

The Art of Engaging Students through **Critical Thinking**



Presenter: Rob Jenkins

Santa Ana College School of Continuing Education

Jenkins_rob@sac.edu

INTENTIONALLY BLANK

BACKWARD QUESTIONS

A. In groups of three or four, participants do a round robin where you chain questions to given answers. The answer giver tells the question giver if he or she is right. For this activity, participants should share answers about their personal lives.

EXAMPLE:

Participant A:	A teacher
Participant B:	What is your profession?
	20 years ago
Participant C:	When did you start working?
	I have 3.
Participant D:	How many children do you have?
	35 every semester
Participant A:	How many students do you have?
	When I have time

Continue until time is up.

OPTIONAL

B. Now with post-it paper, the group writes all the possible questions for the following answer prompt:

ANSWER: Students pay more attention.

C. Do a **gallery walk** by walking to each presentation and return to your group to discuss your favorite answers.

CRITICAL THINKING SURVEY

1. I ask questions when I present new material.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
2. I ask questions that go beyond testing students' knowledge of facts.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
3. I give sufficient time for students to process information after I ask them a question before I step in.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
4. I incorporate a variety of activities in the class.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
5. I ask open-ended questions.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
6. I know and use decision making strategies in the classroom like PMI, CAF, or C&R.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never ☐ I don't know
7. I provide activities that require students to analyze information.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
8. I provide activities that help students to find "value" in things they are analyzing.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
9. I personally incorporate the critical thinking attribute of suspending judgment.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never
10. I personally incorporate the critical thinking attribute of listening carefully.
☐ Almost Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never

DEFINE CRITICAL THINKING

“Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action...” Michael Scriven & Richard Paul (1987)

“The careful and deliberate determination of whether to accept, reject, or suspend judgment”. (Moore and Parker, 1994)

One-Sentence Group Definition – Write on 3/5 Card

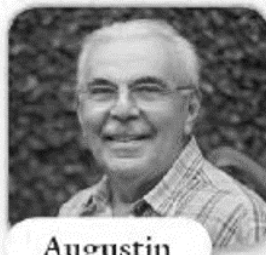
Write Rob’s Definition Here:

RANKING AND CONSENSUS



Silvia

Breakfast: cereal and milk
Lunch: green salad and fruit juice
Dinner: spaghetti with meatballs and ice



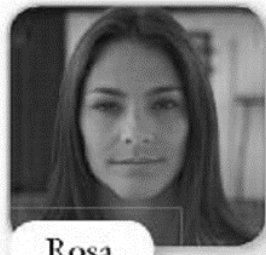
Augustin

Breakfast: coffee
Lunch: sausage, beans, rice, and water
Dinner: cheese, bread, green salad, and fruit



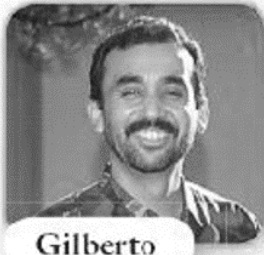
Fernando

Breakfast: fruit, cereal, milk, and toast
Lunch: pepperoni pizza and milk
Dinner: fried chicken and a baked potato



Rosa

Breakfast: coffee
Lunch: soup, bread, fruit, and yogurt
Dinner: turkey, potatoes, green salad, and water



Gilberto

Breakfast: doughnut and coffee
Lunch: hamburger, fries, and a soda
Dinner: pepperoni pizza and water

RANK – most to least nutritious diet

#1

#2

#3

#4

#5

STANDARDS

CREATE STANDARDS - ENGLISH

In groups take one skill area and make a list of standards that reflects critical thinking. One is done for you.

Reading

1. Read for detail.

Writing

1. Write arguments with supporting information.

Speaking and Listening

1. Participate in a range of conversations / collaborate

COLLEGE AND CAREER READINESS

ABBREVIATED - ENGLISH

READING

Key Ideas and Details

1. Read for detail.
2. Read for main ideas.
3. Analyze why and how.

Craft and Structure

4. Interpret words.
5. Analyze structure.
6. Analyze how purpose affects reading.

Integration of Knowledge and Ideas

7. Evaluate content from diverse formats.
8. Evaluate validity of claims.
9. Compare 2 or more text.

Range of Reading and Level of Text Complexity

10. Read increasingly complex text.

WRITING

Text Types and Purposes

1. Write arguments with supporting information.
2. Write well organized informative/explanatory conveying complex information.
3. Write well-structured narratives.

Production and Distribution of Writing

4. Produce writing appropriate to task, purpose, and audience.
5. Use a process of planning, revising, editing, rewriting, etc.
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

7. Conduct research projects.
8. Gather relevant information.
9. Draw evidence to support analysis, reflection, and research.

Range of Writing

10. Write over various time frames depending on purpose.

SPEAKING & LISTENING

Comprehension and Collaboration

1. Participate effectively in a range of conversations/collaborations.
2. Evaluate information from diverse formats.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence.
5. Use digital media and visual displays of data to express information.
6. Adapt speech to a variety of contexts and communicative tasks.

