

# Critical Thinking Examples Winter Quarter Assessment Day January 2, 2025

1. Describe at least one assignment that can be used for assessment of Critical Thinking (you can enter text, copy and paste the assignment here, or upload a document in the next question).

In MASP 223 students complete a group project. This project requires the students to come up with a project. Draw a print, make a bill of materials, create an order of operations, and then machine the parts.

Every student completes skills project at the end of every quarter. The project can be from a premade blueprint or something original. The original project requires a blueprint to be created by said student.

All work is performed by student and held to a 1/16 tolerance. This gives students opportunities to solve issues with bench work and layouts, post weld deflections. Students are required to use the cutting and welding processes used in that quarter. Post completion, students will grade their own work to accompany my grade and have the opportunity to make repairs.

An example would be a lab activity, such as Starter Remove, Test, and Install. Students Are tasked with removing a starter from a truck, bench test, and reinstall it. Each starter they get has at least one issue with it that students have to figure out. They are required to use resources, such as service information, and various tools to diagnose what is wrong for a starter problem. During the process they have to document their work.

The composition for ENGL& 102 would suffice for this assignment. Thesis-driven, argumentative, multiple lens/perspectives, counter-argument, historical analysis, source evaluation, annotated bibliography, etc.

Poster design: students create a poster illuminating a cause that is core to their beliefs. The poster needs to use design elements and compositional principles to effectively convey the gravitas of the topic. It must also serve the function of a poster (i.e. viewable/typography legible from a distance)

I ask students to write about a time that they had to adapt how they communicated -- through speaking, writing, or gesture -- for a particular audience, purpose, or context.

For Medical Assisting critical thinking skills is a required core curriculum standard under affective behaviors A.1 Demonstrate critical thinking skills; Each quarter we have several competencies that the students have to demonstrate critical thinking skills. Example: Affectives Behavior Rubric - Dealing with the angry patient; Obtaining Medical History; Performing Firs Aid procedures.

In PSYC 220 (Abnormal Psychology), students complete a character analysis project in which they choose a person (fictional or real) that they believe is suffering from a psychological disorder and write a paper analyzing this disorder and possible treatment. Below is the description/instructions that students receive on Canvas:

Write a 3-5 page paper analyzing the character you chose, their potential psychological disorder, and a treatment plan. Make sure your paper includes the following:

- -a short (1-2 paragraph) description of your character and any background I might need to know to understand your paper
- -the psychological disorder(s) you believe they might be suffering from
- -which symptoms of the disorder(s) they display, giving specific examples when possible
- -which approach to treatment you think would be best (biological, psychoanalytic, etc.) and why
- -specifically how you would go about treating this character if they were a patient of yours in therapy

Papers should be 12-pt font, double spaced and APA format. Make sure to properly cite any sources you use.

The argumentative assignment that is the last major essay in English 101 requires many aspects of critical thinking. This assignment can be used to assess all four Critical Thinking Outcomes.

Dear Someone (English 270: Literature for Children)

How to set up your project:

Choose a medium: write a letter, create a presentation, or make a video... You can decide on the medium once you've wrapped your head around the rest of the project.

Choose an audience: Dear Self, Dear "Fake Name" Administrator/Librarian/Teacher, Dear Future Child, Dear Longview Public Library, Dear Aunt so-and-so, Dear Grandma, Dear Mom/Dad, Dear Bookstore Owner, etc. As is implied in the list, the audience will turn this into a fake, make-believe, role-playing project or something real/tangible. I'm fine with either one! Again, wrap your head around the rest of the project, and then decide.

Choose a scenario (\*optional\*): If it helps, you are welcome to create a false scenario to accompany the audience you've selected. For example, you might say "Last week, I was perusing the many books on the shelves in your living room, your bookstore, your library, your classroom, etc."

What to say:

Explain the importance of diverse representation in literature for children, focusing especially on historically under-represented people groups in the book publishing industry. (\*THIS IS A COURSE LEARNING OUTCOME). Give multiple, specific reasons; be authentic by sharing the things that actually matter and feel important to you.

Explain the essential ways that this kind of diverse representation can/should be achieved from your point of view.

Give positive, or negative, examples of diverse representation taken from sample books/films for children to further prove your points in a concrete way and represent your unique understanding of this course learning outcome.

