

Professional Development for DIFFERENTIATING INSTRUCTION

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Evaluating Your District's Readiness for a DI Initiative

Activity

Directions:

- Work alone, with a partner, or in a small group.
- Using the chart on the following pages, review the practices of administrators who effectively promote and support differentiation (left column).
- In the middle column, write down how you think your school leadership currently stands in relation to each factor. Rate your school or your district on a scale of 1 (“We haven’t really addressed this much.”) to 4 (“We’ve got it covered! Time to help others!”).
- In the right column, record specific ideas for improvement.
- Share your ratings with others at your table. Work together to prioritize your next steps and make an action plan to address the issues.

Evaluating Your District’s Readiness for a DI Initiative
Activity (Cont.)

Administrators Who Promote and Support Differentiation . . .	How We Are Doing Now	The Next Steps
Know and Practice Differentiation <ul style="list-style-type: none">• Acknowledge, celebrate, and respond to variations in students' and teachers' readiness, interests, and learning profiles.• Have a thorough understanding of what high-quality differentiation is, why it is important, and its nonnegotiables.• Are knowledgeable about a variety of strategies that support differentiated instruction.• Have a solid knowledge of staff's current practices and competencies in differentiated teaching, or seek out that knowledge before and during staff development opportunities to further support teachers' growth in differentiation• Differentiate staff development for teachers with varied interests, learning profiles, and readiness for differentiated practices.		
Provide Support <ul style="list-style-type: none">• Establish an atmosphere that encourages teachers to take appropriate risks in their attempts to grow as professionals.• Hold high expectations for all teachers.• Acknowledge and celebrate current practices that support differentiated instruction.• Provide opportunities, support, and resources for continued training in both the theory behind and the practice of differentiation.• Encourage and provide time for teachers to share their successes and frustrations with differentiation along the way.		

Evaluating Your District's Readiness for a DI Initiative

Activity (Cont.)

Administrators Who Promote and Support Differentiation . . .	How We Are Doing Now	The Next Steps
Provide Support (Cont.) <ul style="list-style-type: none"> • Observe, evaluate, and provide feedback concerning teacher growth over time. • Recognize and support the important role that professionals at all levels of a school system play in supporting high-quality differentiated practices. 		
Understand Change <ul style="list-style-type: none"> • Recognize that change is slow, difficult, and uncertain. • Understand the characteristics of effective staff development for adult learners. • Recognize and acknowledge openly that experienced teachers may feel like beginners all over again when trying to implement differentiation—this can make them doubt their competency after years of feeling like they know what they are doing in the classroom! • Establish expectations for growth: all of us must grow in our ability to respond to student differences. That we must change, grow, and differentiate is nonnegotiable; the path that we each may take is negotiable. • Help staff see the connection between differentiation and all other school initiatives so that differentiation is not seen as yet another add-on to the school's programs. • Share results of the move towards more fully implemented differentiation in terms of achievement and student, teacher, and parent satisfaction with the school experience. • Maintain a long-term commitment to change. 		

Pre-assessment for Administrators and Staff Developers

Activity

Part 1: Complete the chart to show what you know about differentiation. Write as much as you can. You may also use symbols or pictures to communicate your thoughts.

Definition	Associated Vocabulary
Examples: What It Looks Like	Nonexamples: What It Does Not Look Like

Differentiation

Part 2: What are the three most important things to understand about teaching in a differentiated classroom?

1. Teachers must understand that _____.
2. Teachers must understand that _____.
3. Teachers must understand that _____.

Pre-assessment for Administrators and Staff Developers

Activity (Cont.)

Part 3: What are the three most important things for administrators to understand about leading for differentiated instruction?

1. Administrators must understand that _____.
2. Administrators must understand that _____.
3. Administrators must understand that _____.

Part 4: What is something that you struggle with when thinking about differentiation or a question you still have?

Thinking About Leading for Differentiation

ThinkDots Prompts

<p>1. Evaluate It Talk about a successfully differentiated lesson that you have seen. What made it work? What would you encourage the teacher to try next?</p> <p>OR</p> <p>Talk about a “differentiated” lesson that you observed that, in your opinion, was not really differentiated. What changes would need to be made for the lesson to be truly differentiated?</p>	<p>2. Analyze It What is your own next step for growth with regard to differentiation? How will you go about taking this step? Be specific.</p> <p>OR</p> <p>What is your school’s greatest need when it comes to learning about differentiation? How can you help? Be specific.</p>
<p>3. Describe It What does differentiation look like, sound like, feel like? Describe it from the perspective of one of the following:</p> <p>Teacher</p> <p>OR</p> <p>Student</p> <p>OR</p> <p>Parent</p>	<p>4. Apply It A teacher comes to you who wants to start differentiating her instruction. How would you suggest she begin?</p> <p>OR</p> <p>A teacher comes to you who refuses to be “suckered into yet another fad.” What would you say or do to convince her of the merits of differentiation?</p>
<p>5. Argue For or Against It Should a school require teachers to differentiate instruction? Explain your reasoning.</p> <p>OR</p> <p>To what extent should differentiated instruction be a part of the teacher evaluation process? Explain your thinking.</p>	<p>6. Compare It Compare differentiated instruction to more “traditional” instruction.</p> <p>OR</p> <p>Compare the differentiated instruction model to another model of instruction you are familiar with (e.g., Understanding by Design, What Works in Schools).</p>

Thinking About Leading for Differentiation

Activity Directions

Part 1: Working in groups of 3–6, complete the following activity.

- The first person rolls the die. Whatever number lands on top tells the person which of the numbered prompts to answer. That person should answer the prompt, working for a complete, thoughtful, and insightful answer.
- Next, other group members may add their own thoughts about the prompt.
- The second person rolls the cube. If she rolls a number corresponding to a different prompt, the group should answer it; if the group has already answered that prompt, she should roll again.
- Stop once you have answered all the prompts.

Part 2: Working alone, choose any **one** of the prompts, and write a brief response on the index card provided.

How Would You Respond? Role-Play

Activity

Directions:

- You and a partner will take turns playing the role of a teacher and administrator discussing differentiation.
- “Teachers” read the comments on their cards aloud to their partners. “Administrators” will then have several minutes to respond to the comments.
- Switch roles and discuss the same comment, or exchange comment cards with another pair and repeat the exercise.
- Discuss and respond to the reflection questions below.

How did seeing these situations from a different perspective help you better determine how to address them?

How can we promote better communication between teachers and administrators about concerns regarding differentiation?

What conclusions can we come to about the best way to respond to teacher comments about differentiation?

How Would You Respond? Fishbowl

Activity

Directions:

To prepare for the fishbowl:

- Read your assigned teacher comment and spend a few minutes thinking about what the comment reveals about the speaker's beliefs and concerns with regard to differentiated instruction. You may want to jot down your ideas.
- Think about ways that a savvy administrator might respond to the comment to both affirm the teacher's concerns and gently move that teacher forward in his or her thinking. You may want to jot down your ideas.

During the fishbowl:

- If you are a “fish,” you will be assigned one of three roles: teacher, administrator, or observer.
 - If you are the teacher, begin a conversation with the administrator by reading the comment on your assigned card. Think about what the comment reveals about the speaker's beliefs and concerns to make your conversation as realistic as possible. Continue the conversation for 2–3 minutes.
 - If you are the administrator, respond to the teacher's comment and to any underlying concerns about differentiation that the comment or the ensuing conversation seems to reveal. Your job is to acknowledge the teacher's thoughts and concerns and to move that teacher forward in his or her thinking about differentiation.
 - If you are an observer, play close attention to the conversation, and be ready to make recommendations about other ways in which the administrator might both affirm the teacher and push ahead his or her thinking about differentiation.
- If you are a part of the “fishbowl,” you will be asked to add your own thoughts on the conversation and to draw conclusions about effective ways to respond to teacher comments about differentiation.

After the fishbowl:

Respond to the discussion questions on the next page.

How Would You Respond? Fishbowl Activity (Cont.)

How did seeing these situations from a different perspective help you better determine how to address them?

How can we promote better communication between teachers and administrators about concerns regarding differentiation?

What conclusions can we come to about the best way to respond to teacher comments about differentiation?



ACTION TOOL

Minimum Requirements for Success with a Differentiation Initiative

Rationale and Purpose

Use this tool with administrators and staff development leaders to promote a discussion among administrators and teacher leaders about the difficulty of school change and the importance of maintaining a serious commitment to the implementation and support of differentiation in a school or district over time.

Directions

- Share the following quote from Carolyn Callahan of the University of Virginia: “Unfortunately, many administrators opt for the differentiation service model without a full understanding of the conditions that must be in place for effective implementation” (Center for Talent Development, 2002). Ask participants to share their reactions to this statement. Ask: To what extent have our past district initiatives been successful? Have they positively influenced student and teacher satisfaction? Have they continued over time, or have they died a quick—or slow—death? Why does this happen?
- Present Callahan’s list of minimum conditions under which differentiation can work. Discuss each bullet.
- Ask for other ideas about what must be in place for a district to successfully implement a differentiated instruction initiative.
- Discuss related strengths and weaknesses of participants’ specific district or school.
- Make a plan for addressing areas of concern.

Differentiation Option

Instead of having everyone work as a whole group, assign one bullet point to each small group of administrators or teacher leaders. Ask them to thoroughly discuss the point and be ready to share one big idea or recommendation that came out of their discussion.

What to Look For

- Accurate and thorough understanding of each bullet point.
- Insight into how each point interacts with current district culture and practices.
- A reasonable action plan for addressing areas of concern.

Minimum Requirements for Success with a Differentiation Initiative

Activity

Read each of the following bullets (or your assigned bullet), and record your responses to the questions that follow.

Carolyn Callahan's minimum conditions under which differentiation can work:

- Teachers must be advanced in their understanding and knowledge of the disciplines and in the use of multiple instructional strategies. For most teachers, achieving this level requires extensive and in-depth staff development in both the content area and instructional strategies.
- Teachers must have an ability to adopt a philosophy of teaching that is student centered rather than teacher centered.
- There must be time in teachers' days to plan the instruction necessary. The normal planning time allotted to teachers is not sufficient.
- There must be outside resource supports to identify reading materials, help develop alternative learning tasks, etc.
- Students need to be cluster grouped. There must be a critical mass of [special-needs] students in the classroom to trigger the teacher response that it is worth the time and effort to develop alternative learning tasks.
- Teachers must feel free of the burden of the high-stakes testing trap which leads them to focus all their energy on achieving minimums with the most marginal students.
- Administrators must become proficient in understanding differentiation in order to be effective support systems and to hold teachers appropriately accountable for the differentiation in the classroom.

Source: From "Gifted Education in Today's Schools: An Interview with Carolyn Callahan, PhD," by the Center for Talent Development, 2002. Retrieved April 22, 2008, from www.ctd.northwestern.edu/resources/displayArticle/?id=142. Reprinted with permission.

Minimum Requirements for Success with a Differentiation Initiative

Activity (Cont.)

Reflection Questions

What does each item mean to you? Put one or more of the items into your own words, or define key terms such as “knowledge of the disciplines” and “cluster groups.”

What makes each thought so important to the success of a differentiation initiative?

How does your staff or your district measure up? How can you help improve the situation? How can you help to align district practices with the recommendations given? Be specific.

What to Look For When Evaluating Differentiated Activities

Activity

Use the following questions to help you evaluate differentiated examples from your staff.

Question	Evaluation
Is this good curriculum? Is it worthy of teacher and student time?	
Do the differentiated tasks seem equally respectful? Does each task appear to lead to the same goals (KUD)?	
Do all versions of the task require students to stretch as much as possible?	
What type of differentiation does this illustrate (readiness, interest, or learning profile)? Was this a good choice, given the goals and the students for whom the activities were designed?	
What kind of assessment data was used to decide (a) the type of differentiation; and (b) who would do which task? How appropriate was this data? Did it help improve the match between task and student?	
Is this the only type of differentiation you ever see this teacher using? If so, is that appropriate, or is the teacher stuck in a differentiation rut?	
How do students appear to feel about differentiation?	

Debriefing with Teachers

Activity

When talking to a teacher about a differentiated activity or lesson, choose from the following questions. Use the chart below to record notes about your discussion with the teacher and how you might follow up.

Teacher name: _____

Questions	Teacher Responses	My Thoughts/Follow-up
What were your objectives for this activity?		
Why did you feel the need to differentiate this activity?		
How did you decide the kind of differentiation to use (readiness, interest, learning profile)? In retrospect, was this a good choice? Why?		
How did you decide who got which version? Did you make the right choices? Explain your thinking.		
Did you tell students that the activity was differentiated? Why or why not? Was this a good choice? Why or why not?		
How did you handle the management issues—giving multiple directions, rearranging the room, distributing materials, dealing with early finishers, and so forth?		
What other changes to the activity would you make if you could do it again?		

A Differentiation Rubric: Planning for Teacher Growth

Ascending Intellectual Demand: Differentiation

Novice		Apprentice		Practitioner		Expert	
<ul style="list-style-type: none"> • Unsettled by the ambiguous and organic nature of differentiation. • Seeks algorithmic processes and expects “mastery” of differentiation. • Focuses on the challenges instead of the benefits/necessity. • Seeks solutions that are already part of a repertoire of strategies instead of redefining the nature of curriculum and instruction. • Identifies the challenges inherent in high-prep differentiation (grading major projects) instead of focusing on low-prep possibilities. • Lacks a big-picture understanding of the philosophy due to misperceptions about good curriculum and instruction (e.g., assessment and evaluation). • Lacks persistence and a willingness to work at understanding and application. 		<ul style="list-style-type: none"> • Tolerates the ambiguous nature of differentiation. • Understands the philosophy of differentiation but lacks confidence in application. • Acknowledges gaps in personal understanding and skills with differentiating curriculum and instruction. • Makes surface-level connections between differentiation and other models and strategies inherent in good curriculum and instruction. • Demonstrates a willingness to work through challenges with some persistence. • Distinguishes between good curriculum and instruction and that which is differentiated. • Asks thoughtful questions about both the philosophy and the application. • Can accurately explain differentiation as a concept. 		<ul style="list-style-type: none"> • Accepts the ambiguous nature of differentiation. • Demonstrates accuracy and confidence in explaining differentiation of curriculum and instruction. • Makes connections among various methods within a discipline to facilitate differentiation. • Understands the connections among content, process, product, and learning environment when differentiation is achieved in the areas of readiness, interest, and learning profile (or any combination of these areas). • Exhibits a belief in differentiation but lacks confidence at times in addressing challenges. • Recognizes and avoids the “quick fixes” to differentiating curriculum and instruction. 		<ul style="list-style-type: none"> • Skillfully differentiates curriculum and instruction through the development of curriculum. • Models differentiation with fluency and flexibility in staff development and teaching situations. • Problem-solves in situations where differentiation is both necessary and difficult. • Articulates the rationale, philosophy, and “how to” of differentiation to a wide variety of audiences (e.g., parents, teachers, students, administrators). • Uses various methods from a variety of disciplines to facilitate the differentiation of curriculum and instruction. • Exhibits an unyielding belief in the necessity of differentiation for all students. • Seeks new methods that will facilitate refinement in the differentiation of curriculum and instruction. • Understands there is much left to learn in the area of differentiation. 	

Source: Adapted from “Staff Differentiation Must Be Made to Measure,” by K. A. Hedrick, 2005, *Journal of Staff Development*, 26(4), pp. 34–37. Reprinted with permission of the National Staff Development Council, www.nsdc.org, 2006. All rights reserved.

A Differentiation Rubric: Planning for Teacher Growth

What Does the Learner Need at Each Stage?

Novice	Apprentice	Practitioner	Expert
<ul style="list-style-type: none"> • Clarification on the big picture of differentiation as well as the foundational components. • Focus on the theoretical underpinnings of the concepts and principles. • Frequent and specific feedback on perceptions, questions, and ideas. • Opportunities to build upon the characteristics of good instruction as a bridge into differentiation. • Specific and clear examples of differentiation. • Analysis of curricular and instructional examples. • Focus on the benefits and necessity despite inconvenience and discomfort. • Opportunities to experience with support the organic nature of the philosophy. • Low-risk experiences. 	<ul style="list-style-type: none"> • Continued study and discussion with a variety of tools and practitioners. • Opportunities for critical analysis of curriculum and instruction to identify the degree and areas of differentiation. • Problem solving with increased challenge over time. • Opportunities to articulate the rationale, principles, and methods. • Discussion and problem solving (with support) in the areas of respectful tasks, flexible grouping, ongoing assessment, and adjustment. • Focus on the differentiation of curriculum and instruction through a study of the topics associated with low-prep differentiation. • Opportunities to make connections among curricular and instruction models as a means to an end (differentiated curriculum and instruction). 	<ul style="list-style-type: none"> • Collaboration with varied curriculum and area specialists in the differentiation of curriculum and instruction. • Specific feedback on the differentiation of curriculum and instruction. • Discussion and problem solving (with feedback) of the detractors of differentiation (e.g., grading, classroom management, "fairness"). • In-depth study of topics associated with high-prep differentiation (e.g., tiered assignments, flexible grouping, assessment and evaluation). • Opportunities to explain both the philosophy and the practices associated with differentiation to a variety of audiences (e.g., teachers, administrators, colleagues, parents, and students). • Observations and analysis of differentiated curricula and instructional settings. • Practice and ongoing support in the differentiation of curriculum and instruction. 	<ul style="list-style-type: none"> • Practice and ongoing support in the differentiation of curriculum, instruction, and staff development. • Opportunities to work collaboratively with specialists in the differentiation of curriculum, instruction, and staff development, with colleagues in a variety of disciplines and areas of specialty (e.g., regular education, special education, and gifted education). • Participation in conferences, staff development, and book studies focusing on differentiation and subsequent sharing of experiences, knowledge, and skills with colleagues. • Opportunities for discussion and problem solving in areas of concern associated with differentiation with an emphasis on growth. • Opportunities to work with teachers, administrators, and colleagues in the refinement of knowledge, understanding, and skills in the area of differentiation. • Ongoing dialogue about the status of differentiation in the discipline and area of specialty with a focus on growth and development of expertise. • Support in the development and monitoring of policies and procedures that promote the differentiation of curriculum, instruction, and staff development.

Source: Adapted from "Staff Differentiation Must Be Made to Measure," by K. A. Hedrick, 2005, *Journal of Staff Development*, 26(4), pp. 34–37. Reprinted with permission of the National Staff Development Council, www.nsdc.org, 2006. All rights reserved.

A Differentiation Rubric: Planning for Teacher Growth

Activity

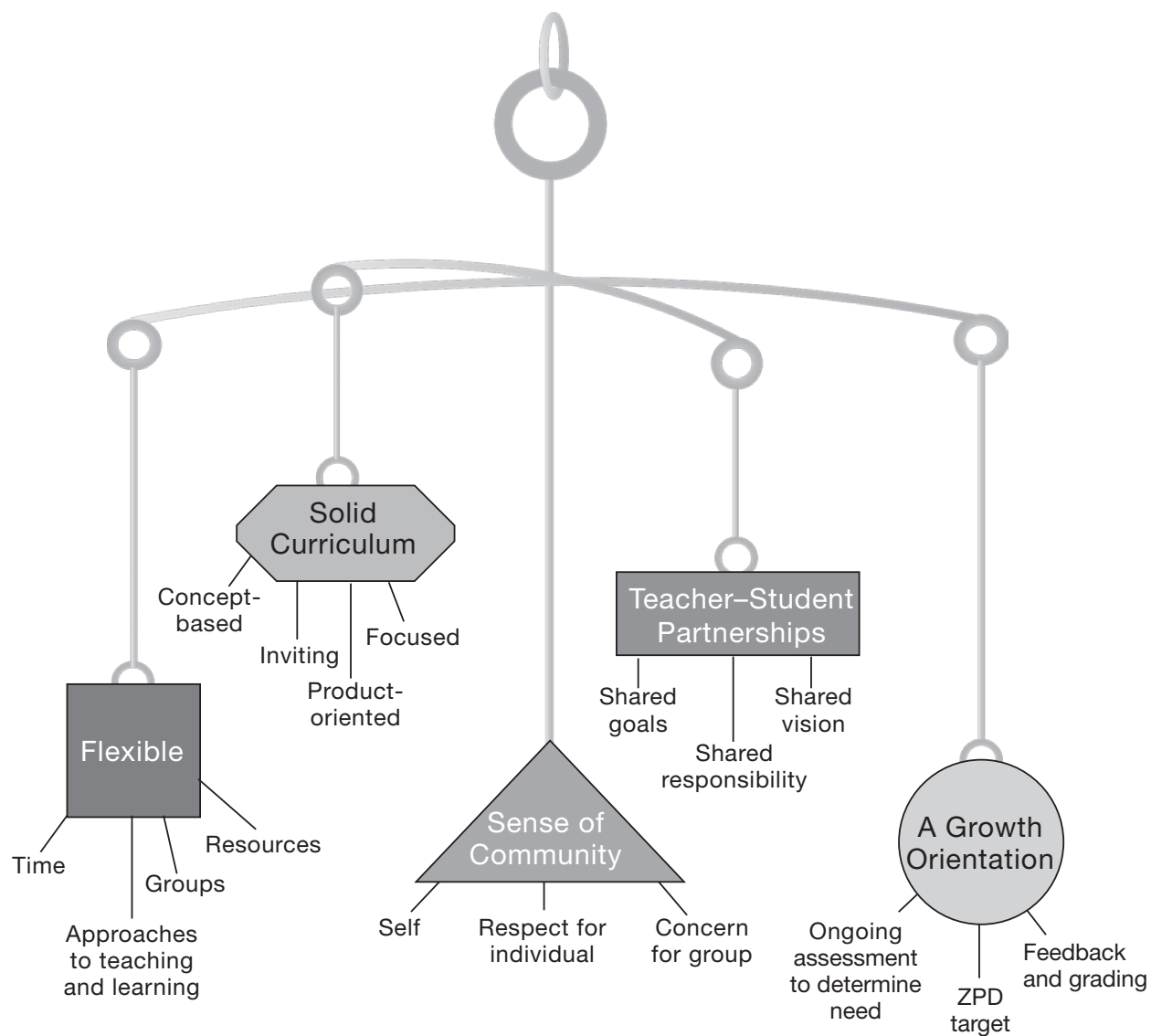
Directions:

- Refer to the Ascending Intellectual Demand: Differentiation rubric. Where are *you* in terms of expertise in differentiation? Where are the teachers you work with?
- Study the What Does the Learner Need at Each Stage? rubric to help you see a variety of ways to support teachers at different stages of expertise.
- Complete the chart below:
 - In the “Teacher’s Name” column, write the names of several teachers you work with. If possible, choose teachers who are at different levels of comfort with differentiated instruction.
 - In the “Current Level of Expertise” column, write the level (novice, apprentice, practitioner, expert) that best matches what you have seen with this teacher. Use descriptors from Hedrick’s rubric, or choose your own.
 - In the “Evidence” column, provide specific evidence for your determination if at all possible.
 - In the last column, write ideas for a specific plan of action that will support each teacher in moving closer to the expert level or in refining their skills as an expert.

