# Considering Visual Text Complexity: A Guide for Teachers

*Marva Cappello*

> Literacy teachers are now responsible for supporting students as they engage with visual texts, so we must carefully and intentionally choose images for instructional practice and consider visual text complexity.

Twenty-first century literacy requires the ability to critically analyze and contribute to the large number of images we encounter every day in contemporary culture. Images dominate communication outside of school, and educators must capitalize on the prodigiously visual nature of society. The ways visual texts communicate meaning can no longer be seen as ancillary and must be recognized as essential representational modes (Kress, 2010).

The Common Core State Standards (National Governors Association Center for Best Practices [NGA Center] & Council of Chief State School Officers [CCSSO], 2010a) recognize this vital skill as a foundational assumption embedded throughout the Standards. The authors believe that "to be ready for college, workforce training, and life in a technological society, students need the ability to…analyze and create a high volume and extensive range of print and nonprint texts in media forms old and new" (p. 4). Nonprint texts include visual texts. I use this term intentionally because it allows for an extensive range of images, including fine art, illustrations, photographs, and graphic organizers, to name just a few. Visual texts make meaning through pictorial communication. Because my focus is on the benefits of visual texts for instruction, my discussion will focus on considering images in school contexts.

We know that nonlinguistic representations such as visual texts provide variable tools for students processing and communicating information and, consequently, have a positive impact on student outcomes (Marzano, Pickering, & Pollock, 2001). Visual integration also helps create an instructional environment where students are welcome to take risks, one of the essential advantages visuals have for supporting English learners in our classrooms (Britsch, 2010; Cappello & Lafferty, 2015; Cappello & Walker, 2016; Cummins & Quiroa, 2012; Wilhelm, 1997). Visual-based literacy curricula benefit oral and written language when the overall goal is meaning making and may address several specific literacy needs, including information retention (Gangwer, 2005), vocabulary support (Dean, Hubbell, & Pitler, 2012; Jones, 2010), and general comprehension (Cousin, 2008; Wilhelm, 1997). Indeed, language as a communication mode cannot be isolated from the visual (Britsch, 2010).

We should not assume that because students' worlds are overwhelmingly visual in nature, students are equipped to make sense of images. As students' instructional interactions with visual texts continue to grow, they will need new skills and strategies to bring to experiences (Serafini, 2010). As teachers "become more aware of the increasing role of visual communication in learning materials of varying kinds, they are asking themselves what kind of maps, charts, diagrams, pictures, and forms of layout will be most effective for learning" (Kress & van Leeuwen, 2006, p. 14). This teaching tip offers several considerations for choosing the types of visual texts to include in literacy instruction across the disciplines and extends the qualitative criteria outlined by the Common Core to illuminate visual text complexity.

## Why Visual Text Complexity?

Simply adding images may not be enough to yield the many potential benefits that result from embedding visual texts into the curriculum; images must be carefully selected to serve instructional purposes. The inclusion of visuals must be for intentional reasons beyond the convenience and supplemental functions of images found in commercially available publishers' materials.

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When choosing images to meet students' instructional needs through specific lesson objectives within the disciplines, visual text complexity must be considered. Images must be sufficiently complex to satisfy instructional intentions and to provide the right kinds of student support. Thus, the application of criteria for exploring visual texts outlined in this section is always bracketed by the reader/viewer and instructional purposes. We must also consider the image maker's purpose and visual text elements when making instructional decisions. This is no easy task. Therefore, teachers need ways to determine visual text complexity.

To be clear, I do not advocate for a quantitative measure of images or leveling by grade. Although I suggest that images should be valued as classroom texts, I do not believe that assigning a numeric (or alphabetic) code is the way to privilege visual texts in our classrooms as official literacy resources and outcomes.

Therefore, to address the idea of visual text complexity in classroom images, I apply the qualitative features used to describe complex written text in the Common Core State Standards (NGA Center & CCSSO, 2010a) and elaborated on by others (Fisher & Frey, 2014; Fisher, Frey, & Lapp, 2016; Sierschynski, Louie, & Pughe, 2014).

