Digital cameras are ubiquitous, their prices are falling, and students love them. Now’s the time to bring digital cameras into your classroom, and ISTE’s new book shows you how. Experienced practitioners Glen Bull and Lynn Bell bring together all the technical and logistical strategies you’ll need, and subject area experts contribute ideas and lessons for meeting curricular goals. Math experts, for example, tackle proportional reasoning, irregular figures, and creating context for story problems. Experts in teaching science focus on using digital cameras to help students understand events and processes that are otherwise too small, too fast, or too slow to visualize. The following sample chapter from the coordinator of teacher programs at the National Gallery of Art explores the fascinating—and beautiful!—links between art, storytelling, and visual literary. Integrate digital images into your curriculum today!
IT’S EASY to imagine the following scenarios: a teacher constructs a Web page for a social studies class using historical images downloaded from the National Archives Web site. Meanwhile, a student grabs an image from Google, uses Adobe Photoshop to manipulate it, drops it into an iMovie video clip, adds an MP3 of a popular song as a soundtrack, and creates a digital story. You may not even have to imagine these things—something similar may already be happening on a regular basis in your school. In this age of peer-to-peer file swapping and cut and paste from the Web, anything goes, right? Well, perhaps not. These “original” works are being constructed using sounds and images created by other artists.
The idea of original “authorship” is becoming increasingly attenuated and confusing. While free and ubiquitous programs such as Movie Maker and iMovie make it easy for students to become active creators of digital media (not just passive observers), the potential for misuse of copyrighted material represents a tremendous challenge for schools and teachers. Learning to navigate the murky and ever-changing current of copyright law has never been more difficult.

A work need not have a copyright symbol anywhere on it to be protected by copyright law. Any work created in any tangible form of expression—printed text, a photo or film, a piece of music, a Web page—is automatically copyrighted, and remains protected for many years after the creator’s death. New technologies, of course, have created new gray areas and unforeseen circumstances that will require ongoing legal interpretation. Copyright law is not a fixed entity; instead, it is malleable and constantly changing in response to the influence of interested parties. In recent years, technology has been the catalyst for major revisions of copyright law, as legislators try to find a balance between corporate interests and consumer rights.

It is understandable that many educators are confused by the changes in copyright legislation. While it is important that teachers learn how to properly respect the rights of copyright holders in their classroom, it is equally important that they know how to take advantage of the tremendous opportunities for learning offered by new media technologies. This chapter will give you a good start in that direction.

**Fair Use in the Classroom**

TEACHERS AND students can legally use copyrighted material without the author’s permission if it falls under “fair use” guidelines. Section 107 of the 1976 Copyright Act addresses the question of fair use; this section reads (in part): “The fair use of a copyrighted work, including such use by reproduction … for purposes such as criticism, comment, news reporting, teaching, … scholarship, or research, is not an infringement of copyright.”

In order to qualify for fair use, four factors must be weighed:

1. **Purpose of Use.** The work must be used for legitimate scholarship and/or nonprofit, educational purposes.

2. **Nature of the Work.** Creative works are afforded greater copyright protection than factual works.

3. **Amount Used.** Only a small percentage of the entire work may be copied for educational uses.

4. **Effect on the Market.** Potential commercial sales must not be affected.
To use copyrighted material without permission, students and teachers must employ this four-factor test. For example, if a student wants to copy a cartoon character from the Web for use in a multimedia presentation, each factor must be considered separately to determine whether fair use applies. In this case, the purpose for the use (scholarly) and its effect on the market (none) would probably outweigh the nature of the work (creative) and the amount being used (using an image is generally considered using the whole work). As long as the project is shown only in the classroom or at home, this would probably be interpreted as fair use even though only two of the factors are strongly in favor.