Teacher’s Name	Current Level/ Specific Descriptor	Evidence	Plan of Action/Next Steps for Growth

A Differentiated Lesson Observation Rubric

Mobile: A Differentiated Classroom in Balance



Source: Adapted with permission from the work of Carol Ann Tomlinson, Curry School of Education, University of Virginia.

A Differentiated Lesson Observation Rubric

Activity

Directions:

- Use the rubric or parts of the rubric below to help you determine the level of expertise in differentiation that a teacher displays during a classroom visit.
- Use the rubric to set professional development goals after a classroom visit, and complete the reflection that follows the rubric for each teacher you observe.

Characteristics (Based on Carol Ann Tomlinson's "A Differentiated Classroom in Balance" mobile)	Novice Level This is what we hope not to see. If we do, we need to help these teachers understand what good teaching and learning are all about.	Apprentice Level These teachers are beginning to make sense of differentiated teaching and learning. They just need more support and practice.	Practitioner Level This is where most good teachers who use differentiation are most of the time. These teachers have a pretty good handle on differentiation but would benefit from problem-solving sessions with one another or an expert.	Master Level Very few teachers will fall consistently into this category. Those who do are ready to lead and support others. Don't forget that they still need opportunities to refine their own knowledge, understanding, and skill. No one is ever done learning.
Solid Curriculum	<ul style="list-style-type: none"> • The lesson is unfocused or disorganized. Lesson goals are not listed. It is not clear what the teacher wants students to know, understand, and be able to do as a result of the learning experience. • Lesson components are not engaging and do not connect to students' lives. Students do not use what they learn. No differentiation takes place. 	<ul style="list-style-type: none"> • The lesson has an identifiable structure, although the logic of that structure may be unclear. Student goals or objectives are listed but not referenced during the lesson, <i>or</i> these goals do not appear to match lesson components. • Lesson components are somewhat interesting to learners but do not necessarily connect with their lives or goals. Students use what they learn, but not in ways that require consistent use of high-level thinking skills. Differentiation takes place in a limited manner. Not all versions of an activity lead to the same KUD. 	<ul style="list-style-type: none"> • The lesson is organized sensibly. It is clear to observer and students what students are to know, understand, and be able to do as a result of the learning experience. • Lesson components are engaging to learners and connect with their lives and/or goals. Students use what they learn in interesting ways that call upon higher-order thinking skills throughout the lesson. Differentiated activities relate to the same KUD. 	<ul style="list-style-type: none"> • The curriculum is organized in a coherent (organized, unified, and sensible) manner. It is crystal clear to both observers and students what the teacher wants students to know, understand, and be able to do as a result of the learning experience <i>and</i> how specific lesson components match these goals. • Lesson components are mentally and affectively engaging to learners and clearly connect with their lives or goals. Students use what they learn in important ways; deal with complex problems, ideas, issues, and skills; and think at high levels. Differentiated activities are clearly related to same lesson goals (KUD).

A Differentiated Lesson Observation Rubric

Activity (Cont.)

Characteristics	Novice Level	Apprentice Level	Practitioner Level	Master Level
Growth Orientation	<ul style="list-style-type: none"> Activities appear to be designed with little regard to student readiness, interest, or learning profile. Work is not demanding for the majority of students. Few students are likely to grow as a result of the learning activities 	<ul style="list-style-type: none"> Students with a particular level of readiness, interest, or learning profile will likely grow, but others will find it difficult or impossible to do so. Work inconsistently challenges students or challenges only some students. 	<ul style="list-style-type: none"> Students with varied readiness, interest, or learning profiles have an opportunity to grow at some point during the lesson. Work is consistently demanding, although a few students may be able to “wriggle out” of the highest quality of work. 	<ul style="list-style-type: none"> All students, no matter their level of readiness, interests, or learning profiles, are appropriately challenged. Lesson is written in such a way that no students can “wriggle out” of the highest quality of work; rather they are propelled to do their best.
Flexible Grouping	<ul style="list-style-type: none"> No variation in instructional strategies, modes of presentation; grouping strategies; or use of time, space, and materials. 	<ul style="list-style-type: none"> Evidence of variation exists in at least one of the following: instructional strategies; modes of presentation; grouping strategies; and use of time, space, or materials. However, flexibility appears to occur for the sake of variety more than from a desire to match specific student needs or serve lesson goals. 	<ul style="list-style-type: none"> Evidence of variation exists in one or more of the following: instructional strategies; modes of presentation; grouping strategies; and use of time, space, or materials. This flexibility appears to be in response to student need or lesson goals. 	<ul style="list-style-type: none"> A variety of instructional strategies, modes of presentation, and grouping strategies are evident. Time, space, and materials are used flexibly and creatively. Flexibility is in response to a clear analysis of student needs or perfectly serves learning goals.
Teacher–Student Partnerships	<ul style="list-style-type: none"> The teacher's only role is to deliver content or direct student activities. The teacher takes the lead in classroom activities. The teacher sets goals and assesses student progress toward these goals. 	<ul style="list-style-type: none"> Teacher's role is primarily deliverer of information or director of student activities. The teacher allows for occasional student input into lesson content and activities. The teacher sets goals and assesses student progress toward these goals, but invites limited student input as to what the goals are or the progress they're making. 	<ul style="list-style-type: none"> Teacher plays the role of deliverer of information or director of student activity but also acts as coach or facilitator of learning at some point in the lesson. Teacher frequently invites and encourages student input into lesson content and activities. Students frequently work with teachers to set goals for learning and assess progress toward those goals. 	<ul style="list-style-type: none"> Teacher's overall role is primarily that of coach or facilitator of learning. Students and teacher have consistent and balanced input into lesson content. Students are consistently involved in setting goals for learning and assessing progress toward those goals, taking on increasing responsibility for their own learning.

A Differentiated Lesson Observation Rubric

Activity (Cont.)

Characteristics	Novice Level	Apprentice Level	Practitioner Level	Master Level
Sense of Community	<ul style="list-style-type: none"> • Environment is physically and emotionally unsafe. • There is no apparent focus on individual or group excellence and growth. • Students do not engage or support one another in learning. • Students recognize and comment negatively on differences. There are no discussions about the rationale for differentiation or related concerns. 	<ul style="list-style-type: none"> • Environment is physically safe, but some students occasionally feel as though they do not belong or are not valued. • Focus tends to be on competition among students, rather than individual or group excellence and growth. • Students engage and support one another but tend to do so within their usual groups or cliques. • Occasional negative comments about differences are heard. Discussions about the rationale for differentiation or related concerns come up, but usually only when someone is unhappy. 	<ul style="list-style-type: none"> • Environment is physically and emotionally safe. In general, students feel as though they belong and are valued. • Individual and/or group excellence and growth appear to be valued. • Students generally engage and support one another in learning. They appear comfortable working with a variety of peers. • Students recognize and acknowledge similarities and differences in student needs. There are ongoing whole-class and individual discussions about the rationale for differentiation. Concerns about fairness and questions about different tasks are handled immediately and sensitively. 	<ul style="list-style-type: none"> • Environment is physically and emotionally safe. There are consistent affirmations by both teacher and students of belonging and value. • Students and teacher consistently focus on both individual and group excellence and growth. • Students consistently engage and support one another in learning. They are perfectly comfortable working with any other student in the class. • Students and teacher recognize, acknowledge, and celebrate similarities and differences. Ongoing whole-class and individual discussions about the rationale for differentiation take place. Concerns about fairness and questions about different tasks occasionally occur, but there is little need for them because differentiation is so keenly integrated into the class philosophy and belief system of both teacher and students.

A Differentiated Lesson Observation Rubric

Activity (Cont.)

Reflections About My Observation

1. In general, I think this teacher operates at the _____ level because _____

2. I will help this teacher further his or her growth by:

-

-

-

-

Teacher Pre-assessment for Differentiation

Activity

Complete the chart to show what you know about differentiation. Write as much as you can.

Differentiation	Associated Vocabulary
Differentiation	
Examples (What it looks like in the classroom)	Nonexamples (What it does not look like in the classroom)

On the back of this sheet, please list specific “burning” questions you have about differentiated instruction.

Staff Development Learning Preferences Survey

Activity

Circle the answer that best completes each statement.

1. When learning about a new model or strategy in education, I prefer to
 - a. Read about it.
 - b. Hear about it.
 - c. See it in action.
 - d. Try it out on my own.
2. When learning about a new model or strategy in education, I first
 - a. Focus on the details and structure of the model or strategy.
 - b. Try to figure out how the model or strategy would look in my own classroom.
 - c. Use the ideas as a springboard for my own variation on the model or strategy.
3. When learning about a new model or strategy in education, I prefer to
 - a. Learn on my own.
 - b. Learn with others.
4. I am at my best in learning in
 - a. Early morning.
 - b. Mid-morning.
 - c. Mid-afternoon.
 - d. Late afternoon.

How interested are you in the following? (1 = I would prefer not to participate; 2 = I might participate; 3 = I would be very likely to participate)

- ___ Sharing examples of differentiated activities from my own classroom at a faculty meeting
- ___ Sharing examples of differentiated activities from my own classroom at a department or team meeting
- ___ Allowing colleagues to observe me teaching a differentiated activity
- ___ Observing colleagues teaching a differentiated activity
- ___ Watching videos of differentiation in action, followed by a discussion of what is seen
- ___ Being part of a book study on differentiation
- ___ Attending a local conference on differentiation
- ___ Taking a course in differentiation

What's My Role?

Activity

Round 1

- Imagine that we have been studying the pilgrims. You and your teammates will now prepare a presentation to help us see what you have learned in this unit. Your project must clearly communicate the three most important ideas you think people should remember about the pilgrims. You may use the provided supplies and anything you have with you today. You will share your project when the time is up.
- While you watch the other groups present, evaluate their work using the criteria below. (You will not have to share your evaluations with others.)
- For each project, please indicate on a scale of 1–4 (with 4 being the best):
 - The importance of the ideas communicated.
 - How well the project communicated those ideas.
 - The technical quality of the project.

Round 2

Form new groups as directed by your leader, and repeat this exercise using pioneers as your new topic.

Discussion

Discuss the following questions, and record your thoughts:

1. How did you react when you were asked to move from the corner that corresponded to your best skill to the corner designated for your weaker skill? How does that experience relate to how students feel when they are assigned to work in their most and least preferred ways of learning?
2. Consider the similarities and differences between the two experiences with learning profile.

What's My Role?

Activity (Cont.)

3. In looking at your grading of the projects, what differences in quality, if any, did you notice?
4. Compare your feelings about each of the two experiences.
5. What can we conclude from this experience about the importance of learning profile differentiation?

Differentiated Instruction Interest Survey

Activity

Please indicate the answer that best completes the following statements.

1. I am most interested in learning more about
 - a. Interest differentiation.
 - b. Learning profile differentiation.
 - c. Readiness differentiation.
 - d. How to incorporate more than one kind of differentiation into an activity.
2. I am most interested in the following strategy for differentiation:
 - a. RAFTs
 - b. Sternberg intelligence preferences
 - c. Learning centers
 - d. Learning contracts
 - e. Tiered lessons
3. I prefer to read
 - a. An overview of the components of differentiated instruction.
 - b. About the theory and rationale behind differentiation.
 - c. Examples of how differentiation looks in the classroom.
 - d. About the results of implementing differentiated instruction.
4. I am most interested in expanding my repertoire of
 - a. Pre-assessment strategies.
 - b. Ongoing assessment strategies.
 - c. Summative assessment strategies.
5. The aspect of differentiation I am most interested in learning more about is _____
 _____ because _____

 _____.



My Current Practices (Readiness and Interest)

Rationale and Purpose

Use this tool to pre-assess teacher practices. It will also provide information about teacher interests.

Directions

- Distribute the tool.
- Ask teachers to complete all three parts, plus the summary and goal-setting sections. Point out the importance of providing examples in Part 1.
- If teachers are unsure of an answer, they may write NS (not sure) for that question.
- Collect the pre-assessments, and use the results to plan follow-up differentiated staff development.

Tips and Differentiation Options

This assessment is comprehensive, but that means it will take a long time to complete. You may:

- Choose to break the assessment up into smaller chunks over time or to focus on those areas you plan to address next in your staff development work.
- Leave off the summary and/or goal-setting sections for use at a later date.
- Use only the Summary section. If you do so, be aware that the information you collect will not be as easy to interpret unless you are very specific about what a 5 would mean, what a 4 would mean, and so forth. You might also ask teachers to provide rationale or evidence for their ratings.

What to Look For

Part 1

- If teachers mark 3 (frequently) or 4 (consistently), you will need to examine the example to see if they are correctly interpreting the question or concept.
- Use appropriate examples given by teachers in your follow-up staff development. This honors teachers' current expertise and points out that you are taking the pre-assessment seriously.
- Take special note of answers for which teachers mark NS. Is this the result of missing vocabulary, or does it indicate a lack of understanding of broader concepts related to differentiation?

Part 2

- This part of the pre-assessment gives you information about teachers' comfort level with the various aspects of flexible grouping. You may notice that some teachers are comfortable with readiness differentiation, for example, but don't incorporate interest or learning profile differentiation as often. This indicates a need for you to help them branch out. The best differentiators are comfortable using all types of flexible grouping and make their decisions about when and where to differentiate based on learning goals and knowledge of their audience.

- If your staff is new to differentiation, you may have them skip this section or remove questions 1–3, as those depend heavily on the vocabulary of differentiation.

Part 3

- This section of the pre-assessment helps you identify those strategies associated with differentiation that may need to be introduced and refined. It will also help you identify faculty members who might be able to share good examples of the strategy or have other teachers observe the strategy in action in their classroom.
- If your staff is new to differentiation, you may have them skip this section, or you might adapt the list to include some strategies that you are certain they are familiar with as well as some you suspect they are not.

Part 4

- Use these results to identify overall trends in teachers' assessment of their competencies and teachers who are in need of support or coaching in a particular area.

Part 5

- Look for measurable goals that fit the philosophy of differentiation and are appropriate to the time period for which they are being set.
- Consider using the information from this part to form discussion or study groups among teachers with similar goals.

My Current Practices (Readiness and Interest)

Activity

Part 1: For each statement below, indicate whether you engage in that practice never or seldom (1), occasionally (2), frequently (3), or consistently (4). For those practices you engage in frequently or consistently, provide an example from your classroom to illustrate your practice. If you are unsure of the question or your answer, you may mark NS (not sure).

Statement	1	2	3	4	NS	Example
My students know what differentiation is.						
My students know why differentiation occurs in my classroom.						
I help my students get to know one another.						
I help my students identify their strengths and weaknesses.						
I pre-assess for readiness.						
I pre-assess for interest.						
I pre-assess for learning profile.						
I use a variety of ongoing assessments during a unit of study.						
My students help establish appropriate classroom routines.						
My students help monitor and enforce appropriate classroom routines.						

My Current Practices (Readiness and Interest)

Activity (Cont.)

Statement	1	2	3	4	NS	Example
Before beginning a unit of study, I identify what I want students to know, understand, and be able to do as a result of their work in the unit.						
I share my learning goals with the students throughout the unit of study.						
I differentiate learning activities.						
I differentiate homework assignments.						
I differentiate quizzes.						
I differentiate unit tests.						
I differentiate culminating unit projects.						
I provide feedback about student mastery of course materials and/or standards.						
I provide feedback about student growth.						
I provide feedback about student work habits.						

My Current Practices (Readiness and Interest)

Activity (Cont.)

Part 2: How often in the last month have you done the following? Indicate 0 (never), 1 (once), 2 (twice), or 3+ (three or more times).

- ____ 1. Differentiated for readiness
- ____ 2. Differentiated for interest
- ____ 3. Differentiated for learning profile
- ____ 4. Had students work in small groups (If you did, please indicate the type of groups below.)
 - ____ a. Homogeneous groups according to interest
 - ____ b. Heterogeneous groups according to interest
 - ____ c. Homogeneous groups according to learning profile
 - ____ d. Heterogeneous groups according to learning profile
 - ____ e. Homogeneous groups according to readiness
 - ____ f. Heterogeneous groups according to readiness
 - ____ g. Randomly assigned groups
- ____ 5. Asked students to work in pairs
- ____ 6. Conducted whole-class lessons
- ____ 7. Held conferences with individual students
- ____ 8. Assigned differentiated tasks to students
- ____ 9. Let students choose which differentiated task to complete

Part 3: How often in the past month have you used the following strategies? Indicate 1 (once), 2 (twice), or 3+ (three or more times).

- ____ Lecture or direct instruction
- ____ RAFTs
- ____ Contracts
- ____ Cubing or ThinkDots

My Current Practices (Readiness and Interest)

Activity (Cont.)

- ___ Learning centers
- ___ Differentiating for Sternberg intelligences
- ___ Differentiating for Gardner intelligences
- ___ Tiered assignments
- ___ Compacting
- ___ Entry points
- ___ Jigsaws

Part 4: On a scale from 1 (novice) to 5 (expert), rate your level of proficiency in each of the following key areas:

- ___ Setting up a welcoming and safe classroom environment
- ___ Recognizing and supporting high-quality curriculum for all students in your classroom
- ___ Engaging in pre-assessments and ongoing assessments that directly affect classroom content, process, and products
- ___ Designing respectful differentiated activities
- ___ Practicing flexible grouping
- ___ Tackling management issues that arise as a result of differentiation
- ___ Feeling comfortable discussing and dealing with grading issues in the differentiated classroom
- ___ Recognizing your own strengths and weaknesses when it comes to high-quality differentiation
- ___ Setting goals for your own growth
- ___ Supporting colleagues' growth in differentiated beliefs and/or practices

My Current Practices (Readiness and Interest)

Activity (Cont.)

Part 5: Choose three of the areas from the list in Part 4, and for each area, set a realistic goal that will help you grow and refine your differentiated practices. Indicate how and when you will measure your progress.

Goal	How will you assess?	When will you assess?

KUD Sort

Cards

KNOW

UNDERSTAND

BE ABLE TO DO

KUD Sort

Cards (Cont.)

English Cards

<p>Direct exposition is what is said about the character.</p> <p>(English)</p>	<p>Describe the use of images and sounds to elicit the reader's emotions</p> <p>(English)</p>
<p>An author's voice will influence the reader's perceptions of events in a story.</p> <p>(English)</p>	<p>Distinguish between different character types</p> <p>(English)</p>
<p>Dynamic characters change and grow during a story, while static characters remain the same throughout.</p> <p>(English)</p>	<p>Identify a position or argument in an informational text</p> <p>(English)</p>
<p>In dramatic works, setting, mood, characters, plot, and theme are often revealed through staging.</p> <p>(English)</p>	<p>The components of scripting include exposition, rising action, conflict, climax, falling action, and resolution.</p> <p>(English)</p>

KUD Sort

Cards (Cont.)

<p>Plagiarism is the act of presenting someone else's ideas as one's own.</p> <p>(English)</p>	<p>Distinguish one's own ideas from information created or discovered by others</p> <p>(English)</p>
<p>Identify and analyze the author's techniques to convey ideas and content</p> <p>(English)</p>	<p>Analyze the techniques used by an author to convey information about a character</p> <p>(English)</p>
<p>Grammar acts as a contract in which users agree to use and follow certain conventions and rules to facilitate communication.</p> <p>(English)</p>	<p>Parallel structure means using the same grammatical form to express equal or parallel ideas.</p> <p>(English)</p>
<p>Use parallel structure when linking coordinate ideas and comparing or contrasting ideas</p> <p>(English)</p>	<p>Effective writers consider their audience and purpose when writing.</p> <p>(English)</p>

KUD Sort

Cards (Cont.)

<p>Write clear, varied sentences</p> <p>(English)</p>	<p>Scan research information and select resources based upon reliability, accuracy, and relevance to the purpose of the research</p> <p>(English)</p>
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Science Cards

<p>Patterns discerned from direct observations form the basis for predictions or hypotheses that attempt to explain the mechanism responsible for the pattern.</p> <p>(Science)</p>	<p>An <i>experiment</i> is a structured test of a hypothesis. A <i>hypothesis</i> is stated in terms of a testable relationship</p> <p>(Science)</p>
<p>Develop a classification key that uses numerous characteristics</p> <p>(Science)</p>	<p>Accurate observations and evidence are necessary to draw realistic and plausible conclusions.</p> <p>(Science)</p>

KUD Sort

Cards (Cont.)

<p>Design an experiment in which one variable is manipulated over many trials</p> <p>(Science)</p>	<p>An ecosystem is made up of the living community and the nonliving factors that affect it.</p> <p>(Science)</p>
<p>Human activities can alter abiotic components and thus accelerate or decelerate natural processes.</p> <p>(Science)</p>	<p>Plowing cropland can increase erosion, and planting trees can prevent it.</p> <p>(Science)</p>
<p>Propose ways to maintain water quality within a watershed</p> <p>(Science)</p>	<p>The three major regional watersheds in Virginia lead to the Chesapeake Bay, the North Carolina sounds, or the Gulf of Mexico.</p> <p>(Science)</p>
<p>Forecast potential water-related issues that may become important in the future</p> <p>(Science)</p>	<p>Governments play significant roles in managing and protecting natural resources.</p> <p>(Science)</p>

KUD Sort

Cards (Cont.)

