

The Language of Critical Thinking: A Sequence With Activities

by [Bruce Rubin](#)

Though it could be said that critical thinking has a language of its own, it's a language you're probably already teaching, and it's first and foremost about asking good questions that lead to accuracy, clarification, explanation, and/or discovery. But the responses, whether oral or written, must also be carefully framed lest someone argue that the responder is claiming more of the truth than he or she has a right to. One major purpose of critical thinking is to assess the strength of knowledge claims, not only in others' statements, but in our own as well.

Critical thinking can be employed to deepen student engagement in a reading, listening, writing, or grammar class—in short, just about any language class—and it can be practiced at all language proficiency levels. As we'll see in the exercise modeled here, there are grammar structures (starting with question formation) and vocabulary terms that appear in beginning-level texts, others that appear in more intermediate levels, and some that are for the most advanced. All levels will be able to perform and benefit from the exercise, but your language emphasis will be different for each.

This exercise, simply called “Reading a Photograph,” focuses on utilizing critical thinking skills to improve visual literacy, and all you need is a photograph suitable for classroom analysis (e.g., see Figure 1) and a list of questions about it. Though one common idiom in English is “a picture is worth a thousand words,” you may instead find in class that a picture is worth a thousand questions.



Figure 1. Example of photo for critical thinking activity.
“[Family Restaurant](#)”; by Eden, Janine, and Jim; July 4, 2011.
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Procedure

Using a photograph to practice vocabulary and grammar is a classic classroom technique. The photo in Figure 1 could be used to practice identifying people, objects, and activities, but will likely also include setup questions about time and location. (Historical photos add some extra challenge.) At the lowest levels, such practice usually begins with question formation, but early-sequence grammatical structures could also include pronoun selection, *be*-verb usage, and *there is/there are*.

In general, you should try for comprehensible, level-appropriate questions that are simple but revealing. Responses should show what we really know just from looking at the photo and what we're not quite sure about. You might hope to generate alternative hypotheses, like a scientist or a detective.

Presenting the Photo

When you reveal the photograph to the class, it is important to tell students as little as possible about it. Save any knowledge you may have or any written information—including a caption if there is one—for the end of the exercise. Before you put students in groups for discussion or call on them in class, be sure to give them ample time to study the photo using the guidelines you provide. A few minutes will seem like an eternity to some who will “figure it out” in a few seconds, but it's good to present the possibility that a photo may require more sustained attention. Any of the pathways in Table 1 will work for analysis and discussion.

Table 1. Discussion Pathways

Basic Question Words	Who, what, when, where, why, how
Basic Elements	Time, location, people, objects, activities
Basic Knowledge	<ul style="list-style-type: none">• What do we know about the subject, just from looking? What do we not know?• What do we see? What are we guessing about? What do we assume? What can we infer?• What does the photographer choose to include or exclude? Does he or she have an agenda?
Basic Creative Writing	<ul style="list-style-type: none">• What lies beyond the photograph frame?• What happens beyond this moment, before or after?
Basic Aesthetics	Composition, form, color, lighting, dynamics

Determining Assumptions

The legally required attribution on this photo tells us when it was taken. The generic location provided in the title, a “family restaurant,” is suggestive enough to make us assume this is a family. But do we know for sure? The kids could be cousins, or one could be a neighbor's child. And what country are they in? By now your students will notice the small table sign in English—but which English-speaking country are they in?

For language learning alone, it's enough to assume that the oldest person in the photo, the woman in the upper left of the photograph, is the grandmother of the family. We can assume some of the relationships by noting relative ages according to appearance and seating location (e.g., the parents sitting together, the eldest/teenage child sitting apart). After teaching or reviewing the vocabulary, you may point to the woman and ask, "Who is she?" And your students might answer, "She is the grandmother." The *be*-verb sounds so certain.

Questioning Assumptions

Is the woman the grandmother? Do we know, for sure, with 100% certainty? This is the critical thinking question; acknowledging it is a form of identifying and evaluating assumptions that may not be provable based on the evidence in the image at hand. The response it demands is a further acknowledgement that however likely the assumption may be, there is room for doubt and for generating alternative hypotheses. For example, the woman could be a family friend or neighbor.

When you model the response, "She might be a friend" or "She might be a neighbor," your use of the modal indicates the lack of certainty we have. Simple modals are another segment of the early grammar sequence. In addition, you can model the use of *maybe*, as in "*Maybe* she is a friend."

