

A STUDY GUIDE COMPANION FOR REFLECTION AND PRACTICE

Differentiation With AI: An Innovative Approach to Designing Student-Centered Learning Experiences

Study Guide

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How to Use This Study Guide

Read each chapter, then use the five reflection questions for individual thinking or discussion. Capture only ideas you want to keep; written answers to every question are not required.

The practice experiences build on one another. Begin with Chapter 1 and revisit the same lesson and learner or small group throughout. Brief notes are enough. Refer to earlier entries instead of rewriting them.

Choose a situation you can revisit with learners, or work with a teaching colleague. Complete the observation sections after trying the adjustment. If implementation must wait, return to those sections when you have classroom evidence.

Starting in Chapter 4, use an appropriate conversational large language model, or LLM. Protect student privacy in your notes, discussions, and prompts by using generalized descriptions.

Your Path Through the Study Guide

Chapter	Practice focus
1	Notice the challenge.
2	Understand the learner.
3	Identify where instruction might vary.
4	Prepare to use AI responsibly.
5	Prompt, refine, and review.
6	Try the adjustment and examine evidence.
7	Decide what is worth continuing.

AI generates possibilities. The teacher directs. AI refines. The teacher decides.

All referenced appendixes appear within the book. Use Appendix A for prompting, B for planning and review, C for ethical use, and D for continued learning.

Contents

The Differentiation Challenge 3

 Reflect on the Reading 3

 Put It Into Practice 4

Building Empathy Into Instruction 5

 Reflect on the Reading 5

 Put It Into Practice 6

Foundations that Support Differentiation 7

 Reflect on the Reading 7

 Put It Into Practice 8

Partnering with AI for Differentiation 9

 Reflect on the Reading 9

 Put It Into Practice 10

Planning for Differentiation with AI 11

 Reflect on the Reading 11

 Put It Into Practice 12

Differentiation in Action 14

 Reflect on the Reading 14

 Put It Into Practice 15

Moving Forward 16

 Reflect on the Reading 16

 Put It Into Practice 17

Chapter 1: The Differentiation Challenge

Notice a learning moment worth revisiting.

Reflect on the Reading

1. Where do you see learner variability most clearly in your classroom?

Consider a recent lesson. Whose needs were easy to recognize, and whose might you have missed?

2. Which misconception about differentiation does this chapter challenge for you?

Use an example to explain how shared learning goals can allow different pathways without requiring a separate lesson for every student.

3. How would you distinguish differentiation from personalization?

Consider who makes instructional decisions and the role of student agency.

4. What feels familiar about Ms. Williams's experience?

Identify a barrier you can influence and one that requires support beyond your classroom.

5. Where might AI make differentiation more manageable?

Explain which part of the work it could support and which decisions must remain yours.

Ideas to carry forward from your reading or discussion

CHAPTER 1 / THE DIFFERENTIATION CHALLENGE

Put It Into Practice

Choose one lesson or task that did not work equally well for every learner. Record the situation before deciding how to change it.

① Your Differentiation Challenge

Consider	Your notes
Grade or course and content area	
Lesson or task and essential learning goal	
What worked well	
What you saw, heard, or found in student work	

Describe observable evidence in the last row. Save possible explanations for Chapter 2.

② Consider the Variability

Select relevant differences that you had already considered when planning.

- | | |
|---|---|
| ☐ Readiness | ☐ Interests |
| ☐ Learning preferences | ☐ Language or culture |
| ☐ Prior knowledge or experiences | ☐ Learning needs or disabilities |
| ☐ Attention or participation | ☐ Access to prior opportunities |

Other relevant difference, if needed	
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③ Focus the Challenge

Learner or small group to focus on [use general description]	
Main planning barrier to keep in mind	

Carry forward this situation, learning goal, and observation. In Chapter 2, look more closely at the learner.

Chapter 2: Building Empathy Into Instruction

Look beyond the first explanation.

Reflect on the Reading

1. What makes empathy an instructional stance?

Describe how understanding a learner's perspective could change a teaching decision.

