Learning Cues

Review the chart below to learn about how certain statements, or cues, can positively impact students' learning.

Type of Cue	Example	Student Message	Impact on Beliefs About Learning
Novelty	"This is a new way to approach this topic. I took a close look at it last week and found it really interesting."	"Wow, even my instructor is learning new things."	"Learning is not static. Everyone continues to learn."
Utility	"Our next topic is critically important. We will be using the concepts and skills for the remainder of the semester, and I'm sure you will find them helpful once you leave the classroom."	"This sounds like it might be valuable to me. I should make sure I learn this."	"I am capable of learning skills that will be useful."
Applicability	"I believe you will find this particular content helpful in other classes as well."	"My instructor understands what might be helpful to me."	"As a learner, it is important to understand what I should pay close attention to."
Anticipation	"While reading the next chapter, see if you can identify where the author is planning to take you."	"My instructor must believe that I am capable of learning this content."	"As a learner, it is important to understand what I should pay close attention to."
Surprise	"We've seen this information quite a few times this semester. However, I think you will find this approach is quite different."	"This sounds intriguing. I should pay attention."	"Learning is beneficial."
Challenge	"Who's ready for a challenging task? I think that you'll find this assignment very interesting."	"My instructor believes that I'm ready to take on some challenging content."	"My instructor has confidence in my ability to learn."
Feedback	"Completing this task will help you determine if you really understand the content from this past week."	"It's my responsibility to monitor my own learning."	"This builds the key metacognitive skill of reflecting on your learning."
Closure	"Many of you have asked questions about this next topic, and I've told you that we are getting there. Well, we're here!"	"My instructor is listening to my questions and is interested in helping me learn."	"When my instructor puts effort into teaching me, it communicates that they have confidence in my ability to learn."

Oops Token

Background

Providing room for flexibility in case a challenge arises that prevents students from completing an assignment on time helps to demonstrate caring for your students. It also encourages them to reach out and ask for help when needed which is key to developing self-directed learning skills.

Use an "Oops Token" or other "Pass" to soften class policies when needed (Darby, 2019). For example, students can use an "Oops Token" to extend a deadline or receive an excused absence.
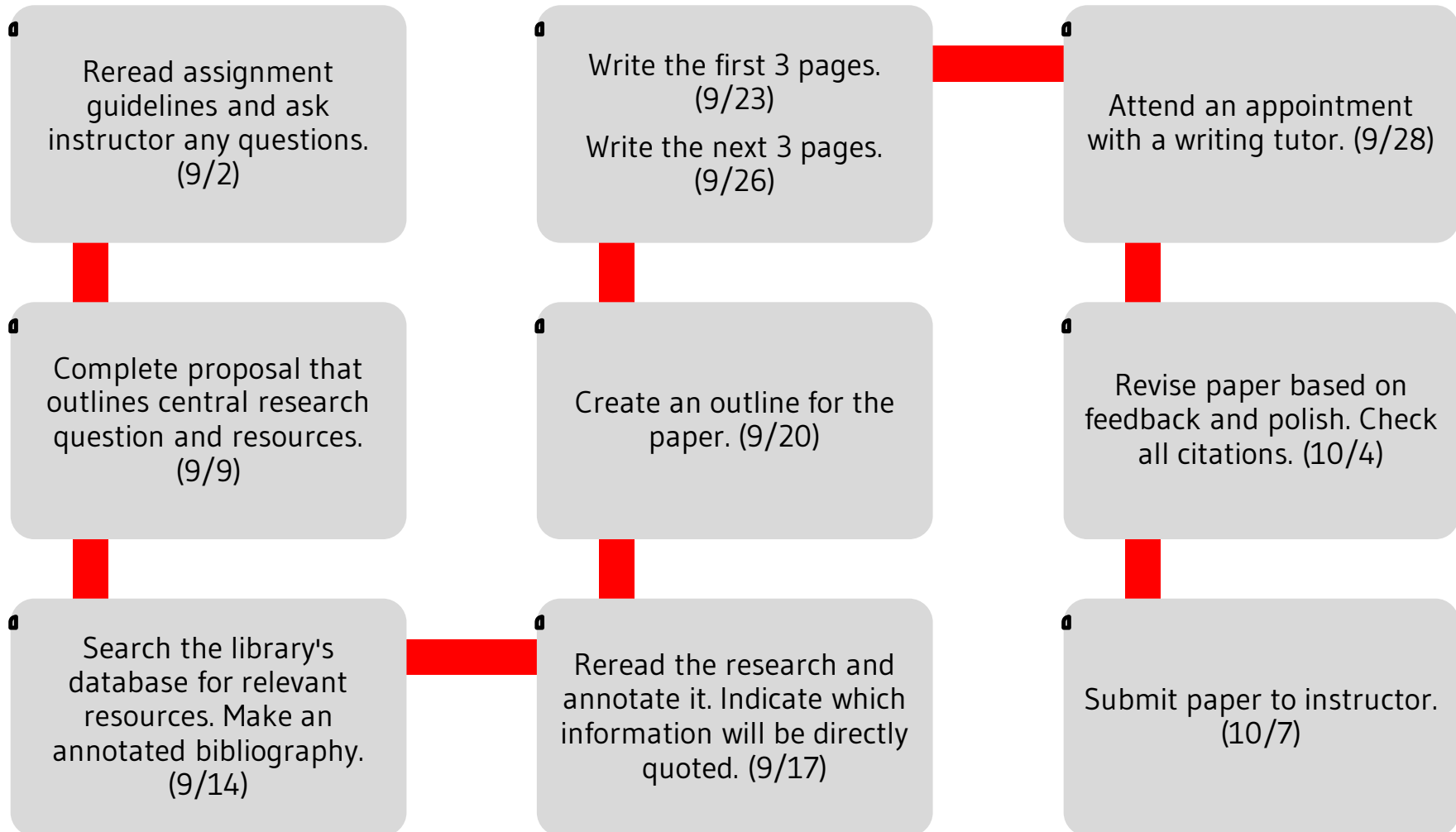
Implementation