\*Depending on your medium, audience, or scenario, you might be trying to convince your audience to change something, or improve something (whether in a small or significant way). On the other hand, you might be thanking or praising the audience for the things they are already doing well. You might be doing both. Or, you might be writing to your future self or future situation in which you are pleading with the audience to "remember these things" for future use. Strike whatever tone feels authentic and represents your feelings about these values in children's literature.

How to structure it:

This is not an essay, which means that you can put the \*thesis\* wherever it feels natural and effective when considering your audience and medium (letter, slides, or video). I'm open to all kinds of organizational patterns and structures, as well as various styles/tones as long as they feel authentic and aligned with your audience, medium, and purpose. You'll have to experiment with this a bit until it feels right... like creating a mini work of art.

Though it is not a formal essay, you are required to use the following resources and to reference them specifically in the body of your work, giving credit via signal phrases (such as "According to..."):

Choose one or both of the following in order to provide OFFICIAL, nation-wide, statistical support for your points:

The Cooperative Children's Book Center (CCBC) "...2019... Diversity Statistics"Links to an external site.

The Diverse Book Finder website, especially the "Disparities in Representation" data sectionLinks to an external site.

Choose at least two of the following in order to provide the perspectives of diverse AUTHORS in the field:

"The Windows & Mirrors of Your Child's Bookshelf" (TED Talk by author Grace Lin)Links to an external site.

"The Danger of a Single Story" (TED Talk by author Chimamanda Ngozi Adichie)Links to an external site.

"The Politics of Fiction" (TED Talk by author Elif Shafak)Links to an external site. Incorporate ideas from Russell, Chapter 2 and Louise Derman-Sparks's "Guide" in order to provide SCHOLARLY perspective:

Russell, Chapter 2 (pgs. 25-38)

Louise Derman-Sparks's "Guide to Selecting Anti-Bias Children's Books"Links to an external site. Integrate illustrations from at least three different books/films for children, which enriches the project with YOUR OWN perspective as a reader/viewer of various pieces of work:

Example diverse texts: The House on Mango Street and/or any other books/films you've read before or that you choose to read as a result of our learning activities over the next two weeks. \*You may add any additional sources that you've found on your own. This is optional, of course! Just be sure to include a Works Cited section at the end for your entire project.

The persuasive outline and speech in my public speaking course should work well for the assessment of Critical Thinking. I believe that all of the criteria on the rubric apply to this assignment.

Goal setting project in NUTR& 101 - In this project, students set 2 personal nutrition goals for 7-10 days. These goals need to be backed by current nutritional science and based on personal interest and needs. After the 7-10 day duration, the students will analyze the results and make informed, educated nutritional decisions going forward. We believe that this assignment meets Critical Thinking Outcomes A, B, C, and D.

In IT 141, students assess and fix broken desktop systems. They need to document the issues they find and propose solutions for the issues on how to fix them. This exercise addresses all of the Critical Thinking outcomes, since the need to find primary problem (A), draw inferences from these problems (B), they will use certain troubleshooting processes for possible solution (C), and implement solutions to fix the system (D). This exercise enhances their critical thinking skills, since the student do not know the issues that will be presented, and they will need to draw on knowledge from this course and previous classes to find a solution that works.

Child Scenario: Choose one child below to complete this assignment. Look at the information provided about the child and answer the prompts. First, read about each child and then choose one to complete the assignment. I will post the child scenarios week 9.

Second read about Bronfenbrenner's Ecological Systems Theory and review the Family Systems Theory. Are the basic needs of this child met? What are the strengths in the child's life (in his/her microsystem, mesosystem, exosystem, and macrosystem)? Where is the child lacking support or resources (in his/her microsystem, mesosystem, exosystem, and macrosystem)? According to Bronfenbrenner's theory the most important or influential system is the microsystem. Based on the child chosen and his/her microsystem what resources could the child or family use?

Based on Family Systems Theory what are the profound relationships in the child / family provided? How does the family run together, independently and emotionally? Does the nuclear family have dysfunction between spouses (or members), is there impairment of one child (if so, how does that affect the family), is there marital conflict or emotional distance? Are there any other resources needed based on the information above?

