



Harry S. Truman College

Assessment Committee

**Final Report on Critical Thinking- General
Education Assessment**

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Executive Summary

The Truman College Assessment Committee conducted a faculty survey about Critical Thinking in the fall of 2024. This report summarizes the study and protocol, analyzes the findings, and most importantly, offers conclusions and recommendations concerning future Assessment Committee general education studies more broadly, and Critical Thinking, more specifically.

Context and History

Previous Assessment SLOs and Study

The report from the last Critical Thinking Assessment, conducted in the 2016-2017 academic year, collected and assessed student work artifacts from various courses within disciplines across the college. These artifacts were then assessed by committee members using a shared rubric to learn if students were meeting the stated General Education Goals and associated SLOs.

After reviewing the previous report, which was a study of BOTH general education goals of Critical Thinking AND Inquiry and Analysis, it was determined that this study would only attempt to assess Critical Thinking in the Fall of 2024, which was preceded by the Inquiry and Analysis study during the 2023-2024 academic year. Further, the previous study used student learning artifacts offered by faculty to come to conclusions about student learning. The committee report indicated that they did not receive a sufficient number of artifacts aligned to the SLOs to adequately learn about the college goal.

In the Fall of 2023, the Assessment Committee (AC) reviewed college's General Education Goal # 3: Critical Thinking. After a formal review of the previous study, report, and current literature, it was revealed that this goal was much more related to Math and Science courses than the curriculum across the college on the whole. For example, the former goal stated, "The student considers mathematical models within real-world contexts to make good predictions, judgments, and decisions." As such, the committee revised the goal to say this: "The student demonstrates the ability to critically explore and evaluate issues, ideas, and information before coming to an informed conclusion." Accordingly, we also edited the SLOs as shown in the chart below.

Former SLOs	Revised SLOs (Fall 2023)
Formulate a hypothesis/thesis.	Identify topic to be considered critically,
Establish criteria for evaluation AND select or construct a method for testing the hypothesis.	Select appropriate resources to investigate issue.
Reason from sound premises to a valid conclusion.	Analyze selected resources and assumptions to investigate issue.
Apply knowledge to new situations.	Form a conclusion that reflects an informed evaluation of the issue.
Synthesize knowledge.	

Assessment Process

There was significant effort that went into the review, design, execution, and data analysis for this study. It was decided that after revising and updating the SLOs for this General Education goal, the committee would use a new study structure altogether: a survey for full and part time faculty at the college aimed at assessing faculty perceptions, practices, and barriers to the teaching and evaluation of critical thinking across all disciplines. Although this is not a direct assessment of student learning, the committee felt that this was an opportunity to learn more about how the teaching, learning and practice of Critical Thinking skills was occurring around the college.

Given that we used a student survey structure for the 2023 Inquiry and Analysis study, it was decided that we would craft a survey for faculty to complete. The survey was crafted over a few months and asks questions related to how faculty members perceive, practice, and adjust their instruction of critical thinking (see appendix A). The committee created a 33 question (30 Likert-scale questions and 4 open-ended questions) survey that was proctored during FDW week in August 2024. The questions around “perceptions” were aligned with the college’s SLOs.

During our FDW presentation for Fall 2024, we had faculty fill out the survey right then and there. Initially, we collected about 65 faculty members during this session. Two faculty email communications went out afterward asking for additional participation and we ended up with 94 total faculty participants, with 58 full-time and 30 part-time faculty responding. Surveys were scored and assessed using Qualtrics software (6 incomplete surveys were discarded).

Data Analysis

Department	Full-Time	Part-Time
Automotive Tech	3	0
Biology	5	4
Business and CIS	3	1
Cosmetology and Barbering	7	1
ECTJ	12	1
Education and HDFS	6	5
Humanities	4	7
Library	1	2
Mathematics	6	5
Physical Sciences and Engineering	6	1
Social Sciences	5	3
Totals	58	30

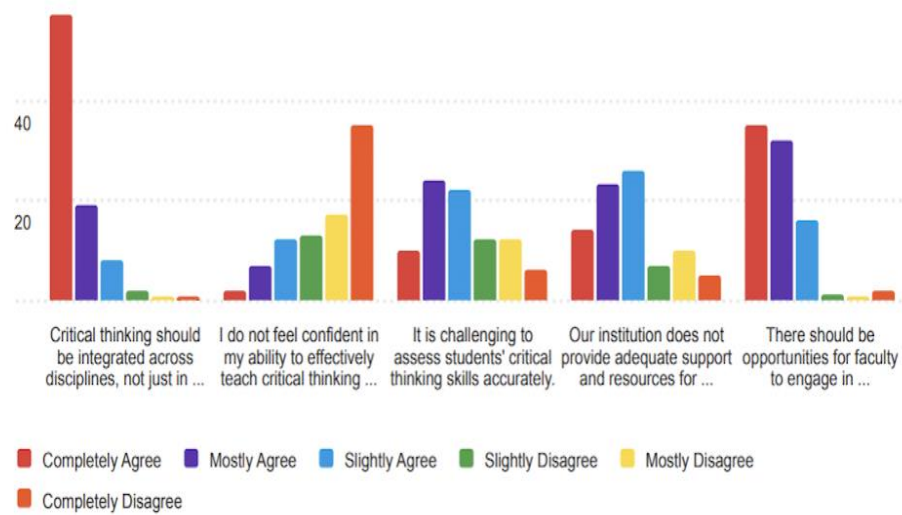
The data provide touchpoints for important conversations about critical thinking at the college. Given that the survey was broken into 3 parts, the section that follows will report on each of the 3 areas of the survey.

Perceptions of Critical Thinking in the Classroom:

The first set of questions asked participants to reflect on how and why critical thinking occurs in college classrooms. It was clear that the majority of faculty believed critical thinking to be an important aspect of a student’s educational journey. Overwhelmingly, faculty noted that *community college faculty should prioritize teaching critical thinking*, that *faculty should be encouraged to explore innovative approaches to critical thinking*, that *critical thinking should be integrated across disciplines*, and that teaching critical thinking is essential for preparing students for success in their academic and professional lives.

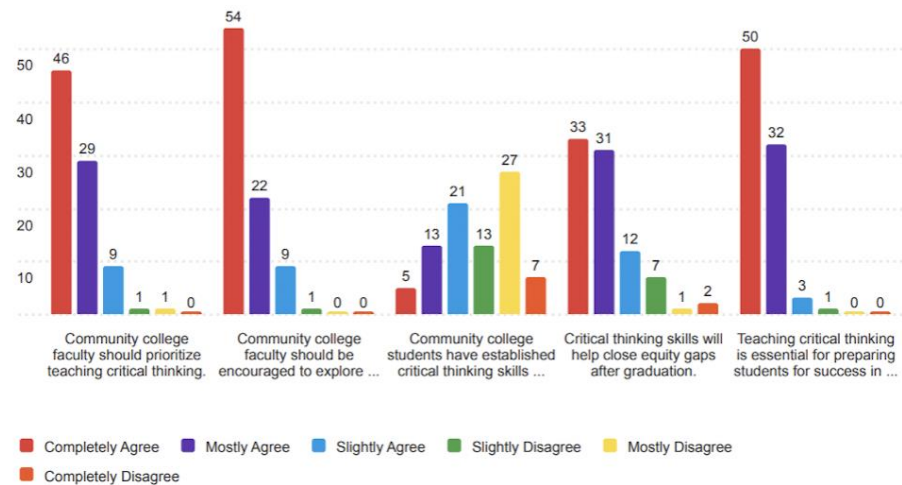
Perceptions - The following statements pertain to faculty perceptions about teaching crit...

86 Responses



Perceptions - The following statements pertain to faculty perceptions about teaching crit...

86 Responses



However, of interest in these results is that many faculty members do not feel both students and themselves are adequately equipped to teach and learn critical thinking skills. For instance, more than half of faculty responded that they disagree that students are equipped to learn critical thinking, despite the majority of faculty saying they have overwhelming confidence when it comes to teaching critical thinking. Faculty also believed the institution could do more to support critical thinking at the institution. Moreover, many faculty noted that it is difficult to assess students' critical thinking skills accurately. If this is the case, then it is clear that we need more professional development opportunities related to assessing and teaching critical thinking. Such results ask us to reflect on our own teaching practices. For instance, how can we adjust our teaching to account for this discrepancy? How can we better encourage critical thinking in the classroom regardless of a student's academic background?

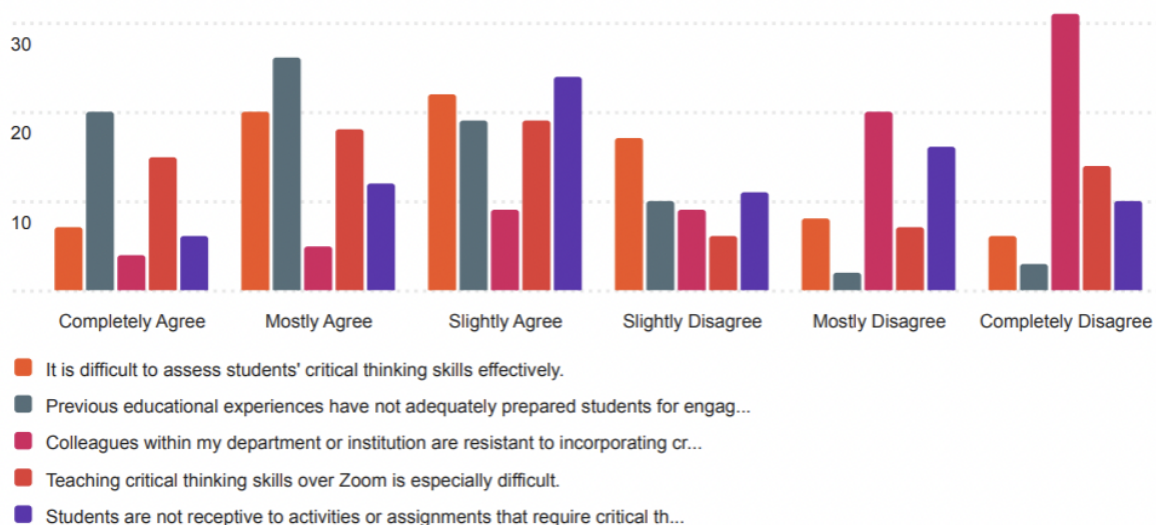
The qualitative data offered similar sentiments to what the quantitative data did. We asked faculty to tell us "what does a student that possesses critical thinking do/say/act?" Multiple themes arose in the results. Many faculty members seemed to agree that a student with critical thinking skills continually questions assumptions and does not accept information at face value. Further, many faculty remarked that students with critical thinking skills continually ask questions that aim to understand process and not just the "right" answer.

Barriers to Critical Thinking in the Classroom:

The third set of questions asked participants to reflect on barriers to critical thinking in the classroom. Overwhelmingly, faculty responded that it is difficult to assess student's critical thinking skills effectively. Faculty also note that for many students, their previous educational endeavors did not prepare them for critical thinking in the college classroom. This could be due to K-12 education not focusing on critical thinking enough, international students who have been taught to learn by rote memorization, and/or ignorance of critical thinking in general.

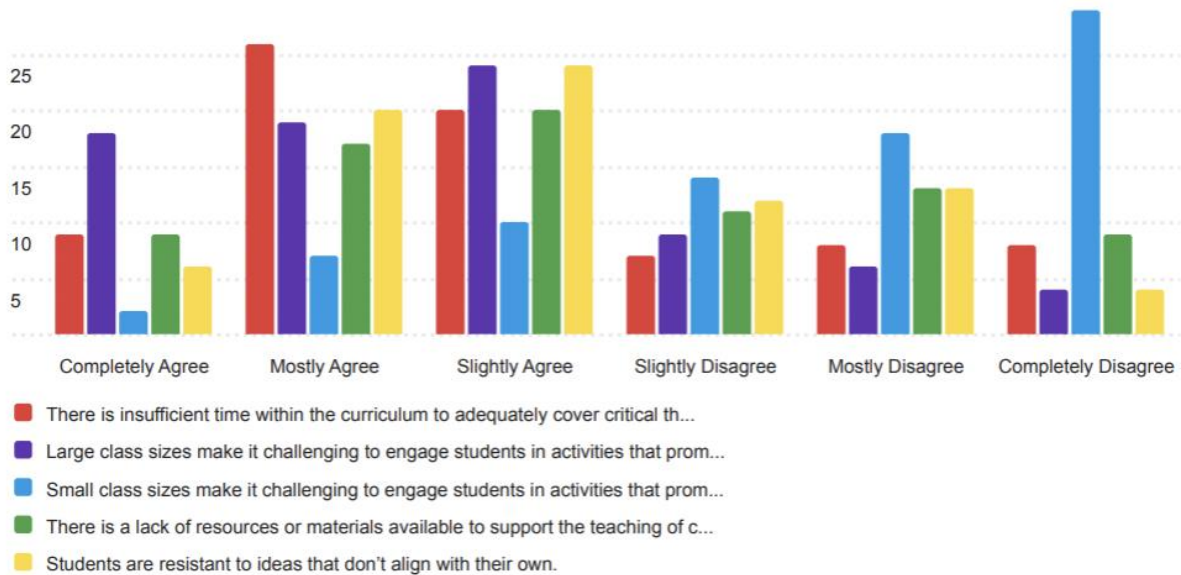
Barriers - The following statements pertain to barriers to teaching critical thinking....

