

The Artful Thinking program takes the image of an artist's palette as its central metaphor. Typically, a palette is made up of a relatively small number of basic colors which can be used and blended in a great variety of ways. The artful thinking palette is comprised of 6 thinking dispositions - 6 basic colors, or forms, of intellectual behavior - that have dual power: They are powerful ways of exploring works of art, and powerful ways of exploring subjects across the school curriculum.

The Artful Thinking palette comes alive through the use of "thinking routines." Each thinking disposition has several thinking routines connected to it. Thinking routines are short, easy-to-learn mini-strategies that extend and deepen students' thinking and become part of the fabric of everyday classroom life. They are used flexibly and repeatedly -- with art, and with a wide variety of topics in the curriculum, particularly in language arts and social studies.

For more information, visit the following site: http://www.old-pz.gse.harvard.edu/tc/atp_palette.cfm

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OBSERVING AND DESCRIBING SEE, THINK, WONDER

Look at the artwork or object for a moment. What do you see? What do you think about what you see? What do you wonder about?

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine helps students make careful observations and develop their own ideas and interpretations based on what they see. By separating the two questions, What do you see? and What do you think about what you see?, the routine helps students distinguish between observations and interpretations. By encouraging students to wonder and ask questions, the routine stimulates curiosity and helps students reach for new connections.

WHEN AND WHERE CAN IT BE USED?

This widely-used routine works well with almost any artwork or object. It is versatile, easy to use, and almost never fails to deepen students' interest in the topic at hand, whether students have lots of background knowledge or none at all. Many teachers like to use this routine at the start of a lesson, or as a first step in a more extended activity.

TIPS FOR USING IT.

The routine works particularly well when used as a group; everyone can participate and because students invariably build on each others' ideas, it helps students vividly see the power of shared inquiry. The best tip for using this routine is to trust the routine and give it time, even if –or perhaps especially if – you're unsure of the direction the conversation will go in. Another tip is to keep the routine anchored to direct observation by returning often to the question, What do you see? One way to do this is to borrow a phrasing from another routine: When students address the "What do you think? question by giving an opinion or interpretation, respond by asking: What do you see that makes you say that?

ELABORATION GAME

As a group, observe and describe several different sections of an artwork.

 One person identifies a specific section of the artwork and describes what he or she sees. Another person elaborates on the first person's observations by adding more detail about the section. A third person elaborates further by adding yet more detail, and a fourth person adds yet more. Observers: Only describe what you see. Hold off giving your ideas about the art until the last step of the routine.

2. After four people have described a section in detail, another person identifies a new section of the artwork and the process starts over.

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine encourages students to look carefully at details. It challenges them to develop verbal descriptions that are elaborate, nuanced, and imaginative. It also encourages them to distinguish between observations and interpretations by asking them to withhold their ideas about the artwork – their interpretations – until the end of the routine. This in turn strengthens students' ability to reason carefully because it gives them practice making sustained observations before jumping into judgment.

WHEN AND WHERE CAN IT BE USED?

Use this routine with any kind of visual art that stays still in time, such as painting or sculpture. (There is an adapted version of this routine for use with music on the Artful Thinking website.) You can also use the routine with non-art objects, such as a microscope, an animal skeleton, or a plant. The Elaboration Game is an especially good way to launch a writing activity because it helps students develop a detailed descriptive vocabulary.

TIPS FOR USING IT.

This routine is pretty much is self starting. All you need to do is explain the rules of the game. Decide ahead of time whether you want to have each student speak in turn, or whether you want students to raise their hand and offer their observations at will. Don't worry if the routine feels a bit awkward the first time you try it. It is challenging to look at things deeply and it sometimes takes students a while to make new observations and find fresh ways to describe things. Give students lots of "think time" and they'll soon get the hang of it.

BEGINNING, MIDDLE, END

Choose one of these questions:

- If this artwork is the beginning of a story, what might happen next?
- If it this artwork is the middle of a story, what might have happened before? What might be about to happen?
- If this artwork is the end of a story, what might the story be?

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine uses the power of narrative to help students make observations and encourages them to use their imagination to elaborate on and extend their ideas. Its emphasis on storytelling also encourages students to look for connections, patterns, and meanings.