To use an "Oops Token" lay out the guidelines ahead of time. You will most likely want to establish under what circumstances they can used. You may set them up as providing an extension or an excused grade. Determine how many tokens each student will receive and how they can be used. You may want to require that students contact you before an assignment is due if they plan on using a token. Set your parameters at the beginning of the course and stick to them.

Sample Token or Pass

Oops Token	
This token is good for a three-day grace period on one assignment.	
To use this token, please contact me via email at least an hour before an assignment is due to let me know you will be using the token. Provided you have not already used your token, I will respond with a revised due date for the assignment.	
This token may not be used for the final term paper or the group project.	
Oops Token	
Date Used:	Assignment:
Original Due Date	Revised Due Date:
Student Signature:	
Instructor Signature:	

1

Sample Assignment Flowchart

Reread assignment guidelines and ask instructor any questions. (9/2)

Write the first 3 pages. (9/23)

Write the next 3 pages. (9/26)

Attend an appointment with a writing tutor. (9/28)

Complete proposal that outlines central research question and resources. (9/9)

Create an outline for the paper. (9/20)

Revise paper based on feedback and polish. Check all citations. (10/4)

Search the library's database for relevant resources. Make an annotated bibliography. (9/14)

Reread the research and annotate it. Indicate which information will be directly quoted. (9/17)

Submit paper to instructor. (10/7)

Sample Structured Assignment

Assignment
Term Paper

Purpose and Goals of the Assignment
You are to argue for the thesis you have chosen. To do so, you must demonstrate knowledge of the subject and synthesize information from several references.

Skills
You should demonstrate the following skills: persuasive arguments, clarity, and research skills.

Tone
This is a formal report. You should only use first-person sentence constructions in your conclusion where you are offering your own opinion supported by the research.

Audience
Your audience is a group that is generally knowledgeable about the field of education—in other words, your classmates.

Schedule
- January 21: Topic and two references submitted to instructor for approval (less than half a page, double spaced)
- February 5: Annotated list of references due
    - At least four sources; at least one must be from a peer-reviewed journal
- February 14: Four-page "research proposal" for term paper due
    - Statement of the thesis
    - Outline
    - List of references
- February 28: Draft of paper due
    - 8–10 pages, double spaced
    - 1" margins and 12-point font
- March 30: Final paper due

Assistance
You may schedule a conference to discuss topics, go over rough drafts, or review references. Please follow the protocol in the syllabus to schedule a conference. You may also drop in during office hours.