Degrees of Certainty

With any luck, your chosen photo has a bonus: something mysterious about it that you can use to generate more inferences and hypotheses. With the photo in Figure 1, you can guide the students to notice that there is an empty chair with food in front of it. Someone is missing. Look again—there are two untaken trays and two empty chairs—just a small piece of one chair can be seen. To whom might they belong? What might these people be doing? Again, a few hypotheses. Could there be a second grandmother? Maybe another child? Here you might take the opportunity to inject another degree of certainty with *probably* and *possibly/it's possible that*, and so in the end you might conclude that one chair is *probably* the grandfather's, and *it's possible that* the grandfather is taking the photo. The other person? Generate some possibilities, but it's anybody's guess who or where that person may be.

Should you happen to be teaching the vocabulary of emotions at slightly higher proficiency levels, you might point at various people in the photo and model "She is happy" or "She is bored." But is she? Do we know just from looking? Posing for pictures is common, and poses can be deceiving. The careful critical thinker says, "She **looks** happy" or "She **looks** bored."

As you use the photo with intermediate proficiency levels, you can model phrases found on TOEFL and IELTS such as "What can you infer..." (e.g., about the location), or "Any hypotheses?" You can get into more adverbs showing degrees of certainty, among them *likely* and *certainly*. You may find yourself expanding student modal range by teaching more sophisticated, logic-based modals: "She **must be** the grandmother." Or: "The grandfather **must be** taking the picture," to be used only when one is very certain.

Comparing and Contrasting

Photos lend themselves as well to the analytical language of comparing and contrasting: *old*, *older*, *oldest* or *young/younger/youngest* in the photo. You can of course provide another photo, similar but different—just do a web search for “family at table eating”—and have your students compare the two, using the same analytical guidelines.

Options for Advanced Proficiency Levels

At the highest levels of academic language proficiency, initial engagement with the photo may be in classroom conversation, but there will likely be a follow-up in writing. This will entail quoting and documenting sources, and possibly conveying the overall reliability of the source and the writer’s confidence in it. The writer may choose to make more nuanced claims about the photo in phrases like “Their seating arrangement suggests that the middle-aged couple in the middle are the parents,” or, “The small sign on the table indicates that this is an English-speaking country.” Both verbs imply less than 100% fact and show the reader that the writer is a careful thinker.

At these higher levels you can also continue to expand the range of qualifiers and hedges, as in “She looks **fairly** old,” which conveys a lack of certainty about her exact age, or as in “**Presumably** she is the grandmother,” or “The grandfather is **apparently** taking the picture,” both of which signal a confession that this is indeed a well-founded assumption, but not a proven fact.

Other Language-Generating Critical Thinking Activities

- **Practice conditionals:** You can also enjoy practicing conditionals, which pose hypotheticals that function as thought experiments. Sentence completions starting with “If I were a bird, I would...” or “If I were rich, I would...” require being able to take a different perspective—a multitude of perspectives, perhaps. This is another hallmark of critical thinking, which expects information packaged with a spectrum or range of potential factors, causes, conditions, or options upon which to base decisions.
- **Examine a short reading:** Provide students with a short reading. Have students highlight any concept, conclusion, implication, or claim about which they have a clarification question. Have them highlight as well (or do this in a separate exercise) any language indicating uncertainty or imprecision.
- **Identify restatements and inferences:** Provide students with a short reading and five statements related to the reading. Ask students to identify restatements and inferences. This activity is good for TOEFL/IELTS.
- **The Five Whys:** This idea is borrowed from Toyota engineering, where it is used as a problem-solving device. Have students ask themselves and each other why they are there in English class; they will good-naturedly accept your prodding them with more *whys* than they were prepared for.

- **Simile/metaphor/analogy generators:** Provide the beginning of a simile, metaphor, or analogy: “The mind works like a...”, or “A teacher is like a...” Fill the board with student responses.
- **Reordering scrambled paragraphs:** This activity requires making logical connections to complete a thought sequence.
- **Creative writing prompts:** There’s an idiom proclaiming that “Every picture tells a story,” and coming up with hypotheses for the existence of any given situation is one of the first steps in fiction writing. Prompts such as the following lead to critical thinking:
 - What are these people really thinking?
 - What are their relationships really like?
 - What happened before or after this photo was taken?
 - Where do they live and how do they survive?

Critical thinking is much harder in a second language because ambiguity is amplified and nuances can be subtle. It is nonetheless an empowering skill that builds student competency and confidence.

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