WHEN AND WHERE CAN IT BE USED?

The routine works with any kind of visual art that stays still in time – such as painting or sculpture. Use Beginning, Middle, or End when you want students to develop their writing or storytelling skills. You can use the questions in the routine in the open-ended way they are written. Or, if you are connecting the artwork to a topic in the curriculum, you can link the questions to the topic. For example, if you are studying population density, you can ask students to keep the topic in mind when they imagine their stories. The routine is especially useful as a writing activity. To really deepen students' writing, you can use the Ten Times Two routine with the same artwork prior to using this routine as a way of helping students generate descriptive language to use in their stories.

TIPS FOR USING IT.

Give your students quiet time to look before they begin writing or speaking. If you like, take a few minutes to ask the class to name several things they see in the artwork, before they begin thinking individually about a story. If students are writing, they can talk over their ideas with a partner before they begin to write solo. They can also write in pairs. If students are doing the routine verbally, they can tell stories individually, or work in pairs or small groups to imagine a story together. You can also invent a story as a whole class by asking someone to begin a story and having others elaborate on it.

LOOKING: 10 X 2

1. Look at the image quietly for at least 30 seconds. Let your eyes wander.

2. List 10 words or phrases about any aspect of the picture.

3. Repeat Steps 1 & 2: Look at the image again and try to list 10 more words or phrases to your list.

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

The routine helps students slow down and make careful, detailed observations by encouraging them to push beyond first impressions and obvious features.

WHEN AND WHERE CAN IT BE USED?

The routine can be used with any kind visual art. (There is a version for music on the Artful Thinking website, called Listening ten times two.) You can also use non-art images or objects. The routine can be used on its own, or to deepen the observation step of another routine. It is especially useful before a writing activity because it helps students develop descriptive language.

TIPS FOR USING IT.

Quiet, uninterrupted thinking and looking time is essential to this routine. Give students a specified amount of time to look (say, 8 minutes for each round of 10 observations) and be the timekeeper. Don't tell students beforehand that you will be asking them to do another round of 10. If you like, you can vary the format for each of the two rounds of observations. For example, students can do the first round solo and the second round in pairs or small groups.

OBSERVING AND DESCRIBING COLOURS, SHAPES, LINES

What colors do you see?

What shapes do you see?

What lines do you see?

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

The routine helps students make detailed observations by drawing their attention to the forms in an artwork – its formal aspects – and giving them specific categories of things to look for.

WHEN AND WHERE CAN IT BE USED?

The routine can be used with any kind of visual art. It can also be used with visually rich non-art images or objects. Like the "Looking ten times two" routine," students can use the routine on its own, or prior to having a discussion about an artwork or use another routine. It is especially useful before a writing activity because it helps students develop descriptive language.

TIPS FOR USING IT.

Encourage students to vary their gaze while looking. For example, ask them to look for big features as well as small features, for obvious elements as well as nonobvious details. Students can work in any format – solo, small groups, or as a whole class. The routine can be used to deepen the observation step in another routine (e.g., See Think Wonder), or on its own.

CLAIM, SUPPORT, QUESTION: What makes you say that?

1. Make a claim about your topic Claim: An explanation or interpretation of some aspect of the artwork

> 2. Identify support for your claim Support: Thing you see, feel and know about your claim

3. Ask a question related to your claim Question – What's left hanging? What isn't explained? What new questions does your claim raise?

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine reveals and encourages the process of reasoning by asking students to formulate an interpretation of something and support it with evidence. By pushing students to ask questions about their interpretation, it helps students see that reasoning is an ongoing process that is as valuable for raising questions as it is for providing answers.

WHEN AND WHERE CAN IT BE USED?

Use the routine with works of art and with topics in the curriculum that invite explanation or are open to interpretation.

TIPS FOR USING IT.

The routine works particularly well when used as a group; everyone can participate and because students invariably build on each others' ideas, it helps students vividly see the power of shared inquiry. The best tip for using this routine is to trust the routine and give it time, even if –or perhaps especially if – you're unsure of the direction the conversation will go in. Keep the routine anchored to direct observation by returning often to the question, What do you see?