2. When has your first explanation for a student's behavior or performance been incomplete?

What evidence helped you see the situation differently?

3. What can you learn about students that grades alone do not reveal?

Consider participation, emotional cues, language, culture, peer interactions, or responses to tasks.

4. How can an empathetic response remove a barrier while preserving rigor?

Use a classroom example to distinguish additional support from reduced expectations.

5. Why should understanding the learner come before asking AI for a solution?

Consider how a student's sense of being understood may affect participation and persistence.

Ideas to carry forward from your reading or discussion

CHAPTER 2 / BUILDING EMPATHY INTO INSTRUCTION

Put It Into Practice

Return to your Chapter 1 observation. Keep the same learner or small group in view.

① Separate Evidence from Interpretation

Does your observation describe what happened or assume why it happened? Revise only if needed.

Consider	Your notes
Revised observation, if needed	

Look for relevant cues you may have missed. Select any that apply.

- | | |
|---|---|
| ☐ Emotional cues | ☐ Participation patterns |
| ☐ Learning behaviors | ☐ Language or cultural context |
| ☐ Peer interactions | ☐ Responses to the task |

② Consider More Than One Explanation

One possible explanation	
Another possible explanation	
What might the learner have experienced? What evidence suggests this?	

③ Gather What Is Missing

What do you still need to know?	
How will you find out? For example, talk with the learner or examine student work.	
What did you learn? Add a brief note after gathering evidence.	

Keep explanations tentative until evidence supports them. Carry what you learn into Chapter 3.

Chapter 3: Foundations that Support Differentiation

Connect the learner, the goal, and the adjustment.

Reflect on the Reading

1. How do readiness, interests, and learning preferences inform your planning?

Explain how you can use this information without treating learners as fixed categories.

2. Where do you most often differentiate: content, process, product, or learning environment?

Identify another area worth considering, and explain why it might help.

3. How do clear learning goals protect rigor?

Use a lesson to show what could vary and what must remain consistent.

4. How does formative assessment change a differentiation decision?

Describe evidence that would lead you to add support, extend learning, or reconsider an assumption.

5. Why should the strategy follow the learner and the learning goal?

Explain where AI-generated possibilities could help and where teacher judgment must guide selection.

Ideas to carry forward from your reading or discussion

CHAPTER 3 / FOUNDATIONS THAT SUPPORT DIFFERENTIATION

Put It Into Practice

Use what you learned in Chapter 2 to identify a promising area for adjustment.

1 Connect the Learner and the Goal

Consider	Your notes
Most relevant learner need and supporting evidence	
What must remain consistent? Refer to your goal; clarify it only if needed.	

2 Identify Where Instruction Could Vary

Select the most promising area. Add a second only if needed.

- ☐ Content
- ☐ Process
- ☐ Product
- ☐ Learning environment

Why is this area a good match for the learner and goal?	
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3 Check the Match

Check the match	Yes	No	Not sure
Does my choice respond to learner evidence?	☐	☐	☐
Does the essential learning goal remain intact?	☐	☐	☐
Will it preserve appropriate challenge?	☐	☐	☐
Do I have enough evidence to proceed?	☐	☐	☐
If No or Not sure, what will you reconsider or find out?			

You are identifying where instruction could vary. In Chapters 4 and 5, consider how AI can help you explore and develop an adjustment.

Chapter 4: Partnering with AI for Differentiation

Prepare to use AI thoughtfully and responsibly, keeping practical and ethical considerations in mind.

Reflect on the Reading

1. What belongs to AI's role as a planning partner, and what belongs to the teacher?

Consider how you would review and revise a polished response before using it.

2. How could inaccurate information or bias enter an AI-generated resource?

Identify something you would verify and a representation or assumption you would examine.

3. How can you give AI useful learner context while protecting privacy?

Explain why access to an approved platform does not remove this responsibility.

4. When should you acknowledge AI assistance in professional work?

Consider how transparency makes your responsibility for the final resource clear.

5. What would make an AI tool worth using in your setting?

Weigh usefulness, time, privacy, ease of use, and teacher control. Identify one manageable starting point.