Look at prompts on Canvas: -(Content Page 9)

If you were a teacher working with the child (of your choice) what could you do to help support the child while he/she is in your care / classroom? What could you do to help support the family? When listing resources find local resources the child / family could access. Include the purpose of the resources and how the resources are a fit for the child / family.

A. Students will identify and define primary problems. B. Students will present relevant, accurate, and objective information and will draw inferences from the information. D. Students will propose and evaluate solutions based on the criteria of logic, evidence, ethical principles, and coherence.

The students get a child / family scenario and must identify the "main problems" the family is facing related to Bronfenbrenner Ecological Systems Theory & Family Systems Theory. They must define the issues in their own words and back it with reliable resources. They must break down each system, defining and explaining.

Students are provided 6 resources and must find 3 reliable resources of their own. The students review the information and come up with resources and strategies for home and school to support the child and family.

The techniques that are relevant to our discipline include guidance techniques to improve behavior, connecting school and home and school and community resources. Building relationships to improve educational and family outcomes. It requires students to evaluate the family, come up with a needs assessment, and follow-up with resources.

Students are required to look past family circumstances and not pass judgement. They can refer to the NAEYC Ethical Standards or other reliable resources.

The students must propose solutions. They offer suggestions to help children and family to be successful in school and offer solution for home creating the school to home connection. They must use reliable resources to back their thoughts and reference them. Students must explain the why behind their conclusions. They must explain the family issues and the why, the solutions and the why, the suggested resources and the why.

OLTM 329 Foundations of Business Practices and Emerging Tech has an assignment evaluating the issues and ethical decisions of net neutrality. The assignment focuses on the pros and cons of net neutrality or "free" internet access. We analyze how converging technologies shape business functions (outcome).

Critical Thinking Outcomes: A-Students will identify and define primary problems or issues. C-Students will use techniques or processes appropriate to the subject to analyze and make judgements.

CMST 330 Organizational Communication has a large project creating a Workforce Assessment where students identify a specific organization they are well informed and have experienced the organizational internal communication processes. Students create an assessment and evaluate communication processes concentrating on industry trends, DEI, SWOT analysis and technology. Critical Thinking Outcomes: B-Students will present relevant, accurate and objective information and will draw valid inferences from that information. D-Students will propose and evaluate solutions based on the criteria of logic, evidence, ethical principles and coherence.

In the BUS 270 class the students apply critical thinking to a series of project management activities that address student outcomes A through D.

The assignment i have chosen is Inspection, Troubleshooting, and repair of a diesel fuel system. This assignment can be used to assess almost all of the critical thinking areas. First a student must inspect, and identify a problem or issue with a fuel system.(outcome A) then the student will draw a valid inference from the information they have gathered during inspection.(outcome B) The student will then start troubleshooting the system using techniques appropriate to the subject to analyze a problem and make a judgment.(outcome c) The student will then propose a repair (solution) to the problem based on the information gathered during the inspection and troubleshooting steps using logic, evidence and coherence.(outcome D) Finally the student will then perform the repair.

### Overview of Assignment:

In the three part final for DRMA 101, you will choose one of two characters from Water by The Spoonful, and construct a Character Study for them. Using the play you will 1) Make a list of given circumstances (things the play tells you through the stage directions and dialogue) for that character; 2) Use your imagination and the facts from the play, to write a character study (see below) for the character; and 3) Submit three images that you find inspirational in imaging the character and for each one explain in one sentence why.

#### Breakdown of Assignment:

Choose one of the following characters to focus on:

- ~Odessa, aka Haikumom
- ~Elliot

Part One: Given Circumstances (see examples below) (20 Points)

Throughout the play specific information is revealed about a character. You will make a numbered list starting at the beginning of the play, scene by scene of those things that are important about the character. This list will help you to write your character study. Make sure to follow the example below.

Part Two: Character Study (20 Points)

Once you have completed your list of given circumstances from the play, you will write a 350-word character study following the guideline below.

Part Three: Inspirational Images (10 Points)

Find and upload three images that help you to imagine the character:

~Two (2) images should be concrete: what the character looks like, how they dress, etc. DO NOT USE IMAGES FROM A PRODUCTION OF THE PLAY.

~One (1) image should be more abstract and should capture the struggle that the character is dealing with throughout the play. A one sentence description will accompany each image clearly explaining what the image shows and why it was chosen.