Style
Follow APA formatting for quoting, crediting, and referencing sources.

Style Expectations
Your writing will be expected to adhere to standard written English, including the following:
- No run-ons, incomplete sentences, or comma splices
- Scholarly language
- Subject and verb agreement
- No spelling errors
- Carefully editing in the final paper

Style Assistance
You may find these writing handbooks helpful:
- American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.
- Hacker, D., & Sommers, N. (2012). *Rules for writers* (7th ed.). Boston, MA: Bedford/St. Martin's.
- Strunk, W., Jr., & White, E. B. (1979). *The elements of style* (3rd ed.). New York, NY: Macmillan.

Grading
Please refer to the term paper rubric for grading expectations.

Steps to Creating a Structured Assignment

Follow these steps to create a structured assignment:

1. Provide a purpose or goal statement.
   a. What do you want students to know or be able to do by the end of this assignment, and how will it benefit them?

2. Clearly explain the requirements.
   a. Specify the length, style, and style guide for formatting and citations.
   b. Include research requirements, such as the number of sources or references required.

3. Provide and discuss models.
   a. Ask your students how familiar they are with the kind of document they are to produce, provide support, and review models or samples. If possible, provide multiple examples so students don't think there is only one "right" way to do it.
   b. Review the format and styles of the models with your students and tell them why you selected them as positive models.
   c. It is also helpful to show models of common mistakes students have made in the past and discuss revision techniques with students.

4. Schedule the process.
   a. Instead of simply providing a list of what needs to be included in the project, create step-by-step instructions.
   b. Break the assignment into sections and provide a due date for each section.

Online Cognitive Wrappers

Not all online courses include exams as assessments; however, using a variation of the exam wrapper technique can help students assess the processes they use to complete online course assignments such as discussions, essays, and projects. These "wrappers" are often referred to as "cognitive wrappers" (Bowen, 2013) or "learning wrappers" (Lovett, 2013). Below are directions for assigning cognitive wrappers for students to reflect on their processes for (a) writing a discussion post, (b) writing an essay, and (c) completing a project.

Discussion Board Cognitive Wrapper

Instructions to students

During the online course, you will be writing posts for discussion forum activities every week. Your initial post in response to a reading, problem, question, or challenge will be the most work intensive of all your posts. The discussion wrapper will help you to think through your processes for developing and writing the initial post. The wrapper is intended to encourage you to think through not only the content of what you are learning, but your strategies for learning, thinking, and writing. The goal of this reflective activity is to help you continue to improve or to fine-tune your processes of writing quality posts that prepare you to gain more insight and to learn from the discussion.

1. Reflect upon the following questions that focus on your preparation processes and completion of your initial post.

   a. Did I underestimate or overestimate the amount of time needed to complete the work to inform my discussion post?

   b. Did I review and understand the rubric for the discussion post?

   c. Did I write down possible responses, questions, and ideas for my post and prepare an outline before writing the post?

   d. Did I write a draft and then review and revise the post? Did I recheck the rubric criteria, including grammar and spelling?

2. Think through the discussion wrapper questions above, and post a reflection summary to the designated assignment area in the learning management system (LMS). Your reflection summary should include the following:

   a. Which discussion forum processes helped you to complete your discussion posts? Why were the processes helpful?

   b. Which discussion forum processes were less helpful, or which processes you did not utilize to complete your posts?

   c. How will you prepare differently for your next discussion posts?

Essay Cognitive Wrapper

Instructions to students.

Essays are an important part of your coursework, because they require you to demonstrate your knowledge, understanding, and critical thinking about a topic. Writing a successful essay requires significant preparation. An essay wrapper helps you to think through your processes for developing and writing an essay. The wrapper is intended to encourage you to think through the content of what you are writing and to strategize and prepare for writing an essay. The goal of this reflective activity is to help you continue to improve or to fine-tune your processes in order to write more clearly, to gain more insight, and to learn from the essay assignment.

1. Reflect upon the following questions that focus on your preparation processes for writing an essay.

   • Did I underestimate or overestimate the amount of time needed to (a) research, (b) write, and (c) revise my essay?

   • Did I review and understand the rubric for the essay?

   • Did I develop an outline to structure my essay to meet the rubric expectations?

