21st Century Skills Map

DESIGNED IN COOPERATION WITH THE NATION'S ARTS EDUCATORS

This 21st Century Skills Map is the result of hundreds of hours of research, development and feedback from educators and business leaders across the nation. The Partnership has issued this map for the core subject of the Arts. This tool is available at www.P21.org.

The Partnership advocates for the integration of 21st Century Skills into K-12 education so that students can advance their learning in core academic subjects.

The Partnership has forged alliances with key national organizations that represent the core academic subjects, including Social Studies, English, Math, Science, Geography and the Arts. As a result of these collaborations, the Partnership has developed this map to illustrate the intersection between 21st Century Skills and the Arts. The maps will enable educators, administrators and policymakers to gain concrete examples of how 21st Century Skills can be integrated into core subjects.



THE ARTS

Introduction

Anyone who has ever seen a student become excited, energized, and confident through artistic exploration has seen first-hand how arts education engages children and contributes to their overall development. The arts – dance, music, theatre, and the visual arts, which collectively include the media arts – are recognized as "core academic subjects" in Federal law, as well as in state statutes and core educational documents.¹ While each of the arts disciplines has its own unique set of knowledge, skills, and processes, the arts share common characteristics that make arts education powerful preparation for college, career, and a fulfilling life. This Skills Map presents just a few of the many ways that children acquire 21st Century Learning Skills through arts study. Educators and others knowledgeable about arts education will see connections among these examples, the student achievement goals listed in the *National Standards for Arts Education* (1994), and the artistic processes of creating, performing, and responding that educators use to evaluate learning in the four arts disciplines.² Collectively, the examples in this document demonstrate that the arts are among society's most compelling and effective paths for developing 21st Century Skills in our students.

Business leaders and visionary thinkers concerned about preparation of students for the future know that the ability to be creative – a key 21st Century Skill – is native to the arts and is one of the primary processes learned through arts education.³ The examples in this Skills Map illustrate how the arts promote work habits that cultivate curiosity, imagination, creativity, and evaluation skills. Students who possess these skills are better able to tolerate ambiguity, explore new realms of possibility, express their own thoughts and feelings and understand the perspectives of others. Furthermore, these examples suggest ways that study of the arts can help produce globally aware, collaborative, and responsible citizens.

Communications in today's interconnected world increasingly emphasize multimedia, and the arts are the media. For personal as well as professional success, students must therefore learn to critically interpret media messages, and to convey their own ideas through the medium of artistic form. Many examples in this document extend the rich array of existing artistic media and tools by incorporating technology. All of those media, both traditional and new, offer powerful opportunities to cultivate 21st Century Skills and to articulate human expression.

Students' capacity to create and express themselves through the arts is one of the central qualities that make them human, as well as a basis for success in the 21st century.

I No Child Left Behind Act of 2001, 20 U.S.C. § 9101 (11): "The Value and Quality of Arts Education: A Statement of Principles" (1998), http://www.menc.org/about/ view/the-value-and-quality-of-arts-education; Academic Preparation for College: What Students Need to Know and Be Able to Do (New York: The College Board, 1983), still in use.

² The NAEP Arts Report Card. U.S. Department of Education, National Center for Education Statistics, 1997.

³ See, for example: Daniel Pink. A Whole New Mind: Why Right-Brainers will Rule the Future. New York: Penguin, 2005: Thomas L. Friedman. The World is Flat: A Brief History of the Twenty-First Century 3 ded. New York: Farrar, Straus and Giroux 2007; The Conference Board, Ready to Innovate: Are Educators and Executives Aligned on the Creative Readiness of the U.S. Workforce? (2008); The College Board, 2008; Arts at the Core: Recommendations for Advancing the State of Arts Education in the 21st Century, 2009

Critical Thinking and Problem Solving



8th Grade

- Exercising sound reasoning in understanding
- · Making complex choices and decisions
- Understanding the interconnections among systems
- Identifying and asking significant questions that clarify various points of view and lead to better solutions
- Framing, analyzing and synthesizing information in order to solve problems and answer questions

EXAMPLE: Students individually articulate different ways to interpret the same musical passage. Students then compare the various interpretations and determine which one is most effective, taking into account age-appropriate considerations such as the style and genre of the music. /

EXAMPLE: Students gather information about a challenging school or community issue such as peer pressure, discrimination, or the environment through online Environmental Literacy research and recorded interviews with local citizens. They create and perform a series of ensemble scenes that address the issues identified and propose possible solutions. They organize the information gleaned into an online archive to be disseminated through blogs, podcasts, and wikis.