<p>Formulate hypotheses based on cause-and-effect relationships</p> <p>(Science)</p>	<p>Scientists' unique social and educational backgrounds and differences lead to their disagreement about the interpretation of evidence or the development of a theory.</p> <p>(Science)</p>
<p>Critically examine and discuss the validity of results reported in scientific literature and databases</p> <p>(Science)</p>	<p>Discuss accuracy, confidence, and sources of experimental error based on number of trials and variance in the data</p> <p>(Science)</p>
<p>The cell theory states that all living things are composed of cells and that cells come from other cells by the process of cell reproduction.</p> <p>(Science)</p>	<p>The introduction of the germ theory led to the understanding that many diseases are caused by microorganisms.</p> <p>(Science)</p>

KUD Sort

Cards (Cont.)

Social Studies Cards

<p>Formulate historical questions and defend findings based on inquiry and interpretation</p> <p>(Social Studies)</p>	<p>Exploration and colonization result in the redistribution of populations.</p> <p>(Social Studies)</p>
<p>The Middle Atlantic region was settled chiefly by English-, Dutch-, and German-speaking immigrants seeking religious freedom and economic opportunity.</p> <p>(Social Studies)</p>	<p>Identify, analyze, and interpret primary and secondary source documents</p> <p>(Social Studies)</p>
<p>Develop perspectives of time and place</p> <p>(Social Studies)</p>	<p>The Declaration of Independence stated grievances against the king of Great Britain and declared the colonies' independence from Great Britain.</p> <p>(Social Studies)</p>
<p>Distinguish between relevant and irrelevant information</p> <p>(Social Studies)</p>	<p>Review information for accuracy, separating fact from opinion</p> <p>(Social Studies)</p>

KUD Sort

Cards (Cont.)

<p>The “Rule of Law” refers to the principle that the government and those who govern are bound by law.</p> <p>(Social Studies)</p>	<p>Fundamental political principles define and shape American constitutional government.</p> <p>(Social Studies)</p>
<p>The decline of Roman influence in Western Europe left people with little protection against invasion.</p> <p>(Social Studies)</p>	<p>The feudal system functioned in an interdependent fashion to meet the needs of various groups of people.</p> <p>(Social Studies)</p>
<p>The feudal society of the Middle Ages was made up of vassals, serfs, fiefs, and so forth.</p> <p>(Social Studies)</p>	<p>Early civilizations made major contributions to social, political, and economic progress.</p> <p>(Social Studies)</p>
<p>Some early written law codes included the Ten Commandments and the Code of Hammurabi.</p> <p>(Social Studies)</p>	<p>Analyze trends in human migration and cultural interaction</p> <p>(Social Studies)</p>

KUD Sort

Cards (Cont.)

River valleys' resources attract the settlement of civilizations.

(Social Studies)

Early river valley civilizations included the Egyptian settlement in the Nile River valley and delta and the Mesopotamian settlements in the Tigris and Euphrates river valleys.

(Social Studies)

Math Cards

A coordinate plane is formed when two number lines intersect at right angles. The x -axis is the horizontal axis and the y -axis is the vertical axis. The two axes meet at the origin, O (00)

(Math)

Algebra is a tool for describing and representing patterns and relationships.

(Math)

Apply appropriate computational techniques to evaluate an algebraic expression

(Math)

Changing the grouping or the order of addends or factors does not change a sum or product.

(Math)

Cards (Cont.)

Express numbers using scientific notation, and perform operations using the laws of exponents	Express the square root of a whole number less than 1,000 in simplest radical form
(Math)	(Math)
A radical in simplest form is one in which the radicand has no perfect square factors other than one.	Find the quotient of polynomials using a monomial divisor
(Math)	(Math)
Polynomial expressions can be used to model real-life situations.	Relate concrete and pictorial representations for polynomial operations to their corresponding algebraic manipulations
(Math)	(Math)
The laws of exponents can be investigated using patterns.	The operations and the magnitude of the numbers in an expression affect the choice of an appropriate method of computation.
(Math)	(Math)

KUD Sort

Cards (Cont.)

<p>The square root of a perfect square is an integer.</p> <p>(Math)</p>	<p>Translate verbal expressions into algebraic expressions with three or fewer terms</p> <p>(Math)</p>
<p>Use the distributive property to factor out all common monomial factors</p> <p>(Math)</p>	<p>Use the x-intercepts from the graphical representation of the polynomial to determine and confirm its factors</p> <p>(Math)</p>
<p>A linear function is a function whose graph forms a straight line.</p> <p>(Math)</p>	

KUD Sort

Cards (Cont.)

Specials Cards 1 (Physical Education, Health, Foods, Technology, Business)

<p>Apply the theoretical food pyramid to a practical diet plan</p> <p>(Specials 1)</p>	<p>The rules and equipment needed for softball</p> <p>(Specials 1)</p>
<p>The performance of each team member influences the success of the team.</p> <p>(Specials 1)</p>	<p>Keeping your body healthy involves an understanding of the roles of nutrition and exercise.</p> <p>(Specials 1)</p>
<p>CAD programs can simplify and speed up the process of design.</p> <p>(Specials 1)</p>	<p>How you feel about tobacco use probably depends on your perspective.</p> <p>(Specials 1)</p>
<p>Macronutrients, calorie intake, ratio of body mass to fat</p> <p>(Specials 1)</p>	<p>Explain the inner workings of one business form</p> <p>(Specials 1)</p>

KUD Sort

Cards (Cont.)

<p>Pitch within the “zone”</p> <p>(Specials 1)</p>	<p>Conduct research on the health risks associated with tobacco</p> <p>(Specials 1)</p>
<p>Select and explore a form of business ownership that complements specific personal characteristics</p> <p>(Specials 1)</p>	<p>Facts about tobacco</p> <p>(Specials 1)</p>
<p>Make appropriate choices from a list of software programs to accomplish a specific goal</p> <p>(Specials 1)</p>	<p>Each type of business ownership presents unique advantages and disadvantages.</p> <p>(Specials 1)</p>
<p>The amount of fat in foods and size of a serving</p> <p>(Specials 1)</p>	<p>Run to the correct base</p> <p>(Specials 1)</p>

KUD Sort

Cards (Cont.)

<p>The structures of both the old and the revised food pyramids</p> <p>(Specials 1)</p>	<p>Make a complete case using defensible evidence based on varied viewpoints</p> <p>(Specials 1)</p>
<p>Appropriate encouragement helps people succeed.</p> <p>(Specials 1)</p>	<p>The food pyramid represents our current understanding of the balance needed to best sustain humans.</p> <p>(Specials 1)</p>
<p>Different forms of business ownership; definitions of key business terms</p> <p>(Specials 1)</p>	<p>The levels of the food pyramid exist in an interdependent relationship with one another; change to one level will result in change to at least one of the other levels.</p> <p>(Specials 1)</p>
<p>Kick at various intensities</p> <p>(Specials 1)</p>	<p>Motivate yourself and teammates</p> <p>(Specials 1)</p>

KUD Sort

Cards (Cont.)

Evaluate your own diet and exercise regimen to maximize health

(Specials 1)

Keep score accurately

(Specials 1)

Specials Cards 2 (Fine and Performing Arts, Foreign Language)

How to conjugate verbs in imperfect tense

(Specials 2)

Artistic style reflects the artist's culture, time, and personal experiences.

(Specials 2)

Describe the musical tools used by the composer

(Specials 2)

Space can be manipulated in dance to create different moods.

(Specials 2)

KUD Sort

Cards (Cont.)

Advanced musical technicality and dissonant structure are central to modern musical composition.	Demonstrate improved grammatical accuracy in writing and speaking in the target language
(Specials 2)	(Specials 2)
Sing an assigned part accurately and with expression	Vincent Persichetti was a 20th century composer.
(Specials 2)	(Specials 2)
Do a blind contour drawing of your hand	Create a story filled with emotion to communicate, and describe what the accompanying dance would look like
(Specials 2)	(Specials 2)
Discuss literary elements in the target language	Appropriate use of art materials
(Specials 2)	(Specials 2)

Cards (Cont.)

Author of <i>Le Petit Prince</i> and an overview of his life	Principles of design
(Specials 2)	(Specials 2)
As in native-language literature, we can see reflections of ourselves in target-language literature.	Definition of artistic expression
(Specials 2)	(Specials 2)
Use of specific art materials and style are related.	Dance is a form of communication.
(Specials 2)	(Specials 2)
Reading literature in the target language is one way to improve vocabulary and increase fluency.	Note names and melodic intervals
(Specials 2)	(Specials 2)

Cards (Cont.)

<p>Poetic literature often inspires musical compositions.</p> <p>(Specials 2)</p>	<p>Read fluently in the target language</p> <p>(Specials 2)</p>
<p>Characters, setting, plot, and themes of <i>Le Petit Prince</i></p> <p>(Specials 2)</p>	<p>Analyze an artist's personal style and use of materials</p> <p>(Specials 2)</p>
<p>Create a facsimile of an artist's work</p> <p>(Specials 2)</p>	<p>Incorporate new target-language vocabulary into discussion and writings</p> <p>(Specials 2)</p>

KUD Sort

Answer Keys

English Cards

Know

- Direct exposition is what is said about the character.
- Dynamic characters change and grow during a story, while static characters remain the same throughout.
- The components of scripting include exposition, rising action, conflict, climax, falling action, and resolution.
- Plagiarism is the act of presenting someone else's ideas as one's own.
- Parallel structure means using the same grammatical form to express equal or parallel ideas.

Understand

- An author's voice will influence the reader's perceptions of events in a story.
- In dramatic works, setting, mood, characters, plot, and theme are often revealed through staging.
- Grammar acts as a contract in which users agree to use and follow certain conventions and rules to facilitate communication.
- Effective writers consider their audience and purpose when writing.

Be Able to Do

- Describe the use of images and sounds to elicit the reader's emotions
- Distinguish between different character types
- Identify a position or argument in an informational text
- Distinguish one's own ideas from information created or discovered by others
- Identify and analyze the author's techniques to convey ideas and content
- Analyze the techniques used by an author to convey information about a character
- Use parallel structure when linking coordinate ideas and comparing or contrasting ideas
- Write clear, varied sentences
- Scan research information and select resources based upon reliability, accuracy, and relevance to the purpose of the research

KUD Sort

Answer Keys (Cont.)

Science Cards

Know

- An *experiment* is a structured test of a hypothesis. A *hypothesis* is stated in terms of a testable relationship.
- Plowing cropland can increase erosion, and planting trees can prevent it.
- The three major regional watersheds in Virginia lead to the Chesapeake Bay, the North Carolina sounds, or the Gulf of Mexico.
- The cell theory states that all living things are composed of cells and that cells come from other cells by the process of cell reproduction.
- The introduction of the germ theory led to the understanding that many diseases are caused by microorganisms. (Could also make a case for Understand.)

Understand

- Patterns discerned from direct observations form the basis for predictions or hypotheses that attempt to explain the mechanism responsible for the pattern.
- Accurate observations and evidence are necessary to draw realistic and plausible conclusions.
- An ecosystem is made up of the living community and the nonliving factors that affect it.
- Human activities can alter abiotic components and thus accelerate or decelerate natural processes.
- Scientists' unique social and educational backgrounds and differences lead to their disagreement about the interpretation of evidence or the development of a theory.
- Governments play significant roles in managing and protecting natural resources.

Be Able to Do

- Formulate hypotheses based on cause-and-effect relationships
- Critically examine and discuss the validity of results reported in scientific literature and databases
- Discuss accuracy, confidence, and sources of experimental error based on number of trials and variance in the data
- Develop a classification key that uses numerous characteristics
- Design an experiment in which one variable is manipulated over many trials
- Propose ways to maintain water quality within a watershed
- Forecast potential water-related issues that may become important in the future

KUD Sort

Answer Keys (Cont.)

Social Studies Cards

Know

- Early river valley civilizations included the Egyptian settlement in the Nile River valley and delta and the Mesopotamian settlements in the Tigris and Euphrates river valleys.
- The decline of Roman influence in Western Europe left people with little protection against invasion.
- The Declaration of Independence stated grievances against the king of Great Britain and declared the colonies' independence from Great Britain.
- The "Rule of Law" refers to the principle that the government and those who govern are bound by law.
- The Middle Atlantic region was settled chiefly by English-, Dutch-, and German-speaking immigrants seeking religious freedom and economic opportunity.
- The feudal society of the Middle Ages was made up of vassals, serfs, fiefs, and so forth.
- Some early written law codes included the Ten Commandments and the Code of Hammurabi.

Understand

- River valleys' resources attract the settlement of civilizations.
- Early civilizations made major contributions to social, political, and economic progress.
- Fundamental political principles define and shape American constitutional government.
- Exploration and colonization result in the redistribution of populations.
- The feudal system functioned in an interdependent fashion to meet the needs of various groups of people.

Be Able to Do

- Identify, analyze, and interpret primary and secondary source documents
- Develop perspectives of time and place
- Distinguish between relevant and irrelevant information
- Review information for accuracy, separating fact from opinion
- Analyze trends in human migration and cultural interaction
- Formulate historical questions and defend findings based on inquiry and interpretation

KUD Sort

Answer Keys (Cont.)

Math Cards

Know

- A coordinate plane is formed when two number lines intersect at right angles. The x -axis is the horizontal axis and the y -axis is the vertical axis. The two axes meet at the origin, $O(0,0)$.
- A radical in simplest form is one in which the radicand has no perfect square factors other than one.
- The square root of a perfect square is an integer.
- A linear function is a function whose graph forms a straight line.

Understand

- Algebra is a tool for describing and representing patterns and relationships.
- Changing the grouping or the order of addends or factors does not change a sum or product.
- The laws of exponents can be investigated using patterns.
- The operations and the magnitude of the numbers in an expression affect the choice of an appropriate method of computation.
- Polynomial expressions can be used to model real-life situations.

Be Able to Do

- Apply appropriate computational techniques to evaluate an algebraic expression
- Express numbers using scientific notation, and perform operations using the laws of exponents
- Express the square root of a whole number less than 1,000 in simplest radical form
- Find the quotient of polynomials using a monomial divisor
- Relate concrete and pictorial representations for polynomial operations to their corresponding algebraic manipulations
- Translate verbal expressions into algebraic expressions with three or fewer terms
- Use the distributive property to factor out all common monomial factors
- Use the x -intercepts from the graphical representation of the polynomial to determine and confirm its factors

Specials 1 (Physical Education, Health, Foods, Technology, Business) Cards

Know

- The rules and equipment needed for softball
- Facts about tobacco
- Different forms of business ownership; definitions of key business terms

KUD Sort

Answer Keys (Cont.)

- Macronutrients, calorie intake, ratio of body mass to fat
- The amount of fat in foods and size of a serving
- The structures of both the old and the revised food pyramids

Understand

- The performance of each team member influences the success of the team.
- Appropriate encouragement helps people succeed.
- How you feel about tobacco use probably depends on your perspective.
- Each type of business ownership presents unique advantages and disadvantages.
- Keeping your body healthy involves an understanding of the roles of nutrition and exercise.
- The food pyramid represents our current understanding of the balance needed to best sustain humans.
- The levels of the food pyramid exist in an interdependent relationship with one another; change to one level will result in change to at least one of the other levels.
- CAD programs can simplify and speed up the process of design.

Be Able to Do

- Pitch within the “zone”
- Kick at various intensities
- Run to the correct base
- Keep score accurately
- Motivate yourself and teammates
- Make a complete case using defensible evidence based on varied viewpoints
- Conduct research on the health risks associated with tobacco
- Select and explore a form of business ownership that complements specific personal characteristics
- Explain the inner workings of one business form
- Evaluate your own diet and exercise regimen to maximize health
- Apply the theoretical food pyramid to a practical diet plan
- Make appropriate choices from a list of software programs to accomplish a specific goal

KUD Sort

Answer Keys (Cont.)

Specials 2 (Fine and Performing Arts, Foreign Language) Cards

Know

- Author of *Le Petit Prince* and an overview of his life
- Characters, setting, plot, and themes of *Le Petit Prince*
- Vincent Persichetti was a 20th-century composer.
- Note names and melodic intervals
- Appropriate use of art materials
- Principles of design
- Definition of artistic expression
- How to conjugate verbs in imperfect tense

Understand

- Artistic style reflects the artist's culture, time, and personal experiences.
- Use of specific art materials and style are related.
- Space can be manipulated in dance to create different moods.
- Dance is a form of communication.
- Reading literature in the target language is one way to improve vocabulary and increase fluency.
- As in native-language literature, we can see reflections of ourselves in target-language literature.
- Advanced musical technicality and dissonant structure are central to modern musical composition.
- Poetic literature often inspires musical compositions.

Be Able to Do

- Read fluently in the target language
- Demonstrate improved grammatical accuracy in writing and speaking in the target language
- Incorporate new target-language vocabulary into discussion and writings
- Discuss literary elements in the target language
- Sing an assigned part accurately and with expression
- Describe the musical tools used by the composer
- Create a story filled with emotion to communicate, and describe what the accompanying dance would look like
- Do a blind contour drawing of your hand
- Analyze an artist's personal style and use of materials
- Create a facsimile of an artist's work

KUD Sort

Activity

Directions:

- Remove **only** the package of cards from your baggie, place the **header cards** (Know, Understand, Do) on the table, and shuffle the rest of the cards.
- Sort the cards under the appropriate header:
 - KNOW (Knowledge)
 - UNDERSTAND (Big Ideas)
 - DO (Skills)
- When you are satisfied with your groupings, check your results with the answer key (in the baggie).
- Discuss any cards you miscategorized, and answer the reflection questions below.
- Reshuffle the cards before returning them to their baggie.

Reflection Questions:

1. What do the Know goals have in common?

The Understand goals?

The Do goals?

KUD Sort

Activity (Cont.)

2. How would you explain the difference between a Know goal and an Understand goal?

3. Were there any categories you frequently confused? If so, how might you better distinguish between them in the future?

Source: Adapted with permission from an activity by Kristi Doubet, James Madison University.

Tiered KUD Application Activities

Tier 1 Activity

In this activity, you will focus on writing Understand statements.

1. Study the examples and nonexamples of Understand statements in the chart below.

It's probably an Understanding if it . . .	Example	Nonexample
Represents subtle ideas that are not obvious at first glance	Scientists' unique social and educational backgrounds and differences lead to their disagreement about the interpretation of evidence or the development of a theory.	Scientists study the world around them.
Involves multiple layers or multiple meanings	Changing the grouping or the order of addends or factors does not change a sum or product.	$2 + 3 = 3 + 2$
Is an idea that is especially powerful in understanding the discipline and across topics in the discipline	A person's perspective is shaped in part by his or her past experiences.	The Hundred Years' War lasted from 1337 to 1453.
Provides a purpose for the discipline, the reason for studying the discipline, and an explanation for why the discipline is valuable	Dance is a form of communication.	American ballet has been shaped by George Balanchine.
Raises additional questions or paths of thought within the discipline	Use of specific art materials and style are related.	Monet was an impressionist.
Can be understood on a continuum; something that kindergarteners through graduate students could study, albeit at different levels of sophistication	Parts of a system are interrelated.	A system has more than one part.
Can be stated as "I want students to understand that . . .," rather than "I want students to understand . . ."	I want students to understand that voice is the writer revealed.	I want students to understand writer's voice.
Is a pithy statement that reveals a truth about the study or practice of the discipline	Culture shapes people and people shape culture. (This is something that anthropologists spend their lives studying!)	There are lots of cultures in the world.

Source: Adapted from *Tools for High-Quality Differentiated Instruction: An ASCD Action Tool* (pp. 78–79), by Cindy A. Strickland, 2007, Alexandria, VA: ASCD. Copyright 2007 by ASCD.

Tiered KUD Application Activities

Tier 1 Activity (Cont.)

2. Brainstorm: What are the really big ideas in *your* discipline? In other words, if at the end of the year, students forgot the facts or got rusty on the skills, what would you at least want them to walk away understanding?

3. Star those big ideas that are the most important to you or that pertain to a particular unit of study. Place each big idea into the Understand column below. For at least **one** of your Understand statements, list what students would need to know and do to show their understanding. If you need help, refer to the KUD Basics chart on the next page.

KNOW	UNDERSTAND	DO

Tiered KUD Application Activities

Tier 1 Activity (Cont.)

KUD Basics

	Definition	Examples
Know	<p>Most often represented in bullet form; sometimes as a sentence</p> <ul style="list-style-type: none"> • Facts • Dates • Definitions • Rules • People • Places • Vocabulary • Information • Concepts 	<ul style="list-style-type: none"> • There are 50 states in the United States. • Thomas Jefferson • 1492 • The Continental Divide • The multiplication tables • The rules of soccer • The parts of an engine
Understand	<p>Best stated as a sentence beginning with "I want students to understand that . . ."</p> <ul style="list-style-type: none"> • "Big" ideas • Essential understandings • Important (arguable) generalizations • Principles • Theories • The "point" of the discipline or the topic 	<ul style="list-style-type: none"> • Multiplication is another way to do addition. • People migrate to meet basic needs. • All cultures contain the same elements. • Entropy and enthalpy are competing forces in the natural world. • Voice reflects the author. • Use of illegal drugs has both anticipated and unanticipated effects on the human body. • Composers use certain tools to change the mood of a piece of music. • Parts of a system are interdependent. • How you solve a problem depends on your perspective.
Do	<p>The skills of a discipline, including:</p> <ul style="list-style-type: none"> • Basic skills • Communication • Thinking: <ul style="list-style-type: none"> – Analytical – Critical – Creative • Planning • Working • Evaluating 	<ul style="list-style-type: none"> • Analyze text for meaning • Solve a problem to find perimeter • Write a well-supported argument • Evaluate work according to specific criteria • Contribute to the success of a group or team • Use graphics to represent data appropriately • Sort buttons in two piles • Describe the job skills necessary for a given profession

Tiered KUD Application Activities

Tier 2 Activity

In this activity, you will write a KUD plan for a lesson or unit of study. (If you teach more than one subject, work in your favorite subject area.)

1. Study the sample KUD plans in the table below. What is the relationship between the Know, Understand, and Do goal for each plan?