   • Did I write a draft, review it, and then revise my essay? Did I check for grammar and spelling errors?

   • Did I recheck the rubric to make sure that my essay met all the expectations?

After considering the questions above, post a reflection summary to the designated assignment area in the LMS. Your reflection summary should include

   a. the essay preparation processes that worked best for you,

   b. the essay preparation processes that you found to be less helpful or which you did not follow, and

   c. a description of how you plan to adjust you processes for preparing and writing a quality essay next time.

Project Cognitive Wrapper

Instructions to students.

Projects offer you the opportunity to apply your learning in creative and meaningful ways. Many careers require employees to work on long-term projects, often with a team of colleagues. With that in mind, the skills you learn from completing your course project and from this assignment require you to reflect on the processes you have employed for completing the work. The knowledge you gain will be beneficial in your future endeavors, specifically in the workplace. The project cognitive wrapper is meant to help you think through and make adjustments in order to improve your processes continually for completing high quality projects.

1. Reflect upon the following questions that focus on your preparation process for completing the project.

- Did I underestimate or overestimate the amount of time needed to complete each step involved in the project?

- Did I schedule time each week to work on the project?

- Did I review and understand the rubric for the project?

- Did I ask for and integrate peer feedback into the final version of my project?

- Did I recheck the rubric before turning in my final project? Did I make sure that my project met all the expectations?

After considering the questions above, post a reflection summary to the designated assignment area in the LMS. Your reflection summary should include

a. the processes that were most helpful in successfully completing your project,

b. the processes that you found to be less helpful or which you did not use to complete your project, and

c. a description of how you plan to adjust your processes the next time you have a project to complete.

Structured Peer Review for Online Projects

Peer review activities help students develop skills that will benefit them in their future including skills in analysis and collaboration - learning with and from their peers. In addition, the work deepens their understanding of assignment requirements and foster community building which can effectively mitigate the isolation online learners sometimes feel. Below is a step-by-step process for effectively integrating peer- review activities into your online course assignments and activities (see an example of a peer- review process at the end of this document).

1. **Choose an appropriate assignment.** Projects and papers are often the best assignments for peer review, because they typically include multiple stages for development and carry a fair amount of weight toward a final grade. For example, a project proposal is typically the first assignment in a semester-long project and is therefore an ideal assignment for students to obtain feedback from their peers. Getting feedback early can help to ensure that students are on the right track.

2. **Include the peer review process in the assignment rubric.** It is important to include the peer- review process in the assignment rubric including the amount of feedback expected, with the number of points students earn, as a result of offering and using peer feedback. It is also important to help students understand why you are having them engage in this process and the important skills they will gain as a result.

3. **Prepare a rubric for the specific part of the assignment students will be reviewing.** Peer review is best supported by having assignment-or activity-specific rubric. Complex assignments, such as projects, can be broken up into smaller parts with a rubric for each part to help peer reviewers offer more specific and therefore effective feedback. For example, a course project might start with a project proposal and include a rubric that highlights the key elements of a successful project proposal.

4. **Be intentional about the peer-review teams you create .** Assigning peer review to teams of two to five students that stay together for longer multiphase assignments, such as projects, can be helpful for students to get to know one another and more easily schedule ongoing reviews. For single-submission assignments, it can be beneficial to have peer-review teams (two to five students) change throughout the course so that students are exposed to multiple perspectives on their work and can offer feedback on different peers' work.

5. **Offer specific assistance to help peer-review teams get organized.** The process of identifying how and when students will communicate with each other offers students an opportunity to build skills in communicating and working with others. It's helpful to recognize this organizing step by including it in your instructions to peer groups (see example below). If your learning management system (LMS) has the option to facilitate collaborative work, you can create a wiki or private discussion area for each peer-review team. Learners can also choose to use email, text, Skype, phone, or a host of other communication platforms to meet and share feedback.

6. **Clarify what students should do with peer review.** Let students know that they are expected to consider and evaluate all the feedback they receive, then decide if it would be most beneficial to integrate all, some, or none of the feedback into the final draft.