OUTCOME: Students will use various types of reasoning to think and reflect critically and solve problems in both conventional and innovative ways.

EXAMPLE: Dance students investigate, identify, and discuss the key components of a successful dance composition and how that composition might be affected by the technical expertise of the dancers performing it. Students then view dance videos of varying styles and time periods and, working first individually and then together as a class, determine criteria for excellence in performance and composition. Students apply these criteria to future viewings of dance and their own compositions.

CIVIC Literacy EXAMPLE: Students view and critique multiple works of art, created by themselves and their peers, which deal with a specified artistic problem. Students use mutually agreed upon criteria (elements and principles of art and design, subject matter, technique, style, etc.) to describe, analyze, interpret, and make informed judgments about the art works. Using electronic journals, students reflect on the points in their critical thinking that led to their solution to the problem. Students then compare and contrast how the other students addressed the same problem, and use their electronic journals to form a foundation for their participation in a group discussion convened through the use of a class blog or wiki.

12th Grade

VA

Communication



8th Grade

12th Grade

 Articulating thoughts and ideas clearly and effectively through speaking and writing

OUTCOME: Students will communicate in a variety of contexts through a variety of artistic media, including technologies, to convey their own ideas and to interpret the ideas of others.

EXAMPLE: Students perform and audio/ video the same story three times, once with words only, once with physical movements only, and once with both. They review their three different performances and reflect in group discussions and individual writing about how the presentations and story changed and whether or not one version communicated more effectively than another, and why. EXAMPLE: Students examine how composers, artists, choreographers, and playwrights use the arts to communicate particular ideas, themes, or concepts (such as relationships, overcoming obstacles, optimism vs. pessimism), and to evoke particular emotions or feelings (joy, sadness, tension, relaxation) in the listener or viewer. They analyze and compare these devices and develop multimedia presentations illustrating how such communication occurs through each of the arts disciplines.

EXAMPLE: Students research existing site-based choreography to analyze the impact a location makes on the choreographic composition and the messages communicated from both the



specific site and movement governed by that site. Students then create their own piece of choreography based on another specific site that communicates a clear message or point of view about the specific site or environment. The dance is recorded and posted on appropriate websites for public view and comment.

Collaboration



- Demonstrating ability to work effectively with diverse teams
- Exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal
- Assuming shared responsibility for collaborative work

OUTCOME: Students will work together effectively to share and accept responsibility, compromise respectfully to reconcile diverse ideas, and accomplish a common goal.

EXAMPLE: After using student-safe

of their teamwork.

EXAMPLE: While rehearsing a piece, students discuss as a group how each individual part (melody, descant, harmonic or rhythmic accompaniment) contributes to the musical effectiveness of the overall performance and how all musicians must work together to create a satisfying whole. Students also experiment with and discuss how the director (whether student or teacher) communicates with the ensemble (gestures, head movements, facial expressions) to help shape performance.

work tools on the Web to research both sides of a controversial topic or issue in the news, students are divided into two groups and collaborate to create dances that reflect opposite sides of the issue. Each group then creates a public-service DVD on the topic that could be marketed to targeted audiences and includes: a statement on each position, a digital recording of the dance, and ways to get additional information on both sides of the topic. Students complete self- and peer assessments that include evaluations of the quality EXAMPLE: Working together, students share the different responsibilities needed to produce a one-act play. They collaboratively assign specific roles as costumer, set designer, actor, etc., and in these roles, analyze a script and agree on an interpretation that will bring the play to life.