80 Responses



Barriers - The following statements pertain to barriers to teaching critical thinking....

80 Responses



Many faculty members feel that they do not have enough time to adequately teach and cover critical thinking. It also seems that for many faculty, as learned in the perceptions section, believe that critical thinking involves being able to see things from multiple perspectives. This seems to be mirrored in these results as faculty noted that students are resistant to ideas that don't align with their own.

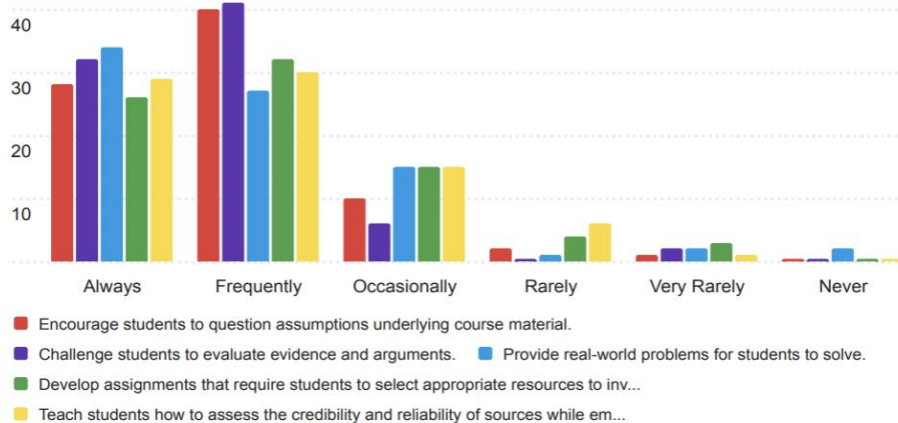
The qualitative data for this question asked survey takers to identify a particular barrier that students face in the teaching and learning of critical thinking. Responses were varied. In some cases, faculty note that recent cultural and political shifts, such as the move to Zoom, social media distractions and misinformation, and AI have all resulted in a downturn of critical thinking skills. Other results here mimic the quantitative data in that faculty identify rote memorization and previous learning experiences as the greatest barriers toward learning critical thinking.

Best Practices for Critical Thinking in the Classroom:

The third set of questions asked participants to reflect on the relationship between classroom practices and critical thinking. Many faculty employ a variety of techniques in the classroom to promote critical thinking. These include reflection/journaling exercises, source evaluation assignments, using case studies as teaching materials, and asking open-ended questions. Faculty overwhelmingly noted that asking students to reflect on their own learning processes, using real world problems as case studies, incorporating probing questions, and encouraging and challenging students to question assumptions and evaluate source materials were some of the practices that faculty noted as valuable classroom activities that encourage critical thinking.

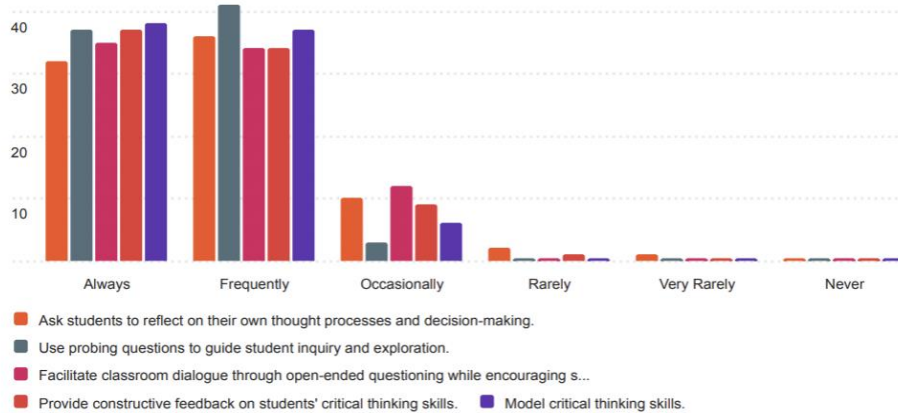
Practices - The following statements pertain to your critical thinking practices. Pl...

81 Responses



Practices - The following statements pertain to your critical thinking practices. Pl...

81 Responses



In addition, the committee developed a “Best Practices in Teaching Critical Thinking” list distilled from the faculty responses:

Best Practices in Teaching Critical Thinking (summarized from Faculty Responses)

1. Reflection/Reflective Writing/Journaling
2. Debates
3. Using Real World Case Studies
4. Activities to help Evaluate Source Material(s)
5. Application and Analysis Activities
6. Modeling Critical Thinking for Students

Closing the Loop

This report will be distributed to all faculty for review. Additionally, during spring FDW faculty will review the data with colleagues in the departments in order to review their own specific departmental data from the study. The data further offers some best practices for teaching critical thinking, as we showcase in that section of this report. Hopefully, faculty will use the data from this study to help adjust their teaching practices to more robustly embrace the notion of critical thinking in both general and specific ways.

What Did We Learn?

There was much to be learned from this study. Overall, we learned that critical thinking is important to faculty and a skill that students should be engaging in. Many faculty believe that students in community college struggle with critical thinking due to prior learning experiences where rote memorization is the focus. Some faculty don't feel equipped to teach critical thinking and some say that the institution could do more to support the further integration of critical thinking into our curriculums. Many faculty teach critical thinking in unique and interesting ways, such as through case studies and reflection exercises. Our list of best practices can serve as a guide for critical thinking tools in the classroom.

Limitations:

1. The committee relied on the college to provide laptops at FDW for participants to complete the survey. They were not available. This forced some faculty to complete the survey on their phones which did not allow them to explore the open-ended responses in the same way as on a computer keyboard.
2. Some faculty, while in the FDW session, did not comply with completion of the study when asked.
3. Despite having many participants in the study, there still could have been more participation, especially from part-time faculty.
4. This was a new form of study for the committee. It's one thing to write about practices and another to see them in action. The survey format itself limits the amount of qualitative data to work with overall.
5. Some faculty completed the quantitative portions of the survey while not completing the qualitative portions.

Future Recommendations:

1. Ensure the equipment/tools required for success are available and ready to use when needed.
2. Find other ways to encourage faculty responsiveness.

3. Provide paid time for part-time faculty to participate in assessment initiatives during their paid FDW time.
4. Replicate this same study in 5 years and compare data points, something prior studies have yet to do.

Appendices

Appendix A. Survey (Likert values were 1 = never, 5 or 6 = always)

PERCEPTIONS

- 1. Community college faculty should prioritize teaching critical thinking.**
- 2. Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.**
- 3. Community college students have established critical thinking skills upon entry.**
- 4. Critical thinking skills will help close equity gaps after graduation.**
- 5. Teaching critical thinking is essential for preparing students for success in their academic and professional lives.**
- 6. Critical Thinking should be integrated across disciplines, not just in specific areas or subjects.**
- 7. I do not feel confident in my ability to effectively teach critical thinking skills.**
- 8. It is challenging to assess students' critical thinking skills accurately.**
- 9. Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.**
- 10. There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.**
- 11. What does a student who possesses critical thinking skills do/say/act? (open-ended).**

PRACTICES

- 1. Encourage students to question assumptions underlying course material.**
- 2. Challenge students to evaluate evidence and arguments.**
- 3. Provide real-world problems for students to solve.**
- 4. Develop assignments that require students to select appropriate resources to investigate an issue.**
- 5. Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.**
- 6. Ask students to reflect on their own thought processes and decision-making.**
- 7. Use probing questions to guide student inquiry and exploration.**
- 8. Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.**
- 9. Provide constructive feedback on students' critical thinking skills.**
- 10. Model critical thinking skills.**
- 11. Share an example of a critical thinking opportunity you regularly incorporate into your classroom. (open-ended).**

BARRIERS

- 1. There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.**
- 2. Large class sizes make it challenging to engage students in activities that promote critical thinking.**
- 3. Small class sizes make it challenging to engage students in activities that promote critical thinking.**
- 4. There is a lack of resources or materials available to support the teaching of critical thinking.**
- 5. Students are resistant to ideas that don't align with their own.**
- 6. It is difficult to assess students' critical thinking skills effectively.**
- 7. Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.**
- 8. Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.**
- 9. Teaching critical thinking skills over Zoom is especially difficult.**
- 10. Students are not receptive to activities or assignments that require critical thinking.**
- 11. What are the primary barriers students and faculty encounter in engaging with critical thinking? (open—ended)**

Appendix B. – Developing the Survey/Working Documents

Group #1 – Where possible, align the following with our Goal of Critical Thinking and the Associated SLOs. Ask yourselves the following questions about the survey.

1. *Is this survey question pertinent?*
2. *Is this survey question necessary?*
3. *Is this survey question appropriate for our faculty?*
4. *Is this survey question repetitive?*
5. *Is this survey question*

The student demonstrates the ability to critically explore and evaluate issues, ideas, and information before coming to an informed conclusion.

1. Identify topic to be considered critically
2. Select appropriate resources to investigate issue
3. Analyze selected resources and assumptions to investigate issue
4. Form a conclusion that reflects an informed evaluation of the issue

Perceptions of Critical Thinking Teaching: Please indicate your level of agreement with the following statements regarding teaching critical thinking, using the following Likert scale:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

1. Importance of Critical Thinking:

- Teaching critical thinking is essential for preparing students for success in their academic and professional lives.
- Critical thinking skills are more important than ever in today's complex and rapidly changing world.

2. Integration Across the Curriculum:

- Critical thinking should be integrated into courses across disciplines, not just in specific areas or subjects.
- All faculty members have a responsibility to incorporate critical thinking into their teaching practices.

3. Impact on Student Learning:

- Teaching critical thinking improves students' ability to analyze and evaluate information.
- Students who develop strong critical thinking skills are better equipped to solve problems and make informed decisions.

4. Challenges and Opportunities:

- Teaching critical thinking presents both challenges and opportunities for faculty.
- Faculty members should be encouraged to explore innovative approaches to teaching critical thinking.

5. Faculty Preparedness:

- Faculty members feel confident in their ability to effectively teach critical thinking skills.
- Professional development opportunities focused on critical thinking pedagogy are valuable for faculty members.

6. Assessment of Critical Thinking:

- It is challenging to assess students' critical thinking skills accurately.
- Institutions should invest in developing robust assessment tools for measuring critical thinking.

7. Institutional Support:

- Our institution provides adequate support and resources for faculty to teach critical thinking effectively.
- There is a need for greater institutional support for initiatives aimed at enhancing critical thinking education.

8. Collaboration and Sharing Best Practices:

- Faculty members should collaborate and share best practices for teaching critical thinking.
- There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.

9. Student Engagement and Feedback:

- Students are generally receptive to activities and assignments that promote critical thinking.
- Faculty members should seek feedback from students on their experiences with critical thinking instruction.

10. Future Directions:

- There is a need for further research and scholarship in the area of critical thinking pedagogy.
- Our institution should prioritize ongoing efforts to enhance the integration of critical thinking into the curriculum.

Group #2-Where possible, align the following with our Goal of Critical Thinking and the Associated SLOs. Ask yourselves the following questions about the survey.

1. *Is this survey question pertinent?*
2. *Is this survey question necessary?*
3. *Is this survey question appropriate for our faculty?*
4. *Is this survey question repetitive?*
5. *Is this survey question*

The student demonstrates the ability to critically explore and evaluate issues, ideas, and information before coming to an informed conclusion.

1. Identify topic to be considered critically
2. Select appropriate resources to investigate issue
3. Analyze selected resources and assumptions to investigate issue
4. Form a conclusion that reflects an informed evaluation of the issue

Critical Thinking Practices: Please indicate the frequency with which you incorporate activities or strategies to promote critical thinking in your courses using the following Likert scale:

1. Never
2. Rarely
3. Occasionally
4. Frequently
5. Always

1. Engaging Students in Critical Analysis:

- Presenting conflicting viewpoints and asking students to analyze them.
- Encouraging students to question assumptions underlying course material.
- Challenging students to evaluate evidence and arguments.

2. Problem-Solving Activities:

- Providing real-world problems for students to solve.
- Facilitating group discussions or projects aimed at finding solutions to complex issues.
- Incorporating case studies that require critical analysis and decision-making.

3. Evaluating Sources and Information:

- Teaching students how to assess the credibility and reliability of sources.
- Emphasizing the importance of distinguishing between fact and opinion.
- Guiding students in recognizing biases in media and research.

4. Reflective Thinking Exercises:

- Asking students to reflect on their own thought processes and decision-making.
- Incorporating journaling or reflective writing assignments.
- Providing opportunities for students to discuss and learn from their mistakes.

5. Socratic Questioning:

- Using probing questions to guide student inquiry and exploration.
- Encouraging students to articulate and defend their viewpoints.
- Facilitating classroom dialogue through open-ended questioning.

6. Integrating Critical Thinking Across the Curriculum:

- Incorporating critical thinking skills into assignments across disciplines.
- Collaborating with colleagues to develop interdisciplinary approaches to critical thinking.
- Providing opportunities for students to apply critical thinking skills beyond the classroom.

7. Feedback and Assessment:

- Providing constructive feedback on students' critical thinking skills.
- Using rubrics or other assessment tools to evaluate critical thinking abilities.

- Adjusting teaching strategies based on students' demonstrated critical thinking skills.