Sample KUD Plans

<p>ELEMENTARY ART</p> <p>KNOW</p> <ul style="list-style-type: none"> • Primary colors <p>UNDERSTAND</p> <ul style="list-style-type: none"> • If you combine two primary colors, you make a new color. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Tell what will happen if you mix two specific primary colors 	<p>SECONDARY ART</p> <p>KNOW</p> <ul style="list-style-type: none"> • Primary and secondary colors found on the color wheel <p>UNDERSTAND</p> <ul style="list-style-type: none"> • The color wheel arranges colors in a logical sequence, helping artists make informed decisions about the colors they use in a painting or other work of art. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Use the color wheel to make and justify decisions for color choice and placement in a work of art
---	--

Tiered KUD Application Activities

Tier 2 Activity (Cont.)

<p>ELEMENTARY SOCIAL STUDIES</p> <p>KNOW</p> <ul style="list-style-type: none"> • Places and roles in a community • Community vocabulary, including <i>need, want, goods, services</i> <p>UNDERSTAND</p> <ul style="list-style-type: none"> • People have needs and wants that are met by different roles within a community. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Explain the different components of a community • Compare, contrast, and evaluate community roles 	<p>SECONDARY SOCIAL STUDIES</p> <p>KNOW</p> <ul style="list-style-type: none"> • The elements of culture <p>UNDERSTAND</p> <ul style="list-style-type: none"> • All cultures contain some of the same elements. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Identify elements of culture in various settings and times • Recognize similarities and differences in cultures
<p>ELEMENTARY SCIENCE</p> <p>KNOW</p> <ul style="list-style-type: none"> • Vocabulary such as <i>precipitation, rain, drizzle, and snow</i> • The four main types of clouds <p>UNDERSTAND</p> <ul style="list-style-type: none"> • Natural signs can be used to predict the weather. • Clouds can be indicators of different weather. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Predict weather using knowledge of clouds • Identify the different types of clouds 	<p>SECONDARY SCIENCE</p> <p>KNOW</p> <ul style="list-style-type: none"> • Parts of a cell <p>UNDERSTAND</p> <ul style="list-style-type: none"> • A cell is a system of interrelated parts. If one part breaks down, the whole cell suffers. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Identify the parts of a cell and describe their function

Tiered KUD Application Activities

Tier 2 Activity (Cont.)

<p>ELEMENTARY LANGUAGE ARTS</p> <p>KNOW</p> <ul style="list-style-type: none"> • Capital and lowercase letters • Letter sounds <p>UNDERSTAND</p> <ul style="list-style-type: none"> • Specific sounds correspond to letters in the alphabet. • Words are composed of letters. • The alphabet gives us a way to communicate. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Identify capital and lowercase letters • Identify and apply beginning sounds of words 	<p>SECONDARY LANGUAGE ARTS</p> <p>KNOW</p> <ul style="list-style-type: none"> • Elements of characterization <p>UNDERSTAND</p> <ul style="list-style-type: none"> • Passages from a text can reveal a character's personality. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Analyze character actions and statements
<p>ELEMENTARY MATH</p> <p>KNOW</p> <ul style="list-style-type: none"> • Coin names and values <p>UNDERSTAND</p> <ul style="list-style-type: none"> • We can combine coins in different ways to make the same amount of money. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Given a supply of pennies, nickels, dimes, and quarters, combine the coins in more than one way to make a set amount of money (e.g., 40 cents) 	<p>SECONDARY MATH</p> <p>KNOW</p> <ul style="list-style-type: none"> • Geometry vocabulary <p>UNDERSTAND</p> <ul style="list-style-type: none"> • Using geometric terms is one way to describe the structure of our environment. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Describe, draw, compare, and classify geometric objects

Tiered KUD Application Activities

Tier 2 Activity (Cont.)

<p>BUSINESS</p> <p>KNOW</p> <ul style="list-style-type: none"> • Different forms of business ownership; definitions of key business terms <p>UNDERSTAND</p> <ul style="list-style-type: none"> • Each type of ownership presents unique advantages and disadvantages. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Select and explore a form of business ownership that complements their personal characteristics; explain the inner workings of one business form 	<p>FOODS</p> <p>KNOW</p> <ul style="list-style-type: none"> • Macronutrients, calorie intake, ratio of body mass to fat • Foods that are healthy for teens <p>UNDERSTAND</p> <ul style="list-style-type: none"> • Keeping your body healthy involves an understanding of the roles of nutrition and exercise. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Evaluate personal diet and exercise regimen to maximize health
<p>PHYSICAL EDUCATION</p> <p>KNOW</p> <ul style="list-style-type: none"> • How to dribble and pass <p>UNDERSTAND</p> <ul style="list-style-type: none"> • Practice makes better! • There is more than one way to get better at a skill. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Improve skill in dribbling and passing 	<p>MUSIC</p> <p>KNOW</p> <ul style="list-style-type: none"> • Circle of fifths <p>UNDERSTAND</p> <ul style="list-style-type: none"> • The circle of fifths provides a shortcut for figuring how to identify key signatures, find related keys, and determine the order of sharps and flats in a key signature. <p>BE ABLE TO DO</p> <ul style="list-style-type: none"> • Use the circle of fifths to <ol style="list-style-type: none"> a. identify key signatures, b. find related keys, and c. add or subtract sharps and flats

Tiered KUD Application Activities

Tier 2 Activity (Cont.)

FRENCH GRAMMAR**KNOW**

- Definition of *verb* and *subject*
- How to conjugate verbs

UNDERSTAND

- Language is made up of patterns; if you can recognize the pattern, you can make a good guess about the form.

BE ABLE TO DO

- Conjugate verbs to match subjects

FRENCH LITERATURE**KNOW**

- Author of *Le Petit Prince* and overview of his life experience
- Characters, setting, plot, and themes of *Le Petit Prince*
- New vocabulary words
- Verb tenses used in text

UNDERSTAND

- Reading literature in the target language is one way to improve vocabulary and increase fluency.
- It is possible to read for pleasure in more than one language!
- As in native-language literature, we can see reflections of ourselves in target-language literature

BE ABLE TO DO

- Read fluently in target language
- Demonstrate improved grammatical accuracy in writing and speaking
- Incorporate new vocabulary into discussion and writings
- Discuss literary elements in the target language
- Analyze a theme found in the book
- Examine your own beliefs and values through a textual lens

Tiered KUD Application Activities

Tier 2 Activity (Cont.)

2. Complete the KUD template for an upcoming unit or lesson.

KUD Template

Write what you want students to know, understand, and be able to do by the end of the learning experience. You may think in terms of a lesson or a unit of study.

KNOW (facts, dates, definitions, people, places, etc.)

-
-
-
-
-
-

UNDERSTAND (I want students to understand that . . .)

-
-
-
-

BE ABLE TO DO (specific skills; start with a verb; **not** classroom activities)

-
-
-
-

Tiered KUD Application Activities

Tier 3 Activity

The best KUD plans are cohesive in nature. Although there tend to be fewer Understand statements than Know or Do ones, each Know or Do goal should be given a purpose and a context by at least one Understand statement. In this activity you will work to refine your ability to write coherent and cohesive KUD goals.

1. Study at least one of the sample unit KUD plans below. Check to be sure that every Know and Do statement has a corresponding Understand statement. If not, eliminate the Know or Do or add an appropriate Understand.

Sample Unit KUD Plan: English

KNOW (facts, dates, definitions, rules, people, places, etc.)

- General:
 - General literary vocabulary: *plot, setting, characters, theme, tone, point of view, protagonist, conflict*
 - Difference between text-to-text, text-to-self and text-to-world connections
- Specific to novel:
 - Author of *The Giver*
 - Characteristics of author's voice
 - Context of novel
 - Novel's plot, setting, characters, theme, tone, point of view, protagonist, conflict, climax

UNDERSTAND (big ideas, principles, generalizations, rules, the “point” of the discipline or topic within the discipline)

I want students to understand that . . .

- General:
 - Authors use specific tools when writing a novel.
 - All good novels include many of the same or very similar literary elements.
 - An author's voice is influenced by his or her own experiences and by the intended audience.
 - Literature is a reflection of ourselves and our society.
- Specific to novel:
 - Memory plays a key role in the continuation of a culture.
 - There is a relationship between pain and pleasure. If one is missing, the other is likely to also be missing.
 - Individuals can make a difference in a society.

Tiered KUD Application Activities

Tier 3 Activity (Cont.)

BE ABLE TO DO (skills of literacy, numeracy, communication, thinking, planning, production, etc.; start with a verb such as describe, explain, show, compare, synthesize, analyze, apply, construct, or solve)

- General:
 - Define the following literary elements: plot, setting, characters, theme, tone, point of view, protagonist, conflict
 - Explain what makes a “good” novel
 - Make text-to-text, text-to-self, and text-to-world connections
- Specific to novel:
 - Identify the novel’s author and her context for writing the novel
 - Summarize the novel’s plot
 - Identify the novel’s setting, characters, theme, tone, point of view, protagonist, conflict
 - Evaluate the overall message of the novel

Sample Unit KUD Plan: Math

KNOW (facts, dates, definitions, rules, people, places, etc.)

- What data is and why we collect, interpret, and display it
- Different ways to display data: graphs and charts

UNDERSTAND (big ideas, principles, generalizations, rules, the “point” of the discipline or topic within the discipline)

I want students to understand that . . .

- You can pack a lot of information into a small space by using graphs and charts.
- There is usually more than one way to represent the same data.
- Some representations are more useful than others depending on the type of data, the intended audience, and the message to be communicated.

BE ABLE TO DO (skills of literacy, numeracy, communication, thinking, planning, production, etc.; start with a verb such as describe, explain, show, compare, synthesize, analyze, apply, construct, or solve)

- Collect data
- Analyze data
- Display data appropriately
- Interpret charts and graphs

Tiered KUD Application Activities

Tier 3 Activity (Cont.)

Sample Unit KUD Plan: Technology—Searching the Web

KNOW (facts, dates, definitions, rules, people, places, etc.)

- Common search engines and how they work
- How to make sense of the results
- What to look for when choosing sources

UNDERSTAND (big ideas, principles, generalizations, rules, the “point” of the discipline or topic within the discipline)

I want students to understand that . . .

- Different search engines produce different results due to the way they classify, sort, and prioritize information.
- The more you can refine your search parameters, the more useful the results.
- Not every Web site is created equal. The burden is on you, as the reader, to establish the validity, authorship, timeliness, and integrity of what you find.

BE ABLE TO DO (skills of literacy, numeracy, communication, thinking, planning, production, etc.; start with a verb such as describe, explain, show, compare, synthesize, analyze, apply, construct, or solve)

- Use common search engines
- Choose the appropriate search engine for a particular task
- Refine a general search to seek more specific information
- Evaluate the usefulness of a Web site as a resource

2. Complete the KUD Template on the next page for your own unit or lesson of study. Ensure that every Know or Do goal has a corresponding Understand goal to give it context and meaning.

Tiered KUD Application Activities

Tier 3 Activity (Cont.)

KUD Template

Know	Understand	Do

Source: Adapted with permission from *Tools for High-Quality Differentiated Instruction: An ASCD Action Tool* (p. 88), by Cindy A. Strickland, 2007, Alexandria, VA: ASCD. Copyright 2007 by ASCD.



KUD Reference Cards

Rationale and Purpose

The following documents are quick references for teachers to use when writing KUD plans.

Directions

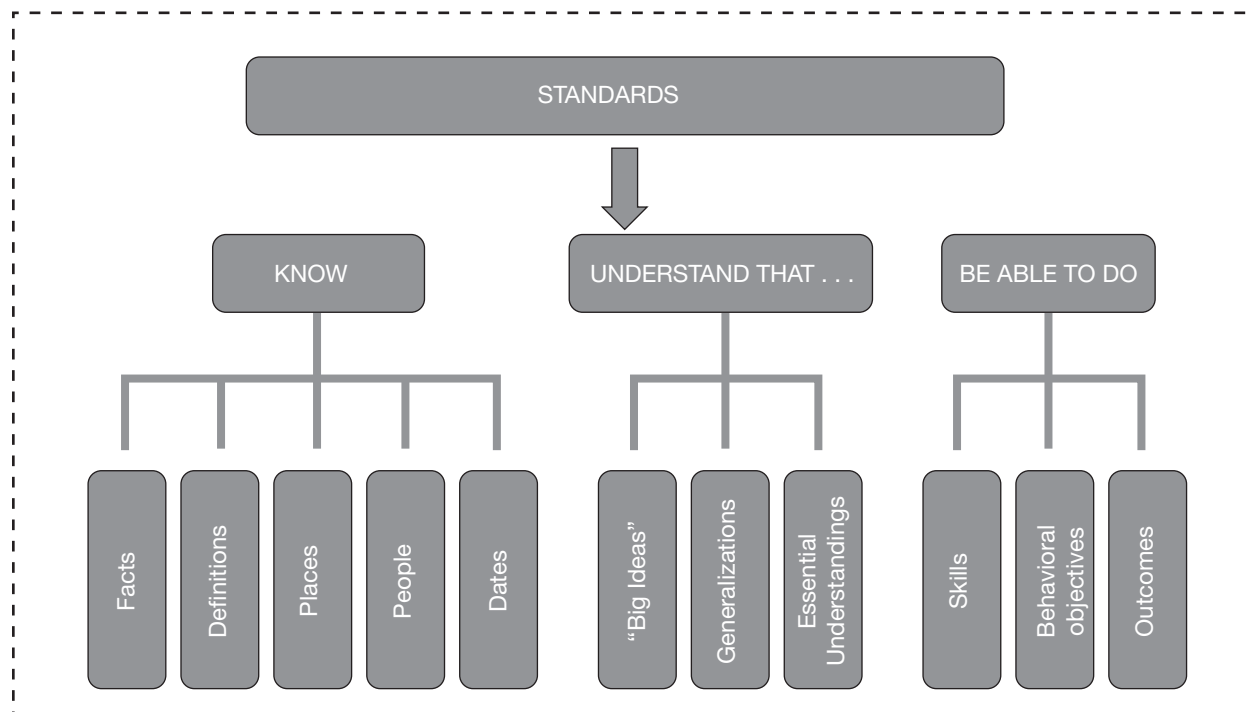
Laminate multiple copies of each card, and distribute them to teachers.

Differentiation Option

Provide reminder cards only for those who need or ask for them.

KUD Reference Cards

KNOW	UNDERSTAND	DO
<p>Most often represented in bullet form; sometimes as a sentence</p> <ul style="list-style-type: none"> • Facts • Dates • Definitions • Rules • People • Places • Vocabulary • Information • Concepts 	<p>Best stated as a sentence beginning with “I want students to understand that . . .”</p> <ul style="list-style-type: none"> • “Big” ideas • Essential understandings • Important (arguable) generalizations • Principals • Theories • The “point” of the discipline or the topic 	<p>The skills of a discipline, including: Basic skills</p> <ul style="list-style-type: none"> • Communication • Thinking: • Analytical • Critical • Creative • Planning • Working • Evaluating



KUD Reference Cards

(Cont.)

It's probably an UNDERSTANDING if . . .

- It represents subtle ideas that are not obvious upon first glance.
- There are multiple layers or multiple meanings involved.
- It is an idea that is especially powerful in understanding the discipline.
- It requires or encourages depth and breadth of knowledge.
- It provides a purpose for the discipline, the reason for studying the discipline, or an explanation for why the discipline is valuable.
- It represents core ideas of the discipline.
- It raises additional questions or paths of thought.
- It is an idea that can be understood on a continuum—something that kindergarteners through graduate students could study, albeit at different levels of sophistication.
- It could cause disagreement, argument, or misunderstanding.

Examining a Pre-assessment

Sample 1: U.S. Government

Part 1: Identifications

Please identify the following. You do not have to write complete sentences. Indicate how sure you are of your answer with the following code: C= Confident; P= Pretty sure; G = Guess. If you have never heard of the term, write HLY (Haven't Learned Yet).

1. Balance of power:
2. Bill of Rights:
3. Civil rights:
4. Constitution:
5. Declaration of Independence:
6. Democracy:
7. Government:
8. Ideals:
9. Separation of powers:

Part 2: Short Answer

Answer the following with as much detail as you can.

1. Why should we learn about the Declaration of Independence, the Constitution, and the Bill of Rights?
2. What do these documents have to do with *your* life?

Examining a Pre-assessment

Sample 1: U.S. Government (Cont.)

3. What is a government? Why do we have one?

4. How is the U.S. government structured? Give as much detail as possible. You may write or diagram your answer.

5. What is the role of the U.S. Supreme Court? What is its importance to U.S. citizens?

Part 3: Charts

Fill in the charts below with as much information as you can.


Chart A:

	Declaration of Independence	Constitution	Bill of Rights
WHO wrote this document			
WHY this document was written			

Examining a Pre-assessment

Sample 1: U.S. Government (Cont.)

Chart B:

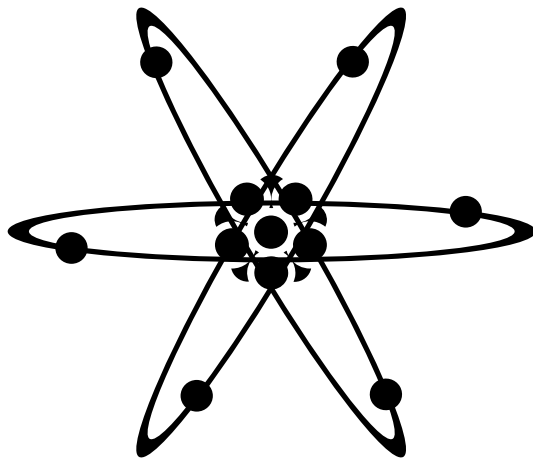
Meaning— What does it mean to have rights? Inalienable rights?	Importance— Why do Americans care so much about rights?
<div style="text-align: center;">  <p>CONSTITUTIONAL RIGHTS</p> </div>	
Examples— Rights granted to us by the U.S. Constitution	Nonexamples— Rights not granted to us by the U.S. Constitution
What happens in the United States when a person's rights are violated? What <i>should</i> happen? Why do you say so?	

Source: From *The Parallel Curriculum in the Classroom, Book 2: Units for Application Across the Content Areas K–12* (pp. 271–272), by C. A. Tomlinson, S. N. Kaplan, J. H. Purcell, J. H. Leppein, D. E. Burns, & C. A. Strickland, 2005, Thousand Oaks, CA: Corwin. Copyright 2005 by Corwin Press. Reprinted with permission.

Examining a Pre-assessment

Sample 2: Science

1. In this diagram, identify the following:



Protons

Neutrons

Electrons

Nucleus

2. What is this a diagram of?
3. What does it mean when we say the atom is a building block?
4. Why do scientists study atoms?

Examining a Pre-assessment

Sample 2: Science (Cont.)

5. In what professions would it be important to know about atoms? Explain your thinking.

6. Circle the area of science that you are most interested in.

Biology

Chemistry

Physics

7. If you were asked to show how atoms join together to make molecules, which of the following would you choose? Why?

- Diagram how and why atoms join to make molecules.
- Write or tell a story about the making of a molecule.
- Explain in pictures and/or words why understanding how atoms join together into molecules is important in the real world.

Examining a Pre-assessment

Sample 3: Music

1. Match each picture to its name.

a.



k.



___ Oboe

b.



l.



___ Harp

___ Timpani

c.



m.



___ Cymbals

___ Piano

d.



n.



___ Viola

___ Bass

___ Trombone

e.



o.



___ Flute

___ Violin

___ Clarinet

f.



p.



___ Horn

___ Tuba

g.



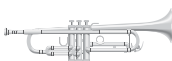
q.



___ Cello

___ Snare drum

h.



r.



___ Trumpet

___ Baritone

i.



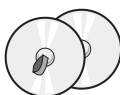
s.



___ Bassoon

___ Saxophone

j.



Examining a Pre-assessment

Sample 3: Music (Cont.)

2. Organize the instruments into categories of your choosing. Explain why you organized them the way you did.
3. How do instrument(s) produce sound?
4. Why do orchestras or bands include so many different instruments?
5. What instrument(s) do you play? What instruments do members of your family play?
6. What instrument do you **wish** you could play? Why?
7. What kind of music do you listen to at home?
8. Would you rather play or sing a song or listen to a song?

Examining a Pre-assessment

Activity

Directions:

- Working alone, study one of the sample pre-assessments or a pre-assessment you or your colleagues have used in the past.
- Answer the following questions about your pre-assessment.

Pre-assessment I examined: _____

1. In what ways does the pre-assessment provide information about students' prior knowledge, understanding, and skill? About their interests? About how they like to learn?

2. What might you add to the pre-assessment if you were to adapt it for a similar unit? Why?

Examining a Pre-assessment

Activity (Cont.)