Creativity



OUTCOME: Students will draw on a variety of sources to generate, evaluate, and select creative ideas to turn into personally meaningful products.

 Demonstrating originality and inventiveness in work

 Being open and responsive to new and diverse perspectives

EXAMPLE: Students research works of art to identify how different artists have created work relevant to their lives and the world around them. Students analyze the works to identify distinguishing characteristics that reflect each artist's creativity. Students then produce multiple sketches to explore several approaches they might take to create a finished work. Students select and refine one idea from among their sketches to create a painting, and revise the painting during the creative process. EXAMPLE: Students work through the creative process (identify a topic, research, explore options, select and develop ideas, get feedback, revise, refine, perform) and create an original piece of choreography that uses the basic elements of dance – body, action, space, time, energy. Students next interview several choreographers to discuss how they personally approach an inspiration for a piece of choreography. Students share with each other the choreographers' insights and compare it to the process they used. EXAMPLE: Students write short original plays, cast them with classmates, workshop the scripts over a designated period, and present them in a staged reading. Through discussions with the audience, cast members, and teachers, they make decisions about what worked well in their plays and what did not, revise the scripts, and submit them to a student playwriting competition.

Innovation



- Developing, implementing, and communicating new ideas to others
- Acting on creative ideas to make a tangible and useful contribution to the domain in which innovation occurs

OUTCOME: Students will investigate new processes, implement creative ideas, and revisit traditional ideas to create new and reinterpret existing works of visual and performing arts.

EXAMPLE: Students read or view multiple versions of a traditional folk tale before writing, performing, and video recording their own adaptation set in a radically different culture, historical period,

or contemporary context. They review their adaptation, discuss creative choices, and reflect on ways the story stayed the same or changed.

Global Awareness EXAMPLE: Students work in small groups to select an existing graphic novel and create alternative endings to the story using animation or text-to-movie software that incorporates different points of view and identifies the incremental steps involved in depicting action, changes, cause and effect, or transformation to reach the new endings. EXAMPLE: After studying a particular composer's work, students compose a theme and then create variations on that theme in the style of that composer. They notate their compositions using music software; orchestrate their compositions using a variety of sound sources (synthesized or acoustic); and publish their compositions in written form and also on their class website, wiki, or blog so that others can listen, critique, and perform the music.

PARTNERSHIP FOR 21ST CENTURY SKILLS

Information Literacy





12th Grade

- Accessing information efficiently and effectively, evaluating information critically and competently, and using information accurately and creatively for the issue or problem at hand
- · Possessing a fundamental understanding of the ethical/legal issues surrounding the access and use of information

OUTCOME: Students will access and evaluate information from a variety of sources accurately and creatively with an understanding of ethical and legal issues.

EXAMPLE: Students identify and access sources of information that enable them to compare and contrast the forms, content, and context of two works of art. Then, students prepare a written. oral, or multimedia presentation describing the common characteristics identified in the two works of art. Students use their presentations as the basis for creating an original work of art in response to the works they have examined and compared.

EXAMPLE: Students devise guiding questions and conduct interviews with local immigrants about the obstacles they faced in coming to the United States and their transition once they arrived. They transcribe the immigration stories and use these as a basis to write, edit, and perform original monologues based on their ethnographic research. Throughout the process, students reflect on the ethical implications of docudrama theatre.



EXAMPLE: Students conduct research, online and through other means, about unfamiliar musical styles. They listen to representative examples of the unfamiliar music and classify the examples. Students explain the reasoning behind their classifications and share their findings with peers and, potentially, a global audience on the Web. Throughout the process, they show that they can evaluate sources of information effectively, critically, and competently.

Media Literacy



8th Grade

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12th Grade

- Understanding how media messages are constructed, for what purposes and using which tools, characteristics, and conventions
- Examining how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors
- Possessing a fundamental understanding of the ethical/legal issues surrounding the access and use of information

OUTCOME: Students will analyze and use media to understand how and why messages are created and interpreted and how media influences culture, beliefs, and behaviors.