Some teachers may be familiar with the rule that no more than five images by any one artist and no more than 10% from a published collective work may be used. This rule was suggested several years ago by special interest groups in a document titled “Classroom Guidelines” (see www.publishers.org/about/copyqa.cfm). Although these guidelines were never enacted by the federal government as part of the fair use statute and thus are not law, many school districts have adopted these guidelines. In 1994, the Conference on Fair Use (CONFU) attempted to update the “Classroom Guidelines” to reflect the use of electronic materials, but after many years of deliberations, the CONFU delegates failed to achieve consensus for fair use of electronic media in education.

Easier than trying to negotiate the vagaries of four-factor tests and the “Classroom Guidelines” is using resources that have special permissions already granted for classroom use, such as Creative Commons.

**Creative Commons as a Classroom Resource**

MUCH OF the evolution of copyright law, both with respect to the crafting of legislation and the subsequent interpretation of it in the courts, has been shaped by corporate stakeholders. Individual consumers typically lack the time or resources to provide input into the process. Both perspectives are important, but the debate is frequently polarized, reflecting either a world of total control of media and materials with all rights reserved, or the anarchy of peer-sharing networks with no safeguards for copyrighted materials.

Creative Commons was established by Lawrence Lessig to offer a middle ground. It involves a vision of copyright licenses in which some rights are reserved, but not all (see http://creativecommons.org). Creative Commons recognizes and protects the rights of creators while simultaneously allowing certain educational uses of copyrighted material:

THE FRAMERS of the U.S. Constitution understood that copyright was about balance—a trade-off between public and private gain, society-wide innovation and creative reward ... We want to help restore that sense of balance ... A single goal unites Creative Commons’ current and future projects: to build a layer of reasonable, flexible copyright in the face of increasingly restrictive default rules. (http://creativecommons.org/projects/founderscopyright/)
For example, the Open Photo site (http://openphoto.net) provides images offered under a Creative Commons Attribution license, which states that the photographs may be used by others provided that proper attribution is provided. The Creative Commons search engine is a useful tool that facilitates the educational use of Web content. The Creative Commons search engine helps identify materials—images, music, and text—whose authors permit reuse for noncommercial purposes.

**Works in the Public Domain**

WORKS WHOSE copyright protections have expired enter into the public domain and are available for public use. Most of the images available on the U.S. National Archives Web site (www.archives.gov) have entered into the public domain and thus can be used without permission. The teacher in the example at the beginning of this chapter who wants to include National Archive images in her social studies Web site would be free to do so, so long as the images used are in the public domain.

When does copyright protection end and a work enter the public domain? The answer, unfortunately, is an unequivocal “it depends.” The term for copyright protection has increased steadily over the years. In 1790, the term of copyright was established as 14 years with the option of a one-time renewal. Subsequent legislation, most recently the Sonny Bono Copyright Term Extension Act (1998), has extended this to the life of the author plus 70 years. The Cornell Copyright Center provides a useful chart that outlines the current copyright terms for various types of work (see www.copyright.cornell.edu/training/Hirtle_Public_Domain.htm).

In the digital age, much of the material that falls in the public domain has been accumulated in online centers such as the Library of Congress American Memories Collection (http://memory.loc.gov/ammem) and the Electronic Text Center at the University of Virginia (http://etext.lib.virginia.edu). These sites make works in the public domain available for convenient searching and downloading.

Meanwhile, the Art Museum Image Consortium or AMICO (www.amico.org) offers convenient access to images that are still protected by copyright. The goal of this consortium of art museums is to make a common pool of images available to schools for educational use through a common license. When a school subscribes to AMICO, all the images contributed by its members can be secured.

The easiest way for students to use images without worrying about copyright issues is to use materials they have created themselves. Students are the copyright holders for their...
own photographs and drawings, a fact teachers should remember before posting student pictures on their own class Web site.

Permission and Attribution

TEACHERS NEED to guide students in exercising good digital citizenship and appropriate behavior. Responsible use of technology should be modeled and discussed with students. Attribution and permission are two important pieces of responsible use that should be a part of the repertoire of every teacher.

The Web has prompted an unprecedented deluge of self-published materials. Often the individuals who publish such sites are willing to grant permission for educational use. Proper attribution of others’ work should always be made, whether the material is copyrighted or in the public domain. Often, students are not aware that attribution for materials copied from Web sites is required.