8. Professional Development:

- Seeking opportunities for professional development related to teaching critical thinking.
- Participating in workshops or seminars on integrating critical thinking into the curriculum.
- Engaging in scholarly research or writing on critical thinking pedagogy.

Group #3 – Where possible, align the following with our Goal of Critical Thinking and the Associated SLOs. Ask yourselves the following questions about the survey.

1. *Is this survey question pertinent?*
2. *Is this survey question necessary?*
3. *Is this survey question appropriate for our faculty?*
4. *Is this survey question repetitive?*
5. *Is this survey question*

The student demonstrates the ability to critically explore and evaluate issues, ideas, and information before coming to an informed conclusion.

1. Identify topic to be considered critically
2. Select appropriate resources to investigate issue
3. Analyze selected resources and assumptions to investigate issue
4. Form a conclusion that reflects an informed evaluation of the issue

Barriers to Teaching Critical Thinking: Please indicate the extent to which you agree or disagree with the following statements regarding barriers to teaching critical thinking, using the following Likert scale:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

1. Limited Class Time

- There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

2. Class Sizes:

- Large class sizes make it challenging to engage students in activities that promote critical thinking.
- Small class sizes make it challenging to engage students in activities that promote critical thinking.

3. Lack of Training or Resources:

- I feel inadequately trained to effectively teach critical thinking skills.
- There is a lack of resources or materials available to support the teaching of critical thinking.

4. Student Resistance or Apathy:

- Students are not receptive to activities or assignments that require critical thinking.
- Some students demonstrate apathy towards developing critical thinking skills.

5. Disciplinary Constraints:

- The nature of my discipline makes it difficult to incorporate critical thinking activities.
- There are constraints within the curriculum or program requirements that limit opportunities for teaching critical thinking.

6. Assessment Challenges:

- It is difficult to assess students' critical thinking skills effectively.
- There is a lack of appropriate assessment tools or methods for evaluating critical thinking.

7. Institutional Culture and Expectations:

- There is a lack of institutional support or recognition for the importance of teaching critical thinking.
- Institutional priorities and expectations do not align with promoting critical thinking in teaching.

8. Student Preparedness:

- Many students enter my courses lacking foundational critical thinking skills.

Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.

9. Pedagogical Resistance:

Some faculty members within my department or institution are resistant to incorporating critical thinking into their teaching.

There is a lack of buy-in or support from colleagues for integrating critical thinking across the curriculum.

10. Other Barriers: Please identify any other barriers not mentioned above that you encounter when teaching critical thinking.

Appendix C – Data by Department

Full-Time Faculty Responses by Department - Social Sciences

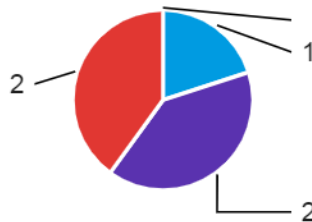
Perceptions - The following statements pertain to faculty perceptions about teaching crit...

5 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	3.00	1.80	0.75	0.56	5
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	2.00	1.60	0.49	0.24	5
Community college students have established critical thinking skills upon entry.	2.00	4.00	2.80	0.75	0.56	5
Critical thinking skills will help close equity gaps after graduation.	1.00	6.00	2.80	1.72	2.96	5
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	2.00	1.60	0.49	0.24	5
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	2.00	1.60	0.49	0.24	5
I do not feel confident in my ability to effectively teach critical thinking skills.	4.00	6.00	5.20	0.75	0.56	5
It is challenging to assess students' critical thinking skills accurately.	2.00	3.00	2.60	0.49	0.24	5
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	2.00	5.00	3.40	1.02	1.04	5
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	3.00	1.80	0.75	0.56	5

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.

5 Responses



- Completely Disagree
- Mostly Disagree
- Slightly Disagree
- Slightly Agree
- Mostly Agree
- Completely Agree

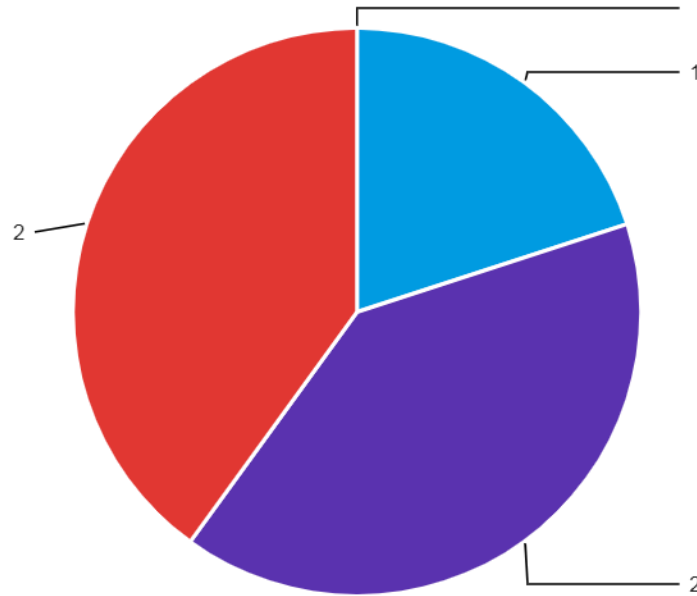
Practices - The following statements pertain to your critical thinking practices. Pl...

5 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	1.00	3.00	1.80	0.75	0.56	5	9.00
Challenge students to evaluate evidence and arguments.	1.00	2.00	1.80	0.40	0.16	5	9.00
Provide real-world problems for students to solve.	1.00	2.00	1.60	0.49	0.24	5	8.00
Develop assignments that require students to select appropriate resources to investigate an issue.	1.00	2.00	1.60	0.49	0.24	5	8.00
Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	2.00	1.60	0.49	0.24	5	8.00
Ask students to reflect on their own thought processes and decision-making.	1.00	3.00	1.60	0.80	0.64	5	8.00
Use probing questions to guide student inquiry and exploration.	1.00	3.00	1.80	0.75	0.56	5	9.00
Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	3.00	2.00	0.89	0.80	5	10.00
Provide constructive feedback on students' critical thinking skills.	1.00	3.00	1.80	0.75	0.56	5	9.00
Model critical thinking skills.	1.00	2.00	1.40	0.49	0.24	5	7.00

Practices_1 - Encourage students to question assumptions underlying course material.

5 Responses



■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

Barriers - The following statements pertain to barriers to teaching critical thinking....

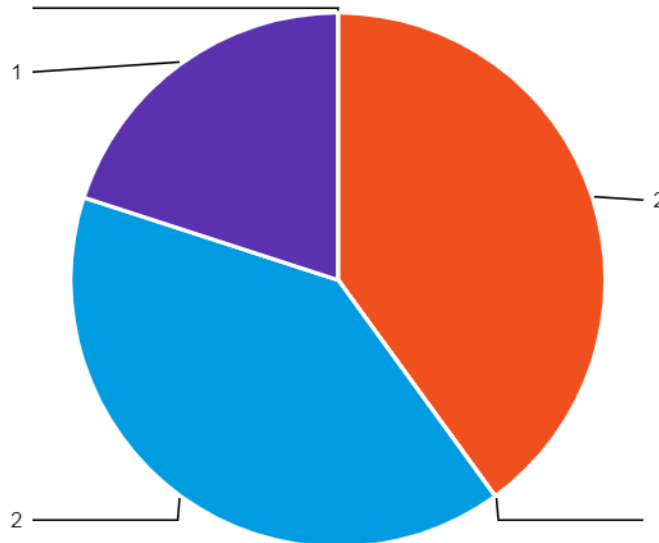
5 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	2.00	6.00	4.00	1.67	2.80	5	20.00
Large class sizes make it challenging to engage students in activities that promote critical thinking.	2.00	6.00	4.20	1.60	2.56	5	21.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	3.00	6.00	5.40	1.20	1.44	5	27.00
There is a lack of resources or materials available to support the teaching of critical thinking.	3.00	6.00	4.20	0.98	0.96	5	21.00
Students are resistant to ideas that don't align with their own.	3.00	5.00	3.80	0.98	0.96	5	19.00

It is difficult to assess students' critical thinking skills effectively.	2.00	5.00	3.20	0.98	0.96	5	16.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	2.00	4.00	3.20	0.75	0.56	5	16.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	4.00	6.00	4.80	0.75	0.56	5	24.00
Teaching critical thinking skills over Zoom is especially difficult.	1.00	6.00	4.40	2.06	4.24	5	22.00
Students are not receptive to activities or assignments that require critical thinking.	4.00	6.00	4.80	0.75	0.56	5	24.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

5 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
 ■ Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

3 Responses

What does a student who possesses critical thinking skills do/say/act?

Asks questions; explains and/or challenges information presented; compares and contrasts perspectives/ideas/concepts; reflects on their own work; offers constructive feedback to others; creates/designs; presents/teaches/shares information with others

They engage the material, question what they read, seek additional information, ask questions, apply new information to what they know/experience, try to connect with real-life examples from their own communities/world.

Why? How? I'm curious about.... What relationships exist between this and other areas of my life/society... They are invested in the journey of learning.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

3 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

Media Watch Quiz on current events and information literacy.

Students read about inequality and work in groups to brainstorm policy solutions--existing or new ones to mitigate the public issue/social problem.

In cultural anthropology all realities have the same value: Null Value, Why? What influences how we construct our realities? Why do anthropologists use a null value approach? What are the benefits and potential drawbacks of this approach?

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

3 Responses

What are the primary barriers you encounter to effectively teach critical thinking?

questions around academic integrity; concerns over the use of AI; trying to figure out creative ways to adapt to new technologies to promote better understanding of the tools AND incorporate the use of these tools so they ADD value to teaching and learning rather than replace critical thinking in our learning environments

Students claim to have too much on their plates; poor time management skills to complete the work required.

students who have strong personal bias, a closed mindset, and/or a lack of thinking critically in the past.

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

3 Responses

What are the primary barriers students encounter in engaging with critical thinking?

preparation, time, experience, assignments, assessments, relevance, etc.

Language barrier; readiness.

Finding a topic or theme they deem as "worthy" of their time and energy. A lot of second guessing and self-fulfilling prophecies around not knowing how to think critically.

Full-Time Faculty Responses by Department - Auto

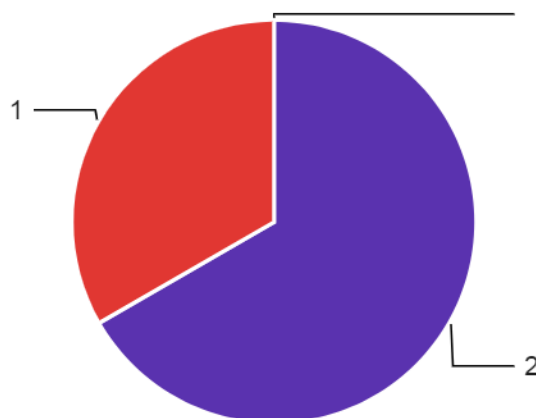
Perceptions - The following statements pertain to faculty perceptions about teaching crit...

3 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	2.00	1.67	0.47	0.22	3
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	2.00	3.00	2.33	0.47	0.22	3
Community college students have established critical thinking skills upon entry.	3.00	6.00	4.00	1.41	2.00	3
Critical thinking skills will help close equity gaps after graduation.	2.00	4.00	3.00	0.82	0.67	3
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	2.00	1.67	0.47	0.22	3
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	2.00	1.33	0.47	0.22	3
I do not feel confident in my ability to effectively teach critical thinking skills.	2.00	6.00	4.67	1.89	3.56	3
It is challenging to assess students' critical thinking skills accurately.	2.00	5.00	3.67	1.25	1.56	3
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	2.00	3.00	2.67	0.47	0.22	3
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	2.00	1.67	0.47	0.22	3

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.

3 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
■ Completely Agree

Practices - The following statements pertain to your critical thinking practices. Pl...

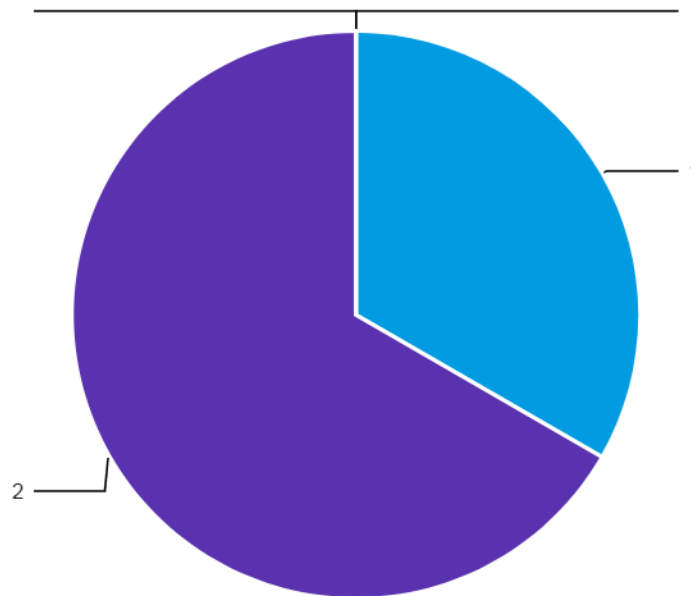
3 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	2.00	3.00	2.33	0.47	0.22	3	7.00
Challenge students to evaluate evidence and arguments.	2.00	2.00	2.00	0.00	0.00	3	6.00
Provide real-world problems for students to solve.	1.00	1.00	1.00	0.00	0.00	3	3.00
Develop assignments that require students to select appropriate resources to investigate an issue.	1.00	4.00	2.33	1.25	1.56	3	7.00
Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	4.00	2.33	1.25	1.56	3	7.00
Ask students to reflect on their own thought processes and decision-making.	2.00	2.00	2.00	0.00	0.00	3	6.00
Use probing questions to guide student inquiry and exploration.	1.00	2.00	1.33	0.47	0.22	3	4.00

Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	2.00	1.33	0.47	0.22	3	4.00
Provide constructive feedback on students' critical thinking skills.	1.00	2.00	1.33	0.47	0.22	3	4.00
Model critical thinking skills.	1.00	2.00	1.67	0.47	0.22	3	5.00

Practices_1 - Encourage students to question assumptions underlying course material.