Table 1 offers a scale for considering visual text complexity designed to support teachers' planning decisions. I have adapted tools created by Fisher and Frey (2014) to operationalize thinking and support teachers' discussions matching students with visual texts, noting, as Fisher and Frey do, the inherent categorical overlap.

To combat the implied hierarchy of the scale as well as the temptation to assign a score or level to an image, I worked with a former designer and current education doctoral student, Michelle Ruiz, to create a visual representation of the process of considering visual text complexity that is detailed in Table 1. Figure 1 illustrates the ways the categories cluster around visual text elements contributed by the author/image maker, those explored within the visual text, and those dependent on the reader/viewer and their relationship to the instructional task. The following section briefly unpacks the ideas in the scale and offers questions to guide teachers' decision making as they choose visual texts for instructional purposes.

## Author/Image Maker Considerations

In creating visual texts, the image maker makes several decisions that influence complexity. Beginning with purpose or intention, these factors address why the image was created.

**Levels of Meaning and Purpose.** Density, symbolism, and image maker's purpose are essential factors that determine a visual text's levels of meaning. The following questions may help guide teachers' decisions: Is the image an explicit depiction, or are there multiple levels of meaning that require inferencing or critique? Does the visual text include symbolism? Are the symbols familiar or abstract? What is the image maker's purpose in creating the image? Does it illustrate a concept or complement writing? Is it used to express an aesthetic idea?

## Visual Text Considerations

The compositional elements are also image makers' decisions. However, the following factors are examined in the appearance of the visual text.

**Structure.** *Structure* refers to how a text is organized and presented. Consider the visual medium (materials and techniques) when assessing complexity. Visual mediums such as painting, photography, or illustrations may be like genres, some "inherently more complex and complicated" (Fisher & Frey, 2014, p. 242). Does the image conform to the expected conventions of the medium? We must also consider the compositional text features and the role of supplemental (often but not exclusively written) information when exploring structural visual text complexity. Are compositional devices used to convey meaning or evoke emotion? What is the visual point of view? Is the supplemental information provided (e.g., caption, guides) essential for making meaning of the visual text?

**Language Conventionality and Clarity.** Although this scale was created to explore visual texts used for instruction and within school settings, there are still register variations. Is the image scholarly or informal? Does the image communicate using formal, technical, and archaic visual elements, or is it casual and familiar?

## Readers/Viewers and Task Considerations

The idea that complexity lies solely within the text will lead to misuse of images across the curriculum. In their three-way evaluation of text complexity, reader and task connections are called out as paramount by the Common Core:

**Table 1**
**Qualitative Scale of Visual Text Complexity**

| | More complex | Complex | Less complex |
|---|---|---|---|
| *Levels of meaning and purpose* | | | |
| Density | Multiple levels of meaning depicted through abstract or ambiguous components; requires critique | Combination of visual elements involves interpretation for understanding; layers of information add to the complexity. | Single levels of meaning in literal and explicit imagery |
| Symbolism | Analysis of nonrepresentational symbols required to make meaning; viewers draw conclusions and make inferences for understanding | Familiar and conventional symbols, shapes, and colors used to illustrate concepts and ideas (e.g., flags, peace signs, red for heat or anger) | Representational images, true to objects portrayed |
| Purpose | Created to communicate aesthetic and intellectual ideas | Repurposed or multipurpose images used out of original context; purpose may be implied or withheld; persuasive imagery | Functional illustration or depiction of real objects |
| *Structure* | | | |
| Visual medium | Unfamiliar or expanded perceptions of specific medium or form of expression | Extended perceptions of medium or multimedium expressions, but some familiar characteristics provide insight | Conventional characteristics of medium (photography, painting, comics, etc.) |
| Compositional features | Compositional devices used to intentionally challenge perception to evoke meaning or emotion; forces viewer to reflect on subject through particular, multifaceted, or ambiguous point of view | Some unexpected compositional features used for communication (frame within a frame); alternate perspective such as bird's-eye or angle point of view | Traditional conventional compositional devices used (foreground, background, size in frame, etc.); viewed from centered or straightforward perspective |
| Supplemental information | Visual text is difficult or impossible to understand without essential supplemental information. | Visual text understood with supplemental information such as captions, keys, or guides | Written texts or other supporting information not necessary for understanding visual text |
| *Language conventionality and clarity* | | | |
| Register | Scholarly and discipline-specific register represented in diagrams, tables, or fine art | Register is more formal but includes universal graphic organizers representing common subjects. | Informal visual register depicted in student drawings, familiar graphics, sketches, and casual depictions |
| *Knowledge demands* | | | |
| Background knowledge | Visual text stretches student experiences for understanding sophisticated themes. | Visual text builds on student knowledge in ways that extend personal experiences and references to other texts. | Content matches viewer's life experiences; simple themes; high levels of intertextuality |
| Prior knowledge | Presumed specialized or technical content knowledge necessary for understanding | Subject-specific knowledge required, but image provides support | Draws on general academic learning |