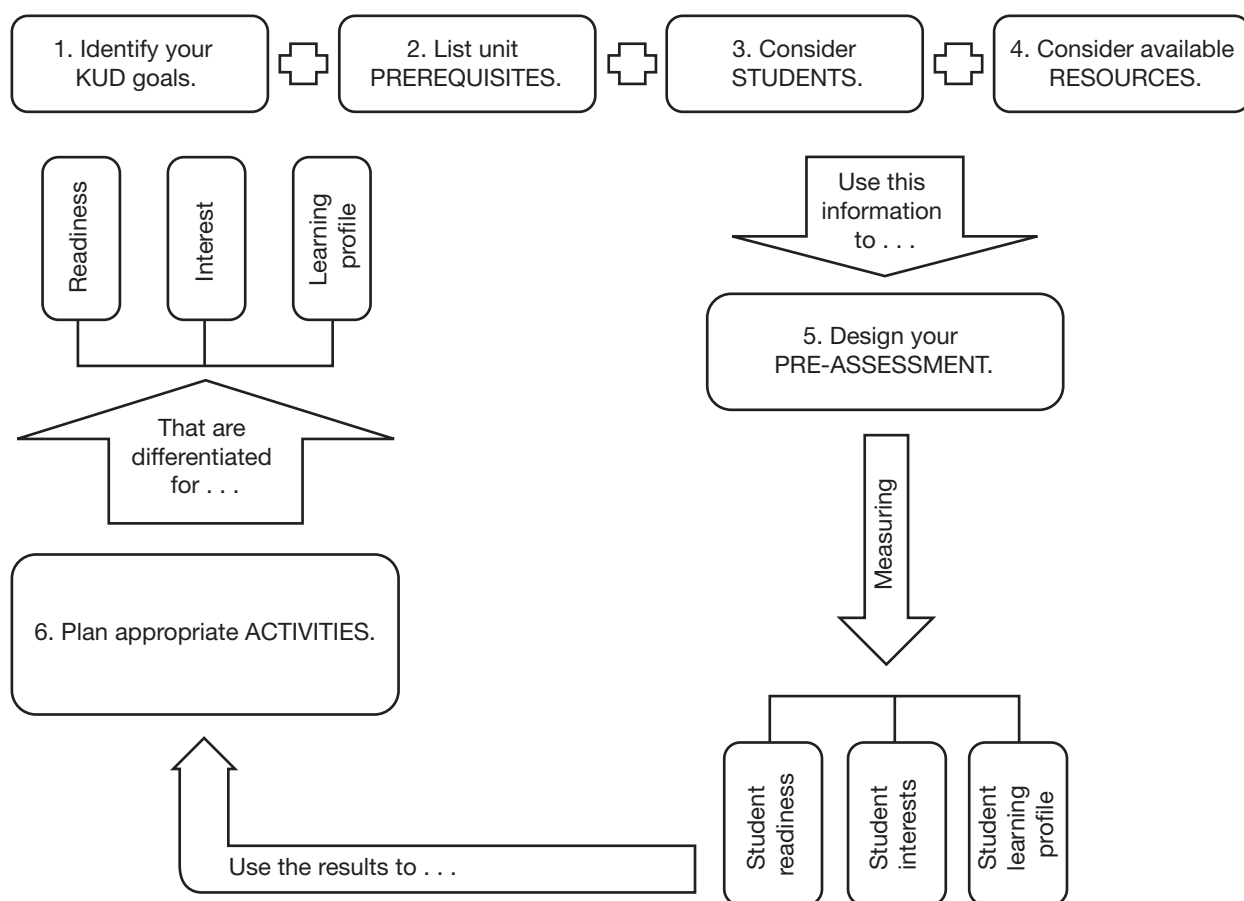
3. What might you eliminate if adapting it? Why?
4. Based on the results of the pre-assessment, what changes might you expect the teacher to make in the teaching of this unit?
5. Meet with others who studied the same pre-assessment. Share your analyses with one another. What insights did your peers have?

Designing a Pre-assessment

Activity

Use the flowchart and Step-by-Step Planner below to help you to design a pre-assessment for an upcoming unit of study.

Flowchart



Designing a Pre-assessment

Activity (Cont.)

Step-by-Step Planner

Step 1: Consider.

1. What is your unit KUD plan?
2. Which aspects of the KUD plan are the most important?
3. What prerequisite skills are necessary to be successful with this KUD plan?
4. Who are your students? How do they vary?
5. Of all the ways they vary, which differences are greatest?
6. For which student differences do you have or could you gather appropriate resources?

Designing a Pre-assessment

Activity (Cont.)

Step 2: Plan.

7. Sketch out possible pre-assessment items that would help you identify those differences in students **for which you are likely to differentiate.**
8. Ask a colleague to identify your purpose in including each item. Refine items as necessary.
9. Decide whether you will administer the pre-assessment as a whole or in pieces.
10. Plan a date or dates to administer the pre-assessment sufficiently in advance of the start of the unit so that you have time to interpret the results prior to planning instruction.
11. Administer the pre-assessment.
12. Evaluate and record the results in such a way that you can identify student differences for separate aspects of the KUD plan rather than recording an overall impression of student knowledge, understanding, and skill. For example, in recording results from the music pre-assessment, you might use the following format:

Designing a Pre-assessment

Activity (Cont.)

Sample Pre-assessment Recording Format

Instruments of the orchestra	AG = Above grade knowledge OG = On grade knowledge BG = Below grade knowledge
How instruments are grouped	1 = Knows traditional groupings and accurately places instruments into each category 2 = Knows traditional groupings but makes minor mistakes in assigning instruments into categories 3 = Does not know traditional groupings but groups instruments logically 4 = Does not know traditional groupings and groups instruments illogically
How sound is produced	1 = Advanced understanding 2 = Rudimentary understanding 3 = Little or no understanding
Purpose of different instruments	1 = Advanced understanding 2 = Rudimentary understanding 3 = Little or no understanding
Background knowledge	1 = Plays an instrument 2 = Family member plays an instrument 3 = Does not play an instrument
Type of music preferred	CI = classical Co = country P = pop Rk = rock Rp = rap Rg = religious
Performance preference	P = play S = sing L = listen

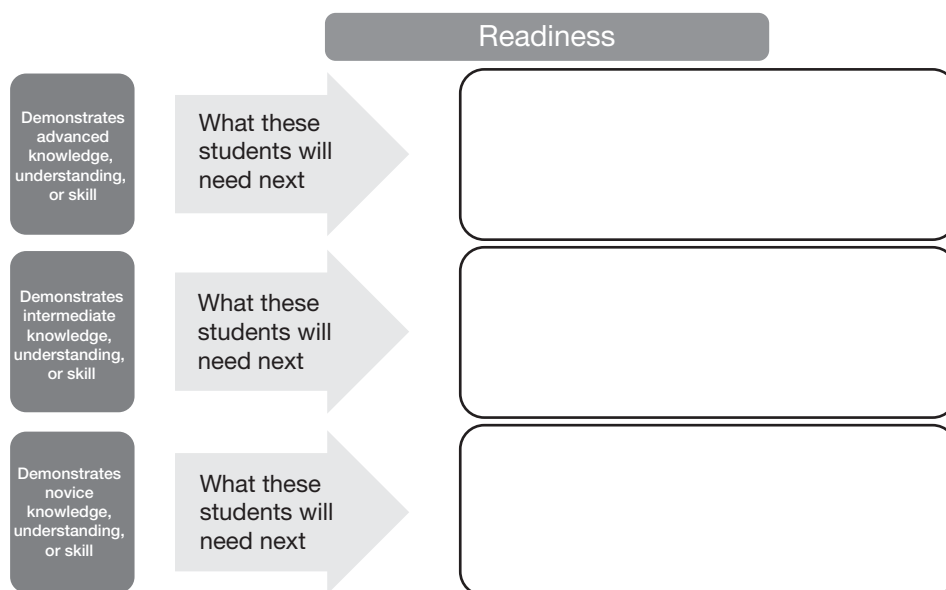
Designing a Pre-assessment

Activity (Cont.)

Sample Pre-assessment Summary



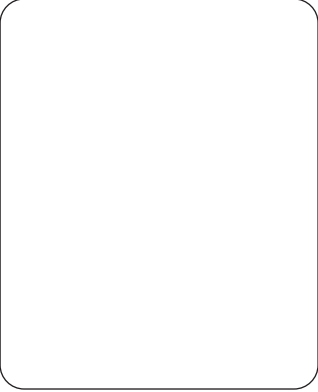
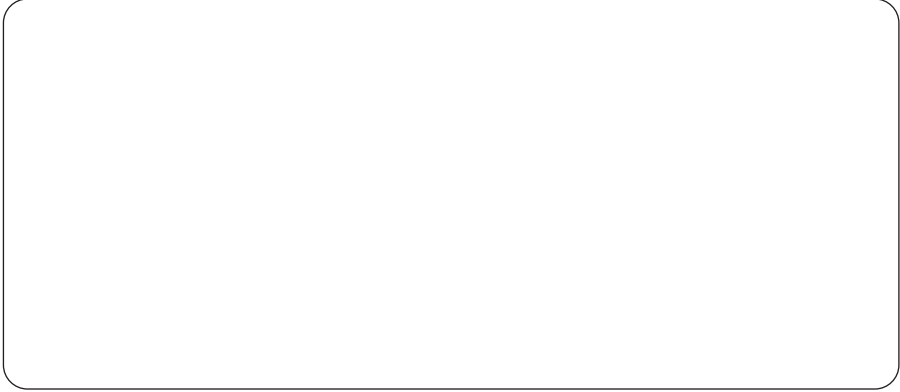
Student	Instruments of the orchestra	Instrument groupings	How sound is produced	Purpose of instruments	Background knowledge	Type of music preferred	Performance preference
Amanda	AG	2	1	2	2	P	L
Katie	AG	3	1	1	1	Rg	PSL
Matthew	OG	2	2	2	1	Rk	PL
Jessa	BG	3	3	3	3	Rk	SL



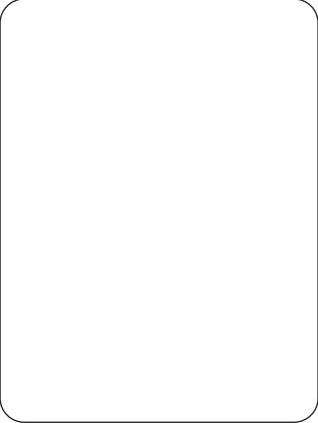

13. Use the pre-assessment results and other information to group students for appropriate differentiation. Remember that grouping does not necessarily mean students will work in a group. It may refer to how you mentally group students for the various versions of an activity. Use the following charts to help you plan.



Designing a Pre-assessment

Activity (Cont.)

Interests	
Identified Interests	How I might differentiate for these interests
	
	

Learning Profiles	
Identified Learning Profiles	How I might differentiate for these learning profiles
	
	

Using Formative Assessment Data to Plan for Differentiation

Activity

Complete the following table using these guiding questions.

- Column 1: Study your assigned exit card or journal prompt.
- Column 2: Is the teacher is looking for information about student knowledge, understanding, or skill, or a combination of these? Be ready to justify your answer.
- Column 3: What range of answers should the teacher expect? What would indicate no, some, and sophisticated levels of knowledge, understanding, or skill?
- Column 4: Suppose the teacher gets a wide range of answers to the prompt. What might he or she do as a follow-up to ensure that all students have the opportunity to grow? Be specific.
- Anchor activity: If you finish before the others, complete at least one of the following:
 - a. Use the last row of the table to devise and analyze an exit card or journal prompt that would work in your own classroom.
 - b. Describe or suggest ways that the teacher might differentiate one of the prompts to meet varied readiness, interest, and/or learning profile needs.

Using Formative Assessment Data to Plan for Differentiation

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
Draw a picture to show what you learned about magnets from the experiment we did today.			
Write or draw three words you know that have a short vowel sound.			
List: 3 things you learned today 2 things you'd like to learn more about 1 question you still have			
We have been learning about the green-house effect. Define the term. Explain or diagram the importance of this issue to human survival. What questions do you have about this topic?			

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
Solve for x : $2x + 3 = 23$ Name a real-life situation in which you might use an equation like this one.			
What does multiplication have to do with shopping?			
The muddiest point for me today is . . .			
Choose one: • What does order of operations mean? Be sure to show that you know the cor- rect order as part of your answer. • What might happen if there were no standard “order of operations”? Give a specific example. Be sure to show that you know the correct order as part of your answer.			

Using Formative Assessment Data to Plan for Differentiation

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
What are some tools we could use to measure?			
Why do historians use more than one source for information?			
What is the purpose of a hero in a story?			
Explain the difference between simile and metaphor. Give some examples of each as part of your explanation.			

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
We have been learning about plants. Draw a picture of a plant, and label its parts. Does every plant have these parts? Why or why not?			
Draw a clock that says 7:15.			
How is a tree like a person?			
In the story we are reading, who would you say is a good friend? Why?			

Using Formative Assessment Data to Plan for Differentiation

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
What are dynamics? Why are they important? List examples you might see in a piece of music.			
Of the rights granted to you by the Constitution, which one right is most important to you? Why? What might make you change your mind about its importance?			
Is it ever OK for a musician to ignore dynamic markings? Explain your thinking.			
Write down De Morgan's Law. Why do programmers need to know this law?			

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
Draw and label the parts of a stage.			
Your friend just won a race. What Spanish phrase might you use to praise your friend?			
Based on what happened in today's game, what skill do you (or your team) most need to work on?			
What happens when you mix two primary colors? Give an example.			



Using Formative Assessment Data to Plan for Differentiation

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
Why does a town need firefighters and police officers?			
How is a swing set like a scientific experiment?			
What's one thing I could do to help you learn better?			
Check one: Today's lesson moved: ___ Too slowly for me. ___ At the right speed for me. ___ Too fast for me.			

Using Formative Assessment Data to Plan for Differentiation

Activity (Cont.)

Prompt or Assignment	Is the Teacher Measuring K, U, or D? (Explain your thinking)	What to Look for in Answers (the range of likely responses)	What Should Happen Next? (Ideas for follow-up differentiation)
My example:			



Planning a Formative Assessment

Activity

In this activity, you will practice designing an appropriate exit card to use with students during the course of a unit of study.

Part 1: Define your vision.

Write your unit KUD statements below. Which aspects of your unit objectives do you want your exit card to focus on? Are you looking for information about knowledge? Understanding? Skill? A combination? Highlight or star those aspects of these areas that you will attempt to measure.

KNOW	UNDERSTAND	DO

Part 2: Design your prompt.

For this exercise, design an exit card prompt that measures aspects of your KUD goals.

Exit Card Prompt:

Challenge (optional): How might you differentiate the prompt to respond to key differences in your students' readiness, interest, and/or learning profile?

Variations:

Planning a Formative Assessment

Activity (Cont.)

Part 3: Interpret results.

What would an incorrect answer look like? A correct answer? A partially correct answer (if applicable)?

If you are measuring knowledge or skill:

Sample Correct Answer	Sample Incorrect Answer

If you are measuring understanding:

Answer Showing Novice/ Below-Grade-Level Understanding	Answer Showing Intermediate/ Grade-Level Understanding	Answer Showing Advanced/ Above-Grade-Level Understanding

Part 4: Use the results to differentiate.

Student's Current Level of Knowledge, Understanding, or Skill	Follow-Up Activity

Sample Performance Task Planner

Part Three

Differentiating a Summative Assessment

Performance Tasks

Imagine that you are a personal trainer hired by the school district to help improve the fitness of district staff. Goals include weight reduction and improved muscle strength. Design a well-balanced 8-week program that will meet the staff's needs.

You must paint your house. Figure out the total volume of paint you need, as well as its cost.

You serve as a case worker at the psychiatric hospital where Holden Caulfield is telling his story. After a close reading and discussion of Holden's account of the events of the preceding December, write a letter to Holden's parents to describe Holden's behavior and explain what (if anything) is wrong with him. Cite examples from the text to support your analysis.

The local children's museum is looking for ideas on how to help children understand the impact of geography on culture. Make a detailed plan for a museum display to submit to the selection committee.

You have just returned from an adventure where you were unexpectedly dropped into a new environment. Back home, you wish to tell your classmates what happened to you and how you survived. Your job is to explain the resources of a particular habitat. Your work must show how humans meet their needs for shelter, food, water, and clothing in your assigned habitat. You may build a model of the environment that shows how you met your needs, write a series of letters about your experiences, or draw a series of illustrations for a picture book.

We need a new school song! Compose a song that is simple to play and expresses what is most important for people to know about our school.

Source: Task 3 adapted from *The Understanding by Design Professional Development Workbook* (p. 150), by J. McTighe and G. Wiggins, 2004, Alexandria, VA: ASCD. Copyright 2004 by ASCD.

Differentiating a Summative Assessment

Activity

Directions:

- Use the sample performance task you are assigned or one of your own. Use the template on the next page to (1) identify the objective or KUD goals for the task and (2) brainstorm ideas for differentiating the tasks to meet varied student readiness, interest, and learning profile needs.
- Be ready to explain your thinking. Remember that if you differentiate the task, the resulting versions must still give you clear information on what the student knows, understands, or is able to do.

Considerations for Differentiation

- Who might need extra challenge? For these students, you could design a more sophisticated task or more complex challenge, a problem that is less well-defined, or a setting or context that is less familiar, or you could ask students to overcome more than one obstacle in accomplishing the task.
- Who might need extra support to be successful? Consider graphic organizers, templates, time lines, background information, vocabulary lists, technology support, and other resources. Design tasks that are more familiar, are well-defined, and have only one obstacle to overcome.
- To match your KUD goals, do all students have to play the same role? Could students choose or be assigned authentic roles that closely match their interests and learning profile? Do some roles require a more sophisticated understanding of content?
- Could you vary the audience students will target? For example, you could ask advanced students to present to a more sophisticated audience or use more complex tools or techniques. Some students may need more familiar audiences.
- What will students produce? Is there more than one product that would show student knowledge, understanding, and skill yet appeal to varied student interests and learning profile?

Differentiating a Summative Assessment

Activity (Cont.)

Differentiated Summative Assessment Template

Original Task:	
Possible KUD Goals:	<p>Know:</p> <p>Understand:</p> <p>Do:</p>
Thoughts About Differentiation:	



Student Variance Reminder Card

Rationale and Purpose

Give this card to teachers to help remind them of ways that students are likely to vary.

Directions

Laminate multiple copies of the card, and distribute them to teachers.

Differentiation Option

Provide reminder cards only for those who need them or ask for them.

Student Variance Reminder Card

INTERESTS	LEARNING PROFILE	READINESS
<ul style="list-style-type: none"> • Passions • Hobbies • Family interests or pursuits • Organizational affiliations: after-school clubs, extracurriculars • What they watch on TV • Where they go on vacation • The kind of music they listen to • The friends they hang out with • Electives they take 	<ul style="list-style-type: none"> • Learning styles: visual, auditory, kinesthetic; whole-to-part vs. part-to-whole; concrete versus abstract; sequential versus random, etc. • Intelligence preferences: Sternberg—creative, analytical, practical; Gardner—verbal-linguistic, logical-mathematic; visual-spatial, bodily-kinesthetic, musical-rhythmic, interpersonal, intrapersonal, naturalist, existential • Environmental preferences: temperature, light, availability of food and drink, presence or absence of background noise or music • Gender or culture related preferences: competition versus collaboration, individual versus group emphasis • Group orientation: work alone or with others; focus on peers versus focus on adult 	<ul style="list-style-type: none"> • Attitude toward school, subject, or topic • School or general experience with topic or aspect of topic • Knowledge, understanding, and skill in topic prerequisites or related topics • Misunderstandings about the topic or discipline • Overgeneralizations about the topic or discipline • Sophisticated use of vocabulary of the topic or discipline • Evidence of skills of the discipline • Insightful connections between the current topic and other topics in the discipline or in other disciplines • General communication, thinking, reasoning skills, etc.

Looking For Respect in All the Right Places

Scenarios

Scenario 1

Teacher A is helping students learn about simple machines and their uses in the real world. For most students, this is a fairly new topic. She does have a few students, however, who studied this in depth last year in the gifted pull-out class. When she assigns practice activities, she figures she will ask each experienced student to work in a small group with students who are new to the topic so that they can help those who are not as advanced in their knowledge of the topic. She figures that will help the advanced students, too, because students learn so much by teaching others.

Scenario 2

Teacher B is assigning math homework. Some of her students are still struggling to master converting fractions to decimals, some understand the process but need more practice, and some are fairly proficient. Because she knows that it will take longer for some students to complete the problems, she decides to assign 10 problems to struggling students, 20 problems to on-grade-level students, and 30 problems to advanced students.

Scenario 3

Teacher C likes to give students options when completing a culminating project in social studies. She typically tells them they can write a report, prepare a PowerPoint presentation, or give a speech that reveals their knowledge, understanding, and skill with a unit of study. However, one of her students is a really poor writer, so she asks him to do a report to give him additional practice with that skill.

Looking For Respect in All the Right Places

Scenarios (Cont.)

Scenario 4

Student D got a 100 on a pre-test that assessed his ability to use PowerPoint. So instead of the class demonstrations and assignments, his teacher asks him to design a rubric that he could use to judge the professional quality of a PowerPoint presentation. His task, over several days, is to use that rubric to evaluate several examples the teacher found on the Web. For fun, the teacher also throws in a presentation that she herself has designed. Student D must choose one of the examples and redo it so that it looks more professional. He will present both the “before” and “after” versions to the class.

Scenario 5

Teacher E is teaching his students to design pop-up cards that exemplify the style of different artistic movements. He has differentiated the assignment so that students can choose the two movements that most interest them. The methodology for the project is quite complex, so he designs a version of the assignment that is much simpler to complete. Because three students are non-English speakers, he assigns them to the simpler task.

Scenario 6

Teacher F is assigning a chapter in the science text. She knows that some students in her high school class read at an elementary level, some at a middle school level, some at grade level, and a few at a postsecondary level. But she only has one textbook. She tells students that she knows that some of them will have a hard time with the reading, but just to do as much of it as they can.

Looking For Respect in All the Right Places

Scenarios (Cont.)

Scenario 7

Teacher G is helping students learn about simple machines and their uses in the real world. A few students studied this in depth last year in an after-school enrichment class, but it is a fairly new topic for most students. Teacher G does not want to bore the experienced students with introductory lessons and worksheets, so he lets them work with building materials in the back of the room to construct a Rube Goldberg device that incorporates each type of simple machine at least once. The rest of the students will complete a packet of worksheets.

Scenario 8

Teacher H wants all students to complete outside reading. He asks each student to read 10 books per semester and record their reactions to the books in a journal. He provides a number of prompts to help them know what to write. Teacher H knows that a few students in his class read considerably above grade level, so he assigns them 20 books per semester.

Scenario 9

Teacher J likes to give students options when completing a culminating project. He typically tells them they can write a report, prepare a PowerPoint presentation, give a speech, design a Web page, write a skit, or design a series of posters. All work must meet a provided list of criteria. However, one of his students has a really hard time making choices, so he decides to limit this student's choices to three. He tries to pick three options that this student would find interesting.

Looking For Respect in All the Right Places

Scenarios (Cont.)

Scenario 10

One of Teacher K's students got a 100 on her word processing pre-test, so the teacher sends her to the library to do an independent research paper on the history of computers.

Scenario 11

Teacher L is assigning a project for which students will compare and contrast the musical styles of two composers of their choice. Two students in the class are classified as special education students, so she figures they will have trouble completing the fairly complex compare and contrast matrix she has designed. She assigns these students to study one composer, instead.