If you would like to use an image that is protected by copyright and does not fall under fair use, contact the author, artist, photographer, or editor of the image or Web page. You can often find this information at the top or bottom of a Web page under “Contact us” or “About us.”

When contacting the copyright holder, be specific about which image you want to use and where you found it, and communicate what you plan to do with the image and whether it will be used for commercial purposes. Include your contact information, and be sure to keep a copy of the permission letter or e-mail you receive in case there are any problems or questions down the road.

When using an image created by someone else, it is always appropriate to give proper attribution to the creator. On the Web, of course, it is not always evident who created an image. If there is no
indication who is responsible for the image, students should at least indicate the Web site address where the image originated.

At a time when studies indicate that students more often use the Web than a physical library for research and study, it is more important than ever that educators understand copyright and present this information to students in a meaningful context. Although the paradoxes of the current era present teachers with a number of challenges, with a little effort we can find a middle ground between respecting the rights of copyright holders and taking advantage of the learning opportunities presented by new media.

This information is not to be considered legal advice. When in doubt about use of a copyrighted work, consult with your institution’s legal counsel.

Resources for More Information

PRINT


ONLINE

Stanford University Libraries: Copyright and Fair Use: http://fairuse.stanford.edu

University of Texas: Fair Use of Copyrighted Materials: www.utsystem.edu/ogc/intellectualproperty/copypol2.htm
A PICTURE is worth a thousand words—this saying has become a cliché for a reason. Some of history’s most creative individuals, in fields ranging from science to art, have favored visual modes of analysis and thought (West, 1997, p. 11). Yet many school systems still privilege verbal and mathematical skills despite decades of research demonstrating that individuals learn in different ways and that learning is optimized when multiple intelligences are engaged in combination (Gardner, 1985).

The advent of the Web has dramatically changed the type and range of images available in schools, making possible new ways of teaching that incorporate and develop visual intelligence. This chapter explores some of these new opportunities, and in particular the potential for using works of art to promote visual literacy.
The National Gallery of Art has long provided leadership in object-based teaching, working with educators to develop compelling classroom projects that build essential academic and life skills. Selected examples and digital resources from the Gallery’s collections are provided in the final section of the chapter.

Why Images in Education? Why Now?

IMAGES ABOUND in our multimedia age. Young people today learn much of what they know through electronic imagery. According to the National Standards for Art Education (Consortium of National Arts Education Associations, 1994), students not only need to learn to communicate verbally, but also need to be able to read and process information visually. Few schools, however, have curricula for developing visual literacy skills (White, 1987).

Happily, we may be on the cusp of significant change. Images may soon become more important in the curriculum as affordable visual computer technologies replace those that are text-based (Bull, Bull, Thomas, & Jordan, 2000; West, 1997). Brain research suggests that images are central to information processing, and work in the field of artificial intelligence is shedding new light on how visual imagery influences memory, thinking, and behavior. As Mary Alice White (1987, p. 44) has argued, “If it is true that our theories of human memory are deeply influenced by advances in computer technology, it is possible that, as the technology moves from being print oriented to being image oriented, our theories of human memory will also become much more image oriented.”

Of course, even before the advent of computers, images were critical to conveying information. Graphic images, for example, have always been used to communicate spatial relationships and patterns in ways that words cannot. Information of this kind is often best comprehended holistically and nonsequentially, and visual models support this mode of thinking.

Images and words have always been interdependent. From medieval manuscripts to contemporary preschool storybooks, image and text feed and inform one another. The picture makes the idea tangible; through visualization, the abstract becomes concrete. In much the same way, pictures partner with the spoken word. Verbal analysis is an invaluable aid to understanding what the eye beholds. Discussion and debate build competence in language, critical thinking, and interpersonal skills as students listen to one another and share ideas.