**Figure 1**
**Visual Representation of the Process of Considering Visual Text Complexity**
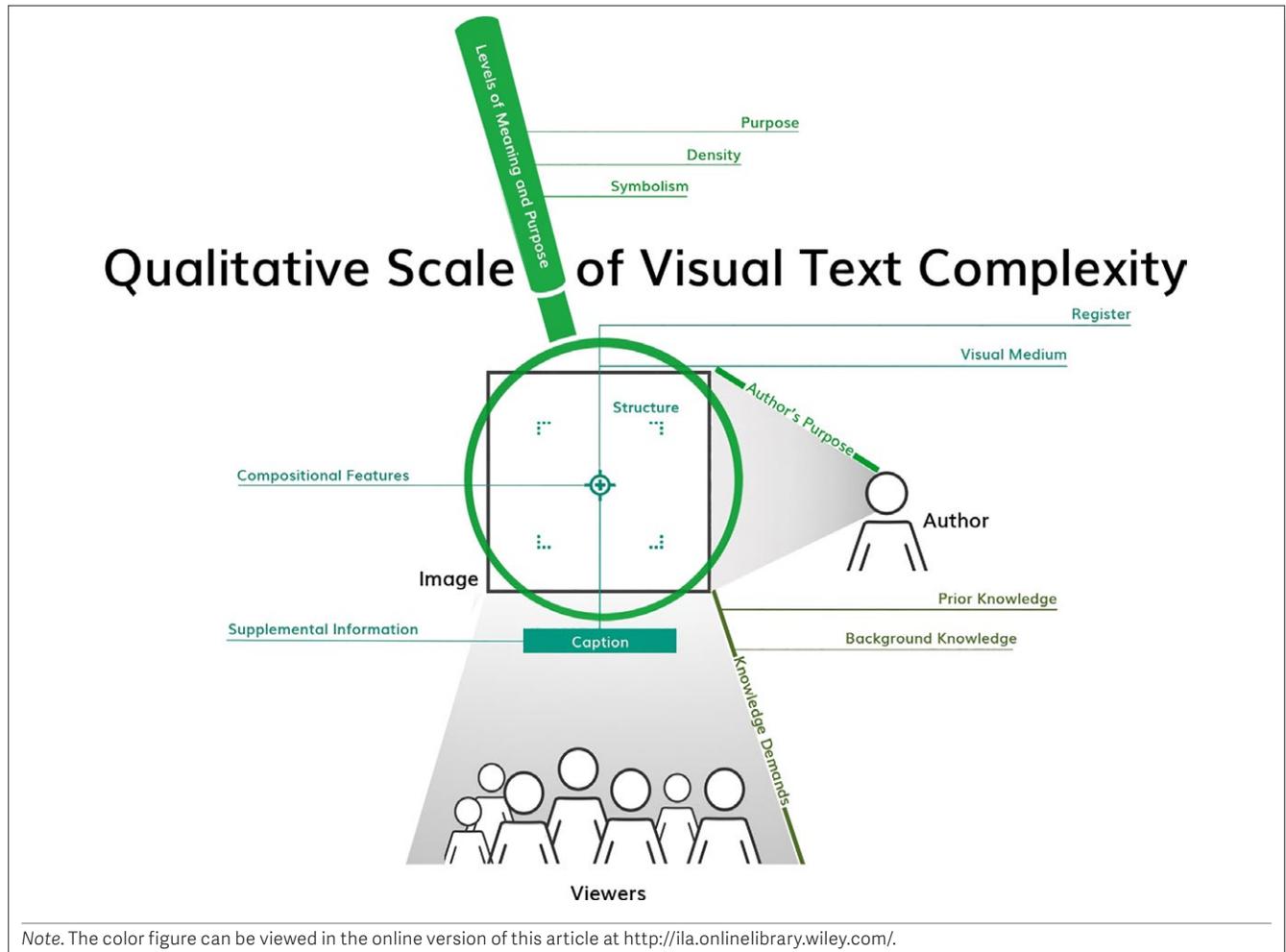