Scenario 12

Teacher M is assigning a reading in the psychology text on the multiple intelligence theories of Howard Gardner and Robert Sternberg. She has prepared questions for students to answer based on their reactions to the reading. She believes the reading level of the text is appropriate for most of her students, so she asks them to read the section in the text on this topic. However, a few students read and comprehend at a much higher level, so she gives them a reading on this topic from the AP text she has borrowed from her colleague down the hall.

Looking For Respect in All the Right Places

Activity

Directions:

- Read the assigned scenario.
- Discuss the scenario with your partner, and answer the following questions.

Scenario Number:

Is this an example of respectful differentiation? Why or why not?

How would you improve the assignment and adapt it for your class?

Looking For Respect in All the Right Places

Activity (Cont.)

Scenario Number:

Is this an example of respectful differentiation? Why or why not?

How would you improve the assignment and adapt it for your class?

Evaluating Differentiated Activities

Samples

Sample 1—Art: Choosing a Subject

Instructional goal: Understand how artists choose a subject for their work.

Prepare an oral explanation for a classmate of why your subject is important enough to paint.	Prepare a flowchart that illustrates how you go about choosing a subject or setting for your painting.	Make a soundscape (no words) that captures the same kind of feeling you wish your painting to capture.
Create a skit or pantomime that illustrates the right and the wrong way to go about choosing a subject for your work.	Find a quiet space, and write me a letter telling how you go about deciding on a subject for your painting. Let me inside your head!	Go outside to find inspiration for your painting. Sketch patterns, textures, and moods in nature that you wish to introduce into your work. How did this experience influence the final product?

Sample 2—Science

Instructional goal: Communicate knowledge about the rain forest.

Describe the rain forest using as much information as you can. Involve as many of your senses as possible in your description.	Describe how your life would change if you moved to the canopy of the rain forest, using as much information as you can about the canopy, involving as many of your senses as possible in your description, and explaining why these changes would take place.
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Sample 3—Social Studies

Instructional goal: Describe the interaction of Native Americans and the early settlers.

Diagram or model the relationship between the early settlers and American Indians. Show the positives and negatives that came from that relationship.	Present an argument for or against the following: Did early settlers or American Indians benefit more from their relationship? Be sure to consider how someone taking the opposite position might respond as you prepare your most convincing argument.
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Evaluating Differentiated Activities

Samples (Cont.)

Sample 4—Music Appreciation

Instructional goal: Compare the musical styles of Ives and Elgar.

Basso	Alto	Soprano
Using the provided grid, compare the musical styles of Ives and Elgar. Note that some cells are already filled in for you. Consider type of compositions, instrumentation, cultural influence, and at least one other variable.	Using the provided grid or another graphic organizer of your choice, compare the musical styles of Ives and Elgar. Consider type of compositions, instrumentation, cultural influence, and at least one other variable.	In a graphic organizer of your choice, compare and contrast the musical styles of Ives and Elgar. Include at least four important variables for comparison. Be ready to justify your choice of variables.

Sample 5—Computer-Aided Design

Instructional goal: Identify the capabilities and benefits of computer-aided design (CAD) software.

Practical	Creative	Analytical
Create and print a simple technical drawing using the CAD program. Label your drawing, and explain what command capabilities you used to make the drawing. Be ready to explain how specific tools work to simplify your task.	Write a paragraph telling how you would design an improved version of the CAD software you are using. Address drawing and command capabilities. Why would architects want to buy your “new and improved” version?	Write a paragraph explaining why the CAD drawing system results in faster and easier technical drawings. List several command capabilities, and explain why an architect would choose to use CAD programs instead of pencil techniques.

Sample 6—Literature (or Advanced French)

Instructional goal: Compare the perspectives of the two main characters in this novel.

Practical Prompt	Analytical Prompt	Creative Prompt
Why is it important that the Little Prince and the aviator understand each other's viewpoints?	In what ways are the Little Prince's and the aviator's worldviews similar and different?	How might the Little Prince's worldview be different if, like the aviator, he had lived his entire life on Earth?

Evaluating Differentiated Activities

Samples (Cont.)

Sample 7—Math

Instructional goal: Design, carry out, and share the results of a survey.

Below Grade	On Grade	Above Grade
<p>Design a survey to distribute to your classmates. Follow the steps below:</p> <ol style="list-style-type: none"> 1. Write your question. 2. Design four likely answers to the question. 3. Distribute your survey. 4. Based on the results, fill out the provided frequency table. 5. Place the results into a bar graph or pie chart format. (You may ask your teacher for sample graphs.) 6. Write a brief summary or prepare an oral presentation that communicates the results of your survey and answers the following questions: What was your question? Who did you ask? What were the results? 	<p>Design a survey to distribute to your classmates. Follow the steps below.</p> <ol style="list-style-type: none"> 1. Write your question. 2. Design four likely answers to the question. 3. Distribute your survey. 4. Design a frequency table to help you tabulate the results. 5. Place the results into an appropriate graph. 6. Write a brief summary of the results of your survey for publication in the school newspaper. 	<p>Design a survey to distribute to your classmates. Follow the steps below:</p> <ol style="list-style-type: none"> 1. Write your question. 2. Design four or five likely answers to the question. 3. Distribute your survey. 4. Compile your data using an appropriate frequency table. 5. Choose a graph design that would best communicate the data you collected. Be ready to explain why you chose the type of graph you did and why your choice was a good one. 6. Write an analysis of your survey as if it were an article for a math journal. What was your question? Who did you ask? What were the results? What are possible sources of error? What are the real-world implications for your findings?

Sample 8—Biology

Instructional goal: Describe the parts of a cell and how they support the work of the cell.

<p>You have been hit by an alien ray and have been shrunk small enough to travel through the bloodstream. Write a narrative or a play to describe what you see as you come upon a specific cell and what happens to you once you get inside the plasma membrane.</p>	<p>You are a scientist working in New Mexico when a spaceship crashes. You are charged with figuring out the biology of the alien species that was in the spaceship. You do some preliminary research and find that this alien has something similar to cells, just like Earth's organisms. Compare and contrast all of the Earth's organism's organelles with the alien species'. Write a lab report on your findings.</p>
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Evaluating Differentiated Activities

Samples (Cont.)

Sample 9—Reading

Instructional goal: Given a set of words or picture cards, sort according to similar attributes.

Novice	Intermediate	Advanced
Sort the cards into two piles: Pile 1 is for words that begin with consonants, and pile 2 is for words that begin with vowels.	Sort the cards into two piles: Pile 1 is for words with long vowels, and pile 2 is for words with short vowels.	Sort the cards into two piles. Be ready to explain why you sorted them the way you did.

Sample 10—Nutrition

Instructional goal: Plan a healthy menu.

You are planning a party. Decide who the party is for and when and where it will take place. Then design a healthy, balanced menu for the party. Be ready to explain your choices.

Evaluating Differentiated Activities

Activity

Use the following questions to help you evaluate sample differentiated activities:

1. What makes this high-quality or poor-quality curriculum?
2. How does each version of the task appear to lead to the same goals (KUD)? If this isn't true, what changes need to be made to ensure that each task supports the KUD goals?
3. How are the differentiated tasks equally respectful?
 - a. Is each version equally engaging from the perspective of the students it's designed for? If not, what changes could be made to ensure equal engagement?
 - b. Does each version require students to stretch as much as possible? If not, what changes could be made to ensure that each task is equally challenging?

Planning a Tiered Activity

Activity

Step 1: Devise KUD goals (what you want students to know, understand, and be able to do as a result of the lesson or activity).

KNOW (facts, dates, definitions, rules, people, places)	UNDERSTAND (big ideas, principles, generalizations, rules, the “point” of the discipline or topic within the discipline) <i>I want students to understand that . . .</i>	BE ABLE TO DO (skills of literacy, numeracy, communication, thinking, planning, production, etc.; start with a verb such as: describe, explain, show, compare, synthesize, analyze, apply, construct, or solve)

Step 2: Determine your usual starting point (optional).

Jot down what you would typically do in this lesson if you were **not** going to differentiate. (Sketch out the steps you would follow or the assignment you would give.)

Planning a Tiered Activity

Activity (Cont.)

Step 3: Write differentiated plans.

Think about the most advanced student you have ever had. Design an activity (clearly related to your KUD goals) that would stretch this student.	Figure out ways to scaffold the task so that students at or near grade level can be successful with the task. Make sure this version still matches your KUD goals.	Figure out ways to further scaffold the task so that students who may struggle with the task can be successful. Double-check that you have not watered down the task to the point that students miss out on the KUD goals.

Step 4: Check your KUD goals.

- Double-check that every version of the activity leads students to increased competency with activity goals. If not, adjust as needed.
- Double-check that every version of the activity will feel respectful to the student for whom it is designed. If not, adjust as needed.

Planning a Tiered Activity

Activity (Cont.)

Step 5: Assess your plans.

- Where might you run into trouble in carrying out the differentiation in this lesson?
- How will you give directions for each version of the task? Will you color-code task cards or assignment sheets? Audio-record directions?
- Will you tell students the lesson is differentiated? If so, how? If not, why not?
- What will you do if some students or groups finish early?
- If necessary, how will you get students into groups efficiently? How will you get them back to a whole-class configuration?

Planning a Differentiated Activity

Activity

Step 1: Devise KUD goals (what you want students to know, understand, and be able to do as a result of the lesson or activity).

KNOW (facts, dates, definitions, rules, people, places)	UNDERSTAND (big ideas, principles, generalizations, rules, the “point” of the discipline or topic within the discipline) <i>I want students to understand that . . .</i>	BE ABLE TO DO (skills of literacy, numeracy, communication, thinking, planning, production, etc.; start with a verb such as: describe, explain, show, compare, synthesize, analyze, apply, construct, or solve)

Step 2: Determine your usual starting point (optional).

Jot down what you would typically do in this lesson if you were **not** going to differentiate. (Sketch out the steps you would follow or the assignment you would give.)

Planning a Differentiated Activity

Activity (Cont.)

Step 3: Write differentiated plans.

- Think about the students for whom you are planning this activity. What kind of differentiation would best meet their needs? Readiness? Interest? Learning profile?
- Next, decide how many variations of the activity you should have to meet these needs. Be reasonable!
- Use the space below to outline the various versions of the activity.

Version 1	Version 2
Version 3	Version 4

Step 4: Check your KUD goals.

- Double-check that every version of the activity will feel respectful to the student for whom it is designed. If not, adjust as needed.
- Double-check that every version of the activity leads students to increased competency with activity goals. If not, adjust as needed.

Planning a Differentiated Activity

Activity (Cont.)

Step 5: Assess your plans.

- Where might you run into trouble in carrying out the differentiation in this lesson?
- How will you give directions for each version of the task? Will you color-code task cards or assignment sheets? Audio-record directions?
- Will you tell students the lesson is differentiated? If so, how? If not, why not?

Planning a Differentiated Activity

Activity (Cont.)

- What will you do if some students or groups finish early?
- If necessary, how will you get students into groups efficiently? How will you get them back to a whole-class configuration?
- How will you know if today's lesson "worked"? What will you watch for? How will you use what happens in this lesson to improve the next day's instruction?

Sharing Your Differentiated Activity

Activity

You will each share a differentiated activity that you have designed and carried out. If possible, provide each member of your group with a copy of your differentiated activity or lesson plan. Before sharing, jot down your thoughts about the following questions, and use them to frame your explanation of the activity.

What were your objectives for this activity?

Why did you feel the need to differentiate this activity?

How did you decide the kind of differentiation to use (readiness, interest, learning profile)? In retrospect, was this a good choice? Why?

How did you decide on the number of versions? In retrospect, was this a good choice? Why?

What made each version of your activity equally engaging and challenging?

How did you decide who got which version? Did you make the right choices? Why?

Sharing Your Differentiated Activity

Activity (Cont.)

What was the level of quality of student work? Did some versions yield better work than others? If so, what changes would you make to the activity?

Did you tell students that the activity was differentiated? Why or why not? Was this a good choice? Why?

How did you handle the management issues (giving multiple directions, rearranging the room, distributing materials, dealing with early finishers, etc.)?

What other changes would you make to the activity if you could do it again?

What will you try next to further your growth in differentiated practices?

Differentiation Strategies Jigsaw

Activity

Directions:

1. Form a home group.

- You may wish to work with others who teach at your grade level or in your subject area. The ideal group size is 4.
- Assign each member of your home group to one of the four strategies listed below. (Cover all of the strategies, if you can.)
 - RAFT: Strategy where the student is asked to take on a Role, speaking to a particular Audience, in a given Format, and on a specific Topic.
 - Learning Menus or Contracts: Students have choice in some tasks, the length of time they work on individual tasks, and the order in which they complete them.
 - Cubing or ThinkDots: Originally based on Bloom's taxonomy; students respond to multiple prompts in a game format to look at content from several perspectives.
 - Sternberg Intelligences: Based on Robert Sternberg's work in multiple intelligences; students work on one of three intelligence-based tasks: analytical, practical, or creative.

2. Meet in specialty study groups.

Part 1 (*about 15 minutes*)

- When the signal is given, move to the area of the room corresponding to the strategy you have been assigned.
- Working alone, read the materials provided, and study the various examples. Remember that you can learn from examples at all levels and in all subject areas.
- Place a sticky note on one or two of the examples that you especially like. Jot down any questions you have about the strategy.

Part 2 (*about 15 minutes*)

- Discuss the strategy in your large specialty group. As you discuss, fill out the appropriate row in your graphic organizer. Appoint a discussion leader who will use the questions below as a discussion guide:
 - What is this strategy? How does it work?
 - What is the intent or purpose of this strategy? What kind(s) of differentiation does the strategy target?
 - What are the particular strengths and weaknesses of this strategy?
 - What management suggestions do you have for implementing this strategy?

Note: All individuals should go away from the discussion confident in their ability to (1) effectively teach the strategy to their home groups, and (2) answer questions about the use of the strategy.

Differentiation Strategies Jigsaw

Activity (Cont.)

3. Form work groups. (*about 30 minutes*)

- Now, subdivide your specialty group into work groups of 1–3 people.
- Each work group should create an original application of the strategy for an agreed-upon grade level and subject.
- Make sure the first step in designing the application is to write out the learning goal for the activity. This is to ensure that all versions of your activity lead to the same goal. Challenge: Do this in the KUD format. (See below for help.)

KNOW:

Facts, names, dates, places, information, definitions

UNDERSTAND:

Essential truths that give meaning to the topic; stated as a full sentence. Begin with “I want students to understand *that* . . .” (not *how* or *why*).

BE ABLE TO DO:

Skills (basic skills, skills of the discipline, skills of independence, social skills, skills of production)

- You will each be sharing this example with your home group, so be sure everyone in the work group walks away with his or her own copy of the application.

4. Return to your home group. (*about 45 minutes*)

- For each of the four strategies, devote 7–8 minutes (appoint a timer!) to:
 - Explaining, discussing, and critiquing the strategy.
 - Sharing a favorite example from the strategy booklet. (Remember, you marked good ones with sticky notes.)
 - Sharing the example you created in your work group.
- Each group member should use the graphic organizer to record notes and thoughts about each of the strategies.
- Anchor activity if you finish early: Discuss the jigsaw strategy that you have just experienced, and fill out the corresponding jigsaw row on the graphic organizer.

Differentiation Strategies Jigsaw

Activity (Cont.)

Strategy	What Is It? (description)	Why Use It? (purpose, advantages)	Considerations (worries, cautions, management tips)
RAFTs			
Learning Menus/Contracts			
Cubing/ThinkDots			
Sternberg Intelligences			
Anchor Row: Jigsaws			

Incorporating Flexible Grouping into Unit Design (Novice)

Key Questions in Planning a Differentiated Unit

1. What are my *unit* objectives?
2. Do I need to differentiate this unit?
3. If so, when and where would work best (both for me and for my students)?
4. How can I ensure that my differentiation is respectful?
5. Over time, are my differentiated practices *balanced*? Do I use a variety of differentiation techniques, including flexible grouping?

Incorporating Flexible Grouping into Unit Design (Novice)

Activity

1. Think about the past semester or school year. What differentiation options have you offered students during this time? Label each instance as primarily responding to differences in student interests (I), learning profile (LP), or readiness (R).

2. Most of us tend to emphasize one type of differentiation over another, especially at the early stages of learning about differentiation. Using your list, examine the degree to which your differentiation has been balanced over time.

3. Choose the area of student variance to which you have responded the least often, and design an activity that is differentiated for that aspect. Be sure you start with a KUD plan, using the template below.

Activity:

Student Variance Area:

KNOW	UNDERSTAND	BE ABLE TO DO

Incorporating Flexible Grouping into Unit Design (Intermediate)

Differentiating for Student Interest (1)

Sometimes the same objectives can be met through a variety of interest lenses. Consider the various aspects or parts of your unit topics. Where in the unit might it make sense to offer students a choice of topic, perspective, area of specialization, or focus? Sketch out an idea or two below.

Idea 1:

Idea 2:

Incorporating Flexible Grouping into Unit Design (Intermediate)

Differentiate for Student Interest (2)

Anchor activities, which students are taught to turn to when they finish early or are waiting for teacher help, are a perfect way to weave student interests into unit activities. They are differentiated because students have a choice of activity to complete.

Use your knowledge of student interests and the template below to plan anchor activities that you could use in your classroom. Remember, the best anchor activities are related to unit or subject goals, are highly interesting to students, and can be completed independently.

Activity 1:

Activity 2:

Activity 3:

Incorporating Flexible Grouping into Unit Design (Intermediate)

Differentiate for Learning Profile

When could you provide more than one way for students to access unit content, make sense of that content, or show what they have learned? When would it make most sense to let students indulge their learning preferences? When might it make sense to ask them to stretch by working in a way that is less familiar or less comfortable?

Note that it is also possible to ask some students to work in their preferred modality and ask others to stretch. If the work is particularly challenging for a student, it would be better for him or her to work in a preferred modality. You might ask students who find the work less rigorous to stretch. Choose from the following templates to help you differentiate for student learning profile.

Aspect 1: Grouping Options

Design activities in which students could choose whether to work alone (A), with a partner (P), or in small groups (SG).

Activity	Appropriate Grouping Options

Incorporating Flexible Grouping into Unit Design (Intermediate)

Differentiate for Learning Profile (Cont.)

Aspect 2: Learning Styles

Design versions of an activity in which students could choose (or be asked) to work primarily in visual (learn through seeing), auditory (learn through listening), or kinesthetic (learn through moving, doing, and touching) modalities. Indicate whether students will work in a preferred modality (P) or be asked to stretch (S).

Visual Version	Auditory Version	Kinesthetic Version

Aspect 3: Sternberg Intelligence Preferences

Sternberg and Grigorenko (2007) identify three types of thinkers:

- Analytic thinkers use conscious direction of mental processes to find a thoughtful solution to a problem, are able to think critically, and prefer analyzing, judging, critiquing, and comparing.
- Practical thinkers are able to translate theory into practice and abstract ideas into practical accomplishments, prefer applying or using what they learn, and recognize ideas that have a potential audience.
- Creative thinkers are able to generate novel and interesting ideas and prefer creating, discovering, and inventing.

Design versions of an activity in which students could choose (or be asked) to work analytically, practically, or creatively.

Analytic Version	Practical Version	Creative Version

Incorporating Flexible Grouping into Unit Design (Intermediate)

Differentiate for Learning Profile (Cont.)

Aspect 4: Preference for Competition or Collaboration

Design versions of an activity in which students could choose (or be asked) to compete against others, compete against themselves, or collaborate instead of compete.

Compete Against Others	Compete Against Self	Collaborate Instead of Compete

Aspect 5: Extrovert or Introvert

- Extroverts draw energy from the outside world of people, activities, things; prefer interaction with others; are action oriented; and prefer to recharge their batteries in the company of others.
- Introverts draw energy from their internal world of ideas, emotions, impressions; prefer reflecting and concentrating; and prefer to recharge their batteries alone or with one other person.

Design versions of an activity in which students could choose (or be asked) to work in a way that is comfortable for an extrovert or an introvert.

Extrovert Version	Introvert Version

Incorporating Flexible Grouping into Unit Design (Intermediate)

Considering and Responding to Differences in Student Readiness

In what ways do your students vary the most? How might you respond? Choose one or more of the following, and sketch out differentiation ideas.

Aspect 1: Prerequisite Skills

<p>Prerequisite skills students will need to be successful in this unit:</p>	<p>Ways I might accommodate students with learning gaps and teach them the needed skills (graphic organizers, vocabulary lists, minilessons, etc):</p>
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Incorporating Flexible Grouping into Unit Design (Intermediate)

Considering and Responding to Differences in Student Readiness (Cont.)

Aspect 3: Prior Knowledge, Understanding, or Skill

For students I suspect already have a significant body of knowledge, understanding, or skill in unit topics:

What I will do to **ensure** that I have appropriate evidence of that knowledge, understanding, and skill:

What I will do to ensure that these students also have an opportunity to **learn and grow** during the unit:

Incorporating Flexible Grouping into Unit Design (Intermediate)

Considering and Responding to Differences in Student Readiness (Cont.)

Aspect 4: Speed of Learning

What I will do to ensure that students who are likely to master unit knowledge, understanding, and skill more quickly than their peers don't have to wait for others to catch up but can continue their learning or refine their understanding and skill to more expert levels:

Incorporating Flexible Grouping into Unit Design (Intermediate)

Considering and Responding to Differences in Student Readiness (Cont.)

Other Aspects

Consider other ways that your students vary significantly in terms of readiness (e.g., small- or large-motor skills, attention issues, writing ability, reasoning and thinking skills, communication skills, group-work skills, resources at home, research skills, computer skills, IEP issues, language skills, gifted identification).

Issue	Response (Consider and adjust for both deficits and particular strengths in these areas.)

Incorporating Flexible Grouping into Unit Design (Advanced)

Activity

Refinement of good differentiated practices involves looking carefully at your use of differentiation over time. Sometimes we fall into a “differentiation rut” and forget that there are multiple ways to think about differentiating the content, processes, and products of a unit with regard to varied student readiness levels, interests, and learning profiles. This activity will help you identify gaps and expand your repertoire.