7. **Help learners reflect on the peer-review process.** In order for students to improve their ability to offer each other effective feedback, it is helpful to have them reflect on the peer-review process itself. To do this you may assign the questions below to be completed in 1) students' peer-review team, 2) in a small group discussion with other students, or 3) in a private reflection journal. The format for this reflection activity should be determined by your observations of how the peer-review process is progressing. For example, if you observe a lack of honesty and specific helpful feedback in the peer-review process, it may indicate that the students are struggling with the work and would be better served reflecting on the process in a private journal. Instructors can then offer individual support in response. If the peer-review process seems to work well for most students, the reflective discussion questions below could reinforce their learning and encourage continuous improvement.

   - What worked well in the peer-review process?

   - What challenges did your peer-review group encounter? How did your group address those challenges?

   - What individual feedback was most helpful to you? Least helpful?

   - Did you receive feedback with which you disagreed? If so, what did you do about it?

   - What was it like for you to give feedback to your peer(s)? Was the assignment rubric helpful? Did you feel comfortable and able to offer feedback? What would make you feel more comfortable or more able to provide effective feedback?

   - What could you do next time to ensure the peer-review process is more effective and/or enjoyable?

Creating a Peer Review Assignment Checklist

Task	Reminders	Instructor Notes:
Assignment	Choose an appropriate assignment (e.g., projects and papers)	
Assignment rubric	Include the peer review process in the assignment rubric and offer points.	
Peer feedback rubric	Prepare a rubric for the specific part of the assignment students will be reviewing.	
Create peer review teams of 2-5 students	Consider keeping same teams for longer multi-step projects and using	

	different teams for single-submission assignments.	
Organize peer review teams	Offer specific assistance to help peer-review teams get organized including creating a private space on Learning Management System and encouraging teams to discuss their preferred mode of communication with each other.	
Clarify expectations for feedback and revisions	Clarify when peer feedback is due and what students should do with peer review.	
Peer review reflection	Help learners reflect on the peer-review process through a discussion, feedback form, or reflection journal.	

Example Peer-Review Assignment: Peer-Review or Project Groups

Many careers and community organizations require people to work together in teams to solve complex problems or complete large projects. In these situations, it becomes necessary for team members to offer one another constructive feedback—both positive and negative. Giving and receiving thoughtful feedback helps everyone improve their work and become more aware of their strengths as well as areas for improvement. To help you build this skill set and prepare for the future, you will use the following structured format to provide feedback to your peers.

1. You will be assigned to a peer review team of two to five students. You will provide feedback to each other on each phase or deliverable of the major project assignment.

2. Your group will be assigned a discussion board for each phase of the project in order to leave feedback for each other. Additional communication with your peers will be needed, so your group should begin with a discussion about how and when you prefer to communicate (by text, by chat, on FaceTime, in the evenings, in the mornings, etc.). In each group, the person with the last name that starts with the letter closest to "A" in the alphabet is in charge of starting the discussion via email.

3. Post your first draft of Phase 1 Project Assignment by Wednesday, February 28.

4. Each group member will provide feedback using the assignment rubric to at least two peers. This will ensure that everyone in the group receives feedback from at least two different people. It is important for your peers to receive timely feedback in order to improve their work by the due date, so peer review feedback is due by March 3.

5. You will receive five points for each completed peer review. A completed peer review includes the following:

   a. a description of two or three aspects of your peer's work that you think meets the assignment rubric criteria and why you think it meets the criteria;

   b. a description of two or three aspects of the work that you think could be strengthened, based on the rubric criteria, and why you think making adjustments will be helpful to meeting the assignment goal; and

   c. notation of any grammatical, spelling, or formatting errors you find (although you are not responsible for copyediting each other's work).

6. Once you have received feedback from each peer, consider the feedback and revise your work accordingly. Please remember, you are not required to implement all of the suggested changes.

Have Students Develop a Structured Work Plan

For longer assignments, it may be helpful to provide online students with a template to plan when and where they will complete each step of the process (Boettcher & Conrad, 2016). Have students plan for the following steps in the work process.

- **Schedule where to work.** For tasks that require more concentration or higher level thinking such as reading articles, writing an outline, or working on problems, schedule time in your most productive places (e.g., your home office, a library, a coffee shop, etc.).

- **Schedule when to work.** When looking at the time you have allotted to work each day, be sure to account for any time you need to transition to your chosen online working place. For example, if you plan to complete one hour of work at a coffee shop, you should schedule more than an hour so that you have time to get there, to settle in, and to get your coffee.