EXAMPLE: Students research an important issue or conflict central to their lives. Included in their research is an exploration of the ways the issue or conflict is represented in the media and how different points of view are embedded in different media presentations. They create a storyboard and script for a short video designed to express their point of view. EXAMPLE: Students review a variety of political or commercial video messages to consider how particular types of music are used to elicit or manipulate emotional response. They are then presented with a new silent video clip, collaborate to identify alternative meanings, and work together to select one that they underscore by crating a soundtrack that reinforces that meaning. EXAMPLE: Students use current technologies to produce an advertisement or Web page that demonstrates their understanding of media's ability to influence the viewer's perception of a social issue of their choice, such as environmental awareness, mass transit, or the economy.



Information, Communication, and Technology Literacy



- BOA

8th Grade

I2th Grade

- Using digital technology, communication tools, and/ or networks appropriately to access, manage, integrate, evaluate, and create information in order to function in a knowledge economy
- Using technology as a tool to research, organize, evaluate, and communicate information and the possession of a fundamental understanding of the ethical/legal issues surrounding the access and use of information

OUTCOME: Students will use technology effectively to research, access, create, and communicate creative ideas and information with an understanding of ethical and legal issues.

EXAMPLE: Students create a multimedia presentation that illustrates and analyzes a variety of dance genres (including those of other cultures), appropriately using and citing video clips downloaded from the Web. EXAMPLE: Students research, design, and create a multimedia presentation to be used as a part of an original dramatic production about the civil rights movement including historical photos, graphic design, video, music, and sound effects.



EXAMPLE: Students select existing musical source material that they combine with original ideas to create an original digital remix, making sure to remain within the constraints of copyright law by limiting use and obtaining necessary permissions.

EXAMPLE: Students plan and execute an exhibit for placement within a school or cultural site in their community, taking into consideration local community



values. The exhibit showcases artists' use of film and video to depict current political and social issues, using students' commentary and signage to explain content to the viewer. Students create a companion visual experience.

Flexibility and Adaptability

4th Grade

8th Grade

- Adapting to varied roles and responsibilities
- Working effectively in a climate of ambiguity and changing priorities

OUTCOME: Students will be flexible and adapt to change in a variety of artistic contexts.

EXAMPLE: In student-led discussions, students discuss their artistic products, based on criteria related to the assignment. Each student then implements changes to improve his or her artistic product.

EXAMPLE: Students learn to accept responsibility and perform effectively in distinct roles: solo performer who makes all musical decisions, member in a small ensemble in which they collaborate on decision-making, and membership in a large ensemble in which the majority of global decisions are made by a conductor. During the process, they research interviews and documentaries highlighting the work and background of professional soloists, ensemble members, and conductors, and interact with practicing professionals either live or virtually. EXAMPLE: Students work together to perform improvisational theatre sketches (scenes), taking suggestions from audience members. Collectively, they maintain an imaginary world while making credible choices in the moment in reaction to circumstances as they arise. Each student reflects on his or her spontaneous choices in the improv through a written reflection of the scene or translation into another medium (e.g., dance, musical performance, or work of visual art).

12th Grade

EXAMPLE: Students explore the concept of being an understudy through a series of interviews with individuals who have served in that role. Students identify how understudies prepare, and how they become adaptable when approaching a new and unexpected role. Students try out adaptability skills by learning a dance and replacing another dancer as an understudy. Alternatively, they build the ability to handle the unexpected by improvising when performing in front of an audience.

Initiative and Self-direction

4th Grade

8th Grade

12th Grade

- Monitoring one's own understanding and learning needs
- Going beyond basic mastery of skills and/ or curriculum to explore and expand one's own learning and opportunities to gain expertise
- Utilizing time efficiently and managing workload
- Defining, prioritizing, and completing tasks without direct oversight
- Demonstrating initiative to advance skill levels toward a professional level
- Demonstrating commitment to learning as a lifelong process

OUTCOME: Students will be motivated, self-directed, and reflective learners, who independently manage their goals and time to continuously improve as artists.