Pictures—whether they exist in the external world or in the mind’s eye—play a part in memory and imagination. We dream in pictures, and mental imagery can be a catalyst for the accomplishment of real-life goals. Using visualization techniques, we can improve our performance in sports or other activities, not only persuading ourselves of our potential but also rehearsing the very steps and skills needed to ensure it. Many who practice
visualization claim that as much, if not more, can be accomplished through mental imagery as through actual, physical rehearsal.

Although we may intuitively use and respond to an abundance of visual information in daily life, not everyone is adept at interpreting what they see. Visual literacy requires the development of sophisticated viewing skills. The art historian Barbara Stafford (1996, p. 40) maintains, “Educated seeing is precisely about recognizing that information cannot be separated from the manner or style of its display.” Artist Ben Shahn (1957, p. 53) states this same idea, only more emphatically: “Form is the very shape of content.”

To better understand how an artist’s handling of design elements conveys meaning, compare the two narrative images depicting the Old Testament heroine Judith of Bethulia (Figures 1 and 2), shown with the severed head of the Israelites’ enemy, the Assyrian general Holofernes.

**Figure 1.** Andrea Mantegna or Follower (possibly Giulio Campagnola), *Judith with the Head of Holofernes*, c. 1495/1500, tempera on panel, National Gallery of Art, Washington, D.C., Widener Collection.
The beheading of Holofernes was a popular subject in Renaissance and baroque Italy because Judith could represent both personal valor and civic triumph. Although both pictures contain many of the same narrative elements, and each artist aggrandizes the heroine by making her large in scale and placing her close to the viewer’s own space, they ultimately offer very different versions of the story and its female protagonist. The Renaissance interpretation of this theme by Mantegna (or follower) gives us a stoic, timeless, and cerebral heroine who is as cool as a cucumber, while Gentileschi casts her as furtive and poised for action, emphasizing the tale’s tension and drama.

The earlier painting shows Judith standing victorious outside the darkened tent, her face impassive as she prepares to drop Holofernes’ head into the open sack and escape the enemy camp. The general’s severed head—highly visible against the vibrant orange of her servant Abra’s robe—underscores Judith’s power. Unlike Abra, Judith does not grimace at the gruesome trophy in her hand. She is idealized through classically inspired draperies and a graceful yet weighty, columnar pose. Her physical stature is accentuated by the strong vertical of the tent pole and through contrast with the stooping posture of her
maid servant. The tent draperies frame Judith like a heraldic cloth of honor while creating a stable, pyramidal composition that lends the picture an immutable and timeless aura. The colors are clear, bright, and weighted in the primaries, which contribute to the picture's overall suggestion of a carefully deliberated and rational act.

Gentileschi's version is more dramatic and suspenseful. Judith and her servant are in Holofernes' tent. The fatal blow has just been struck, and they are interrupted as Abra tries to stuff the head into the sack. Her hand outstretched cautioning silence!, sword poised for their defense, Judith looks up, alert to impending danger just beyond the frame and the spectator's field of vision. Gentileschi's Judith is a flesh and blood woman, solid, weighty, fully capable of wielding the sword and decapitating her foe. She grips her weapon with serious intent, unlike her Renaissance counterpart who holds hers as if it were a fashion accessory. The harsh, theatrical lighting conveys the drama and tension surrounding this moment of possible discovery. The diagonal thrust of Gentileschi's composition, from lower right to upper left, created by the illuminated bodies of the women, augments the image's dynamic visual power.

These pictures tell the same story but use different visual ingredients; pictorially, they are worlds apart. As a result of the choices each artist made, the paintings offer radically different psychologies of the events depicted—one rational and cool, the other more dramatic and emotional. What is important to note is that the fullness of the story cannot be separated from the means of its telling.

A comparison of two Italian Renaissance portraits of affluent young women is equally illustrative (Figures 3 and 4). Both depict their subjects at the advent of their married lives—the principal occasion for a lady's portrait. Both are approximately the same half-length format (although the Leonardo has suffered the loss of the lower part of the picture, which originally may have included the sitter's hands). Both are painted in a subdued palette dominated by earth tones.