*Note.* The color figure can be viewed in the online version of this article at http://ila.onlinelibrary.wiley.com/.

Variables specific to particular readers (such as motivation, knowledge, and experiences) and to particular tasks (such as purpose and the complexity of the task assigned and the questions posed) must also be considered when determining whether a text is appropriate for a given student. (NGA Center & CCSSO, 2010b, p. 4)

When choosing visual texts for instruction, there is no greater consideration than the student. The purpose of determining visual complexity is to provide students with appropriate images to stretch and support academic goals. Therefore, the specific instructional task is also an important consideration. We must consider visual text attributes in ways similar to carefully choosing a passage or book to serve a specific literacy goal. For example, it makes good sense to choose a (written or visual) text with two main characters if the focus is on comparing and contrasting characters. Further, more

explicit depictions (which are less complex) might function well when creating a storyboard or excitement graph, whereas somewhat ambiguous images (which are more complex) are better suited for Visual Thinking Strategies (Yenawine, 2003). Similarly, visual texts should draw on the structures and practices of the discipline. Images integrated for learning literacy in social science may include timelines and primary source images, whereas scientific images might include microscopic photographs and graphs.

**Knowledge Demands.** Teachers must consider and build on students' academic and personal life experiences when assessing for visual text complexity. What are the lived experiences students can bring to the viewing of the text? What knowledge of other texts (written or visual) can students bring to understanding this image? Does viewing and

comprehending the image presume specialized or technical prior knowledge? Is the academic content aligned with what has been previously taught?

## Making Decisions About Visual Text Complexity

This section describes two visual text choices made for specific instructional purposes and specific students. The first image was selected for use in a fourth-grade southern California classroom working on a Gold Rush unit (see Figure 2). The second image was chosen to illustrate the historical figure George

**Figure 2**
**Example of Visual Text Choice for Fourth-Grade Social Studies Curriculum**[a]



*Note.* The color figure can be viewed in the online version of this article at http://ila.onlinelibrary.wiley.com/.
[a]California Department of Parks and Recreation. (n.d.). *Sutter's Mill reconstruction* [Photograph]. Retrieved from http://www.parks.ca.gov/ImageGallery/?page_id=484

**Figure 3**
**Example of Visual Text Choice for Fifth-Grade Social Studies Curriculum**[a]



*Note.* The color figure can be viewed in the online version of this article at http://ila.onlinelibrary.wiley.com/.
[a]Leutze, E. (1851). *Washington crossing the Delaware* [Painting]. Retrieved from http://www.metmuseum.org/art/collection/search/11417

Washington as part of a Revolutionary War unit (see Figure 3). Both images were chosen from Creative Commons and are freely licensed for classroom use and commercial purposes.

### The Gold Rush

The fourth-grade students in this classroom included a high percentage of English learners, many of whom would benefit from oral language practice. Thus, the teacher decided to focus on the literacy goal described by Common Core Anchor Standard 2 for Speaking and Listening: "Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally" (NGA Center & CCSSO, 2010a, p. 22). Students had recently begun their unit on the Gold Rush, specifically California History–Social Science Standard 4.3.3: "Analyze the effects of the Gold Rush on settlements, daily life, politics, and the physical environment (e.g., using biographies of John Sutter, Mariano Guadalupe Vallejo, Louise Clapp)" (California Department of Education, 2000, p. 13). They were building on some prior classroom experiences within the social science context.