3 Responses



■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

Barriers - The following statements pertain to barriers to teaching critical thinking....

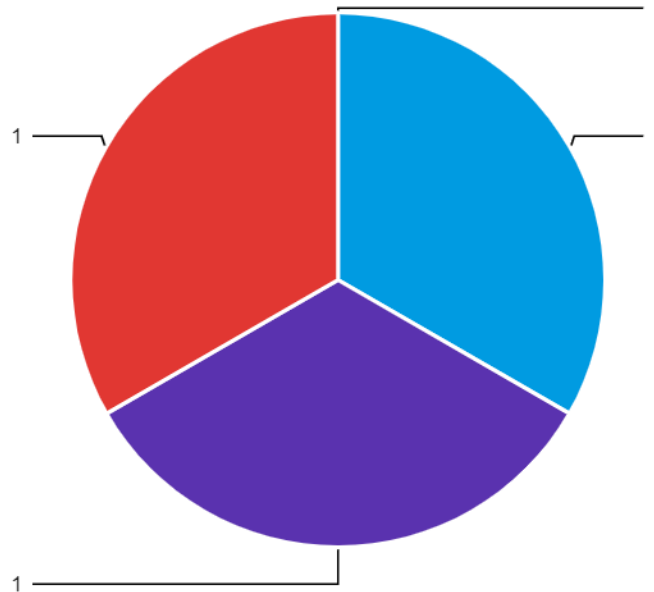
3 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	1.00	3.00	2.00	0.82	0.67	3	6.00

Large class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	2.00	1.33	0.47	0.22	3	4.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	2.00	6.00	4.67	1.89	3.56	3	14.00
There is a lack of resources or materials available to support the teaching of critical thinking.	1.00	4.00	2.33	1.25	1.56	3	7.00
Students are resistant to ideas that don't align with their own.	1.00	4.00	2.33	1.25	1.56	3	7.00
It is difficult to assess students' critical thinking skills effectively.	1.00	2.00	1.67	0.47	0.22	3	5.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	1.00	4.00	2.33	1.25	1.56	3	7.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	5.00	6.00	5.50	0.50	0.25	2	11.00
Teaching critical thinking skills over Zoom is especially difficult.	4.00	4.00	4.00	0.00	0.00	2	8.00
Students are not receptive to activities or assignments that require critical thinking.	1.00	4.00	2.50	1.50	2.25	2	5.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

3 Responses



Completely Disagree Mostly Disagree Slightly Disagree Slightly Agree Mostly Agree Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

2 Responses

What does a student who possesses critical thinking skills do/say/act?

Students with critical thinking skills start to apply what they have learned to other real world situation. They are able to dive deeper and ask more probing questions.

Students that have critical thinking skills can recognize applications of the information that they learn in class even when those applications have not been explicitly stated.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

2 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

I create real life scenarios, and have students discuss the possible solution to remedy the problem.

We ask students to diagnose problems within electrical circuits. This requires them to understand how the circuit is supposed to operate and then identify how it is actually operating. Using that information, they then need to formulate repair ideas.

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

2 Responses

What are the primary barriers you encounter to effectively teach critical thinking?

Student do not know what is critical thinking.

Students lack foundational skills

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

2 Responses

What are the primary barriers students encounter in engaging with critical thinking?

They do not know what critical thinking is and it is harder than it sounds.

Students are resistant to tasks that are not easily mastered

Full-Time Faculty Responses by Department - Biology

Perceptions - The following statements pertain to faculty perceptions about teaching crit...

5 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	3.00	1.80	0.75	0.56	5
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	2.00	1.20	0.40	0.16	5
Community college students have established critical thinking skills upon entry.	2.00	5.00	4.20	1.17	1.36	5
Critical thinking skills will help close equity gaps after graduation.	1.00	2.00	1.20	0.40	0.16	5
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	1.00	1.00	0.00	0.00	5
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	2.00	1.20	0.40	0.16	5
I do not feel confident in my ability to effectively teach critical thinking skills.	6.00	6.00	6.00	0.00	0.00	5
It is challenging to assess students' critical thinking skills accurately.	2.00	6.00	4.00	1.67	2.80	5
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	3.00	6.00	5.00	1.10	1.20	5
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	2.00	3.00	2.40	0.49	0.24	5

Practices - The following statements pertain to your critical thinking practices. Pl...

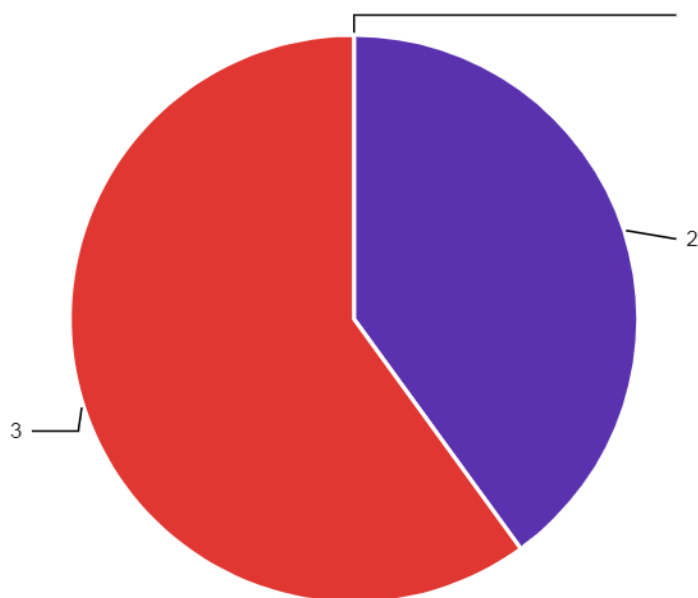
5 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	1.00	2.00	1.40	0.49	0.24	5	7.00
Challenge students to evaluate evidence and arguments.	1.00	2.00	1.20	0.40	0.16	5	6.00
Provide real-world problems for students to solve.	1.00	1.00	1.00	0.00	0.00	5	5.00
Develop assignments that require students to select appropriate resources to investigate an issue.	1.00	2.00	1.20	0.40	0.16	5	6.00

Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	3.00	1.60	0.80	0.64	5	8.00
Ask students to reflect on their own thought processes and decision-making.	1.00	2.00	1.40	0.49	0.24	5	7.00
Use probing questions to guide student inquiry and exploration.	1.00	2.00	1.40	0.49	0.24	5	7.00
Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	2.00	1.40	0.49	0.24	5	7.00
Provide constructive feedback on students' critical thinking skills.	1.00	2.00	1.20	0.40	0.16	5	6.00
Model critical thinking skills.	1.00	2.00	1.60	0.49	0.24	5	8.00

Practices_1 - Encourage students to question assumptions underlying course material.

5 Responses



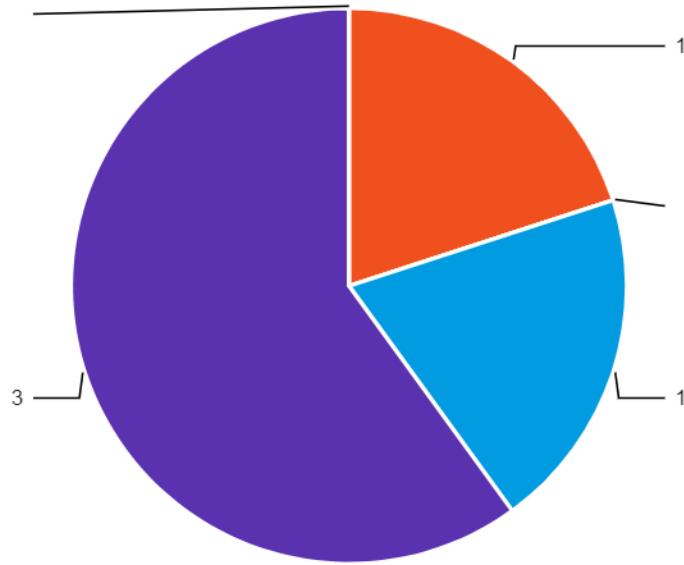
■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

Barriers - The following statements pertain to barriers to teaching critical thinking....

5 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	2.00	6.00	3.00	1.55	2.40	5	15.00
Large class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	6.00	3.00	1.67	2.80	5	15.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	3.00	6.00	4.80	0.98	0.96	5	24.00
There is a lack of resources or materials available to support the teaching of critical thinking.	2.00	6.00	3.80	1.47	2.16	5	19.00
Students are resistant to ideas that don't align with their own.	1.00	6.00	3.40	1.62	2.64	5	17.00
It is difficult to assess students' critical thinking skills effectively.	3.00	6.00	4.00	1.10	1.20	5	20.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	1.00	6.00	2.80	1.83	3.36	5	14.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	6.00	6.00	6.00	0.00	0.00	5	30.00
Teaching critical thinking skills over Zoom is especially difficult.	1.00	6.00	3.20	1.60	2.56	5	16.00
Students are not receptive to activities or assignments that require critical thinking.	1.00	6.00	3.20	1.60	2.56	5	16.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.



Completely Disagree Mostly Disagree Slightly Disagree Slightly Agree Mostly Agree Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

3 Responses

What does a student who possesses critical thinking skills do/say/act?

There is no single correct way to say/act, as each person brings their own critical thinking approach to solving the problem.

They are mature and know their expectations..

Comprehend and find a logical solution to a problem.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

4 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

Case studies

Case studies in my Anatomy and Physiology class.

Darwinian fitness is a measure of how many progenies you leave behind. Using this thematic scheme, students can apply to all alternate scenarios, like siblings, half sibling and non siblings to hone on the understanding of fitness!

Laboratory Work

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

What are the primary barriers you encounter to effectively teach critical thinking?

AI is being used a lot by the students now a days.

Time is the main barrier

The inercia student have from their previous education

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

What are the primary barriers students encounter in engaging with critical thinking?

They are not ready to research on their own. They sort AI help to find answers.

Remote classes

Their educational background

Do not know how to reason adequately

Full-Time Faculty Responses by Department - Cosmetology and Barbering

Perceptions - The following statements pertain to faculty perceptions about teaching crit...

7 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	4.00	1.86	1.12	1.27	7
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	3.00	1.57	0.73	0.53	7
Community college students have established critical thinking skills upon entry.	1.00	6.00	2.86	1.73	2.98	7
Critical thinking skills will help close equity gaps after graduation.	1.00	4.00	2.43	1.40	1.96	7
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	3.00	1.29	0.70	0.49	7
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	3.00	1.29	0.70	0.49	7
I do not feel confident in my ability to effectively teach critical thinking skills.	1.00	6.00	4.29	2.05	4.20	7
It is challenging to assess students' critical thinking skills accurately.	1.00	6.00	3.86	1.46	2.12	7
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	1.00	4.00	2.57	1.05	1.10	7
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	6.00	2.43	1.59	2.53	7

Practices - The following statements pertain to your critical thinking practices. Pl...

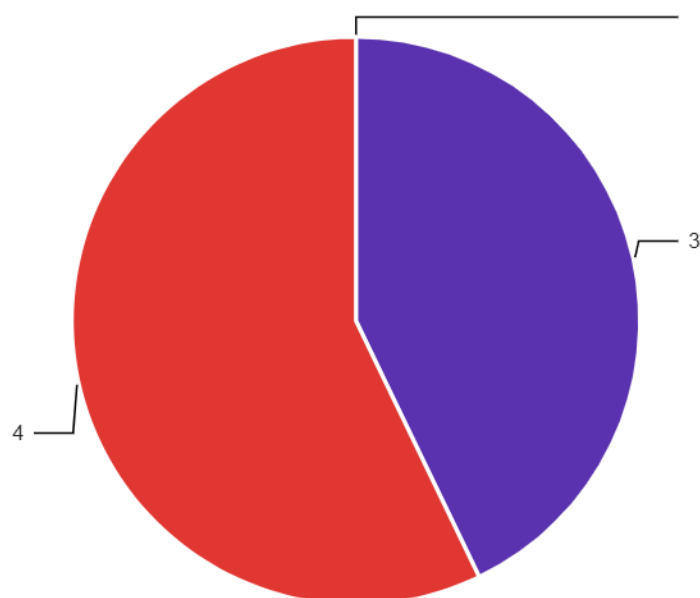
7 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	1.00	2.00	1.43	0.49	0.24	7	10.00
Challenge students to evaluate evidence and arguments.	1.00	2.00	1.29	0.45	0.20	7	9.00
Provide real-world problems for students to solve.	1.00	1.00	1.00	0.00	0.00	7	7.00
Develop assignments that require students to select appropriate resources to investigate an issue.	1.00	3.00	1.71	0.70	0.49	7	12.00

Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	3.00	1.71	0.70	0.49	7	12.00
Ask students to reflect on their own thought processes and decision-making.	1.00	2.00	1.29	0.45	0.20	7	9.00
Use probing questions to guide student inquiry and exploration.	1.00	2.00	1.14	0.35	0.12	7	8.00
Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	2.00	1.29	0.45	0.20	7	9.00
Provide constructive feedback on students' critical thinking skills.	1.00	2.00	1.29	0.45	0.20	7	9.00
Model critical thinking skills.	1.00	2.00	1.14	0.35	0.12	7	8.00

Practices_1 - Encourage students to question assumptions underlying course material.