THINK, PUZZLE, EXPLORE

1. What do you think you know about this artwork or topic?

2. What questions or puzzles do you have?

3. What does the artwork or topic make you want to explore ?

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE? This routine helps students connect to prior knowledge, stimulates curiosity, and lays the groundwork for independent student inquiry.

WHEN AND WHERE CAN IT BE USED?

Almost anywhere, anytime. The routine works particularly when beginning a topic, and when you want students to develop their own areas of interest and questions of investigation.

TIPS FOR USING IT.

Whatever format you use, begin by giving students a few quiet moments to consider the artwork or the topic at hand. Then, ask students to work solo, in small groups or as a whole class and brainstorm ideas in all three areas.

CREATIVE QUESTIONS AND INVESTIGATING

1. Brainstorm a list of at least 12 questions about the artwork or topic. Use these question-starts to help you think of interesting questions: Why...?

- What are the reasons ...?
 - What if ...?
- What is the purpose of ...?
- How would it be different if ... ?
 - Suppose that ...?
 - What if we knew ...?
 - What would change if...?

 Review your brainstormed list and star the questions that seem most interesting. Then, select one of the starred questions and discuss it for a few moments. (If you have the time, you can discuss more than one question.)

3. Reflect: What new ideas do you have about the artwork or topic that you didn't have before?

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE? This routine stimulates and sustains curiosity and helps students discover the complexity of an artwork or topic.

WHEN AND WHERE CAN IT BE USED?

Use it when you want students to develop good questions, when you want them to get beyond questions of information and see that something has many dimensions or layers.

TIPS FOR USING IT.

Work as a whole class or in small groups. Or mix it up. For example, do step 1 as a whole class, do step 2 in pairs, and step 3 as a whole class again.

PERCEIVE, KNOW, CARE ABOUT

Choose a person, object or element in an image or work of art, and imagine yourself inside that point of view.

Consider:

1.What can the person/thing perceive and feel?
 2.What might the person/thing know about or believe?
 3.What might the person/thing care about?
 Take on the character of the thing you've chosen and improvise a monologue. Speaking in the first person, talk about who/what you are and what you are experiencing.

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine encourages perspective taking and close looking through projection, a technique in which students project a persona into a person or thing in order to explore ideas from a new viewpoint.

WHEN AND WHERE CAN IT BE USED?

Use the routine when you want students to see beyond the surface story and explore different viewpoints. Use it when you want to help students bring abstract concepts, pictures, or events to life. Because the routine involves empathic thinking, use it when you want students to make a personal connection to a topic.

TIPS FOR USING IT.

It's natural for students to feel self-conscious before using this routine for the first time. The feeling usually passes quickly because the routine itself is so engaging. But you can help alleviate nervousness by emphasizing that the purpose of this routine is not to produce a polished performance but to use projection as a way of thinking – a way of exploring new ideas.

The routine can be used as a whole class, in small groups, in pairs, or solo as a writing assignment. Sometimes it's helpful to get started by asking students to brainstorm a list of the possible perspectives embodied in that picture or topic before choosing a particular point of view to talk from. When working in pairs or groups, students can help each other stay in character by addressing questions to the persona the student is embodying, rather than the student him or herself.

CIRCLE OF VIEWPOINTS

1. Brainstorm a list of different perspectives.

2. Choose one perspective to explore, using these sentence-starters:
I am thinking of...the topic ... from the viewpoint of...the viewpoint you've chosen

•I think...describe the topic from your viewpoint. Be an actor--take on the character of your viewpoint

•A question I have from this viewpoint is...(ask a question from this viewpoint)

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine helps students see and explore multiple perspectives. It helps them understand that different people can have different kinds of connections to the same thing, and that these different connections influence what people see and think.

WHEN AND WHERE CAN IT BE USED?

The routine works well with topics and artworks that deal with complex issues. It also works well when students are having a hard time seeing other perspectives or when things seem black and white. The routine can be used to open discussions about dilemmas and other controversial issues.

TIPS FOR USING IT.

After identifying a topic, ask students to brainstorm various viewpoints about this topic. This can be done solo, or as a class, but make sure to encourage students to think broadly about possible viewpoints. If they need help, try using the following prompts:

How does it look from different points in space and different points in time?