In order to meet the instructional objectives and provide the right kinds of student support, I suggested the visual-based literacy strategy Listen to Me. In this strategy, students work in partners, with one partner facing the image and the other partner

facing away from the image. The partner facing the image closely reads the visual text and uses specific academic oral language to describe what he or she sees. The other partner listens closely and sketches the image based on what information is shared.

Considering the students and the task at hand, the teacher and I knew we had to find an image that would be complex enough to stretch students' thinking, with the understanding that the strategy requires lower levels of complexity to support oral language development because students need to be able to articulate and sketch out image details.

The photograph that we chose depicts a reconstruction of Sutter's Mill, a historic California location where gold was found in 1848, inciting the Gold Rush, and meets our criteria. Levels of meaning are less complex because this is a representational depiction of a real place. Structurally, the image is also less complex because it uses the conventional characteristics of photography, including composition and perspective; the tracks and deck lead the viewer's eyes to the largest and most important element, the mill. The visual text is complex in that viewers may not immediately recognize the image as Sutter's Mill, but that understanding is not immediately required to effectively engage with the strategy and receive the oral language benefits.

### The Revolutionary War

This fifth-grade teacher found that students were having trouble making logical inferences that were supported by textual evidence (Common Core Anchor Standard 1 for Reading). She wanted to offer additional practice and support within the social studies curriculum, focusing on the Revolutionary War and specifically the "views, lives, and impact of key individuals during this period" (California History–Social Science Standard 5.5.4; California Department of Education, 2000, p. 18). In order to address these interdisciplinary goals, the classroom teacher and I designed activities based on Yenawine's (2003) Visual Thinking Strategies, which is a questioning protocol that requires students to make interpretations and justify them with evidence from the image. The protocol targets three questions:

1. What's going on in this picture?
2. What do you see that makes you say that?
3. What more can you find?

To meet the instructional goals through Visual Thinking Strategies, images should be fairly complex, with familiar subjects "so that students have much to recognize, but they also contain elements of mystery so students have observations, ideas, and emotions to puzzle over" (Yenawine, 2003, p. 24). Although this lesson would introduce the unit, the class has had experience analyzing characters in literature, and a foundational knowledge of first president of the United States was assumed. Therefore, we looked for a more complex visual text to meet the student and instructional task goals.

We chose the famous painting *Washington Crossing the Delaware* (Leutze, 1851) for our Visual Thinking Strategies lesson because it was more complex in multiple dimensions on the scale. This dense fine art painting is layered with information and requires close observation for understanding. Although many components are representational and symbols are recognizable, fifth-grade students may be unfamiliar with the conventions of oil painting or the ways the artist used compositional devices such as organization (the only object higher than Washington in the painting is the American flag), depth, and tone (light and shadow) to inform the viewer. Further, in order to comprehend the visual text, students would need to draw on specific content knowledge about the Revolutionary War and the event this image honors, contributing to its complexity.
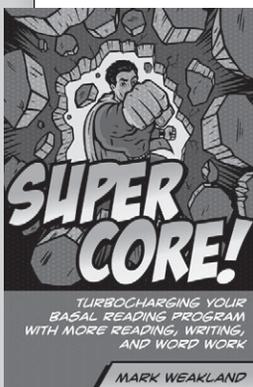
## Conclusions

Today's students must be prepared to engage with the overwhelming number of images we face in today's multimodal society. In order to prepare students to analyze and communicate with visual texts, teachers must be intentional about the images they include in their practice. Choosing visual texts for instruction is not unlike choosing written texts; teachers must consider visual text complexity in the context of the reader/viewer and instructional task. This teaching tip offers a starting point for teachers making curricular decisions. Next steps include research with classroom teachers to examine the impact of these guidelines on teaching and learning.

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