You’ve Mapped To Critical Thinking...
Now What?

https://www.youtube.com/watch?v=1TD_pSeNeIU
Session Description

- This workshop is designed especially for faculty teaching Gen Ed courses. All Gen Ed courses now map to critical thinking (on their Course Outlines).

- This session will teach participants how to:
  - Align class activities and assignments with the Student Learning Outcomes (SLOs) of Broward College’s QEP
  - Use the QEP Critical Thinking (CT) Rubric to evaluate CT as a Gen Ed competency.
Session Outcomes
(More like SLOs than competencies)

- Identify the **purposes of a rubric** and the differences between **grading and assessing** competencies
- Explain the **CT Rubric & SLOs**
- Evaluate **CT** as a Gen Ed competency using the **CT Rubric**
- Apply the **CT Rubric** by engaging in a calibration activity
- (If time allows) Assignment redesign to directly address **CT** as a Gen Ed competency
Say “Hi”

- Name Ball
  - Name
  - Fun Fact
Oh Goodness...
Somebody invited a philosopher!

Why are you here?
Your New **Course Outline**

- General Education Task Force
- General Education Competencies
- Course Outline: Competency Map
Course Outlines & Competencies

GENERAL EDUCATION Competencies and Skills:

1. Critical Thinking 1.0, 2.0, 3.0
2. Communicate Effectively
3. Ethical Reasoning 1.0, 2.0, 3.0
4. Global Self-Awareness 1.0, 2.0, 3.0
5. Information Literacy 1.0, 2.0, 3.0
6. Mathematical and Scientific Reasoning
General Education Competencies

• CRITICAL THINKING
  – Explain questions, problems and/or issues
  – Analyze and interpret relevant information
  – Evaluate information to determine potential conclusions
  – Generate a well-reasoned conclusion

• EFFECTIVE COMMUNICATION
  – Write clearly and coherently
  – Speak and listen interactively
  – Apply non-verbal communication techniques

• ETHICAL REASONING
  – Recognize ethical issues
  – Understand different ethical perspectives
  – Apply ethical perspectives or concepts
  – Evaluate different ethical perspectives or concepts

• GLOBAL SELF-AWARENESS
  – Demonstrate an appreciation for diversity and inclusion
  – Apply multiple viewpoints and perspectives
  – Demonstrate an understanding of human relationships with the world
  – Collaborate to solve problems

• INFORMATION LITERACY
  – Locate information
  – Read with critical comprehension
  – Evaluate information
  – Use information effectively to support an argument or solve a problem
  – Cite sources

• MATHEMATICAL AND SCIENTIFIC REASONING
  – Demonstrate quantitative reasoning
  – Develop graphical facility
  – Apply a deductive and/or inductive approach to inquiry
  – Demonstrate methodical problem-solving
## Competency Map for Gen Ed

<table>
<thead>
<tr>
<th>Competency/Area</th>
<th>Communications</th>
<th>Humanities</th>
<th>Social Science</th>
<th>Science</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Effective Communication</td>
<td>X</td>
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Broward College’s Definition of Critical Thinking:

Critical thinking (CT) is defined as a process of evaluating information by questioning and testing assumptions, accepting and rejecting arguments and/or perspectives, and applying reasoning to make informed decisions.
Critical Thinking: Learning Outcomes (a.k.a. Gen Ed CT Sub-competencies)

• **Explain** questions, problems, and/or issues.

• **Analyze** and interpret relevant information.

• **Evaluate** information to determine potential conclusions.

• **Generate** a well-reasoned conclusion.
Critical Thinking in Your Class:

You know that you do this in your class...

Do your students know? Would they be able to explain to someone how they are practicing CT in your class? Should they be able to do this?
Hello Professor,

I’m excited to be taking your General Education class. As part of my General Education at Broward College, it will help me enhance my Critical Thinking skills, right?