• Who (and what) is affected by it?

• Who is involved?

• Who might care?

EXPLORING VIEWPOINTS HEADLINES

Invent a headline for this artwork or topic that captures an important aspect of it.

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE? This routine helps students identify and clarify big ideas.

WHEN AND WHERE CAN IT BE USED?

The routine works especially well at the end of a discussion or activity. Don't be afraid to use it with complex topics or discussions, even if the headlines don't seem immediately apparent. Using the routine will help students clarify their thinking.

TIPS FOR USING IT.

The routine can be used solo as a writing activity, or verbally in small or large groups. Students can be asked to write just one headline or several. Make sure students have an opportunity to read or hear what others have said: Seeing that there can be many possible headlines helps students appreciate the complexity of an artwork or topic.

COMPARING AND CONNECTING CONNECT, EXTEND, CHALLENGE

Connect: How are the ideas and information presented connected to what you already knew?

Extend: What new ideas did you get that extended or pushed your thinking in new directions?

Challenge: What is still challenging or confusing for you to get your mind around? What questions, wonderings or puzzles do you now have?

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE? The routine helps students make connections between new ideas and prior knowledge. It also encourages them to make a personal connection to an artwork or topic.

WHEN AND WHERE CAN IT BE USED?

A natural place to use this routine is after students have experienced something new. The routine is broadly applicable: Use it after students have explored a work of art, or anything else newly introduced in the curriculum. Try it as a reflection during a lesson, after a longer project, or when completing a unit of study. Try using it after another routine!

TIPS FOR USING IT.

This routine works well with the whole class, in small groups or individually. Keep a visible record of students' ideas. If you are working in a group, ask students to share some of their thoughts and collect a list of ideas in each of the three categories Or have students write their individual responses on post-it notes and add them to a class chart.

COMPARING AND CONNECTING I USED TO THINK, NOW I THINK

Write or say a few sentences using each of the sentence stems: •I used to think... (topic, artwork or object) •Now, I think... (topic, artwork or object)

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine helps students to reflect on how their ideas and impressions have changed over time. It helps students recognize and consolidate new understandings, opinions, and beliefs, and it helps students become more reflective, self-aware learners.

WHEN AND WHERE CAN IT BE USED?

Use this routine whenever students' initial thoughts, opinions, or beliefs are likely to have changed as a result of instruction or experience. For instance, use it after reading new information, exploring or making an artwork, watching a film, listening to a speaker, experiencing something new, having a class discussion, and so on.

PARTS, PURPOSES, COMPLEXITIES

CHOOSE AN ARTWORK, OBJECT OR TOPIC AND ASK: What are its parts? (What are its pieces, components?)

What are its purposes (What is it for, what does it do?)

What are its complexities? (How is it complicated in its parts, purposes, the relationship between the two, or other ways?)

WHAT KIND OF THINKING DOES THIS ROUTINE ENCOURAGE?

This routine helps students build a multi-dimensional mental model of a topic by identifying different aspects of the topic and considering various ways in which the topic is complex.

WHEN AND WHERE CAN IT BE USED?

Use it with many different things – with objects (sea shells, microscope, buildings), topics (fractions, grammar, electricity, democracy), and works of art. It's important for an example of the topic to be readily accessible to students, either physically or mentally. If the object is physically visible, students don't need a lot of background knowledge. If it is a conceptual topic, like democracy, it's helpful for student to have background knowledge of a particular instance of it.

TIPS FOR USING IT.

The routine can be used in any format – large group, small group, or solo. Encourage students to think creatively about different kinds of parts. For example, the colors or shapes in a painting are one kind of part; artist and audience are another kind of part. Use the concept of "purpose" loosely, so that it means how something works, what it's for, what it does, or the purposes it serves. The "purposes" question can broadly apply to the topic as a whole (e.g., the purpose of a microscope is to make small things visible), or to parts of the topic (e.g., the purpose of an eyepiece on a microscope is to hold your eye steady and keep out extra light). When using the routine with works of art, be especially flexible with the meaning of purpose, so that it means "how it works." For example, if bright colors is a part of a work of art, a purpose might be: the colors get your eyes excited and moving around the painting.