Directions:

1. Think about a particular unit of study. First, list all of the ways you have differentiated that unit in the past. Then, place each item on your list into an appropriate cell of the table below.
 - *Content* refers to the “stuff” kids have to learn, including the standards or benchmarks.
 - *Process* refers to the way students make sense of what they have to learn (e.g., activities).
 - *Product* refers to how students show us what they know, understand, and are able to do at the end of the unit.

Past Differentiation Efforts

	Content	Process	Product
Readiness			

Incorporating Flexible Grouping into Unit Design (Advanced)

Activity (Cont.)

	Content	Process	Product
Interest			
Learning Profile			

Incorporating Flexible Grouping into Unit Design (Advanced)

Activity (Cont.)

2. Study the idea grid below for suggestions of other ways to differentiate content, process, and products for readiness, interest, and learning profile. Note that, although we separate these elements for ease of learning, they may overlap considerably at times. (For example, if students are allowed to process via a preferred modality, they may be more ready for particular content.)

Idea Grid

	Content	Process	Product
Readiness	<ul style="list-style-type: none"> • Scaffold reading and find advanced texts. • Provide minilessons on above-grade-level content. • Provide minilessons on prerequisites. • Provide note-taking tools and/or vocabulary support (word banks). 	<ul style="list-style-type: none"> • Allow students to dictate journal entries or other writing tasks (when appropriate). • Ask advanced students to work at a higher level of expertise or use more authentic materials or processes. (Remember, all students should work with authentic materials in ways similar to professionals in the field.) • Provide a set procedure for students to get extra help while working in the classroom. • Model the process and/or provide additional practice time for students who need it. • Provide practice opportunities (both in-class and as homework) at various levels of difficulty. • Break down the directions for students who need extra guidance. 	<ul style="list-style-type: none"> • Require advanced students to work on products that are more expert-like or at a level of expertise appropriate to their growth. • Provide models of and rubrics for high-quality work. • Adjust time lines or check-in points for long-term projects. • Offer “polish-your-product” seminars for different levels of expertise. • Provide minilessons on aspects of the product. • Vary the audience for the product (e.g., some students might “present” their work to the local horticulture club while others “present” to a team of professors from the local agricultural university).

Incorporating Flexible Grouping into Unit Design (Advanced)

Activity (Cont.)

	Content	Process	Product
Interest	<ul style="list-style-type: none"> • Have students become experts in one area of content and teach others (jigsaw method). • Design interest centers for the classroom. • Allow students to study content from a range of perspectives. • Assign independent research on a topic of choice (a composer, a New World explorer, a trigonometry application, etc.). • Assign novels with the same theme but different topics (adventure underwater, in the mountains, in space, etc.). 	<ul style="list-style-type: none"> • Let students work with friends (when appropriate). • Provide mentoring opportunities. • Let students choose a lens through which they work (e.g., suggest they examine environmental issues as a chemist, a biologist, or a physicist might; allow them to show you that they understand the rules of perspective via a variety of artistic media; ask them to investigate a culture while acting as an anthropologist, a sociologist, an archaeologist, etc.). 	<ul style="list-style-type: none"> • Allow students to show what they know through a lens of interest (e.g., show that they understand the effect of the jet stream on climate in a particular region of interest; show that they understand how sales tax works when buying their favorite toys).
Learning Profile	<ul style="list-style-type: none"> • Provide simultaneous options for accessing content that appeal to varied learning styles (e.g., lecture, small-group instruction, individual readings, reading buddies, books on tape, explorations). • Match topics to student intelligence preferences when possible (e.g., allow a musical student to focus on patriotic songs of a particular time and a student who is highly visual to study propaganda posters from the time). Jigsaw the content so all have access as appropriate. • Give the option to read text about the content before or after the lecture or direct instruction. • Provide the option to turn and chat or stop and think about the content as they listen or read. 	<ul style="list-style-type: none"> • Allow students to work alone or in small groups (when appropriate). • Assign group roles according to learning profile preferences. • Provide a choice of graphic organizers (e.g., some that are more sequential in nature; others that are more random). • Give students the choice of competing against others or competing against themselves. • Allow students to keep pace while they read or listen (as long as it is not disruptive to others). • As much as possible, honor student requests about where to sit (e.g., up front, near the heater). • Allow students to debrief activities via journals or small-group discussions. 	<ul style="list-style-type: none"> • Allow students to work alone or in small groups (when appropriate). • Allow for a wide range of product choices that represent varied styles, intelligence preferences, and cultural values. • Provide options for sharing products that respect student differences (e.g., allow students to present in front of the class, in a small group, or one-on-one).

Incorporating Flexible Grouping into Unit Design (Advanced)

Activity (Cont.)

- Return to your original grid. Look for gaps in your own practices. For example, do you tend to consider only reading readiness when you differentiate the content? Do you overrely on learning profile options for products? Now, complete a blank grid (or other organizer of your choice) for an upcoming unit of study. Try for a balance of differentiation of content, process, and product for readiness, interest, and learning profile throughout your unit.

Upcoming Unit Plan

	Content	Process	Product
Readiness			
Interest			
Learning Profile			

My Worries About Managing Differentiation

Activity

Directions:

- Use the boxes below to record your worries about managing a differentiated classroom.
- Compare your worries with those of your colleagues, and share possible solutions to the problems. You may want to note the name of the person(s) offering solutions in case you would like to get more information from them in the future.
- Which of these solutions can you implement immediately? Highlight those boxes.

My worry is . . .

A solution is . . .

My worry is . . .

A solution is . . .

My worry is . . .

A solution is . . .

My worry is . . .

A solution is . . .

My worry is . . .

A solution is . . .

My worry is . . .

A solution is . . .

Self-Assessment: Some Hot-Spot Areas in Leading the Multitask Classroom Activity

Part 1: For each of the following management “hot spots,” rate your proficiency or comfort level on a scale from 1 (consistently a problem) to 4 (no problem whatsoever).

Issue	Rating
Explaining differentiation <ul style="list-style-type: none"> • to students. • to parents. 	
Getting kids into groups quickly and efficiently.	
Giving directions when students are doing different things.	
Keeping kids on task when working <ul style="list-style-type: none"> • as a large group. • in small groups. • alone. 	
Transitioning smoothly and efficiently from one activity to another.	

Self-Assessment: Some Hot-Spot Areas in Leading the Multitask Classroom Activity (Cont.)

Issue	Rating
Teaching children how to work well in group settings.	
Handling "ragged time" (when kids finish at different times or work at different speeds).	
Keeping the noise level reasonable.	
Organizing for efficient access to materials and equipment.	
Delegating responsibility to students rather than doing it all yourself.	
Keeping track of who does what.	
Teaching kids to self-evaluate.	
Other (specify):	

Self-Assessment: Some Hot-Spot Areas in Leading the Multitask Classroom Activity (Cont.)

Part 2: Return to your hot-spot checklist, and choose three areas you would like to address or refine. Make a detailed plan for new ways to address each issue in your classroom. How and when will you evaluate your progress toward your goals?

Issue	How I Will Address the Issue	How and When I Will Evaluate My Progress

Addressing Management Concerns

Read the following thoughts about how to approach varied management concerns. Add your own ideas in the “My Ideas” column.

Worry	Thoughts	My Ideas
<p>How do I decide who gets which version of each task?</p> <p>For group tasks, who should decide who works with whom?</p>	<p>Use all the information you have at your disposal to make the best decision you can. Sometimes you will want to decide who does which task or the exact composition of groups, and sometimes you will want to let the students decide. Teachers in a differentiated classroom base their decisions about who does what on a number of factors. The first three of these considerations are the most important:</p> <ul style="list-style-type: none">• Your outcomes or KUD goals for the task and how keenly these goals depend upon an exact match between student needs and the task at hand—sometimes it is more important than other times that students get exactly the right match.• Your confidence level in your knowledge of specific students' readiness, interests, and learning profiles—sometimes we have an excellent feel for what a student needs, and sometimes we are not so sure in spite of the evidence we have gathered.• Your confidence level in your knowledge of group dynamics—sometimes we have an excellent feel for who should and should not work together and sometimes we are not so sure.• Recent flexible grouping practices—variety is an important aspect of the differentiated classroom.• The day of the week, mood of the students, timing of the task with respect to vacations, and so forth—students are more receptive to being told what to do or with whom they must work at certain times than others!	

Keys to Successful Management of Differentiation

Addressing Management Concerns (Cont.)

Worry	Thoughts	My Ideas
How will I explain why the activity is differentiated? Should I?	<p>Two principles are at work here:</p> <ul style="list-style-type: none">• It is vital that students and teachers in a differentiated classroom engage in ongoing, open, and honest dialogues about what differentiation is and why it occurs in their classroom. That differentiation occurs should never be a secret. Discuss the difference between “fair” and “equal,” and create a class definition of “fair.”• On the other hand, students don’t need to have every instance of differentiation explicitly analyzed and thoroughly discussed. If we succeed in making differentiated activities equally engaging, challenging, and respectful, then students generally will not care—or even notice—that others are doing something different.	
Should the students have a say? If so, how?	<p>Remember, it is important to allow students to make choices so that they know they have some control over their own learning. On the other hand, giving them too many choices may overwhelm them. Providing students with appropriate opportunities to make choices based on their interests can be a strong motivation for learning. Twin goals of the differentiated classroom are to get students to want to pick an appropriate level of challenge and to provide them with the tools with which to make that choice. This happens over time.</p>	
What if the students question which assignment I give them or what I groups I place them in?	<p>Remind students that sometimes they get to pick their assignments or who they work with, and other times you do. Sometimes students will balk at an assignment that they feel is too difficult. If you believe they are ready for the task, encourage them to take a risk and learn to enjoy a challenge. They may be uncomfortable at first, but let them know you have confidence in their readiness to do it. Provide the necessary scaffolding for students to achieve success on tasks that push them a little beyond their comfort zones.</p>	

Keys to Successful Management of Differentiation

Addressing Management Concerns (Cont.)

Worry	Thoughts	My Ideas
What if I notice the task or group assignment is not working for a child?	Ask often for students' feedback about the match between task or group and their own needs. Make sure they know that they can tell you if an assignment is too easy or hard or doesn't quite fit in terms of interest or learning profile, and together you can try to find a solution. On the other hand, don't assume students will always come to you with this information. Be on the lookout for trouble spots, and make the necessary adjustments along the way. Talk openly with students about how and why you make the decisions you do, but make sure they know that you are always refining your techniques for matching student to task.	
What if I notice a group is not functioning well?	<p>First of all, don't assume students know how to work in groups, no matter what grade level they are in. Teach them key group skills and what to do if they run into difficulty making their group function effectively. Remember that not all students like to work in groups, know the difference between effective and ineffective groups, or have the same level of interpersonal skill. You may need to differentiate the teaching of group skills, as well!</p> <p>For additional help with evaluating student readiness for group work, see Arter and McTighe's Group Interaction Rubric (2001, pp. 159–160) or the Teacher Checklist for Group Work in this book (p. 223).</p>	

Keys to Successful Management of Differentiation

Addressing Management Concerns (Cont.)

Worry	Thoughts	My Ideas
How do I give multiple sets of directions efficiently?	<p>It is generally not a good idea to give multiple sets of directions to the whole group. Besides wasting everyone's time, you will find that students will quickly lose interest in those directions that are not relevant to their task and may not notice when the directions <i>are</i> relevant! If a significant part of the instructions are the same for all students, then go ahead and present those to the large group. The rest of the instructions should be delivered to only those students who need them.</p> <p>Help students learn to listen to directions the first time you give them. We sometimes unwittingly teach students not to listen to instructions because they learn we will repeat ourselves numerous times. Routines such as designating an expert of the day to help with instructions or teaching students to "ask three before me" (students must ask three other students for help before they are allowed to ask you) are particularly useful. Such routines also free you to more quickly and efficiently handle unexpected issues that arise rather than answering the same questions over and over.</p> <p>Individual or group task cards are particularly effective ways to deliver instructions. You may find it useful to audio record the instructions so that students who do not read or who are auditory learners can play directions aloud. Check and recheck that your directions are clear so that you do not have numerous students asking you questions about what they should do. Many teachers find it useful to color-code instruction sheets or task cards so that they can quickly tell which set belongs to which activity.</p>	

Addressing Management Concerns (Cont.)

Worry	Thoughts	My Ideas
How do I distribute the differentiated assignments and materials efficiently?	If you are sending students to different areas of the classroom to work, try to have the instructions and necessary materials already located in those areas. Plan ahead and try to anticipate any issues that might arise. Consider assigning jobs (e.g., materials handler, table captain) to different students when appropriate. A good general rule in any classroom is: "If the students can do it, let them!"	
How do I tell them which group they go to?	There are many routines for getting students into groups: <ul style="list-style-type: none">• List groups, their members, and their assigned locations on the board.• Attach clothespins, magnets, or key tags with individual students' names on them to charts to delineate who does what and where to go. That way, you can group and regroup students as needed.• Place colored dots or sticky notes on students' desks before they enter to indicate the group they will join.• Place each version of a task on a separate sheet of colored paper. Distribute the sheets to the appropriate students, and then ask them to join others with the same color paper.	

Keys to Successful Management of Differentiation

Addressing Management Concerns (Cont.)










Worry	Thoughts	My Ideas
What if one student or group needs help and I am busy with someone else?	<p>Teach students when it is OK to interrupt you and what to do when it is not. There are many routines that can help, such as teaching students to:</p> <ul style="list-style-type: none">• Ask for help from other students or the expert of the day.• Sign up on the board for a conference.• Use a table signal that they need help, such as displaying a red plastic cup or card when they are stuck, a yellow cup or card when they need help but can keep working on another part of their task, or a green cup or card when all is well.• Turn to an anchor activity until help is available. <p>Remember the importance of practicing classroom routines and procedures. Simply stating the rules is not enough for most students.</p>	
How will I get everyone's attention when necessary? What if things get too noisy or chaotic?	<p>Set up routines for getting students' attention when necessary. Many teachers use a signal like playing a chime, flicking the lights, ringing a bell, or raising their hands while placing a finger to their mouths. Teach students what indoor voices do and don't sound like, how to move about the room quietly without bothering anyone, and other techniques for keeping order.</p> <p>Talk with the students about the importance of these routines, get them to help you brainstorm solutions, and determine consequences for students or groups who do not follow the rules.</p>	

Addressing Management Concerns (Cont.)

Worry	Thoughts	My Ideas
What if some students or groups finish early or need more time?	<p>Although this is an issue in any classroom, it is even more likely to occur in a differentiated classroom—especially early on, when you are getting used to designing differentiated activities that will take about the same amount of time. One approach to managing this situation is to design what is called an “anchor” activity: an ongoing assignment that students can work on independently throughout a unit, a grading period, or longer. The best anchor activities are meaningful work tied to unit or subject knowledge, understandings, and skills; have clear directions; can be done without disturbing others; and hold students accountable for quality and completion.</p> <p>Anchor Activity Ideas</p> <p>Better Than Nothing:</p> <ul style="list-style-type: none">• Brain teasers• Games, puzzles• Silent reading• Music listening stations• Other homework <p>Better:</p> <ul style="list-style-type: none">• General interest learning packets• Learning or interest centers• Commercial kits and materials• Vocabulary work• Accelerated Reader program• Practice tests (unit, SAT, AP) <p>Better Still:</p> <ul style="list-style-type: none">• Related course readings with questions or activities• Extension activities from text series• Journals or learning logs• Research or long-term class projects	

Keys to Successful Management of Differentiation

Addressing Management Concerns (Cont.)

Worry	Thoughts	My Ideas																						
<p>How will I know students are really working in their groups?</p> <p>How do I keep track of what everyone is doing?</p>	<p>Involve students in keeping track of their progress and evaluating their work, but remember to teach them how to do so. Provide a place for them to record not only what they did on a specific day but also how they think they did in terms of quality and quantity of work, as well as their work habits. For example:</p> <p>How Did I Do?</p> <table><tr><td>What I did</td><td></td><td></td><td></td></tr><tr><td>I worked hard.</td><td></td><td></td><td></td></tr><tr><td>I did not bother anyone.</td><td></td><td></td><td></td></tr><tr><td>I put away my materials.</td><td></td><td></td><td></td></tr></table> <p>Next time, I will . . .</p> <table><tr><td>What I planned to do</td><td>What I accomplished</td><td>What I need to work on next</td></tr><tr><td></td><td></td><td></td></tr></table> <p>Exit cards can be another quick way to check on student progress.</p> <p>Plastic crates with hanging file folders for each student (use different colored crates for different class periods) can be a handy place for students to file their ongoing work. This gives you easy access to their work, too. Teach them what to do with their work once they complete it so that you are not inundated with papers at the end of class.</p>	What I did				I worked hard.				I did not bother anyone.				I put away my materials.				What I planned to do	What I accomplished	What I need to work on next				
What I did																								
I worked hard.																								
I did not bother anyone.																								
I put away my materials.																								
What I planned to do	What I accomplished	What I need to work on next																						

Keys to Successful Management of Differentiation

Teacher Checklist for Group Work

If you notice that a group is not functioning well, consult the following checklist, which identifies factors that contribute to effective group work (adapted from Tomlinson, 2005).

- ☐ Do students understand task goals? Are the directions perfectly clear?
- ☐ Does the task match the learning goals? Do students see a connection between what they are doing and what they need to learn?
- ☐ Do most kids find the task interesting? Feasible?
- ☐ Does the task require genuine collaboration to achieve genuine understanding?
- ☐ Does the task require an important contribution from each group member?
- ☐ Is the task demanding of members? Can all students contribute equally?
- ☐ Do students understand their own role in making the group work a success?
- ☐ Are the time lines brisk enough that students will want to get right to work?
- ☐ Are individuals and groups accountable for their own learning?
- ☐ Is there a way out for kids who are not succeeding? Do they know how and when to seek help?
- ☐ Are there opportunities for built-in teacher and peer coaching?
- ☐ Are there quality descriptors and checkpoints?
- ☐ Do students know what to do when “finished”?

Keys to Successful Management of Differentiation

Activity

Directions:

- For this activity, you will work in table groups.
- Study the question on your chart paper. Brainstorm ideas for handling the issue, and write them anywhere on the paper. You may appoint a scribe to record answers, or you may all write ideas on the paper at once and then discuss them.
- Determine your best two or three suggestions for dealing with the issue, and be ready to share them with the large group.

Our Question:

Suggestion 1:

Suggestion 2:

Suggestion 3:

Is Differentiation Fair?

Activity

You have just seen an example of how an analogy can make an important point about a totally unrelated situation. In this case, we compared a doctor's response to patients with varied ailments to a teacher's response to students with different instructional needs.

What other analogies can you think of that would help your students (or their parents) understand why differentiation is fair? Summarize your ideas below.

What About Standards?

Thoughts About Differentiation

- Standards are **what** we teach. Differentiation is **how** we teach. —Carol Ann Tomlinson
- A textbook and a set of standards do not a curriculum make. Rather they are some ingredients for a meal, not a meal in and of itself. —Carol Ann Tomlinson
- A standard by itself is impotent. . . . It needs to be activated by the teacher to allow students access to powerful concepts and principles. —Sandra Kaplan
- The goal of standards-based curriculum is to provide an equitable and excellent education for all learners —the reality is that there is no such thing as a standard that is appropriately challenging for all learners. —Carol Ann Tomlinson
- For highly able learners who may already demonstrate mastery of standards or who master them in less time than others, standards-based instruction may result in a curriculum of waiting rather than growth. —Carol Ann Tomlinson
- Educators need to stick to standards but should also consider how they might vary their teaching of those standards to ensure instruction is a good fit for a wide range of learners. —Holly Gould (2000)
- We might temporarily simplify the requirements for some students, but that does not mean we will eliminate the benchmarks. We'll reinsert those goals as soon as it's developmentally appropriate to do so. —Rick Wormeli (2007, p. 21)
- Students who are the same age differ in their readiness to learn, their interests, their styles of learning, their experiences, and their life circumstances. The differences in students are significant enough to make a major impact on what students need to learn, the pace at which they need to learn it, and the support they need from teachers and others to learn it well. —Carol Ann Tomlinson (2000)
- Standards-based education and differentiation not only can coexist, but must function together as two sides of the same accountability coin —Jay McTighe & John Brown (2005, p. 235)
- While standards may direct your curriculum and focus your learning goals, they *don't* dictate what you do instructionally to get students "there." —Diane Heacox (2002, p. 14)
- It would be ludicrous to practice for the doctor's physical exam as a way of becoming fit and well. The reality is the opposite: If we are physically fit and do healthy things, we will pass the physical. The separate items on the physical are not meant to be taught and crammed for: rather they serve as indirect measures of our normal healthful living. —Jay McTighe & Grant Wiggins (2001, p. 132)

What About Standards?

Thoughts About Differentiation (Cont.)

- Standards do not imply one-size-fits-all standardization of professional practice. —Jay McTighe & John Brown (2005, p. 243)
- When we differentiate, we give students the tools to handle whatever comes their way—differentiated or not. This is why differentiated instruction and standardized testing are not oxymoronic: Students will do well on standardized, undifferentiated tests only if they have learned the material in the class, and differentiated practices are the ways we maximize students' learning at every turn. —Rick Wormeli (2006, p. 4)

What About Standards?

Activity

1. You have been given a slip of paper with a statement about the interaction of standards-based education and differentiated instruction. Use the following discussion questions to help you process these thoughts:

- What is your immediate reaction to each thought or idea?
- Do you disagree or agree with the speakers? Why?
- Are these ideas new or familiar?
- To what extent does each match or not match your own understanding of standards-based instruction?
Your own philosophy of teaching?
- To what extent do the thoughts help you, your students, and their parents wrestle with the seeming disconnect between the push for common standards for all students and the need for differentiated instruction to meet those standards?

What About Standards?

Activity (Cont.)

2. When the leader gives the signal, pair up with a partner and share your thoughts.
3. Repeat the process with a new partner.
4. Work alone to prepare a brief written or oral response to one of the questions below.