- Can you tell me how it will do that?
- Which Critical Thinking sub-competencies will be focused on in this class?
- Which assignments and activities will help me refine those skills?
- How will you assess my skills so you know I’m making progress?
Rubrics

What is the purpose of a rubric?
Assessment of Competencies v. Grading

What is the difference between assessing competencies and grading?

- How does this relate to rubrics?
- Competencies v. SLOs
Calibration 1
Fun - Practice
Group Project Assessment Time!
Scoring With a Rubric: Sample

Is this group demonstrating CT abilities?

https://www.youtube.com/watch?v=k3jt5ibfRzw
**Critical Thinking Scoring Guide**

*Broward College’s QEP: Question Every Possibility—Think Critically*

Broward College defines critical thinking as a process of evaluating information by questioning and testing assumptions, accepting or rejecting arguments and/or perspectives, and applying reasoning to make informed decisions.

<table>
<thead>
<tr>
<th>Explain questions, problems, and/or issues</th>
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<th>Below Standard 1</th>
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<tr>
<td>Clearly states and describes the hypothesis, question, problem, or issue in a way that demonstrates a comprehensive understanding and provides all relevant information necessary for full understanding of the hypothesis, question, problem, or issue</td>
<td>States and describes hypothesis, question, problem, or issue in a way that demonstrates a fundamental understanding and provides relevant information necessary for a general understanding of the hypothesis, question, problem, or issue</td>
<td>States but does not describe the hypothesis, question, problem, or issue in a way that demonstrates a fundamental understanding, nor provides relevant information necessary for understanding the hypothesis, question, problem, or issue</td>
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<td>Conclusion is somewhat logical and partially reflects the ability to integrate thoughts relevant to the stated hypothesis, question, problem, or issue</td>
<td>Conclusion is inconsistent and does not reflect the ability to integrate thoughts relevant to the stated hypothesis, question, problem, or issue</td>
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*Broward College CT Scoring Guide, version 8*
Outcomes-Based Assessment

- **Resources:**
  - CTLS Rubric (a.k.a. scoring guide)
  - AAC&U Critical Thinking Value Rubric
How can you assess CT in a way that is consistent with other people at BC?

How can you assess CT in a way that can be used to generate data for Gen Ed Assessment?
Again - Critical Thinking: Learning Outcomes (a.k.a. Gen Ed CT Sub-competencies)

- **Explain** questions, problems, and/or issues.
- **Analyze** and interpret relevant information.
- **Evaluate** information to determine potential conclusions.
- **Generate** a well-reasoned conclusion.
Calibration 2
Using Student Samples/Artifacts
# Critical Thinking Scoring Guide

**Broward College’s QEP: Question Every Possibility—Think Critically**

Broward College defines critical thinking as a process of evaluating information by questioning and testing assumptions, accepting or rejecting arguments and/or perspectives, and applying reasoning to make informed decisions.

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Broward College CT Scoring Guide, version 8
Next Steps:

Enhancing Learning
By
Enhancing Assignments & Learning Experiences
#1 Priority

• **Select one assignment** in your Gen Ed class that will:
  
  – Generate **student samples/artifacts** that can be assessed with the “QEP Scoring Guide.”
  
  • TIP: Write your question in a way that will get students to provide responses related to the SLOs (Ex. Explicitly ask them to “Explain questions, problems, and/or issues.”)
  
  • Focus on **one SLO/sub-competency**.
  
  • Reverse engineer learning experiences.

  – **Note: This will generate data that can be submitted for Gen Ed Assessment if you’re asked to provide it.**
Ask: What can I do to help these students score higher next time?
Reverse-engineering Assignments & Experiences In Light of Calibration Insights

<table>
<thead>
<tr>
<th>This is what you'll learn how to do.</th>
<th>This is how you'll learn it.</th>
<th>This is how you'll show that you've learned it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
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Worksheet:
Reverse-engineering Assignments & Experiences In Light of Calibration Insights

<table>
<thead>
<tr>
<th>A</th>
<th>Outcome</th>
<th>Specific Learning Activities Related To Achieving the Outcome</th>
<th>Assessment That Will Be Used To Assess Achievement of Outcome</th>
</tr>
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Resources:

- Goals and Outcomes
- Assessment & Evaluation Plan
- Question Every Possibility--Think Critically
- Teaching and Learning Resources
- Exemplary Syllabi & Learning Activities
- Evidence of Student Learning & Goal Achievement
- Use of Student Learning & Goal Achievement Evidence

Quality Enhancement Plan (QEP)

Assessment Results for Student Artifacts
Winter 2014

October 9, 2014

Division of Institutional Research, Planning, Effectiveness, and Analytics

http://www.broward.edu/sacs/qep/SiteAssets_Lists_Reports_EditForm_Direct_Assessment_Results_Report_Winter2014.pdf
http://www.broward.edu/sacs/qep/Pages/default.aspx
*Tip*: Collaborate

Collaborate with colleagues. Share assignments, questions, and ideas. Ask for feedback.
Questions?
Resources Slides
SEE-I

- **S**: State
- **E**: Elaborate
  - “In other words...”
- **E**: Exemplify
  - “For example...”
- **I**: Illustrate
  - “It’s like...”
Enhance Questions

- What is the **purpose** of this question or comment?
- What is the **main question** or issue at play here?
- What **information** (data, facts, evidence) would be helpful here?
- What **inferences** are being made here?
- What **concepts**, theories, or models are at play here?
- What **assumptions** are being made here?
- What are the **implications** or consequences of...?
- What **point-of-view** are we using to look at this issue? What are different points-of-view?
Clarify Questions

- Can you **elaborate** further?
- Can you give an **example**?
- Can you **illustrate** what you mean?
- How can we find out if that is **true**?
- Can you be more **specific**?
- How does this **relate** to the issue or question at hand?
- What are some of the **complexities** of this issue or question?
- Do we need to consider another **point-of-view**?
- Is there a more **important** issue or question to consider?
- In what ways are our opinions and assumptions shaping the way we look at this? How can we look at this from a more **fair-minded** perspective?

SEE-I
State; Elaborate; Exemplify; Illustrate
Capture SLO data easily
"SEES" the Problem
A Critical Thinking Template for Problem-Solving

- **State** the problem in your own words.
  - Analyze and interpret relevant information.

- **Elaborate** the problem: discuss the purpose, assumptions, relevant information, questions
  - Explain questions, problems and/or issues.

- **Exemplify** and/or illustrate the problem: describe the problem with an example, counterexample, picture, diagram, graph, etc. This may help clarify your "point of view" and suggest potential conclusions.
  - Evaluate information to determine potential conclusions.

- **Solve** the problem: use mathematical concepts and reasoning to make inferences and draw a conclusion. What are the implications and/or consequences of your conclusion?
  - Generate a well-reasoned conclusion.
• I learned that it is important to expand and dissect ideas through the "thinking process." That is the only way to really get to the bottom of a subject and form a unique opinion. If you don't allow yourself time to explore and think about a topic you're not really thinking about it and/or analyzing it.

• From the "thinking process," I learned that it is very important to justify the reasoning behind a statement that you make. Usually when people talk, they just say something just to say it, they have no reasoning behind it. But in situations like these, it is important to justify your view or statement on a topic because it makes it more believable and it makes it more valid.
I never knew there was so much to “the thinking process.” Before, I just thought that “the thinking process” only consisted of clarifying your thinking by stating one point at a time, elaborating on it, and giving examples. After participating in this inquiry, I learned that it is hard to stick to the point, you must question the questions, and it is easy to become close-minded.

A good way to question the big question is to think “Is there a more important question we should be addressing?” “Is there a question we should answer before we attempt to answer this question?” “Does this question capture the real issue we are facing?” and “Is there another way to look at this question?” Also, a good way to realize you are being close-minded is to ask yourself “Am I unwilling to listen to someone’s reasoning?” “Am I irritated by the reasons people are giving?” and “Am I becoming defensive during a discussion?”