- **Specify tasks to complete during each work period.** Use the due dates for the different parts of an assignment as milestones, and make sure you schedule enough time to complete each part on time.

- **Gather your tools and resources ahead of time.** If you have a writing assignment that requires you to cite sources, schedule separate time to search for appropriate articles or other resources prior to your scheduled time for writing.

Assignment Completion Schedule Example		
Assignment: Term paper Final due date: March 30 Additional due dates: Topic, Jan. 21; Annotated references, Feb. 5; Research proposal, Feb. 14; First draft, Feb. 28		
When will you work?	**Where will you work?**	**What will you accomplish at the specified times and places?**
Jan. 19, 7:00–8:00 a.m. and 9:00–10:00 p.m.	On my way to work In my home office	Brainstorm and list topic ideas. Research the viability of my ideas and search for resources.
Jan. 21, 8:00–9:00 a.m. and 7:00–9:00 p.m.	In my home office	Choose a topic and find at least five references. **Submit my topic and references by 9 p.m**.
Feb. 1, 4:00–6:00 p.m.	At the library	Work on my annotated reference list. Complete at least two.

Feb. 3, 4:00–6:00 p.m.	At the library	Work on my annotated reference list. Complete at least two.
Feb 4, 7:00–10:00 a.m.	In my home office	Finish and **submit** my annotated reference list.
Feb. 5, 7:00–8:00 a.m. and 9:00–10:00 p.m.	In my home office	Work on the statement of thesis for my research proposal.
Feb. 6, 6:00–8:00 pm	At the library	Work on the outline for my research proposal.
Feb. 7, 6:00–8:00 p.m.	At the library	Finish the outline for my research proposal.
Feb. 12, 11:00 a.m.– 1:00 p.m.	At the coffee shop	Complete a reference list for my research proposal.
Feb. 14, 7:00–8:00 a.m.	At the coffee shop	Copyedit my research proposal and **then submit it.**
Feb. 20, 6:00–8:00 p.m.	At the library	Work on the first draft of my project.
Feb. 21, 7:00–8:00 a.m.	In my home office	Work on the first draft of my project.
Feb. 23, 6:00–9:00 p.m.	In my home office	Work on the first draft of my project.
Feb. 25, 11:00 a.m.– 1:00 p.m.	At the coffee shop	Meet with Karla to peer review each other's work.
Feb. 26, 8:00–10:00 p.m.	In my home office	Revise the first draft of my project.
Feb. 28, 6:00–7:00 p.m.	In my home office	Complete any final work and **submit my first draft.**
March 10, 11:00 a.m.–12:00 p.m.	At the coffee shop	Start revisions on my second draft.

March 13, 7:00–9:00 a.m.	In my home office	Work on the revisions to my second draft.
March 15, 11:00 a.m.–12:00 p.m.	At the coffee shop	Meet with Karla to peer review each other's work.
March 20, 7:00–9:00 p.m.	In my home office	Complete the final revisions on my second draft.
March 30, 7:00–8:00 a.m.	In my home office	**Submit my final draft.**

Assignment Completion Template		
Assignment: **Final Due Date:**		
Additional Due Dates:		
When will you work?	**Where will you work?**	**What will you accomplish at those specified times and places?**

Using the Critical Incident Questionnaire Online

This planning guide offers suggestions for implementing Brookfield's Critical Incident Questionnaire (CIQ) in your online course. In a face-to-face course, you would assign a CIQ at the end of a single class session or the end of a week to prompt students to reflect on their learning. In online courses, the CIQ is used to prompt learners to reflect on a week-long module or a unit. Here are recommendations for your online CIQ:

1. **Create a discussion forum or anonymous online survey for the CIQ.**

   Brookfield's CIQ involves students responding to questions anonymously to ensure students offer their honest appraisal of the learning opportunities presented by the instructor. Some learning management systems (LMSs) have a discussion board option that allows for anonymous posting. If your LMS does not have this option, you can create an online survey using SurveyMonkey or Qualtrics that will allow you to collect anonymous responses.

   In addition, if it is commonplace in your course for students to give and receive feedback in an open and respectful manner, ask the CIQ questions in a group discussion.