EXAMPLE: After researching current best practices in becoming a better dancer, students develop a plan for the year that addresses self-improvement in artistry, physical ability, and emotional and physical wellness over a period of time. They independently follow and monitor the plan using established benchmarks documented in

a calendaring program.

EXAMPLE: Students use the Internet and library resources to research oral histories of children who rode the late-nineteenth century orphan trains. They employ their gathered information to create monologues or firstperson narrative presentations. EXAMPLE: Students either are assigned or select an appropriately challenging piece to prepare for performance. Students create individual practice plans to focus on the specific aspects of the music that they find challenging, The plans, which can be kept in the students' cell phone or pda calendars, include a timeline for meeting specific goals and sections for students to self-critique, reflect upon, and identify steps to improve their work and prepare a technically accurate and expressive performance in time for the concert. EXAMPLE: Students identify a craft medium such as fiber arts, pottery, jewelry, or furniture, and learn about the techniques, sequences, and characteristics of working with this medium through web-based research. Students develop a specific project to demonstrate what they have learned and the skills they have mastered. To do this, they use their knowledge of the elements of art and principles of design, the requirements for either decorative or functional use, and the technical skills involved in good craft design.

Social and Cross-cultural Skills

4th Grade



- Working appropriately and productively with others
- Leveraging the collective intelligence of groups when appropriate
- Bridging cultural differences and using differing perspectives to increase innovation and the quality of work

EXAMPLE: Students connect virtually with a class in another country to share their ideas for creating sculptures around a common theme: play. Students apply what they have learned to create works reflective of cross-cultural understanding of the theme.

EXAMPLE: Students trained in music of one cultural style join an ensemble that performs music from a distinct culture, and learn to adapt their existing musical skills

and understanding to the demands of the new context (i.e., classical musicians play jazz, a koto player takes up western guitar, or a fiddle player performs in a classical orchestra). The students then interact, either virtually or live, with native performers of the new musical genre to better understand the cultural context and appropriate practices of that genre.

OUTCOME: Students work respectfully and effectively with socially and culturally diverse teams or content to increase innovation and quality in their work.



EXAMPLE: Students research and demonstrate a dance of their own or another culture. Students then facilitate a discussion with the audience on what the dance reveals about the culture they have researched. They gather additional feedback during an online discussion with an audience representing the culture.

12th Grade





Productivity and Accountability

4th Grade

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OUTCOME: Students will set goals, accept responsibility, and refine their work to meet high standards of excellence and accountability.

- Setting and meeting appropriate standards and goals for delivering high-quality work on time
- Demonstrating diligence and a positive work ethic (e.g., being punctual and reliable)

EXAMPLE: Students work collaboratively to develop criteria for evaluating the quality and impact of a musical performance. They conduct online research to compare their criteria to those developed by others and make appropriate revisions. Then, as they prepare a piece for performance, they periodically listen to a recording of themselves singing or playing and evaluate that recording according to the criteria (individually for their own work, individually for peers' work, and collectively for the group's work). EXAMPLE: Students develop a digital or webbased process portfolio of personal work, organized to show the application of creative problem solving processes (fact finding, idea finding, problem finding, solution finding, and acceptance), media, and personal voice. EXAMPLE: Students, with minimal supervision, prepare and deliver a performance, sharing responsibility for all aspects of a theatrical production: design, casting, production, budgeting, rehearsal scheduling, and reviewing each rehearsal and performance to enable continuous improvement.

12th Grade

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EXAMPLE: Students develop personal management habits such as being on time for rehearsals and performances, respecting others, preparing adequately, developing a positive and productive work ethic, setting priorities, being emotionally and physically prepared to honor the group effort. Students use 21st century technologies to connect with professional dancers and discuss with them how they manage their time productively and with accountability.

Leadership and Responsibility

4th Grade



- Using interpersonal and problem-solving skills to influence and guide others toward a goal
- Leveraging strengths of others to accomplish a common goal
- Demonstrating integrity and ethical behavior
- Acting responsibly with the interests of the larger community in mind

OUTCOME: Students will use the arts to inspire others, optimizing the skills of team members through their interpersonal awareness, integrity, and ethical leadership to solve problems that benefit the larger community.

