

Helping Students Exercise Their Critical Thinking using the SEE-I

University of Louisville

Ideas to Action (i2a)

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Promoting critical thinking with our students requires that we help them move beyond rote memorization and gain confidence with talking about and working with new concepts and ideas. The SEE-I is a useful process for clarifying almost anything. The letters in the SEE-I stand for steps in the process:

S: State

To state something is to say it briefly, clearly and sometimes it means offering the most basic but precise definition. Sometimes the “state it” definition is the textbook definition. Strategies to help students clearly state their idea or main point:

- Have the student complete the phrase “*I think...*” about their idea or main point.
- Ask the student to state their idea or basic point in one simple sentence.

E: Elaborate

To elaborate on the statement above is to expand it, explain it in your own words at a greater length. Strategies to help students expand on their idea or main point are:

- Have the student complete the phrase “*In other words...*” about their idea or main point.
- Ask the student to elaborate their basic point more fully.

E: Exemplify

To give a good example of a topic or concept is to clarify for yourself or your audience what you mean after “stating” and “elaborating.” It is best to have an original example that you pull from your own life or the world around you. Strategies to help students exemplify their idea or main point are:

- Have the student complete the phrase “*For example...*” about their idea or main point.
- Ask the student to give you an example of their point for their experience.

I: Illustrate

An illustration of a concept or topic provides a picture to clarify one’s thinking. It might be a graph, diagram or concept map. Typically, it can be a metaphor, simile or analogy that captures the meaning. Strategies to help students illustrate their idea or main point are:

- Have the student complete the phrase “*It is like...*” about their idea or main point.
- Ask the student to give you an analogy or metaphor to help you see what they mean.

Examples of the SEE-I Tool

SEE-I for “civil disobedience” (G. Nosich, p. 35)

State – A definition is the “active refusal to obey certain laws & a primary method of nonviolent resistance.”

Elaborate – In other words, a means by which citizens can actively rebel against unfair laws and the demands of the state

Example –An example would be like Rosa Parks refused to give up her seat on the bus

Illustrate – It’s like being a cliff at the edge of the ocean, waves crash against it, but the cliff remains there.

SEE – I for “Legal System”

State: The legal system of the U.S. is rigid, but nimble. It adapts to societal change.

Elaboration: Societal positions influence the law through the people it serves.

Exemplification: Sociological change brought about a major shift in the law as it relates to education, moving from segregated schools to integrated ones.

Illustration: It’s like how words enter the dictionary. We like to think the dictionary as fixed and set, and therefore permanent. Yet, it changes with society in a real way- words enter the dictionary all the time, such as “*unfriend*” or “*carbon footprint*.”

Paul, R. & Elder, L. (2008). *The miniature guide to critical thinking: Concepts and tools*. Dillon Beach, CA: Foundation for Critical Thinking.

Nosich, G.M. (2012). *Learning to think things through: A guide to critical thinking across the curriculum* (4th Edition). Upper Saddle River, NJ: Pearson Prentice Hall.

Sweet, C., Blythe, H. & Phillips, B. (2010). *Triple Play*. The National Teaching and Learning Forum.

<http://www.ntlf.com/html/ti/v19n2comp.pdf>

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SEEI Worksheet

I. What are some significant or central concepts that you teach in your AP course? (brainstorm two or three concepts with the person next to you)

II. Select one concept _____ with which to practice

State it as briefly, clearly and precisely as possible by constructing a good definition or a single, clear, well-formulated sentence

Elaborate on something to expand or explain it in your own words by starting with the phrase “In other words...”

Exemplify clarifies what you mean by using a good, well-chosen, original example.
“For example...” or “By contrast...”

Illustrate to provide further clarity by giving a literal or an actual picture, metaphor, illustration, or diagram.
“It’s like...”

Discussion Posts

You are to develop a correctly formatted and word processed discussion post for the discussion topic. **Remember: your submissions will be checked for plagiarism.**

Instructions:

Nosich describes a technique he calls SEE-I for thinking things through. The key to using SEEI is to use the following format:

State: A definition or statement: _____ is....

Elaborate: In other words, _____.

Exemplify: For example, _____. (NOT a simile or metaphor)

Illustrate: It's like _____. (insert a simile or metaphor)

Example:

Success

S: Success means that something or someone has attained a desired outcome or goal.

E: In other words, a person is happy with the results, even if things do not go exactly as planned.

E: For example, a person might decide to earn a bachelor's degree to improve her knowledge of the world. Even if she takes five years to complete it, she is still successful.

I: It's like walking up a hill; sometimes we need to rest or take a different path but with perseverance, we eventually reach the top.

Additional instructions for success:

1. You may **NOT** use a dictionary. The definition must reflect your understanding and NOT a published denotation. You may NOT quote or plagiarize any author! You should have a reference list!
2. You must write in complete sentences—no fragments, run-ons, or comma splices.
3. You must explain your I clearly in order to earn credit.
4. Remember that the S, E, and E illuminate your thinking; the I shows that you can apply what you understand.

Grading Criteria

You will be graded based on your thoroughness and clarity of thought (mechanical and grammatical issues always are assumed to be part of the grading mix).

List of terms and concepts associated with critical thinking:

I. Critical Thinking Impediments

- a. The News
- b. Media (TV, Advertising, Movies)
- c. All-or-nothing thinking or black-and-white thinking
- d. Us-vs-them Thinking
- e. Stereotyping
- f. Fears
- g. Egocentrism
- h. Developmental Patterns
- i. Previous commitments / personal experience
- j. Denial

II. The Elements of Reasoning

- a. Purpose
- b. Question at Issue
- c. Assumptions
- d. Implications and Consequences
- e. Information
- f. Concepts
- g. Conclusions
- h. Pt. of View
- i. Alternatives
- j. Context

III. Standards of Critical Thinking

- a. Clearness
- b. Accuracy
- c. Importance / Relevance
- d. Sufficiency
- e. Depth
- f. Breadth
- g. Precision