7 Responses



■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

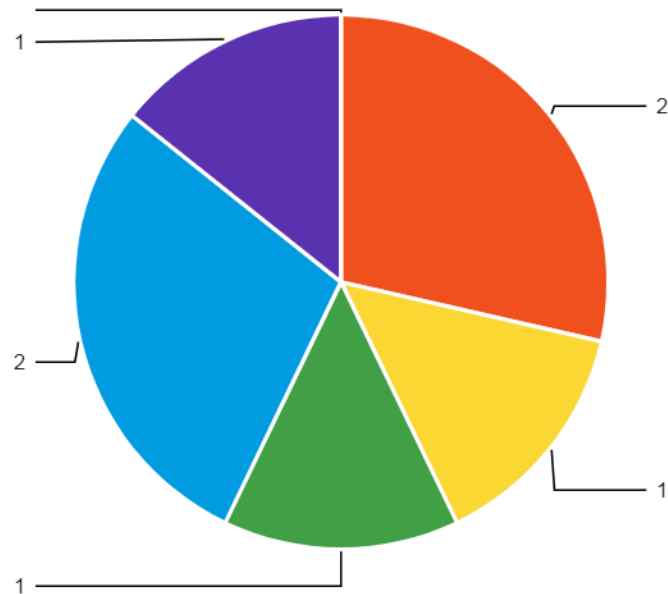
Barriers - The following statements pertain to barriers to teaching critical thinking....

7 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	2.00	6.00	4.14	1.46	2.12	7	29.00
Large class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	5.00	3.00	1.51	2.29	7	21.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	6.00	4.29	1.67	2.78	7	30.00
There is a lack of resources or materials available to support the teaching of critical thinking.	1.00	6.00	3.71	1.83	3.35	7	26.00
Students are resistant to ideas that don't align with their own.	1.00	5.00	2.86	1.46	2.12	7	20.00
It is difficult to assess students' critical thinking skills effectively.	1.00	6.00	3.43	1.59	2.53	7	24.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	1.00	5.00	2.43	1.40	1.96	7	17.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	1.00	6.00	3.00	2.07	4.29	7	21.00
Teaching critical thinking skills over Zoom is especially difficult.	1.00	5.00	2.86	1.25	1.55	7	20.00
Students are not receptive to activities or assignments that require critical thinking.	1.00	6.00	2.71	1.91	3.63	7	19.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

7 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
 ■ Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

7 Responses

What does a student who possesses critical thinking skills do/say/act?

This student shows that they understand the tools given to them and be creative in how they can make it work.

work out the best way to approach a project

When given a task, it is evident in their outcome

They push forward even if they fail the first time or take the time to weigh it out .

do? they do everything. Say? i need assistance. act? problem solving

They move past any experiences that challenges them. They say they will try again and do it differently next time. They don't get discouraged if they hit a wall and learn that mistakes are a huge part of learning.

Typically they have more than one solution to a problem. They can think beyond the first failure.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

7 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

Often times we give students projects to complete and how it relates to the lesson

using cutting techniques to creatively perform a modified cut

A critical thinking opportunity I regularly use in my classroom is provide all of the materials to complete a thing minus the one thing that could be replaced with something else.

When teaching I give an example of a client situation with color or chemical relaxer and it would they go about the service. e

making all my students to be apart of the education by involving them on the method on how to present materials.

When teaching color formulation, the students utilize the formulation chart to figure out how to achieve the desired end result. They are able to use any and all items to come up with their formulation. They then share how they made their formulation and the remaining students can ask questions as to why they chose the path to the end result.

When preparing for our semi annula hair show, construction of headpieces requires lots of trial and error. Helping them find alternative ways to construct their pieces requires lots of research of materials and foundation theories. I try to encourage them to have back-up plans for their pieces.

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

5 Responses

What are the primary barriers you encounter to effectively teach critical thinking?

students that have not experienced certain things may find it difficult to critically think

social media, phones, lack of reading

telephones. They drive me crazy in the classroom.

When students are absent or tardy during the beginning of the lessons which explain the activity and how to achieve the end result.

Larger class sizes.

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

5 Responses

What are the primary barriers students encounter in engaging with critical thinking?

phones, mental illness

They were not required in High school or grade school .

Medical Terminology that are used within the textbook.

same as above

Fixed mindsets and fear of failure

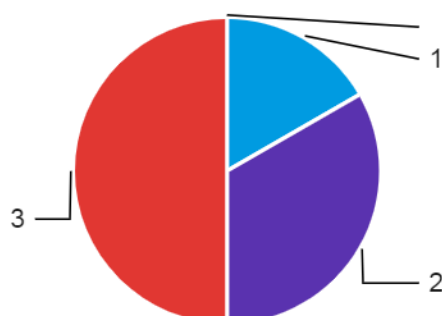
Full-Time Faculty Responses by Department - ED and HDFS

Perceptions - The following statements pertain to faculty perceptions about teaching crit...

6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Community college faculty should prioritize teaching critical thinking.	1.00	3.00	1.67	0.75	0.56	6	10.00
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	3.00	1.67	0.75	0.56	6	10.00
Community college students have established critical thinking skills upon entry.	1.00	4.00	3.17	1.07	1.14	6	19.00
Critical thinking skills will help close equity gaps after graduation.	1.00	2.00	1.67	0.47	0.22	6	10.00
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	3.00	1.67	0.75	0.56	6	10.00
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	2.00	1.33	0.47	0.22	6	8.00
I do not feel confident in my ability to effectively teach critical thinking skills.	3.00	6.00	4.33	1.11	1.22	6	26.00
It is challenging to assess students' critical thinking skills accurately.	1.00	5.00	2.83	1.34	1.81	6	17.00
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	2.00	3.00	2.50	0.50	0.25	6	15.00
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	3.00	1.67	0.75	0.56	6	10.00

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
■ Completely Agree

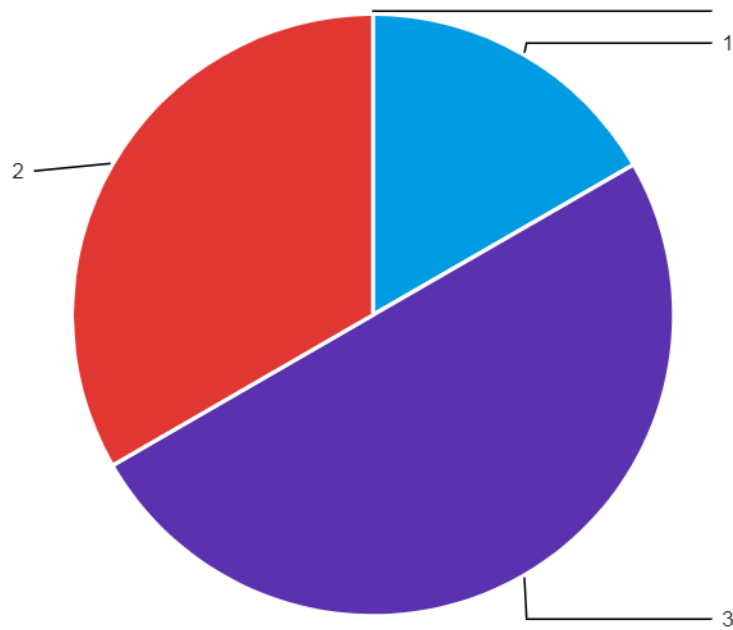
Practices - The following statements pertain to your critical thinking practices. Pl...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	1.00	3.00	1.83	0.69	0.47	6	11.00
Challenge students to evaluate evidence and arguments.	1.00	3.00	2.00	0.58	0.33	6	12.00
Provide real-world problems for students to solve.	1.00	2.00	1.67	0.47	0.22	6	10.00
Develop assignments that require students to select appropriate resources to investigate an issue.	1.00	3.00	1.50	0.76	0.58	6	9.00
Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	3.00	2.17	0.69	0.47	6	13.00
Ask students to reflect on their own thought processes and decision-making.	1.00	2.00	1.67	0.47	0.22	6	10.00

Use probing questions to guide student inquiry and exploration.	1.00	2.00	1.67	0.47	0.22	6	10.00
Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	2.00	1.67	0.47	0.22	6	10.00
Provide constructive feedback on students' critical thinking skills.	1.00	2.00	1.83	0.37	0.14	6	11.00
Model critical thinking skills.	1.00	2.00	1.83	0.37	0.14	6	11.00

Practices_1 - Encourage students to question assumptions underlying course material.

6 Responses



■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

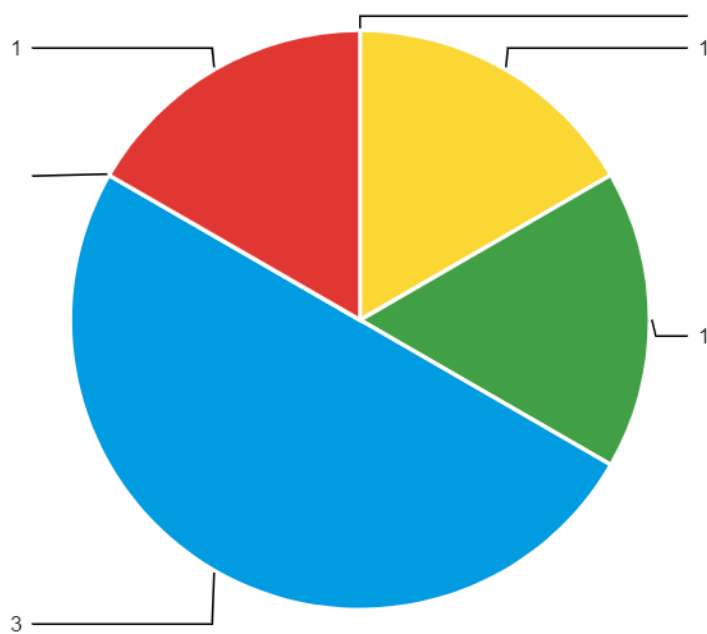
Barriers - The following statements pertain to barriers to teaching critical thinking....

6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	1.00	5.00	3.17	1.21	1.47	6	19.00
Large class sizes make it challenging to engage students in activities that promote critical thinking.	2.00	5.00	3.33	1.11	1.22	6	20.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	2.00	5.00	3.50	0.96	0.92	6	21.00
There is a lack of resources or materials available to support the teaching of critical thinking.	3.00	5.00	3.50	0.76	0.58	6	21.00
Students are resistant to ideas that don't align with their own.	2.00	5.00	3.00	1.15	1.33	6	18.00
It is difficult to assess students' critical thinking skills effectively.	2.00	4.00	2.67	0.75	0.56	6	16.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	2.00	3.00	2.50	0.50	0.25	6	15.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	4.00	6.00	5.50	0.76	0.58	6	33.00
Teaching critical thinking skills over Zoom is especially difficult.	2.00	6.00	3.17	1.34	1.81	6	19.00
Students are not receptive to activities or assignments that require critical thinking.	2.00	5.00	3.17	1.07	1.14	6	19.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

6 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
 ■ Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

4 Responses

What does a student who possesses critical thinking skills do/say/act?

The are able to debate issues, look at a situation from several perspectives. They can analyze a given situation and solve problems.

Asks open-ended questions, actively participates in discussions, shares opinions/interprets course content/materials, researches information, examines sources

I think this looks different at different levels, but I see students learning to see and question their assumptions, learning to evaluate their own and other sources of knowledge, learning to make connections and development arguments and reflect on this (and understand and provide examples of counter arguments-which feels a bit more advanced to me).... and more! These are just my quick ruminations.

They do not take information at face value, rather, they question it, consider alternatives, and add to information in ways that apply to the real world.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

5 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

I give pairs of students two sides of an argument (for example, "It is right to place adoptive children with families whose backgrounds whose backgrounds, especially race and ethnicity are similar to the child's" and "It is right to place adoptive children with loving families regardless of backgrounds"). They have to provide evidence for both sides of the arguments.

Case study analyses: presenting challenging world teaching/learning scenarios, inviting groups of students to discuss/analyze them and share their ideas with the rest of the class about how they would approach a situation and why they think it would be effective

I have students complete activities that have them evaluate multiple options and then decide on the "best" course of action. In another activity I have students utilize sources and evaluate observations based on development sources.

End of module assignments that require students apply the information provided throughout.

Case studies and session reflections.

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

What are the primary barriers you encounter to effectively teach critical thinking?