EXAMPLE: Students take turns being the choreographer – first creating original dance movements, then leading the group in learning the dance, which is later revised using ideas from others in the group.

EXAMPLE: Students work as a team to plan, design, and make a work of public art (for example, a mural) that depicts leadership and service within the communities in which they live. Known community leaders are depicted as the center of interest. VA



EXAMPLE: During the process of creating a musical composition, students assume leadership in different key roles critical to the success of the project. One facilitates discussion of how to structure/design the composition, another assigns the instruments to play the various parts, others take turns rehearsing the group, and yet another conducts the group in public performance.

EXAMPLE: Advanced students serve as peer mentors for younger students in a teachersupervised theatre safety program, demonstrating safe practices in set installation, tool use, toxic material handling, proper recycling of materials, and lighting and audio technology, thereby creating continuity in the school's culture of safety.

12th Grade



THEARTS

Interdisciplinary Themes

Each of the four distinct disciplines of the arts (dance, music, theatre arts, and visual arts) offers its own unique set of knowledge, skills, and processes. As a whole, however, the arts are uniquely situated to provide links from school-based learning to themes that are essential to every child's understanding of the modern world. This is because the arts, which thrive on the free expression of the imagination and the creative instinct common in all human beings, have enabled us to explore the changing nature of our existence and to understand how that nature has both evolved and remained constant over time, culture, and place. The arts inculcate key lessons for participation in a democracy, as they balance the preservation of ideas with the challenging of old ways and the development of new visions.

Regarding key Interdisciplinary Themes for the 21st Century, the arts provide opportunities for building student understanding and skills in the following ways:

Global Awareness. The arts provide opportunities and experiences for students to understand global issues; to work collaboratively with individuals representing diverse cultures, religions and lifestyles in a spirit of mutual respect; and to understand other nations and cultures, including those that shape their thoughts in other languages. The awareness and empathy that come from the collective production of art or the study of art by others enables students to develop a truly global point of view.

Financial, Economic, Business and Entrepreneurial Literacy. Students must know how to make appropriate personal economic choices when they create budgets for a theatre production, choral concert, art exhibit, or dance performance. Students who pursue careers as professional artists must know how to estimate the time and costs of materials and labor to produce finished works and understand current trends, supply and demand, and the effects of the economy on marketing their artistic products. Nationally, there are 5.7 million full-time equivalent jobs in the arts. The nonprofit arts and culture industry generates \$166.2 billion in economic activity every year, including \$63.1 billion in spending by organizations and an additional \$103.1 billion in event-related spending by their audiences.

Civic Literacy. Study in the arts provides a context for exploring the rights and obligations of citizenship at the local, state, national and global levels as well as the implications of civic decisions. Students who study the arts must be aware of policies and laws affecting the creation and performance of their art forms (notably, laws regarding intellectual property) as well as understanding how local and global issues are influenced by the arts. More broadly, students in the arts learn the self-control and sophisticated communications skills necessary to work toward producing artistic products alone or in fruitful cooperation with a group of peers.

Health Literacy. Students who participate in the arts acquire understandings and habits of healthy behavior that they can transfer to other areas of endeavor. For example, students who participate in dance, music, and theatre must understand how to use their bodies appropriately and safely to participate in these art forms without damaging their muscles or vocal mechanism. Students working in the visual arts and technical theatre must understand and apply guidelines for working safely with materials and equipment. A strong body of research suggests that arts participation enhances the physical and emotional wellness as well as the cognitive health of students and adults.

Environmental Literacy. Arts students must be stewards of the earth and utilize appropriate practices with reusing and recycling materials when creating or performing various art forms. Students may also explore environmental issues and consequences through dances, compositions, productions or artworks portraying the use or misuse of natural resources.



Civic

PARTNERSHIP FOR 21st Century Skills Global

Credits

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