We use our lab classes in Automotive Technology for critical thinking exercises.

One assignment includes calculating gear ratios between multiple gear sets. Another is utilizing measuring instruments such as a micrometer. The students take measurements of a used part and compare it to factory specifications and use math to determine the amount of wear on the part and to see if it is useable or needs to be machined.

In ACCT 275 students in the Accounting Technician program complete several case studies as if they are implementing the financial components of a business. They input data, create financial statements and evaluate the success of the business for the time frame presented. This assignment fulfills A, C and D of the critical thinking rubric.

Each quarter I have my choir members listen to a recording of one of our rehearsals and assess how we've done. They are required to identify two problems and suggest possible solutions for the problems. This information is recorded through a Google Form which can be viewed in an Excel Spreadsheet upon completion. I will submit the assignment at the end of the quarter since last quarter's form link was broken and the information was submitted via email.

I've used this assignment in the past---sometimes in parts, other times as a complete activity. This activity was developed and is curated by HHMI Biointeractive website (https://www.biointeractive.org/classroom-resources/biology-skin-color). It's meant to be used in conjunction with a video (approximately 20 minutes long). The questions can be used to assess students' understanding of the key concepts discussed in the film and critical thinking skills. The first several questions allow students to identify the issue/problem (Outcome A). Questions from Part 3 allow students to interpret data and draw inferences (Outcome B). Some questions in Part 2 allow students to analyze and make judgments (Outcome C). Question 10, and maybe some others, allow students to propose solutions/hypotheses (Outcome D).

the below assignment was used in my MATH 246 class this past fall quarter. here, students had to explore a situation in which certain hypothesis tests were used, as well as explaining why this interested them. A copy is attached.

Outcome A: Group Research Paper (legal topic or case analysis) – CJ 154. Outcome B: Group project – develop adult or juvenile corrections system – CJ 105 or 106. Outcome C: Individual Criminal Law project – apply WA State criminal code to a hypothetical situation – CJ 110.

Nestle Bottling water – watch short documentary on issue in a specific town. Hear from Nestle reps, citizens, town leaders. Students identify issue/its nature (Outcome A). Students identify POVs/why they believe it (evidence). Students evaluate trustworthiness of people in doc based on their data, language used, body language, etc. (Outcomes B and C). If students identify Nestle as a problem, then brainstorm/discuss solutions. What can town do? What can student do? (Outcome D)

#### 2. Describe challenges you face when assessing LCC's Critical Thinking outcomes.

Since students get to decide the project as described above, the level of difficulty in designing the part and the following operations varies from group to group.

Some students are more ambitious than others, so it is subjective

Students encounter many opportunities during lab to use critical thinking skills. They have to test and diagnose things, which may or may not follow service information. Sometimes they have to "think outside the box", using the theory and skills they've learned in class.

The weight of the assignment in question vs. the time and preparation allotted to teach students who have a variety of lived experiences, and or time of experiences in order to develop the baseline for their own critical thinking skills. In short: who determines what words such as valid or appropriate actually are?

I haven't faced any challenges when assessing this.

Students are utilizing Al at various stages of the writing process. It is sometimes difficult to assess if and when the student is, in fact, the critical thinker.

I don't necessarily see any challenges; for medical assisting--our Medical Assisting Education Review Board (MAERB) provides us with the core curriculum standards that we must meet as well as examples of rubrics that we can use. So we tend to utilize their material.

I have never assessed this outcome before since I have only been at LCC for two years. I think the biggest challenge I foresee is calibrating my expectations to the current population of students. I imagine that many students now have a difficult time identifying relevant and credible sources because there is such a deluge of information online. Many students likely view TikTok and YouTube as valid sources, and it may be difficult to get them to understand how to assess credibility of these sources, especially because there is some content on these platforms that is very credible and some that is absolute non-sense and it is challenging to teach students what to look for when evaluating these sources.

I don't face any significant challenges in assessing this outcome.

This is not a difficult outcome to assess in the courses I teach because the outcomes align so well with our English 102 outcomes, and writing/literature courses also tend to mirror the outcomes for critical thinking.

One challenge is the lack of technology in RCA 220; we are not currently able to record speeches, so actual speeches cannot be used for review in the Summer Assessment institute.