Providing feedback that doesn't seem to make change

I'm not sure if I see barriers, I find each student and each term to be full of their own opportunities to navigate teaching about thinking in my discipline -differently

Different modalities require different methods to assess critical thinking. It can be taught in all modalities, but the assessing of whether they gained/improved their skill looks different. This can be difficult when you are teaching different modalities.

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

What are the primary barriers students encounter in engaging with critical thinking?

Language barriers that prohibit the articulation of complicated concepts.

I find that sometimes I struggle with getting students to take the feedback I provide and grow from it.

Believing there is only way one to do something. Taking experiences over best practices. Taking one source as the end all, be all

Full-Time Faculty Responses by Department - Humanities

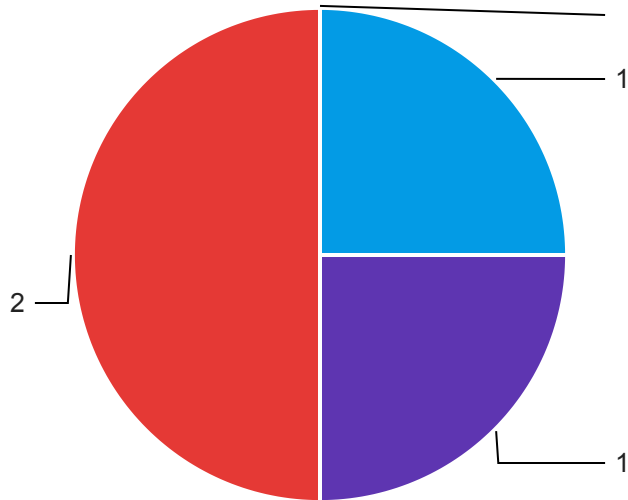
Perceptions - The following statements pertain to faculty perceptions about teaching crit...

4 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	3.00	1.75	0.83	0.69	4
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	2.00	1.25	0.43	0.19	4
Community college students have established critical thinking skills upon entry.	5.00	5.00	5.00	0.00	0.00	4
Critical thinking skills will help close equity gaps after graduation.	1.00	3.00	1.75	0.83	0.69	4
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	2.00	1.50	0.50	0.25	4
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	2.00	1.50	0.50	0.25	4
I do not feel confident in my ability to effectively teach critical thinking skills.	2.00	6.00	4.00	1.58	2.50	4
It is challenging to assess students' critical thinking skills accurately.	1.00	2.00	1.50	0.50	0.25	4
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	1.00	6.00	3.50	1.80	3.25	4
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	2.00	6.00	3.50	1.50	2.25	4

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.

4 Responses



- Completely Disagree
- Mostly Disagree
- Slightly Disagree
- Slightly Agree
- Mostly Agree
- Completely Agree

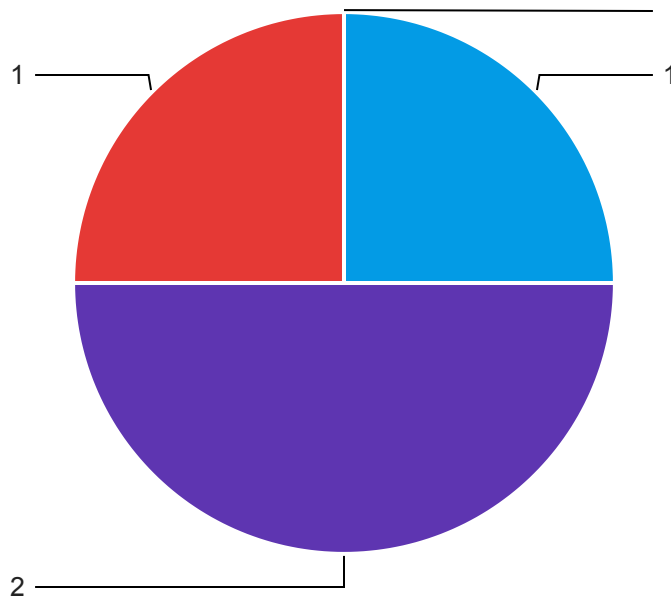
Practices - The following statements pertain to your critical thinking practices. Pl...

4 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	1.00	3.00	2.00	0.71	0.50	4	8.00
Challenge students to evaluate evidence and arguments.	1.00	3.00	2.00	0.71	0.50	4	8.00
Provide real-world problems for students to solve.	1.00	3.00	2.25	0.83	0.69	4	9.00
Develop assignments that require students to select appropriate resources to investigate an issue.	1.00	4.00	2.50	1.12	1.25	4	10.00
Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	4.00	2.50	1.12	1.25	4	10.00

Ask students to reflect on their own thought processes and decision-making.	1.00	4.00	2.00	1.22	1.50	4	8.00
Use probing questions to guide student inquiry and exploration.	2.00	2.00	2.00	0.00	0.00	4	8.00
Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	2.00	1.50	0.50	0.25	4	6.00
Provide constructive feedback on students' critical thinking skills.	1.00	2.00	1.25	0.43	0.19	4	5.00
Model critical thinking skills.	1.00	2.00	1.50	0.50	0.25	4	6.00

Practices_1 - Encourage students to question assumptions underlying course material.



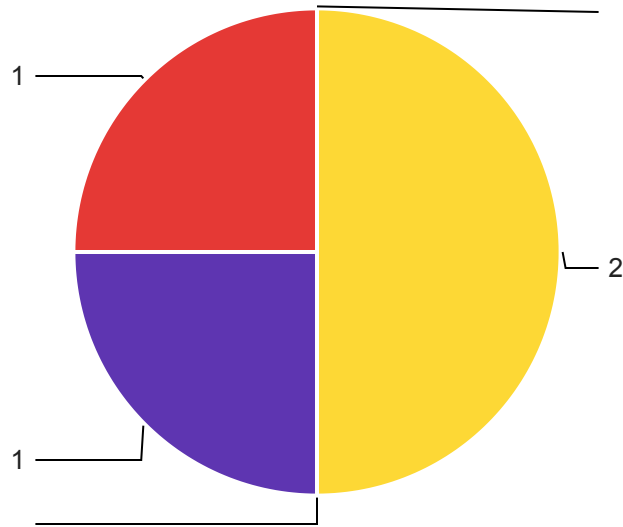
■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

Barriers - The following statements pertain to barriers to teaching critical thinking....

4 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	1.00	5.00	3.25	1.79	3.19	4	13.00
Large class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	4.00	2.25	1.09	1.19	4	9.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	4.00	5.00	4.25	0.43	0.19	4	17.00
There is a lack of resources or materials available to support the teaching of critical thinking.	1.00	5.00	3.25	1.79	3.19	4	13.00
Students are resistant to ideas that don't align with their own.	2.00	4.00	2.75	0.83	0.69	4	11.00
It is difficult to assess students' critical thinking skills effectively.	1.00	3.00	2.00	0.71	0.50	4	8.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	1.00	4.00	2.00	1.22	1.50	4	8.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	4.00	6.00	5.00	0.71	0.50	4	20.00
Teaching critical thinking skills over Zoom is especially difficult.	1.00	5.00	3.25	1.79	3.19	4	13.00
Students are not receptive to activities or assignments that require critical thinking.	2.00	6.00	4.00	1.58	2.50	4	16.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
■ Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

4 Responses

What does a student who possesses critical thinking skills do/say/act?

There is a certain logic that is followed and/or present in forming conclusions.

Able to problem solve and think through situations.

They participate in discussion and ask questions. They offer feedback during critiques with classmates.

They know how to do an objective research, looking at different, even contradictory sources and bring in their own subjective point of view to reach conclusions, ideas etc.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

4 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

How to arrive at a reasonable answer regarding musical styles, composers, contexts. When you hear this-what can you tell me you know about this music.

In Humanities 143, after reading 'I Only Came to Use the Phone, by García Márquez from his collection Strange Pilgrims. What would you have done differently from each of the characters? Ex. María's decision to board the bus; Saturno's reaction to his wife's supposed madness. This is a writing prompt that I also use in short stories read in my advanced Spanish classes. In the language classes, students are given the opportunity to decide what they need to learn to use in real-life situations.

Students are asked to analyze the artwork produced by their peers in the class and offer constructive critique that pinpoints the strengths and weaknesses/challenges in their work.

Students learn a certain subject but have to then find a song, a poem, a painting, a movie to write about while researching the subject, reflecting upon it based on their own experience.

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

4 Responses

What are the primary barriers you encounter to effectively teach critical thinking?

Defining what it is in the context of the discipline, and how detailed and specific should it be in a gen ed class.

Students are reticent about reflecting or even thinking. They are more focused on 'the right answer'.

Only a small percentage of students are willing to participate in group discussion involving this, and when writing assignments are involved, there isn't time to teach them how to express themselves in writing along with our own subject matter.

Challenging students' preconceived ideas

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

4 Responses

What are the primary barriers students encounter in engaging with critical thinking?

Using the phrase critical thinking in class.

Especially since the pandemic, students are finding it difficult to think in general or to reflect. They are more focused on 'the right answer'.

Many students do not have practice with critical thinking when they arrive in our classes. They are unfamiliar with the process of analyzing something and coming up with their own conclusions based on evidence/the visual information in front of them.

Students are afraid to speak freely and openly, they fear cancelation, they fear being labeled as politically incorrect or NON-WOKE.

Full-Time Faculty Responses by Department -Mathematics

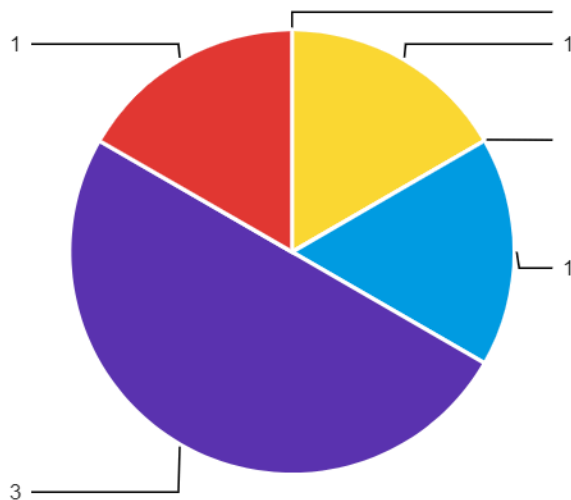
Perceptions - The following statements pertain to faculty perceptions about teaching crit...

6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	5.00	2.50	1.26	1.58	6
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	3.00	1.83	0.69	0.47	6
Community college students have established critical thinking skills upon entry.	2.00	5.00	3.83	1.34	1.81	6
Critical thinking skills will help close equity gaps after graduation.	1.00	6.00	2.67	1.80	3.22	6
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	4.00	1.83	1.07	1.14	6
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	3.00	1.67	0.75	0.56	6
I do not feel confident in my ability to effectively teach critical thinking skills.	1.00	6.00	4.50	1.71	2.92	6
It is challenging to assess students' critical thinking skills accurately.	1.00	5.00	3.00	1.53	2.33	6
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	1.00	4.00	2.17	1.07	1.14	6
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	4.00	2.50	0.96	0.92	6

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.

6 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
 ■ Completely Agree

Practices - The following statements pertain to your critical thinking practices. Pl...

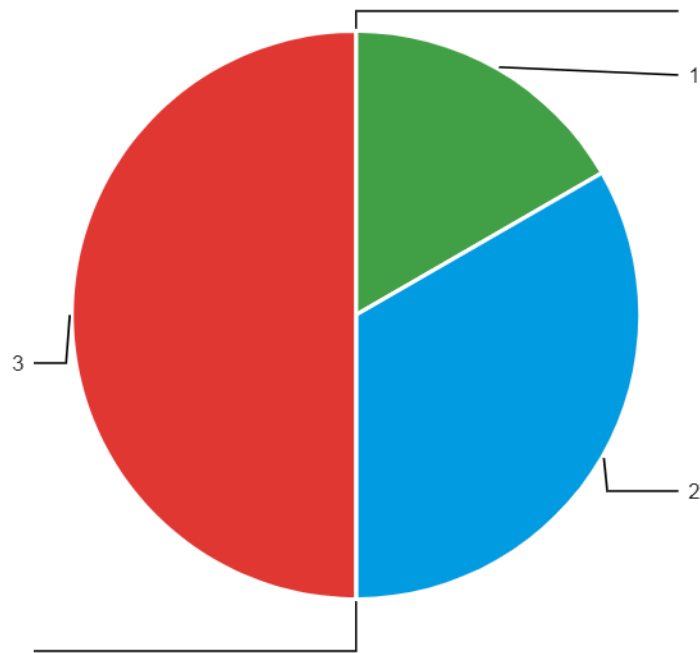
6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	1.00	4.00	2.17	1.21	1.47	6	13.00
Challenge students to evaluate evidence and arguments.	1.00	3.00	2.00	0.82	0.67	6	12.00
Provide real-world problems for students to solve.	1.00	3.00	2.17	0.69	0.47	6	13.00
Develop assignments that require students to select appropriate resources to investigate an issue.	2.00	5.00	2.83	1.07	1.14	6	17.00
Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	2.00	4.00	3.17	0.69	0.47	6	19.00
Ask students to reflect on their own thought processes and decision-making.	1.00	5.00	2.33	1.25	1.56	6	14.00
Use probing questions to guide student inquiry and exploration.	1.00	2.00	1.83	0.37	0.14	6	11.00

Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	3.00	2.00	0.58	0.33	6	12.00
Provide constructive feedback on students' critical thinking skills.	1.00	2.00	1.67	0.47	0.22	6	10.00
Model critical thinking skills.	1.00	2.00	1.33	0.47	0.22	6	8.00

Practices_1 - Encourage students to question assumptions underlying course material.