Ideas to carry forward from your reading or discussion

CHAPTER 4 / PARTNERING WITH AI FOR DIFFERENTIATION

Put It Into Practice

Return to your planning decision from Chapter 3. Identify a useful role for AI and an appropriate tool.

① Choose the Task and Tool

Select one or two ways AI could support your planning.

- | | |
|---|---|
| ☐ Brainstorm approaches. | ☐ Suggest scaffolds or extensions. |
| ☐ Draft or adapt materials. | ☐ Create examples or questions. |
| ☐ Offer another explanation. | ☐ Help create a quick check. |

Consider	Your notes
LLM you will use (Choose a conversational tool so you can ask for revisions.)	
Specific help you want from AI	

② Check Before You Begin

Check the match	Yes	No	Not sure
Is the tool appropriate for my professional setting?	☐	☐	☐
Have I checked its data and privacy practices?	☐	☐	☐
Can I use it without identifying a learner?	☐	☐	☐

Resolve any No or Not sure response before entering a prompt. Appendix C provides the book's ethical-use guidance.

What needs checking, if anything?	
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③ Prepare Safe Context

Keep names, identifiers, student records, and identifying personal details out of prompts. Describe the instructional need in general terms.

Generalized learner context Example: Some learners explain ideas orally but need support organizing a written response.	
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In Chapter 5, use this context to build a prompt. You remain responsible for checking accuracy, bias, learner fit, and rigor.

Chapter 5: Planning for Differentiation with AI

Build a prompt, guide the conversation, and review the result.

Reflect on the Reading

1. How is prompting different from entering a search query?

Explain how a follow-up request can improve an initial response.

2. How does Role, Context, Task, or Format help you communicate an instructional need?

Identify the part most likely to be missing from a vague prompt and explain its effect.

3. How might AI help you work with assessment evidence?

Explain why the teacher must still determine what the evidence means for instruction.

4. Why might you request several possibilities instead of one solution?

Consider how your choice would depend on the learner, the goal, and whether you are planning ahead or responding during a lesson.

5. What turns an AI draft into a useful instructional resource?

Describe how you would direct a revision, and decide whether the result is ready for learners.

Ideas to carry forward from your reading or discussion

CHAPTER 5 / PLANNING FOR DIFFERENTIATION WITH AI

Put It Into Practice

Use your earlier notes. You do not need to copy the learning goal, learner evidence, or tool choice into another planning form.

1 Build Your Prompt

Draft a prompt using Role, Context, Task, and Format. Use this table or draft in your LLM, then refer to the saved conversation rather than copying it twice.

Consider	Your notes
Role Who should AI respond as, or what is your teaching role?	
Context Include the goal, generalized learner need, and relevant constraints.	
Task State the specific help you want.	
Format Explain how to organize the response.	

When useful, ask for two or three possibilities. Make clear what must remain consistent, including the learning goal and appropriate rigor.

2 Compare with the Book and Try It

After drafting your own prompt, review one or two relevant recipes in Appendix A. Strengthen your prompt where useful, then submit it to your LLM.

Read the response. In the same conversation, ask for a specific improvement, such as stronger alignment, clearer directions, or a better fit for the learner. Send the request and review the revision.

What did you ask AI to improve? Add a brief note or reference to your saved conversation.	
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If the learner need is still unclear, gather evidence before developing the adjustment. Continue with the review in Step 3.

CHAPTER 5 / PRACTICE CONTINUED

③ Review and Decide

Apply your professional judgment to the revised output. Use Appendix B's "Lesson Planning Checklist for AI Use" and Appendix C, "Ethical AI in Education," as references. Verify factual content against reliable instructional sources.

Check the match	Yes	No	Not sure
Is the content accurate?	☐	☐	☐
Does it align with the essential learning goal?	☐	☐	☐
Does it address the learner need?	☐	☐	☐
Are appropriate supports and rigor preserved?	☐	☐	☐
Are examples and perspectives represented fairly?	☐	☐	☐
Is student privacy protected?	☐	☐	☐
Is it practical for my setting?	☐	☐	☐

Address each No or Not sure before classroom use. Ask AI to revise where useful, check the new result, and reject suggestions that do not fit.

Consider	Your notes
What needs to change, if anything?	
What will you carry forward into instruction? Describe or name the reviewed resource.	

Save the useful prompt, follow-up requests, and resource together. If the output is unusable, revisit the need and prompt or create the adjustment yourself.

The next chapter needs a reviewed instructional adjustment, not just an AI response.

Chapter 6: Differentiation in Action

Try a manageable adjustment and examine the learner's response.

Reflect on the Reading

1. What does Dr. Cumming's experience reveal about the importance of context?

Explain how clarifying her course and assignment helped her refine AI output.

2. Ms. Parsons used planning time differently with AI. Why does that matter?

Identify work requiring teacher expertise that could benefit from a similar shift in your setting.

3. What made Mrs. Wolover's varied practice problems an example of differentiation?

Consider the learning goal, levels of support and challenge, and her review of materials.

4. What could you learn from Ms. Burgos's menu of supports?

Explain how preparing possibilities in advance can support decisions made during instruction.

5. What common principle connects these educators' uses of AI?

Use an example of teacher selection, revision, or rejection to explain what successful AI use can look like.

Ideas to carry forward from your reading or discussion

CHAPTER 6 / DIFFERENTIATION IN ACTION

Put It Into Practice

Return to the resource from Chapter 5. Try one manageable adjustment with the learner or small group you selected.

1 Prepare to Try It

If needed, ask your LLM to refine the resource. Review it again after changes, including needed supports and applicable accommodations.

Consider	Your notes
When and with whom? Use a general description.	
What will change? Keep the essential goal and appropriate rigor intact.	

2 Decide What Evidence Will Matter

What would progress toward the learning goal look or sound like?	
What evidence will you collect? For example, student work, a quick check, or a learner explanation.	

3 Observe and Choose a Next Step

Complete this step after trying the adjustment. If implementation must wait, return when you have classroom evidence.

What did you observe compared with the original situation?	
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Choose a next step based on the evidence.

- ☐ Keep the approach.
- ☐ Adjust it, using AI if helpful.
- ☐ Try another approach.
- ☐ Gather more learner evidence.

What specifically will you keep or change?	
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Participation adds context but does not by itself show learning. Use what you observed to inform your next decision.

Chapter 7: Moving Forward

Decide what is worth carrying into regular practice.

Reflect on the Reading

1. What responsibilities remain as AI becomes embedded in familiar tools?

Consider what you still need to notice, verify, and decide when AI is less visible.

2. Why is teacher judgment central to Figure 7.1?

Connect the figure to a moment in your practice sequence when knowledge of the learner shaped a decision.

3. What changed for Ms. Williams, and what remained distinctly hers?

Explain what her experience suggests about empathy and authenticity in AI-supported teaching.

4. What would make AI-supported differentiation sustainable for you?

Identify a practice worth keeping and a source of unnecessary work you could reduce.

5. How will you decide which new tools deserve your attention?

Consider how the companion resources at TejedaEDU.com can support selective, purposeful exploration.

Ideas to carry forward from your reading or discussion

CHAPTER 7 / MOVING FORWARD

Put It Into Practice

Use your work across the chapters to evaluate the process and choose what is worth continuing.

① Look Back at the Learner

Consider	Your notes
What do you understand differently about the learner or situation?	
Which part of the process most improved your instructional decision?	

② Evaluate AI's Contribution

Where did AI add value or create extra work?	
What depended on your empathy or professional judgment?	

③ Make It Sustainable

One practice you will continue	
What will you simplify next time?	

AI generates possibilities. The teacher directs. AI refines. The teacher decides.

Keep useful prompts and resources for future adaptation. Appendix D, "Resources and Companion Website Guide," and Tejed.edu support continued exploration as your learners, needs, and available tools change.

If classroom implementation is pending, revisit conclusions about student response after you have evidence.