Without delving into the symbolism of these pictures, or the ways portraiture of this period differs from what we are familiar with today, there are certain visual cues that convey distinctly different messages about the women—messages that transcend barriers of time and cultural context. The portrait of Bianca Maria Sforza is primarily a picture about the social status of the bride, whose lavish jewels and richly brocaded dress are minutely described. Costume, in fact, is given prominence over the sitter herself, whose profile placement against a neutral background effectively isolates her from the viewer and underscores her privileged social position. The portrait of Ginevra de' Benci is much more a study in individual psychology. Ginevra's costume is relatively simple and unadorned, blending into the background. Her three-quarter pose fully reveals her pensive face, while her gaze steadily meets the spectator's.

As these examples reveal, every picture tells a story. The key is learning how to decode a picture's visual language—a skill that can be applied to the appreciation of fine art as well as to the more mundane images and visual information that bombard us daily. To become fluent in this skill is to become visually literate. Not unlike written and oral
literacies, visual literacy involves learning a system of symbols and cues. However, while a symbol system such as language is typically used to convey specific meanings in as straightforward and unambiguous a manner as possible, the artist’s system of visual symbol-making is used more evocatively and metaphorically to convey multiple levels of meaning. The poet’s use of language, which is aesthetic and connotative rather than purely denotative, perhaps offers the closest parallel to the painter’s visual mode of communication (Gardner, 1990).

Visual literacy will only gain importance in our multimedia age and should be recognized as a unique learning modality—one that complements the traditionally sanctioned verbal and mathematical intelligences. Visual learning should also be given a more prominent place in contemporary education because it draws heavily upon the emotional aspects of cognition.

Intellect and emotion—the twin engines of learning— are typically presented as polar opposites. The rational/logical side of learning has traditionally dominated pedagogy, while the affective side of learning has always been held in lower regard, if not ignored altogether. Yet the role of the emotions in learning has lately assumed new importance in research and learning theory. Eric Jensen (1998, p. 71) points out, “The affective side of learning is the critical interplay between how we feel, act, and think. There is no separation of mind and emotions; emotions, thinking, and learning are all linked.” While noting that extremes of emotions are counterproductive in the classroom, Jensen argues that they have a legitimate place in education and even advocates organizing classroom instruction around activities and topics that engage students on a very personal level.
Music, games, dramatic performance, and storytelling are all activities that require students to give deeply of themselves. Assignments that involve debate and dialogue, journaling, and other forms of personal reflection also help foster learning through feeling. As Jenson puts it, “Good learning does not avoid emotions, it embraces them.”

Images are important conduits for affective learning. Artistic images, in particular, make their greatest appeal to our emotions and give shape to our inner experiences. As any teacher of elementary or middle school can attest, visual art captures a child’s imagination, whether she is looking at a picture or creating her own. Art is a uniquely personal experience—and one that offers respite from the more traditional classroom activities. A picture can easily become the point of departure for creative writing or storytelling. The combination of image and word has broad educational applications for students at all grade levels.
Why Storytelling with Digital Images?

STORIES—VISUAL and verbal—are powerful vehicles for affective learning. Penninah Schram notes that one of the primary ways we build community with others is by sharing stories: “Storytelling connects people. It connects hearts. It helps answer questions like: Who am I? Who are my people? With what values did they live? How should I live? How should I die? What are the legacies that I want to transmit to my children and to the next generation?” (as quoted in Mooney & Holt, 1996, p. 8).

The pedagogical dimensions of storytelling in the classroom might be summarized as follows (Schank, 1995):

- **Humanistic**: Storytelling is a culturally rich and venerated practice that is global in relevance and encourages people to value their experiences—imaginary or real. Stories put us in touch with ourselves and with others, and communicate values.

- **Cross-disciplinary**: Storytelling applies to many school subjects, particularly in language arts and social studies.

- **Cross-cultural**: Narrative structures cut across cultural and geographic spaces.

- **Multisensory, multimodal**: Storytelling is visual, auditory, and kinesthetic, and unites verbal and technological literacies.

- **Constructivist**: Storytelling is learner-centered; tales are created out of an individual’s knowledge and experience.

- **Memory and narrative**: We learn in story structures and think in terms of stories.

Digital storytelling—using a computer equipped with electronic text and imaging software to tell tales—is but a contemporary canvas for an age-old art form. It allows many of the traditional elements of performance-based storytelling to become seamlessly integrated—the visual and verbal, the kinesthetic and auditory—by using a platform familiar and appealing to today’s youth. The computer is the new campfire around which students gather and interact.

Because digital storytelling integrates a wide range of tasks—including scriptwriting and editing, image manipulation, voice-over narration, music selection, and timing—it allows teachers to address multiple learning styles within a single project. Because it draws on a wide range of academic skills, it has great cross-curricular potential.

Digital storytelling also allows students to build technical skills required in an increasingly complex, electronic society, and readily addresses the National Educational Technology Standards for Students. As students learn word processing and imaging
Among master teachers, digital storytelling is rapidly becoming a major vehicle for building 21st-century literacies. According to Kathleen Tyner (1998), author of Literacy in a Digital World, electronic storytelling offers the advantages of an experiential approach to learning, while combining oral and written literacies with those intrinsic to the new multimedia.

### Digital Storytelling at the National Gallery of Art

In 2003 and 2004, the educational potential of digital storytelling was explored in a National Gallery of Art program entitled Storytelling and the Visual Arts. Teachers from all disciplines participated in an intense three-day workshop, during which they developed a short three- to five-minute digital movie that focused on an artistic motif of their choice. Teachers arrived at the workshop with a one-page script and a dozen images. With ready access to digital cameras, digital image editing software, and Macintosh computers, these teachers quickly identified digital storytelling as an effective educational medium.

The tutorial was led by Joe Lambert, director of the Center for Digital Storytelling in Berkeley, California. The center’s Web site (www.storycenter.org) provides a step-by-step description of the digital storytelling process and a representative range of final stories produced at workshops conducted around the United States and abroad.

Digital storytelling is a compelling and satisfying process; it begins with crafting the right story and continues through the digitally mediated editing, rendering, and presentation stages. It is learner-centered in the best way imaginable, in that it asks us to make meaning out of experience we deem significant. There is also the “me” element—the movie is all about its maker. For once we can say, with full impunity from any accusations of raging ego, “It’s all about me!” This can offer a particularly powerful way for student authors to find their voice.

Digital storytelling, as practiced by those collaborating with the Gallery, is both about art and an art form in itself. After creating their own digital stories, teachers are better equipped to coach their students through the same process. Many young people never encounter visual art at home, and even in school they may fail to connect personally to the objects their teachers have chosen for study. But if allowed to choose art that speaks to them and conveys the essence of their own story, they find that imagery can become a powerful catalyst for self-expression.

Onnie, a high school studio art teacher from New Jersey, created a potent model for his students in Renaissance Memory—a story of art, family history, and the Harlem...
Renaissance. The image that launched his journey of personal discovery was Palmer Hayden’s *The Janitor Who Paints* (Figure 5).

As the narrative unfolds, it is clear the painting speaks to Onnie’s own identity as an artist and the legacy of those dreamers and “strivers” who came before him:

PALMER HAYDEN’S *The Janitor Who Paints* brings together all of the feelings that I had about art. The artist sits next to a trash can, intently studying a pretty young mother and her baby. All three are proud to be who they are. Even in a basement, they are all obviously strivers. Around the room are the tools of both of Palmer Hayden’s trades; the broom and the feather duster are as important as the canvas and the easel. He wears a beret cocked to the side, a symbol of an artist. It is also the hat that Dizzy Gillespie and Harlem hipsters wore to top off their zoot suits.

I recognize my father and my uncles in all of them. *The Janitor Who Paints* is like all those strivers who came north to become the heroes of the next generation.


Tom, a high school arts resource teacher from Maryland, crafted an equally moving tale wrought with difficult and determined self-examination. For his electronic story, he chose to examine a late-medieval devotional sculpture depicting the Christ child surrounded by members of his extended family (Figure 6). The rich colors and brilliantly reflective gold-leaf surfaces give the sculpture a jewel-like, regal quality that underscores the importance of the religious subject. Gestures and facial expressions are exquisitely rendered and run the gamut of human emotions.

Interestingly, when Tom read his script out loud to the group, his words were neutral, distant, and documentary-like—completely at odds with the image he chose and the overall project goal of exploring one’s personal responses to a work of art. With coaching, Tom stepped back and reconsidered his source of inspiration.

Tom revised his story into an insightful, personal reflection on what struck him most about the sculpture, reactions he was at first unable to articulate. Chief among them were...
the range of emotions displayed by each man and woman in the presence of the Christ child and the power relationships between genders, suggested by the placement of men and women within the sculptural tableau. Family photographs from Tom’s own childhood were interwoven with his reflections on the artwork and the gender relations depicted, including reminiscences about household role models with whom he grew up.

Tom’s story took him on a journey from head to heart, in which historical facts and objective visual data become inflected with personal meanings and associations. What started as a scholarly exegesis developed into something deeper, triggering the powerful memories, values, and truths that are at the core of the best stories. He found his voice and took ownership of the artwork. History was supplanted by his story—Tom’s. As both Tom’s and Onnie’s experiences suggest, everyone, and every picture, has a story to tell.

The challenge for teachers in schools is to add this powerful mode of self-expression to their inventory of pedagogical strategies and tools, and to employ it to address curricular goals. The content area chapters provide examples of ways this can be accomplished in different classrooms. The goal is to effectively communicate content in a manner that empowers the learner. Visual imagery offers an effective mechanism for achieving this, and the new technologies available to teachers offer new opportunities for introducing imagery into the classroom.

Web Resources of the National Gallery of Art

THIS SECTION provides an annotated list of National Gallery of Art Web sites educators may mine for ideas and images.

National Gallery of Art
www.nga.gov
A wide range of digital images and teaching resources for K–12 educators are available at the National Gallery of Art’s Web site. The home page links directly to the Division of Education’s lists of programs and offerings. Of particular interest for teachers are the following Gallery Web addresses.

NGA Classroom
www.nga.gov/education/classroom/index.htm
NGA Classroom is the main Gallery Web site for teachers wishing to integrate art into the curriculum. It features online lessons for teachers and interactives for students that extend selected lessons, allowing students to make their own mobiles, for example, or learn more about the gods and goddesses of Greco-Roman antiquity. A resource finder allows a search for Gallery online teaching materials by curriculum topic, art subject, or artist’s name.

NGA Loan Materials
www.nga.gov/education/classroom/loanfinder
This teaching resource finder complements NGA Classroom and allows a search for loan materials that can be ordered online and direct-mailed for classroom use. Materials can be searched by curriculum topic, art subject, or artist’s name. Particular formats can be specified: teaching packet with slides, CD-ROM, DVD, videodisc, and video.
NGA Kids
www.nga.gov/kids/kids.htm
This is the Gallery’s Web site for children, with interactive art-making projects at the Art Zone, featuring online collage and portrait-making projects, among others.

Digital Image Database and Search Engine
www.nga.gov/search
Text or data on all of the more than 108,000 objects in the Gallery’s collection can be found using various search capabilities. Images of more than 5,600 objects in the collection are available. Search by artist’s name, object title, or by keywords and phrases. Check images only to limit your search to objects for which images are available.

Resources for More Information


Digital storytelling is also a natural for language arts; don’t miss *Teaching with Digital Images*’ activities for helping struggling readers envision text and build a bridge to writing. Lesson plans and ideas for all K–8 subject areas follow a NETS-based strategy of using digital images to acquire, analyze, create, and communicate learning. Order now by phone, fax, or online. Single copy price $37.95. ISTE member price $34.15. Special bulk pricing available. Call 1.800.336.5191 or go to www.iste.org/bookstore/.