6 Responses



Never Very Rarely Rarely Occasionally Frequently Always

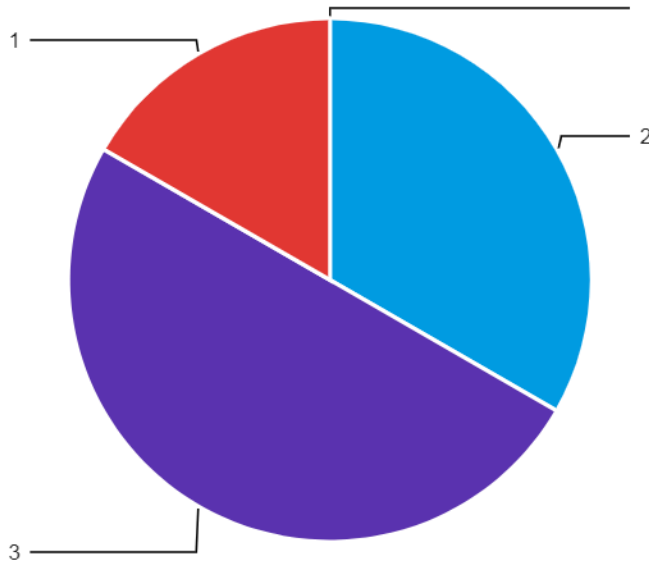
Barriers - The following statements pertain to barriers to teaching critical thinking....

6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	1.00	3.00	2.17	0.69	0.47	6	13.00
Large class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	3.00	1.83	0.90	0.81	6	11.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	4.00	6.00	5.50	0.76	0.58	6	33.00
There is a lack of resources or materials available to support the teaching of critical thinking.	1.00	4.00	2.50	1.12	1.25	6	15.00
Students are resistant to ideas that don't align with their own.	2.00	6.00	3.50	1.50	2.25	6	21.00
It is difficult to assess students' critical thinking skills effectively.	1.00	4.00	3.00	1.00	1.00	6	18.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	1.00	6.00	2.67	1.60	2.56	6	16.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	3.00	6.00	4.50	1.26	1.58	6	27.00
Teaching critical thinking skills over Zoom is especially difficult.	1.00	6.00	2.83	1.77	3.14	6	17.00
Students are not receptive to activities or assignments that require critical thinking.	2.00	6.00	3.33	1.25	1.56	6	20.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

6 Responses



Completely Disagree Mostly Disagree Slightly Disagree Slightly Agree Mostly Agree Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

2 Responses

What does a student who possesses critical thinking skills do/say/act?

Students with critical thinking skills start to apply what they have learned to other real world situation. They are able to dive deeper and ask more probing questions.

Students that have critical thinking skills can recognize applications of the information that they learn in class even when those applications have not been explicitly stated.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

4 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

question whether a metric in a research article is really measuring what it was intended to measure.

Everyday I talk about real world examples and ask students to share their own insights and thoughts. I foster an environment that challenges their learning and celebrate errors. I allow students to teach each other (and me) and give them autonomy over the space.

When the answer is not only wrong but should raise a red flag as in: negative area, a person 250 years old, or the bike had a speed of 300 miles per hour.

application problems in mathematics.

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

4 Responses

What are the primary barriers you encounter to effectively teach critical thinking?

getting students to question their assumptions or first impressions

Time and student resistance due to inexperience. Also, people just don't like math.

Overloaded curriculum, incorrect placement practices, institutional resistance

Time.

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

4 Responses

What are the primary barriers students encounter in engaging with critical thinking?

Not understanding that they are being asked to think at a deeper level

Opinions on mathematics prevent them from connecting to the material or embracing the challenge. I find many of my students don't understand that it is in the struggle and mistakes in education that allows for true learning. They can't see the value in what they're learning and critical thinking further deepens their dislike for the subject (unless the class environment changes that perspective).

They were taught not to do it. They don't like to step out of their comfort zone. Weak background on the facts.

They have not been encouraged to practice critical thinking.

Full-Time Faculty Responses by Department -Mathematics

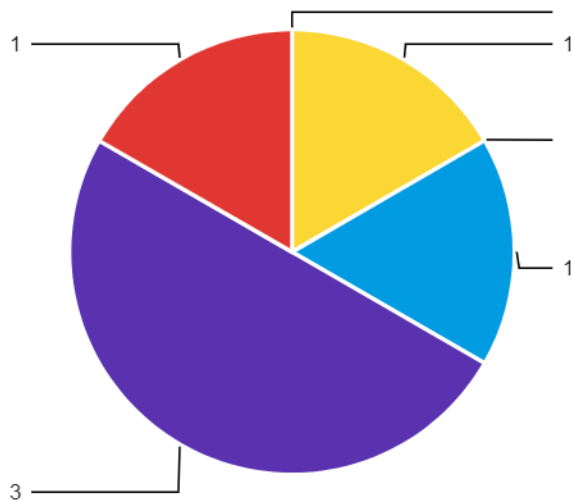
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Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	4.00	1.83	1.07	1.14	6
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	3.00	1.67	0.75	0.56	6
I do not feel confident in my ability to effectively teach critical thinking skills.	1.00	6.00	4.50	1.71	2.92	6
It is challenging to assess students' critical thinking skills accurately.	1.00	5.00	3.00	1.53	2.33	6
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	1.00	4.00	2.17	1.07	1.14	6
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	4.00	2.50	0.96	0.92	6

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.

6 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
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Practices - The following statements pertain to your critical thinking practices. Pl...

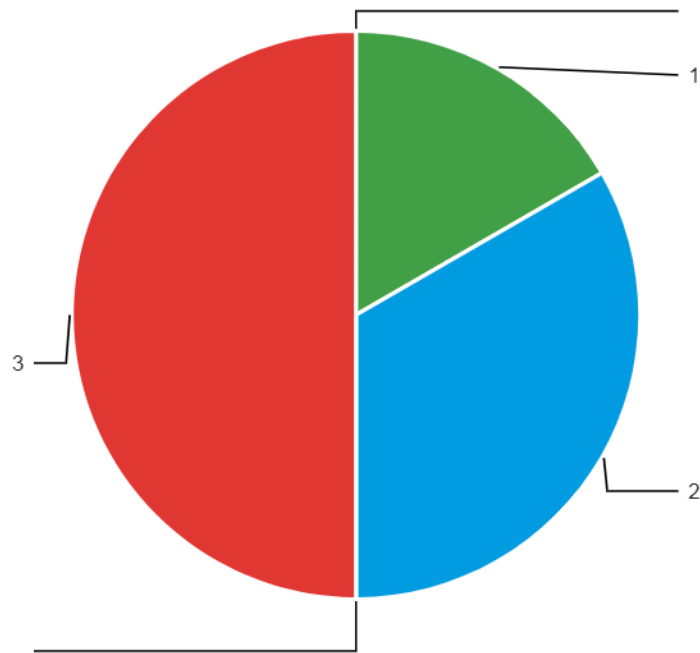
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Practices_1 - Encourage students to question assumptions underlying course material.

6 Responses



■ Never
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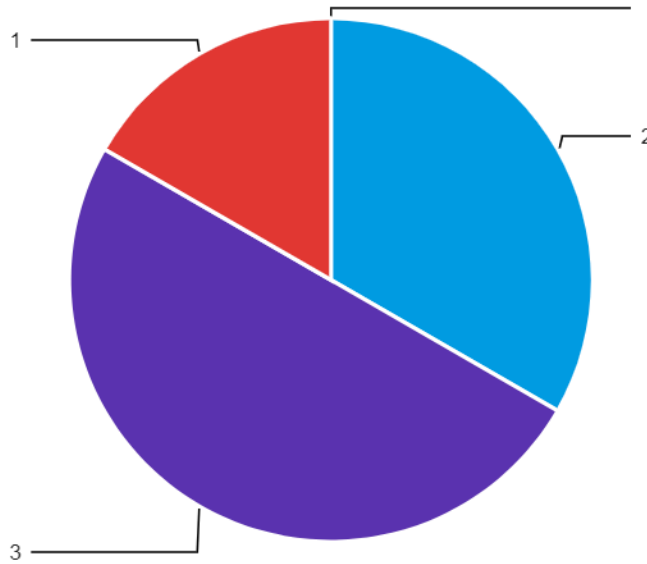
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Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

6 Responses



Completely Disagree Mostly Disagree Slightly Disagree Slightly Agree Mostly Agree Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

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application problems in mathematics.

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

4 Responses

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Time and student resistance due to inexperience. Also, people just don't like math.

Overloaded curriculum, incorrect placement practices, institutional resistance

Time.

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

4 Responses

What are the primary barriers students encounter in engaging with critical thinking?

Not understanding that they are being asked to think at a deeper level

Opinions on mathematics prevent them from connecting to the material or embracing the challenge. I find many of my students don't understand that it is in the struggle and mistakes in education that allows for true learning. They can't see the value in what they're learning and critical thinking further deepens their dislike for the subject (unless the class environment changes that perspective).

They were taught not to do it. They don't like to step out of their comfort zone. Weak background on the facts.

They have not been encouraged to practice critical thinking.

Full-Time Faculty Responses by Department - Physical Sciences and Engineering

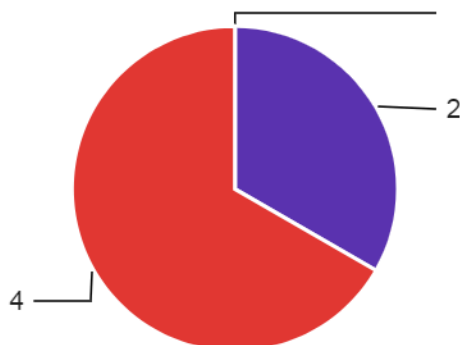
Perceptions - The following statements pertain to faculty perceptions about teaching crit...

6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	2.00	1.33	0.47	0.22	6
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	1.00	1.00	0.00	0.00	6
Community college students have established critical thinking skills upon entry.	3.00	6.00	5.00	1.41	2.00	6
Critical thinking skills will help close equity gaps after graduation.	1.00	4.00	2.17	1.07	1.14	6
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	2.00	1.33	0.47	0.22	6
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	4.00	1.83	1.21	1.47	6
I do not feel confident in my ability to effectively teach critical thinking skills.	3.00	6.00	5.00	1.15	1.33	6
It is challenging to assess students' critical thinking skills accurately.	1.00	5.00	2.67	1.25	1.56	6
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	1.00	5.00	2.50	1.38	1.92	6
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	3.00	1.83	0.69	0.47	6

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.

6 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
■ Completely Agree

Practices - The following statements pertain to your critical thinking practices. Pl...

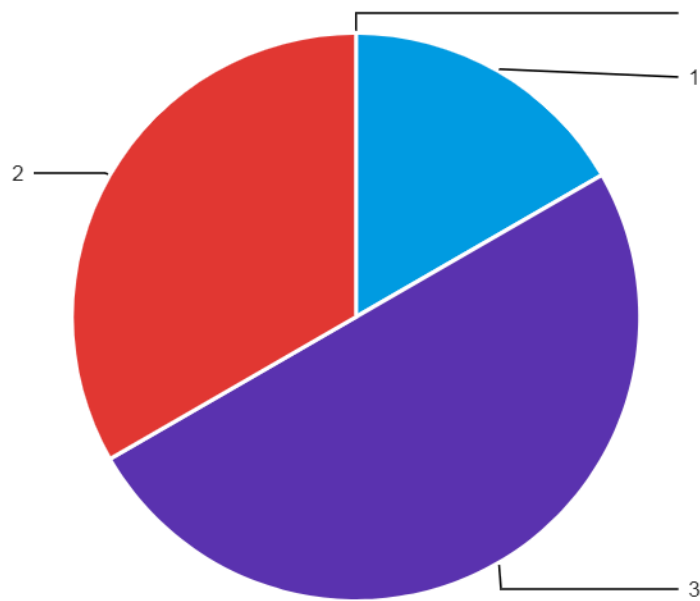
6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	1.00	3.00	1.83	0.69	0.47	6	11.00
Challenge students to evaluate evidence and arguments.	1.00	3.00	2.00	0.58	0.33	6	12.00
Provide real-world problems for students to solve.	1.00	3.00	2.33	0.75	0.56	6	14.00
Develop assignments that require students to select appropriate resources to investigate an issue.	1.00	4.00	2.17	1.21	1.47	6	13.00
Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	5.00	3.17	1.34	1.81	6	19.00
Ask students to reflect on their own thought processes and decision-making.	1.00	4.00	2.50	0.96	0.92	6	15.00
Use probing questions to guide student inquiry and exploration.	1.00	2.00	1.50	0.50	0.25	6	9.00
Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	3.00	2.17	0.69	0.47	6	13.00

Provide constructive feedback on students' critical thinking skills.	1.00	3.00	1.83	0.90	0.81	6	11.00
Model critical thinking skills.	1.00	3.00	1.50	0.76	0.58	6	9.00

Practices_1 - Encourage students to question assumptions underlying course material.

6 Responses



■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

Barriers - The following statements pertain to barriers to teaching critical thinking....

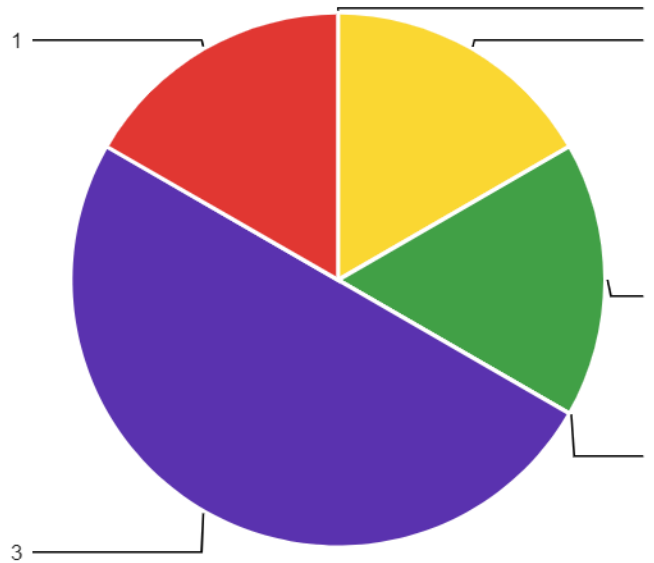
6 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	1.00	5.00	2.67	1.37	1.89	6	16.00
Large class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	3.00	2.17	0.69	0.47	6	13.00

Small class sizes make it challenging to engage students in activities that promote critical thinking.	1.00	6.00	4.17	1.77	3.14	6	25.00
There is a lack of resources or materials available to support the teaching of critical thinking.	4.00	5.00	4.67	0.47	0.22	6	28.00
Students are resistant to ideas that don't align with their own.	2.00	3.00	2.40	0.49	0.24	5	12.00
It is difficult to assess students' critical thinking skills effectively.	1.00	5.00	2.50	1.50	2.25	6	15.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	1.00	3.00	2.17	0.90	0.81	6	13.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	3.00	5.00	4.33	0.75	0.56	6	26.00
Teaching critical thinking skills over Zoom is especially difficult.	1.00	4.00	2.33	1.11	1.22	6	14.00
Students are not receptive to activities or assignments that require critical thinking.	1.00	4.00	2.67	0.94	0.89	6	16.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

6 Responses



■ Completely Disagree
 ■ Mostly Disagree
 ■ Slightly Disagree
 ■ Slightly Agree
 ■ Mostly Agree
 ■ Completely Agree

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

6 Responses

What does a student who possesses critical thinking skills do/say/act?

Be able to use knowledge to solve an unrelated or never exposed to problem.

Make appropriate assumptions about difficult problems.

engage its instructor during class, conceptualize ideas easily, shows more confidence

curiosity, divides intractable problems into component parts, persistence

able to evaluate issues/events/ideas from different perspectives and form an opinion based on that evaluation

Can handle questions efficiently

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

5 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

I stir a discussion about a topic that's unrelated to the subject matter and see if they can deduce a conclusion based on what we've learned in the course.

Solving "structural problems" using spectroscopy (SPEK-TROSS-CO-PY)

use very often case studies

First I describe why electric dipoles in an uniform electric field have zero net force. Second, I ask students why charged objects such as balloons are attracted to neutral objects (such as a white board) via polarization of the neutrals.

After an activity (group or individual), students are asked to identify what they learned and what they're still having difficulty understanding, and explore why

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

5 Responses

What are the primary barriers you encounter to effectively teach critical thinking?

Students' backgrounds and expectations.

For my subject students need a lot of prerequisite knowledge to start thinking critically about a problem, so if they have not done the work to get to that point they can't do it at all.

lack of student receptivity, students reticence to read

Covering the SLOs, creating time, space and questions for critical thinking.

time and resources

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

5 Responses

What are the primary barriers students encounter in engaging with critical thinking?

Students' backgrounds and expectations.

Not doing the prerequisite work

lack of motivation, lack of audiovisual teaching material

stress over basic competency of SLOS

lack of prior engagement in critical thinking in previous educ programs

Library Report

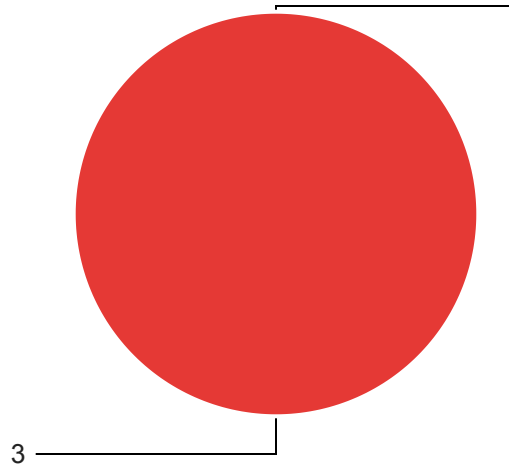
Perceptions - The following statements pertain to faculty perceptions about teaching crit...

3 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Community college faculty should prioritize teaching critical thinking.	1.00	1.00	1.00	0.00	0.00	3
Community college faculty should be encouraged to explore innovative approaches to teaching critical thinking.	1.00	1.00	1.00	0.00	0.00	3
Community college students have established critical thinking skills upon entry.	2.00	5.00	4.00	1.41	2.00	3
Critical thinking skills will help close equity gaps after graduation.	1.00	2.00	1.33	0.47	0.22	3
Teaching critical thinking is essential for preparing students for success in their academic and professional lives.	1.00	1.00	1.00	0.00	0.00	3
Critical thinking should be integrated across disciplines, not just in specific areas or subjects.	1.00	1.00	1.00	0.00	0.00	3
I do not feel confident in my ability to effectively teach critical thinking skills.	2.00	5.00	3.67	1.25	1.56	3
It is challenging to assess students' critical thinking skills accurately.	2.00	4.00	3.00	0.82	0.67	3
Our institution does not provide adequate support and resources for faculty to teach critical thinking effectively.	3.00	4.00	3.50	0.50	0.25	2
There should be opportunities for faculty to engage in interdisciplinary discussions about critical thinking pedagogy.	1.00	1.00	1.00	0.00	0.00	3

Perceptions_1 - Community college faculty should prioritize teaching critical thinking.

3 Responses



- Completely Disagree
- Mostly Disagree
- Slightly Disagree
- Slightly Agree
- Mostly Agree
- Completely Agree

Practices - The following statements pertain to your critical thinking practices. Pl...

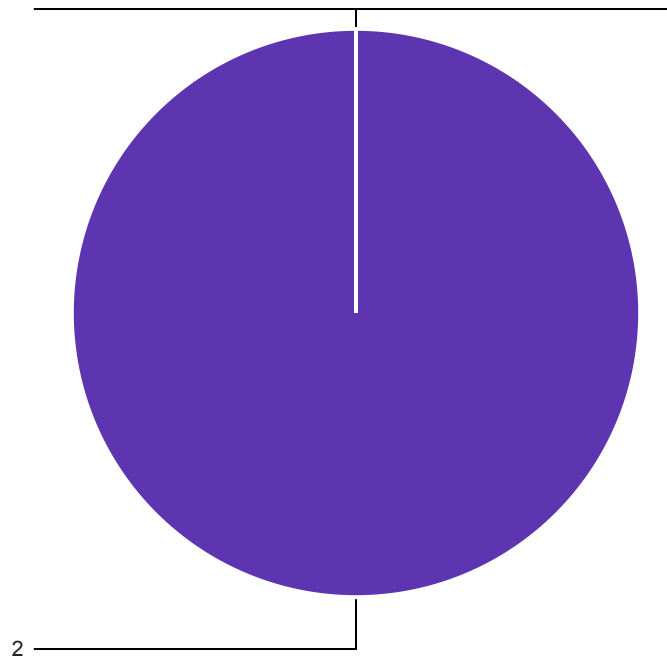
2 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Encourage students to question assumptions underlying course material.	2.00	2.00	2.00	0.00	0.00	2	4.00
Challenge students to evaluate evidence and arguments.	2.00	2.00	2.00	0.00	0.00	2	4.00
Provide real-world problems for students to solve.	2.00	6.00	4.00	2.00	4.00	2	8.00
Develop assignments that require students to select appropriate resources to investigate an issue.	2.00	2.00	2.00	0.00	0.00	1	2.00
Teach students how to assess the credibility and reliability of sources while emphasizing the importance of distinguishing between fact and opinion.	1.00	1.00	1.00	0.00	0.00	2	2.00
Ask students to reflect on their own thought processes and decision-making.	1.00	3.00	2.00	1.00	1.00	2	4.00
Use probing questions to guide student inquiry and exploration.	1.00	2.00	1.50	0.50	0.25	2	3.00

Facilitate classroom dialogue through open-ended questioning while encouraging students to defend their viewpoints.	1.00	2.00	1.50	0.50	0.25	2	3.00
Provide constructive feedback on students' critical thinking skills.	1.00	3.00	2.00	1.00	1.00	2	4.00
Model critical thinking skills.	1.00	2.00	1.50	0.50	0.25	2	3.00

Practices_1 - Encourage students to question assumptions underlying course material.

2 Responses



■ Never
 ■ Very Rarely
 ■ Rarely
 ■ Occasionally
 ■ Frequently
 ■ Always

Barriers - The following statements pertain to barriers to teaching critical thinking....

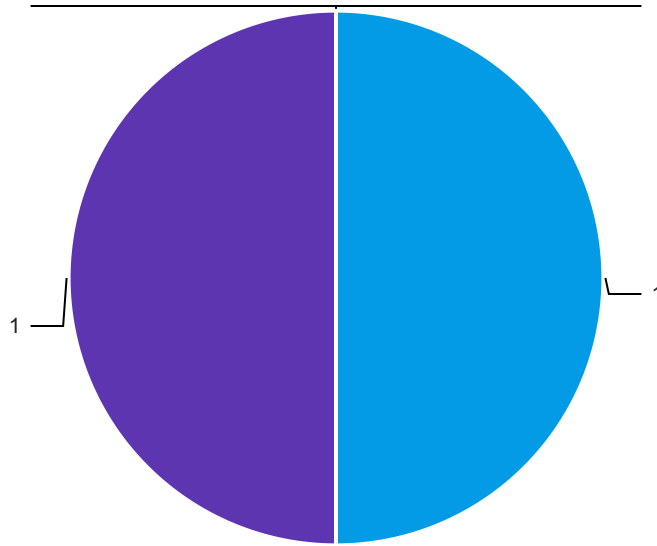
2 Responses

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.	2.00	3.00	2.50	0.50	0.25	2	5.00

Large class sizes make it challenging to engage students in activities that promote critical thinking.	2.00	4.00	3.00	1.00	1.00	2	6.00
Small class sizes make it challenging to engage students in activities that promote critical thinking.	4.00	5.00	4.50	0.50	0.25	2	9.00
There is a lack of resources or materials available to support the teaching of critical thinking.	2.00	3.00	2.50	0.50	0.25	2	5.00
Students are resistant to ideas that don't align with their own.	3.00	6.00	4.50	1.50	2.25	2	9.00
It is difficult to assess students' critical thinking skills effectively.	2.00	4.00	3.00	1.00	1.00	2	6.00
Previous educational experiences have not adequately prepared students for engaging in critical thinking activities.	2.00	3.00	2.50	0.50	0.25	2	5.00
Colleagues within my department or institution are resistant to incorporating critical thinking into their teaching.	4.00	6.00	5.00	1.00	1.00	2	10.00
Teaching critical thinking skills over Zoom is especially difficult.	2.00	3.00	2.50	0.50	0.25	2	5.00
Students are not receptive to activities or assignments that require critical thinking.	4.00	5.00	4.50	0.50	0.25	2	9.00

Barriers_1 - There is insufficient time within the curriculum to adequately cover critical thinking concepts and activities.

2 Responses



Legend: Completely Disagree (Red), Mostly Disagree (Yellow), Slightly Disagree (Green), Slightly Agree (Blue), Mostly Agree (Purple), Completely Agree (Red)

OE perceptions - What does a student who possesses critical thinking skills do/say/act?

2 Responses

What does a student who possesses critical thinking skills do/say/act?

The student pursues multiple venues for arriving at a conclusion.

Able to come up with questions as well as gather and interpret resources to help them understand an issue.

OE Practices - Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

2 Responses

Share an example of a critical thinking opportunity you regularly incorporate into your classroom.

Look at websites closely, question the validity, use the CRAAP test - currency, reliability, authority, accuracy, purpose

I have students look at a website and evaluate it for accuracy. I use this as an example of lateral reading- you shouldn't look to the website itself for information about its credibility. Look up the organization to see what others are saying about it.

OE Barriers 1 - What are the primary barriers you encounter to effectively teach critical thinking?

1 Responses

What are the primary barriers you encounter to effectively teach critical thinking?

Because I am a librarian and normally working with a class for a short period of time, it can be a challenge to fit in everything I want to in one or two sessions. I also have to balance it with the requests of the faculty member.

OE Barriers 2 - What are the primary barriers students encounter in engaging with critical thinking?

1 Responses

What are the primary barriers students encounter in engaging with critical thinking?

I think that overall engagement can be an issue. If students are unwilling to engage in class discussion, getting them to think critically (or demonstrate that they are doing it) during the time I have with them is difficult.