ATTRIBUTES OF A CRITICAL THINKER

A. Study the attributes of a critical thinker below.

1. Asks pertinent questions.
2. Assesses statements and arguments.
3. Is able to admit a lack of understanding of information.
4. Has a sense of curiosity.
5. Is interested in finding new solutions.
6. Is able to clearly define a set of criteria for analyzing ideas.
7. Is willing to examine beliefs, assumptions, and opinions and weigh them against facts.
8. Listens carefully to others and is able to give feedback.
9. Sees that critical thinking is a lifelong process of self-assessment.
10. Suspends judgments until all facts have been gathered and considered.
11. Looks for evidence to support assumptions and beliefs.
12. Is able to adjust opinions when new facts are found.
13. Looks for proof.

B. In a group, classify items above by the number into categories.

Asking Questions	Making Judgments	Identifying Assumptions	Analyzing while suspending judgment

Adapted from CALPRO MODULE: Critical Thinking and Metacognition Session 1

CRITICAL THINKING QUICK ADJUSTMENTS

Rank the activities by which you would do more of or least of. 1= most used.

_____ analyzing data (graphs, charts)

_____ Classifying

_____ collaborating over a problem

_____ comparing (VENN, Johari, charts)

_____ defining concepts

_____ evaluating information with a rubric

_____ individually solving problems

_____ predicting outcomes

_____ ranking

_____ reaching consensus

_____ summarizing concepts

_____ Other

_____ other

_____ other

_____ other

PBL AND TEAM PROJECTS



Project-based learning puts students in the position to use authentic language to communicate and produce a product or solve a problem. (Fried-Booth)

In teams students negotiate, plan and organize, practicing skills essential to living successful lives. (Stein)

Team Projects and Standards

SCANS: Secretaries Commission on Achieving Necessary Skills

RESOURCES

Allocates Materials and Facility Resources
Allocates Human Resources

TECHNOLOGY

Applies technology to task (optional)

PERSONAL QUALITIES

Responsibility
Self Esteem
Sociability
Self-Management

INTERPERSONAL

Participates as a member of a team
Teaches others
Exercises leadership
Works with diversity

INFORMATION

Organizes and maintains information
Interprets and communicates information
Uses computers to process information

BASIC SKILLS

Reading
Writing
Arithmetic
Listening
Speaking

THINKING SKILLS

Creative thinking
Decision making
Problem solving

EFF: Equipped for the Future

COMMUNICATION

Convey ideas in writing
Speak so others can understand
Listen actively
Observe critically

DECISION MAKING

Solve problems and make decisions
Plan

INTERPERSONAL

Guide others
Resolve conflict and negotiate
Advocate and influence
Cooperate with others

LIFELONG LEARNING

Reflect and evaluate
Learn through research
Use information and communication technology

Team Projects - Plan

Objectives:

Students will **apply** all that they have learned in the unit by developing a team project using **task-based activities** that generate collaboration, negotiation, and **teamwork** producing a product.

1. SET THE STAGE

- ☐ Give an overview.
- ☐ Show examples.
- ☐ Don't be too specific.

2. FORM TEAMS

- ✓ Avoid homogeneous teams when possible.

Form by similar level. **or**

Put strong people in each team.

3. ASSIGN TEAM POSITIONS

(All team members help in every task)

Lower Levels:

- ☐ Explain leader position.
- ☐ Immediately ask all leaders to stand.
- ☐ Repeat for all positions.

Higher Levels:

- ☐ Explain all positions.
- ☐ Allow students to discuss and assign positions in their teams.
- ☐ Ask teams to report.

4. GO THROUGH THE STEPS

- ☐ Give a few steps at a time.
- ☐ Avoid allowing teams to get too far ahead.
- ☐ Have students keep minutes (agenda/minutes format)

5. WORK ON THE PROJECT

- ☐ Have assigned person lead efforts.
- ☐ Make sure all students participate in each task.
- ☐ Use computers when possible.
- ☐ Be flexible when time runs short.

6. FACILITATE

- ☐ Walk from team to team.
- ☐ Ask questions.
- ☐ Help the leader to make sure everyone is participating.

7. CLASSROOM MANAGEMENT

- ☐ Encourage English.
 - Work with the leader.
 - Ask students to evaluate their teams.
- ☐ Have contingency plans for faster teams.
- ☐ Prepare teams for their presentations.
- ☐ Post all or some of the projects in the classroom.

Hint: Two-day simulation: Collect student work at end of first day with names of team members to be distributed on the following day.

TEAM PROJECT IDEAS FOR ALL LEVELS

Low Beginning	<i>Design a department store.</i>
	<i>Design a dream home.</i>
	<i>Create a brochure of your city.</i>
High Beginning	<i>Make a plan to move into a new home.</i>
	<i>Create a health pamphlet.</i>
	<i>Create a company.</i>
Low Intermediate	<i>Create a product label and advertisement.</i>
	<i>Create an employee handbook.</i>
	<i>Plan and participate in a debate.</i>
High Intermediate	<i>Create a goal chart.</i>
	<i>Create a purchase plan for an expensive item.</i>
	<i>Create a real estate brochure and plan to buy a house.</i>

FOOD FOR A WEEK

Family Name: _____

S	M	T	W	TH	F	S	
							Breakfast
							Lunch
							Dinner

Leader _____

Chef _____

Food Planner _____

Spokes Person _____