2. **Provide instructions to students.**

   The purpose of the CIQ activity is twofold. First, it helps students to reflect on and begin to understand the types of learning activities and interactions that are most and least effective for them. Second, it helps you to learn which activities and assignments are most effective and the types of facilitation that are most beneficial for learning.

   For each of the following questions, ask students to respond thoughtfully and honestly to the discussion board or online survey. Encourage students to send you an email or visit you during your virtual office hours if there is something they would like to share privately. For a week's module, ask students to answer the following questions:

   - Which activity, assignment, or topic was most engaging for you? When did you feel most excited about what you were learning?

   - Which activity or topic was the least engaging for you? When did you feel the least excited about what you were learning?

   - What action that anyone (instructor or student) took did you find most affirming or helpful?

   - What action that anyone (instructor or student) took did you find most puzzling or confusing?

   - What surprised you most about the class discussions, reactions, or topics covered in the coursework?

3. **Incorporate students' feedback.**

   Summarize the students' feedback about what is working and not working well for them, clarify areas of confusion where needed, and, most importantly, let the students know what you will do to integrate their feedback into the course moving forward. The process of reflecting on and integrating feedback models self-directed learning.

Supporting Student Study Skills

IDENTIFY CORE CONCEPTS
Clearly define the core concepts your students will need to learn to be successful in your course. Explain how these concepts will help them in their future studies and/or careers. Refer to them often and connect your assessments and assignments to them. Help your students track their progress in mastering them. Expect your students to apply the concepts in higher order thinking exercises.

BUILD A GROWTH MINDSET
Research shows that students with a growth mindset are more resilient and are able to overcome challenges. Show students that effort equals learning. Have them track their progress so they can see their improvement over time. Help them understand how learning works by explaining the importance of practicing retrieval of key concepts to arrest forgetting and to strengthen retrieval routes.

PROVIDE PRACTICE TESTS
Share typical test questions in the same format they can expect to see on your exams. Show a few throughout the class and have students record their responses. Revisit them at the end of class and discuss the correct answers. Have students create their own possible test questions from their notes and readings. Build retrieval practice into courses by providing a brief quiz over the important concepts from the current as well as prior classes at the end of class.

USE SPACED PRACTICE
Spaced practice is a schedule of practice that revisits concepts over a period of time. It works because retrieving knowledge from memory is more beneficial when practice sessions are spaced out so that some forgetting occurs before you try to retrieve again. The added effort required to recall the information makes learning stronger. For spacing within the class, revisit important concepts from the class at the end of the class. For spacing across classes, revisit important concepts from earlier classes at the beginning of the next class. Both are helpful but the longer interval between classes will help with long term retention.

CONTINUE TO REVISIT CORE CONCEPTS
Revisit content from previous classes on a regular basis. Require students to continue to use skills and content already covered. Include questions from prior units of study on current exams. Help students make connections between current and past content.

The Best Ways to Learn

MAKE THE MOST OF YOUR NOTES
Review your notes as soon as possible after class. Fill in any missing information by consulting your text or asking classmates or your instructor for clarification. Spend time organizing your notes and making connections with content you have previously covered. Create flashcards for key vocabulary, facts, and content.

PUT IT IN YOUR OWN WORDS
Shortly after completing assigned readings or after reviewing your notes from class, take a few minutes to put the concepts studied in your own words. It can be very helpful to "teach" or explain the content to someone else. You can even pretend to teach others if your friends are not that interested in learning more about physics!

BE AN ACTIVE READER
Stop every few pages and ask yourself questions about what you just read. Turn section headings into questions and answer them in your own words. Make connections between what you read and what you have already learned. Create quiz questions that may appear on a test and write them on note cards for later use.

SCHEDULE STUDY SESSIONS
Set aside a few times each week to study for each course. Study your notes from the current class and then restudy notes from prior classes. Use your practice test questions and flash cards. Keep quizzing yourself until you can reliably recall the information, and then take the cards out of weekly rotation. Add them back in prior to any final assessment.

MIX DIFFERENT TYPES OF PROBLEMS
When you practice two or more concepts at the same time, retrieval is harder but produces longer lasting learning and lets you apply what you are learning. For example, practicing different types of math problems makes you more skilled than working on a set of common problems.