Martin Rayala, Ph.D, Kutztown University of Pennsylvania  
James Reinhard, North Allegheny Schools, Wexford, Pennsylvania  
Evan Tobias, Arizona State University, Tempe, Arizona

## **APPENDIX IV: Draft NCES Proposed Secondary Media Arts Course Descriptions**

### **Media Arts - Introduction**

An introduction to and survey of the creative and conceptual aspects of designing media arts experiences and products, including techniques, genres and styles from various and combined mediums and forms, including moving image, sound, interactive, spatial and/or interactive design. Typical course topics include: aesthetic meaning, appreciation and analysis; composing, capturing, processing and programming of media arts products, experiences and communications; their transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.

### **Media Arts - Digital Imaging**

The creative and conceptual aspects of designing and producing digital imagery, graphics and photography, including techniques, genres and styles from fine arts and commercial advertising, internet and multimedia, web design, industrial and virtual design. Typical course topics include: aesthetic meaning, appreciation and analysis; composing, capturing, processing, and programming of imagery and graphical information; their transmission, distribution and marketing; as well as contextual, cultural and historical aspects and considerations.

### **Media Arts - Interactive Design**

The creative and conceptual aspects of designing and producing interactive media arts experiences, products and services, including reactive (sensory-based [touch, proximity, movement, etc.] devices) and interactive technologies, 3D video game animation, interface design, mobile device applications, web multimedia, social media based, augmented, and/or virtual reality. Typical course topics include: aesthetic meaning, appreciation and analysis; construction, development, processing, modeling, simulation and programming of interactive experiences; their transmission, distribution and marketing, as well as contextual, cultural and historical aspects and considerations.

### **Media Arts - Interactive Game Design**

The creative and conceptual aspects of designing and producing interactive game experiences and products, including reactive (sensory-based [touch, proximity, movement, etc.]) devices and interactive technologies, interface design, mobile device applications, web multimedia and/or virtual reality games. Typical course topics include: aesthetic meaning, appreciation and analysis; game construction and development; game theory and dynamics; processing, modeling, simulation and programming of interactive experiences; their transmission, distribution, marketing, as well as contextual, cultural and historical aspects and considerations.

### **Media Arts - Web Design**

The creative and conceptual aspects of designing and producing interactive, multimedia web sites and experiences, products and services, including information architecture, graphic and interface design and web-based multimedia. Typical course topics include: aesthetic meaning, appreciation and analysis; development, construction, and programming of virtual, multimedia and interactive experiences; their applications in Internet communications; as well as contextual, cultural and historical aspects and considerations.

### **Media Arts – Moving Image**

The creative and conceptual aspects of designing and producing moving images for the variety of cinematic, film/video and multimedia presentations including: fictional dramas, documentaries, music videos, artistic and experimental presentations and/or installations, interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of moving imagery; all processes of development including: pre-production planning and organization, production and post-production methods, tools and processes; moving image presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.

### **Media Arts – Moving Image - Animation**

The creative and conceptual aspects of designing and producing animated images for the variety of storytelling and multimedia presentations including: dramatic narratives, artistic and experimental presentations and/or installations, ambient, interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of animation; all processes of development including: composition and rendering, animation physics and expressions; techniques, forms and technologies; modeling and programming; pre-production planning and organization; production and post-production methods, tools and processes; animation presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.

### **Media Arts – Digital Sound Design**

The creative and conceptual aspects of designing and producing sound for the variety of multimedia and popular musical forms, including: artistic and experimental presentations and/or installations; soundtracks for moving image; interactive, immersive and performance media, etc. Typical course topics include: aesthetic meaning, appreciation and analysis of sound and music; processes of development including: composition, sound physics, programming and synthesis; techniques, forms and technologies; production and post-production methods, tools and processes; sound performance and presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.

### **Media Arts - Virtual Design**

The creative and conceptual aspects of designing and producing simulative, virtual, 3D media arts experiences, products and services, including: environments, structures, objects, architecture and ecologies, virtual and augmented reality. Typical course topics include: aesthetic meaning, appreciation and analysis; construction, development, processing, modeling, simulation and programming of experiences, structures, architecture and/or environments; their presentation, transmission, distribution and marketing, as well as contextual, cultural, and historical aspects and considerations.

### **Media Arts – Multimedia Design**

The creative and conceptual aspects of designing and producing media arts experiences, products and services that combine imagery, text, sound, motion, interactivity and/or virtuality into a unified presentation. Typical course topics include: aesthetic meaning, appreciation and analysis; composition, development, processing and programming of combined physical, interactive and virtual experiences and environments; their presentation, transmission, distribution and marketing; as well as contextual, cultural, and historical aspects and considerations.

### **Media Arts – Intermedia Design**

The creative and conceptual aspects of designing and producing inter-disciplinary media arts, intermedia and/or transmedia, that merges mediums in diverse combinations and emerging hybrids. Typical course topics include: aesthetic meaning, appreciation and analysis; construction, development, processing, modeling, simulation and programming of blended physical, interactive, multimedia and virtual experiences and/or environments across arts forms, platforms, mediums and technologies; their presentation, transmission, distribution & marketing; as well as contextual, cultural, and historical aspects/considerations.

### **Media Arts - Media Arts Theory**

This course covers the conceptual, social and philosophical aspects of the variety, purposes and nature of media arts. Typical course topics include: aesthetic meaning; appreciation and analysis of the range of media art experiences, styles, genres and forms; limited experience in its production tools, methods and processes; the role of media technologies in society and their co-evolution, and contemporary multi-literacies of information, media and digital environments.

**Media Arts – Independent Study**

Independent Study courses focus on a specific area of emphasis within Media Arts. These courses are often conducted with instructors or professional artists as mentors, and enable students to independently explore specific work of their choice, from the range of forms such as moving image, animation, digital sound, virtual design, intermedia, creating a demo reel, etc. Independent Study courses may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills.