River Dell Regional School District
Animation Curriculum

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Mr. Patrick Fletcher
Superintendent
River Dell Regional Schools

Ms. Lorraine Brooks
Principal
River Dell High School

Mr. Richard Freedman
Principal
River Dell Middle School

Mr. William Feldman
Assistant Superintendent
Curriculum & Instruction

Animation Committee
Saratheresa Bartelloni
George Tucci
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RATIONALE

In 1877 Eadweard Muybridge set out to win a bet and unwittingly became one of the seminal players in what would become the most popular and profitable entertainment venues ever created; the animation and motion picture industries. His quest was to prove that a galloping horse at one point in its stride would have all four hooves off the ground simultaneously. His ingenious method of proving this was to create an elaborate battery of cameras that would be set off in sequence as a horse traversed their range of view. The resulting stream of still images each slightly different from the next (with the familiar look of an animation storyboard) resoundingly proved his point.

Ironically it was Muybridge's intent to stop motion, but his experiment was even more glorious than he had thought. Because, when the images are viewed quickly in succession, the resulting illusion of the graceful, fluid movement of that famous galloping horse is beautifully simple and profound.

So when Gertie the Dinosaur premiered as one of the first publically shown animated cartoons in 1914, and Walt Disney debuted Fantasia in 1940, the endless line of major animation productions to follow each raised the bar for creativity, image quality and groundbreaking technological achievement. Therefore, it is with a silent nod that homage is paid to Muybridge – the father of it all. Through his influence, the magic of frame by frame animation had been given life and an endless array of subjects awaited its proliferation to keep its heart beating.

Now in the digital age of animation it is not uncommon to see major animated movies heading the list of the most popular and profitable productions. As technology thrives and grows exceedingly more sophisticated, sequels and spinoffs abound, embracing 3D, surround sound, jaw-dropping special effects and celebrity voiceovers. Digital animation is what has made all of this possible. Simple tasks that once took many man-hours can now be done in seconds. Elaborate story lines and intricate character development is now commonplace as a result of digital processes and possibilities.

In this course students will learn the history of the animated image and gain an understanding of the process of imbuing motion into an inanimate subject. The class emphasizes that the mechanics of human vision and the persistence of vision in particular, plays an integral role in how motion is perceived by the viewer. Students will gain an appreciation for the 12 basic rules of animation and the way these techniques are used to enhance the story they want to tell.

From the construction of simple visual toys through the complete creation of unique animations containing sound, scene changes, tweening, masking, interactivity as well as the development of storyboards and multiple characters, students will gain a true
appreciation of what goes into creating animated movies. They will explore how time proven methods have been expanded and improved upon and how no matter how simple or advanced the animator's methodologies are, in the end animation is all about story-telling.
STANDARDS

1.1.12.D.1  Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.

1.2.12.A.2  Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.

1.3.12.D.1  Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.

1.3.12.D.4  Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.

1.4.12.A.3  Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.

1.4.12.B.2  Evaluate how an artist’s technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.

1.4.12.B.3  Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.

8.1.12.A.2  Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.

8.1.12.A.3  Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.

8.1.12.E.2  Predict the impact on society of unethical use of digital tools, based on research and working with peers and experts in the field.
8.1.12.F.2 Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address educational, career, personal, and social needs.

9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community

9.1.8.C.2 Demonstrate the use of compromise, consensus, and community building strategies for carrying out different tasks, assignments, and projects

9.1.8.D.3 Use effective communication skills face to face and online interactions with peers and adults from home and from diverse cultures

9.1.8.E.2 Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal methods

9.1.8.F.1 Demonstrate how productivity and accountability contribute to realizing individual or group goals within or outside the classroom

8.1 Use digital tools to access, manage, evaluate, and synthesize information in order to solve problems and communicate knowledge

9.1.12.A.1 Apply critical thinking and problem solving strategies during structured learning experiences

9.1.12.C.4 Demonstrate leadership and collaborative skills when participating in online communities and structured learning experiences

9.1.12.D.1 Interpret spoken and written communication within the appropriate cultural context

9.1.12.E.1 Create messages for different purposes and audiences with sensitivity to cultural, gender, and age diversity, using various digital media outlets

9.1.12.F.2 Demonstrate a positive work ethic in various settings, including the classroom and during structured learning experiences

8.1 Use digital tools to access, manage, evaluate, and synthesize information in order to solve problems and communicate knowledge
BIG IDEAS/COMMON THREADS
The strength and value of digital animating relies, as does any world language, on an underlying structure of principles and guidelines. Animation artists apply an understanding of the elements and principles of art, in conjunction with storytelling strategies and the use of animating tools to effectively communicate messages and create original artwork.

ENDURING UNDERSTANDINGS
Animation tools allow artists to tell stories, and/or create artwork for a variety of output formats. Digital animation tools allow artists to create artwork that may be infinitely manipulated.

ESSENTIAL QUESTIONS
- Who are the key figures in the history and technological evolution of animation?
- What is the essence of animation?
- What is the difference between digital and traditional animation techniques?
- What digital tools are available and how do we use them to animate images?
- What are the additional benefits of digital animation?

OBJECTIVES
Students will be able to:
- research the vast array of people, places and inventions that led to the current state of animation as an art, a science and an industry
- understand the phenomenon of the persistence of vision, which is the physical reaction that allows humans to experience the illusion of animation
- trace the heritage of digital tools, techniques and nomenclature to the methods that were used when purely mechanical input of image and effort prevailed
- use digital animation programs (i.e. Flash) to generate computer-based movies without the tedium of hand drawn traditional methodology
- maximize their work time utilizing digital storage, playback and file handling
- develop expertise through research about a problem and make a claim to support a solution
- work as a contributing member of a team to achieve specific outcomes
- show respect for divergent points of view by acknowledging them
- recognize how digital media impacts a person’s perspective
• show the self-discipline to do your best, reach a goal or perform an assigned task
  with good work quality
• apply technology to enhance meaning, communication and productivity

ASSESSMENTS
• Performance-based assessments
• Participation in class discussions, studio maintenance, and appropriate use of
technology as per the district AUP

LEARNING ACTIVITIES
• Research on key figures in the history of moving image (ie. Muybridge)
• Production assignment working with storyboards, timelines, and features within
animation programs to create original animated shorts
• Discussion and Identification of digital art forms and the history of digital animation
• Use of digital animating tools through practice assignments designed to introduce
various tools and their functions.
• Identification of animation in various forms of output including web-based buttons,
animated GIFs, narrative shorts, and broadcast.

RESOURCES
• Web-resources
• *Adobe Creative Suite* applications
• Research Databases and image collections
• Graphic Art artifacts including animated images, movie files, buttons, etc.
• Teacher produced handouts
STANDARDS

1.1.12.D.2 Translate literary, musical, theatrical, and dance compositions by using them as stimulus/inspiration for corresponding visual artworks.

1.3.12.D.1 Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.

1.3.12.D.2 Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.

1.3.12.D.4 Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.

1.3.12.D.5 Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

1.4.12.A.2 Speculate on the artist's intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.

1.4.12.A.3 Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.

1.4.12.B.1 Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.

1.4.12.B.2 Evaluate how an artist’s technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.

1.4.12.B.3 Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and
multimedia arts for consumers, creators, and performers around the world.

8.1.12.A.2 Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.

8.1.12.D.2 Demonstrate appropriate use of copyrights as well as fair use and Creative Commons guidelines.

8.1.12.E.2 Predict the impact on society of unethical use of digital tools, based on research and working with peers and experts in the field.

8.1.12.F.1 Select and use specialized databases for advanced research to solve real-world problems.

8.1.12.F.2 Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address educational, career, personal, and social needs.

9.1.12.A.1 Apply critical thinking and problem-solving strategies during structured learning experiences.

9.1.12.B.1 Present resources and data in a format that effectively communicates the meaning of the data and its implications for solving problems, using multiple perspectives.

9.1.12.D.1 Interpret spoken and written communication within the appropriate cultural context.

9.1.12.D.3 Explain why the ability to communicate in another language in an appropriate cultural context is a valuable 21st-century skill.

9.1.12.E.1 Create messages for different purposes and audiences with sensitivity to cultural, gender, and age diversity, using various digital media outlets.

9.1.12.E.2 Generate digital media campaigns in support of or opposing a current political, social, or economic issue.

9.1.12.E.5 Compare laws governing the unethical use of media in different countries.

9.1.8.A.2 Implement problem-solving strategies to solve a problem in school or the community

9.1.8.C.2 Demonstrate the use of compromise, consensus, and community building strategies for carrying out different tasks, assignments, and projects

9.1.8.D.3 Use effective communication skills face to face and online interactions with peers and adults from home and from diverse cultures

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**BIG IDEAS/COMMON THREADS**

Digital and Traditional animators use an array of tools – traditional and digital – to create moving images that are meaningful and expressive. They work with a target audience and desired product outputs in mind.

**ENDURING UNDERSTANDINGS**

Target audience and desired output drives design decisions and art tool choice.

**ESSENTIAL QUESTIONS**

- What message do I intend to communicate?
- Who is my target audience?
- What will be the format of my final product?
- What digital animating solution can be applied to the task at hand?
• Which tools should I use for the task?
• How do I utilize digital animation technology to develop creative solutions?
• How can I use the elements or art and principles of design when creating original artwork?

OBJECTIVES
Students will be able to:
• determine a target audience and write/design with the target audience in mind
• differentiate between production formats, for example web-based or for broadcast designs
• design with production format in mind
• apply the elements of art and principles of design when creating original artwork.
• differentiate between animating solutions (ie classic and shape tweening) and identify which are best in a selected situation
• make appropriate tool selection based on a specified task
• utilize a combination of digital tools to create original art that meets the creative task
• develop expertise through research about a problem and make a claim to support a solution
• work as a contributing member of a team to achieve specific outcomes
• show respect for divergent points of view by acknowledging them
• recognize how digital media impacts a person’s perspective
• show the self-discipline to do your best, reach a goal or perform an assigned task with good work quality
• apply technology to enhance meaning, communication and productivity

ASSESSMENTS
• Performance-based assessments
• Demonstrated participation in class discussions, studio maintenance, and appropriate use of technology as per the district AUP
• Written quizzes
• Written reaction briefs on specific topics
• Handout-defined projects
• Oral Presentations
• Group or two-person projects
• Portfolio digital illustration images
• Participation in class discussions, studio maintenance, and appropriate use of technology as per the district AUP

LEARNING ACTIVITIES
• Defining digital imaging of all formats and evaluating its importance in a visually literate society
• Discussion and exploration of where examples of animation are found/used in society and why animations are used over static images
• Group and individual analysis of digitally manipulated/animated images with emphasis on deciphering obvious and hidden messages
• Exercises and assignments comparing the way concepts are presented to different viewing audiences
• Discussion of editorial, commercial, fine art and documentational image creation/use
• Redesigning and/or re-purposing images to maximize their effectiveness in different venues and formats
• Assignments that explore workflow strategies and tool-choice options to maximize productivity
• Assignments that utilize text as a design element as well as a literal, communicative tool
• Projects that combine text and images to alter their message
• Creation and use of storyboards for project planning purposes.

RESOURCES
• Web-resources
• Adobe Creative Suite applications
• Research Databases and image collections
• Animation artifacts including Muybridge photographs, hand-rendered illustrations from popular animators (ie. Disney), animated gifs from the web, etc.
• Teacher handouts & samples
• Hands-on non-digital activities, exercises, articles and surveys