Another potential issue I see is the language in outcome C on the rubric. The description "techniques or processes appropriate to the subject..." seems somewhat vague. I'm not sure what the rubric means by "Analyzes problems using appropriate processes." Clarifying what is meant by 'appropriate processes' would be helpful.

We don't tend to have difficulties assessing LCC's Critical Thinking outcomes, but we did find the Prompts for Designing Critical Thinking Assessments helpful in clarifying the outcome wording.

The IT program has little challenges when it comes to the Critical Thinking outcomes. Something usually either works or it doesn't, and it takes a lot of critical thinking skills to find solutions to problems, whether software or hardware related. Our program heavily focuses on documenting solutions, since that is required within the profession. We also highlight ethical solutions in everything we do, since, by default, we have to be in compliance with State and Federal laws. Critical thinking is the heart of our profession and, as a program, we incorporate this in every class to develop a critical thinking mindset. Our assignments always require proof as to why they came to the conclusions. These proofs can be provided by means of calculations, functional simulations, critical thinking questions, or papers/memo with recommendations with rationale.

#### 2. Describe challenges you face when assessing LCC's Critical Thinking outcomes.

Some challenges we face include students trusting themselves in what they are presenting. Other students have a hard time not judging. Our struggle when looking at the prompts for Designing Critical Thinking Assessment with this specific assignment is getting students to recognize bias (for some students) and have students look at alternative solutions and weigh their potential strengths & weaknesses. Because we have a very specific program, we lack researched based prerequisites.

Sometimes students are unable to identify potential bias. In addition, students are often challenged with providing strong academic research with credible references. Oftentimes, these assignments require additional research beyond instructor lecture and course textbook. Reaching beyond course information and engage in additional academic research.

Part D5 does not reference logic or evidence, only ethics. We find this limiting when assessing all biology assignments.

In general when evaluating student work, one challenge beyond this scope is first verifying that the student did their own work. Then, making sure the rubric is effective at capturing and evaluating the quality of students' critical thinking.

At this point I have not had any challenges with assessing critical thinking outcomes.

Being a new faculty member, the challenges I am facing is learning how to identify the critical thinking outcomes being used on an assignment. Using resources such as the critical thinking rubric and talking to other seasoned faculty members has proven to be beneficial when assessing LCC's critical thinking outcomes.

Assessing the outcomes needed to be a teacher, while also assessing the global skill in conjunction without overwhelming the students on the rubric.

I did not have any challenges. Thank you.

None at present.

None.

None really other than getting students to show up for class.

This is difficult to answer... The challenge is getting students to think critically.

Our biggest challenge is finding tangible assessment artifacts. We do a lot of critical thinking in music, but it is difficult to record much of what we do. For example, musicians are thinking critically every time they sing/play their instrument...making adjustments based on what they're hearing; refining the tone, tuning, alignment, etc.; but these assessments and corrections are happening in real time, so there is no way to record it. They also assess each other's performances and suggest possible solution for refining their techniques, but that's all done in real time through the spoken word. I used to have them write down their comments, but it was never very effective because they stop listening when they're writing, and they tend to be more guarded when it's being written down/recorded. They tend to speak more freely and communicate what they're hearing/suggesting more effectively when it's happening in real time.

Some challenges in assessing LCC's Critical Thinking outcomes include subjectivity in the language of the rubric (e.g., Outcome D, indicator level 3). Many of the challenges stem from assignments not necessarily being built/created with the critical thinking outcomes in mind. Rather, I create assignments then try to attach the rubric to it after the fact. Of course, that is a challenge in assessing all the Global Skills.

Critical Thinking can be somewhat subjective, so it may be difficult to identify when/how an outcome is met. However, if willing to put in the time and effort, constructing a rubric that addresses the outcomes at a granular level is very helpful.

Seeing students' preconceived ideas in writing and in class discussions that have little to no objective corroborating evidence. Showing students how to find the evidence helps this problem to often be resolved, or at least mitigated.

### 2. Describe challenges you face when assessing LCC's Critical Thinking outcomes.

(The assignment) is all based around one documentary. If we want to incorporate research/multiple sources, it will become a more time-consuming project. If I want to incorporate this in my ELL class, the documentary and any research sources by be "graded" (i.e. revised to suite ELLs).