Reflection Questions (choose one):

- ___ How can teachers be expected to differentiate when they are told that everyone must meet the same standards?
- ___ To what extent is the standards movement compatible with differentiated instruction?
- ___ How do you justify differentiating in a standards-based environment?

My Response:

What About Standardized Tests?

Activity

Directions:

1. You will be paired with another teacher for this forced-choice debate activity. One of you will take the position that students in a differentiated classroom are at a **disadvantage** when it comes to taking a standardized, one-size-fits-all test. The other will take the position that students in a differentiated classroom are at an **advantage** when it comes to taking a standardized, one-size-fits-all test. Steadfastly represent your assigned side of the issue. You will have 5 minutes to conduct your debate.
2. The facilitator will help you debrief the experience. Your goal is to be able to answer the following question: “How can we justify differentiating instruction when all students have to take the same test on the same day?”

Reflection Questions (choose one):

- ___ How can teachers be expected to differentiate when they are told that everyone must meet the same standards?
- ___ To what extent is the standards movement compatible with differentiated instruction?
- ___ How do you justify differentiating in a standards-based environment?

My Response:

Introduction to Grading in the Differentiated Classroom

Entry Points Activities

We are beginning an exploration of the issues surrounding grading and assessment in the differentiated classroom. Choose one of the following entry points activities, and report to that station. Complete the activity as directed. Once you have finished, respond to the reflection questions provided.

Entry Point	Description	Your Task
Narrational	Read or tell a story or narrative	Do you have a grading story to tell? Share a time when you or someone you know was unfairly affected by grading. What went wrong? How might the situation have been improved?
Logical-Quantitative	Provide data; use deductive reasoning; examine numbers, statistics, musical rhythm, logic, narrative plot structure, cause-and-effect relationships	What confounds grades? Choose one of the following practices, and show mathematically how it can affect students for the better and/or for the worse: <ul style="list-style-type: none"> • Averaging grades • Use of zeros • Extra-credit assignments • Grading everything a student does
Foundational	Confront big questions of philosophy and meaning concerning life, death, and our place in the world	Choose from the following discussion questions: <ul style="list-style-type: none"> • Why grade? • What is a grade? • What does a grade represent? What should it represent? • How do grades affect life after high school? • What makes for a “fair” grade?
Aesthetic	Study sensory and/or surface features, activate aesthetic sensitivities	Assign the role of a student with a particular “label” (special education, learning disabled, gifted, English language learner, etc.) to each group member. Put yourself in the shoes of that student. In character, discuss your feelings about grades.

Introduction to Grading in the Differentiated Classroom

Entry Points Activities (Cont.)

Entry Point	Description	Your Task
Experiential (also known as experimental)	Deal directly with materials (physically or virtually), simulations, personal explanations; a hands-on approach	<p>Imagine the following scenarios. Share your reactions to each one.</p> <ol style="list-style-type: none"> 1. Health and Wellness has been given a grant of \$1,000 to encourage teachers to lose weight. At the end of 9 weeks, the money goes to the teacher who has lost the most weight. 2. Health and Wellness has been given a grant of \$1,000 to encourage teachers to lose weight. At the end of nine weeks, the money goes to one teacher, based on a combination of the following factors: <ul style="list-style-type: none"> • Amount of weight lost • Percentage of starting weight lost • Attitude and effort put into weight loss <p>Extra points are given to teachers who do an extra-credit project on the relationship between weight loss and diet and exercise.</p> 3. Health and Wellness has been given three grants of \$350 each to encourage teachers to lose weight. <ul style="list-style-type: none"> • One grant will go to the teacher who loses the most weight. • One grant will go to the teacher whose percentage loss is greatest. • One grant will go to the teacher who shows up to all the weigh-ins on time; keeps careful—and neat—track of all eating and exercise; tries his or her best to lose weight; and maintains a good attitude throughout the process.

Introduction to Grading in the Differentiated Classroom

Activity Reflection

In what way(s) was this activity differentiated?

How did you decide which activity to complete? Did you make a good choice? Explain.

What were the common learning goals in this activity?

What other ways might we differentiate an introduction to grading?

How might you incorporate an entry points activity into your own curriculum?

Perspectives on Grading

RAFT Activity

Work alone or with a partner. Choose one of the following rows, and complete the assignment together. If you have a different idea, consult the facilitator and fill it in at the bottom of the chart.

ROLE	AUDIENCE	FORMAT	TOPIC
Teacher	Students	Poem or parable	Definition of “fair”
Teacher	Parents	Short speech at Parent Night	Why I grade students
College supervisor	Student teacher	Top 10 list	What you really need to know about grading
Heterogeneous class	Teacher	Rule book	How we would handle grading if we were teachers
A student who finds school difficult and stressful	Parent-teacher organization	Show-and-tell presentation	What I like best about grades
A student from a low-income home	Other students	Comic strip	Why I dislike most grades
Student just learning English	Students fluent in English	Flowchart	What “fair” should mean in the classroom
A highly able student	AP teacher	Conference presentation	What it means to say a teacher really challenges me
Teacher	Self	Pep talk to self	Things about grading I control

Perspectives on Grading

RAFT Activity (Cont.)

ROLE	AUDIENCE	FORMAT	TOPIC
Teacher	Colleagues	Argument presented at a faculty meeting	Why we should outlaw grades
Struggling student	Principal	An illustration with labels	How effort does or doesn't pay off for me in school
My Idea:			

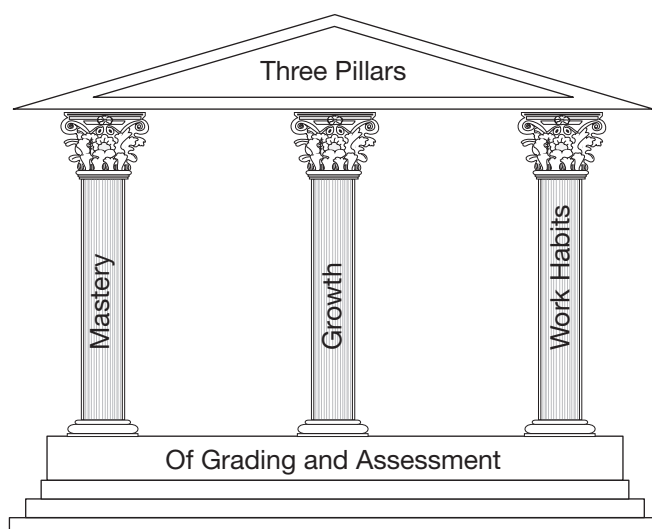
Source: Adapted with permission from the work of Carol Ann Tomlinson, Curry School of Education, University of Virginia.

Practically Speaking: Grading in the Differentiated Classroom

Grading Suggestions

If you are worried about grading in the differentiated classroom:

- Start introducing kids to the idea of the three pillars of grading (below). Help them see the importance of mastery of subject; continual growth no matter where they begin their journey towards mastery; and practicing and refining work habits (participating, completing work on time, cooperating with others, etc.) throughout that journey. Best-practices grading would report information about the pillars *separately*. Note the three pillars are not meant to be averaged together. That defeats the purpose. Even though you may have to keep your current “official” grading system for now, you can at least start reporting information about mastery, growth, and work habits independently to students throughout, and particularly at the end of, a grading period.



- Continually and consistently talk about fairness and how it affects grading: Is it fair for some people to get *As* without working? Is it fair for some kids to never get *As*, even though they work hard and learn a lot?
- Differentiate activities that are not graded or are graded only for completion; if students do the assignment to your satisfaction, give them full credit, but if not, have them redo it.
- Begin your differentiation efforts around differences in student learning profile and interest; students seem to feel there is a lot less at stake when they get to choose according to those aspects of differentiation. Work up to differentiation by readiness.
- When differentiating for readiness, let advanced kids choose whether to do the “harder” (more appropriate) assignment, but push them individually to choose what is actually the right match for them.

Practically Speaking: Grading in the Differentiated Classroom

Grading Suggestions (Cont.)

- When differentiating for readiness, ask advanced kids to do the appropriate assignment and give them serious feedback about how they did on the task, but give them an *A* for the project if you feel that's what they would have gotten on the grade-level assignment. Be careful, though! The problem with this "solution" is its implication for students who struggle—does this mean they can only get a *B* or *C* on an assignment because they are working below grade level? What if they do their absolute best on an assignment that is appropriately challenging? Should they not get an *A* on that assignment? (Note that this would not really be an issue if we moved to the idea of three-pillar grading.)
- No matter how you differentiate an assignment (for interest, learning profile, or readiness), always evaluate the KUD goals first and the product second; that way, all students are responsible for the same knowledge, understandings, and skills even if the products vary or are at varied levels of difficulty. Use the following questions to help you write rubric descriptors for the KUD goals:

KNOW	<p>Do students include important facts, vocabulary, definitions, and people in their work?</p> <p>To what extent do students show a mastery of these facts, vocabulary, definitions, and people?</p> <p>To what degree is their use of facts, vocabulary, definitions, and people accurate and appropriate?</p> <p>How deep is their knowledge?</p> <p>How broad is their knowledge?</p>
UNDERSTAND	<p>Is there evidence that students have an understanding of the "big ideas" or key principles of the unit?</p> <p>To what degree do they appropriately and correctly incorporate these ideas into their work?</p> <p>How sophisticated, creative, and detailed is their understanding of unit principles?</p> <p>Have they identified additional principles that might apply?</p>
BE ABLE TO DO	<p>Can students identify and perform the skills embedded in the unit?</p> <p>Do they or can they use these skills in isolation and in combination?</p> <p>To what extent and at what level of expertise do they use the skills?</p> <p>Do they show evidence of more advanced skills key to the task but not focused on in the current unit of study?</p>

Practically Speaking: Grading in the Differentiated Classroom

Helpful Resources on Grading

- Brookhart, S. M. (2003). *Grading*. Upper Saddle River, NJ: Prentice-Hall.
- Guskey, T. R. (2002). *How's my kid doing? A parent's guide to grades, marks, and report cards*. San Francisco: Jossey-Bass.
- Guskey, T. R., & Bailey, J. M. (2001). *Developing grading and reporting systems for student learning*. Thousand Oaks, CA: Corwin.
- Marzano, R. J. (2000). *Transforming classroom grading*. Alexandria, VA: Association for Supervision and Curriculum Development.
- O'Connor, K. (2002). *How to grade for learning* (2nd ed.). Thousand Oaks, CA: Corwin.
- O'Connor, K. (2007). *A repair kit for grading: 15 fixes for broken grades*. Princeton, NJ: ETS.
- Whitney, D. T., Culligan, J. J., & Brooksher, P. T. (2004). *Truth in grading: Troubling issues with learning assessment*. Lincoln, NE: iUniverse.
- Wormeli, R. (2006). *Fair isn't always equal: Assessing and grading in the differentiated classroom*. Portland, ME: Stenhouse.

Practically Speaking: Grading in the Differentiated Classroom

Activity

Review the grading suggestions that you were given, and record your thoughts about the pros and cons of each in the chart below.

Suggestion	Pros	Cons

Communicating with Parents About Differentiation

Activity

Use the following talking points to help you formulate possible responses to parental concerns about differentiated instruction. Add your own questions and responses to the rows at the bottom.

Question	Talking Points	My Response
Is differentiation fair?	<ul style="list-style-type: none"> • Realities of the diversity in today's classrooms • New definition of fair • Equity of opportunity and access to high-quality teaching and instruction • Definition of appropriate challenge 	
How will I know how my child is doing?	<ul style="list-style-type: none"> • Available avenues of communication • Separate reporting for grade-level standing, growth over time, and work habits 	
How will you grade differentiated assignments?	<ul style="list-style-type: none"> • Focus on KUD goals • Three pillars of grading • Your own philosophy of grading 	
How will you know what my child needs? How will you make sure that you challenge my child appropriately? How will you avoid typecasting my child?	<ul style="list-style-type: none"> • Pre-assessment • Ongoing assessment • Teacher–student partnerships in matching student to task 	
Won't students feel like you have labeled them?	<ul style="list-style-type: none"> • Definition and practice of flexible grouping • Helping students make an honest assessment of their strengths and weaknesses • Respect for potential of all students regardless of "label" 	

Communicating with Parents About Differentiation

Activity (Cont.)

Question	Talking Points	My Response
Why do you teach this way? That's not how school was for us.	<ul style="list-style-type: none"> • Changes in schools and society • Right of all students to grow • Right of all students to high-quality teaching and learning 	
Life's not differentiated, so why should schools be differentiated?	<ul style="list-style-type: none"> • Life is more differentiated than we like to think. • Everyone needs to get along with and appreciate others. • The differentiated classroom celebrates similarities and differences among learners. 	



Myths and Realities About Grading

Rationale and Purpose

This tool helps teachers examine common myths about grading practices in use in many of today's classrooms.

Directions

- Distribute the tool.
- Ask teachers to complete the survey individually and then share their answers in small groups.
- Working as a whole group, tell teachers that, in fact, all these statements are considered myths about grading. Place each myth on the overhead projector or screen one at a time. Ask them to speculate why it might be considered a myth and what the reality might be.
- Exit card: Ask teachers to complete one of the sentence starters below. Collect the cards, and analyze them for future staff development needs.
 - Something I did not know or realize about grading practices in general . . .
 - Something I realized about my own grading practices . . .
 - A question I still have about grading is . . .

Tips and Differentiation Options

- You may skip sharing answers to the survey in small groups if you are concerned that teachers will be uncomfortable sharing “wrong” answers.
- See Helpful Resources on Grading (p. 250) for additional background information on best-practices grading. *A Repair Kit for Grading* (O'Connor, 2007) is especially helpful.

What to Look For

1. **Myth:** Grades are the best tool we have for communicating student proficiency.

Reality: Grades are actually so imprecise that they are nearly meaningless. One teacher's *A* is not necessarily equivalent to another teacher's *A*. Although we often think that a *C* means average competency in course material, it could actually mean a number of things. It might even mean that a student got *As* on all of his tests but turned in no homework and thus ended up with a *C* for the quarter. Unless we are given detailed information about a teacher's grading practices, we are unable to tell how much of a grade comes from a student's mastery of course objectives, how much comes from his growth during the grading period, and how much comes from his work habits such as effort and participation. Most experts on grading (e.g., Thomas Guskey, Ken O'Connor, Robert Marzano) recommend assessing and reporting information about mastery, growth, and work habits separately.

2. **Myth:** Parents of kids who usually get *As* without much effort will be angry with me if I truly challenge their children and their grades are no longer *As*. They will complain to the principal and force me to change their child's grade.

Reality: We need to reeducate the public—both students and adults—about the importance of all students working at an appropriate challenge level. We won't change the public's attitude towards grading overnight, but we can begin the conversation. Don't forget that when students are challenged for the first time, they will need lots of academic and emotional support. In fact, the older they are, the more support they are likely to need. Tell parents how you will help their children approach the new challenges and how they can support their child at home.

3. **Myth:** I must average grades to get a fair picture of student progress.

Reality: Practice work is for practice. Why penalize students for less-than-stellar work early in a learning experience? Consider giving more weight to work that is assigned later in the unit. This allows students the opportunity to practice and grow without fear.

Averaging also contributes to confusion about the meaning of a grade. Unless we average scores only across the same skills (e.g., listening, writing, or reading), it is difficult for us to tease out the student's performance on each individual skill from a composite grade.

4. **Myth:** If students get a bad grade on an assignment, they will work harder next time.

Reality: A bad grade does not motivate most students to improve. The only grades that are likely to motivate students are *As* and grades that are higher than what they usually get (O'Connor, 2002). According to Guskey and Bailey (2001), low grades often cause students to give up rather than try again.

5. **Myth:** My grade book will be hard to organize and interpret if I have different assignments for different students.

Reality: In your grade book, name the assignments according to topic, skill, or standard (rather than "questions, page 30"). Every student's assignment should relate to that topic or goal. Keep a separate list detailing the variations on the assignment, or color-code your entry according to assignment. You might also mark those assignments that are differentiated with a star or a "D." Studying the pattern of achievement across differentiated and one-size-fits-all assignments can yield interesting insights about student readiness, interest, and learning profile.

Student	Identifying parts of a poem (10/12)	Identifying imagery in poetry (10/15) (D)	Quiz on Imagery (10/19)	Poem using imagery (10/21) (D)
Chris				
Gordon				
Rosalie				
Helen				
Simon				
Ji-Hae				

10/15

Tiered assignment: pp. 15 (text), 23 (text), 7 (local literary magazine)

10/21

Differentiated by interest: (sports, animals, school, music)

6. **Myth:** All my college-bound students and their parents care about are GPAs.

Reality: Colleges are changing. Most colleges do not focus solely on any one piece of information about student suitability. Furthermore, admissions officers know that an *A* at one school is not necessarily equivalent to an *A* at another school. Some high schools are doing away with class rank and honors distinctions. Some students are homeschooled or come from schools where no grades are given. Colleges look at a school's profile when considering a student's record. This profile can include information about differentiation practices and their impact on grades in a school system.

7. **Myth:** I have to grade everything, or the students won't do the work.

Reality: It's true that many students have been conditioned to work only for the extrinsic reward of grades. That doesn't mean that we should give in to that thinking. In the differentiated classroom, students are taught the rewards of trying something that is just a little too hard. Learning and growth should be emphasized, along with mastery of standards. Sometimes students do not do the work because it is not appropriate for them. Work to design assignments that truly meet students' interests, learning profiles, and readiness levels, and you will likely see an increase in completion rates.

Myths and Realities About Grading

Activity

Directions:

Read the following statements, and indicate the whether you agree strongly (AS), agree (A), disagree (D), or disagree strongly (DS). Below each statement, explain your thinking.

___ 1. Grades are the best tool we have for communicating student proficiency.

Comments:

___ 2. Parents of kids who usually get As without much effort will be angry with me if I truly challenge their children and their grades are no longer As. They will complain to the principal and force me to change their child's grade.

Comments:

___ 3. I must average grades to get a fair picture of student progress.

Comments:

Myths and Realities About Grading

Activity (Cont.)

___ 4. If students get a bad grade on an assignment, they will work harder next time.

Comments:

___ 5. My grade book will be hard to organize and interpret if I have different assignments for different students.

Comments:

___ 6. All my college-bound students and their parents care about are GPAs.

Comments:

___ 7. I have to grade everything, or the students won't do the work.

Comments:

Differentiation Bingo

Bingo Card

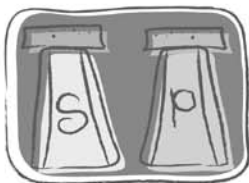
Try to make one bingo between now and the end of the year. Attach evidence of your work and a brief reaction to each experience, and submit it to your staff development leader.

B	I	N	G	O
Provide students with a choice of graphic organizer.	Give students a choice of activities or products that are differentiated for learning profile. Ask them to work in their preferred style or modality.	Read an article or chapter on differentiation. Write a brief reaction to the reading.	Talk to students or parents about why you differentiate or the meaning of "fair."	Provide advanced students with an advanced text or reading assignment.
Teach a minilesson to review or reinforce knowledge, understanding, or skill.	Design and carry out an activity in which students work in a group with others who are unlike them in interests, learning profile, or readiness.	Offer product options for a culminating assessment.	Give students the choice of working alone or with another person.	Ask students to choose an activity or product option that is not in their preferred learning modality. Have them reflect on that experience.
Ask students to self-evaluate their work according to set criteria.	Observe another teacher differentiating, or provide that teacher with feedback on a differentiated task.	FREE: Your choice of activity that supports differentiation.	Teach a minilesson to extend knowledge, understanding, or skill.	Change grouping of students at least once during a class period. Be sure your groupings are purposeful, not random.
Share a differentiated activity at a school or department staff meeting.	Differentiate a homework assignment for interest, learning profile, or readiness.	Design and carry out an activity in which students work in a group with others who are like them in interests, learning profile, or readiness.	Assign classroom or group jobs.	Help students learn about the difference between a functional group and a dysfunctional group.
Design and introduce an anchor activity that is clearly tied to your unit or course goals.	Design and use an exit card for ongoing assessment.	Scaffold your text or a reading assignment to support students who struggle with reading.	Pre-assess for interest, learning profile, or readiness.	Provide audio support for a text or reading assignment.

Differentiated Strategies Menu

Menu Activity

Menu: DIFFERENTIATION OF INSTRUCTION



Due Date:

You must complete all items in the main dish and the specified number of side dishes by the due date. You may select the indicated number of choices from among the side dishes, and you may decide to do some of the dessert items, as well. Please highlight the options you choose. Initial and date each item when completed. Attach evidence of your work to this contract, and turn it in to the facilitator.

Main Dish (Complete all.)

- Design a tiered activity with 2–4 levels. Be sure you include clear KUD goals for the activity.
- Carry out the activity in your classroom.
- Write a one- or two-paragraph summary of how it went and what you would do differently next time.



Side Dish (Select at least three.)

For each selection:

- Choose from the following activities to carry out in your classroom.
- Jot down notes on how they went and what you would do differently next time.

Options:

- Activity based on Sternberg's intelligences (creative, practical, and analytical)
- Learning contract
- Entry points activity
- Pre-assessment for readiness
- Pre-assessment for interest or learning profile
- RAFT assignment
- Cubing or ThinkDots activity
- Differentiated learning center
- Compacting for a student or group
- Another differentiated strategy you have read about
- Anchor activity that extends or reinforces a unit of study

Dessert (Optional or may take the place of two side dishes)

- Present your differentiated activity to the staff; include visuals. Be ready to say what worked well and what you would change next time.
- Watch a colleague teach a differentiated lesson, and meet to provide feedback.
- Teach a differentiated lesson while being observed by a colleague. Meet afterward to get feedback.
- Invite your principal to observe you teach a differentiated lesson. Meet to get feedback.
- E-mail a differentiated activity to a colleague, instructional coach, or administrator for feedback before you teach the lesson and send a reflection for feedback after you teach the lesson.



Summarizing the Components of Differentiation

Activity

A colleague sends you an e-mail asking you about one of the following:

- Differentiation in general
- Pre-assessment
- KUD goals
- Respectful activities

You know this colleague's preferred intelligence according to Robert Sternberg's theory, and it happens to match your preference. Select one of the following tasks, and use your knowledge of what appeals to an analytical, practical, or creative learner to design a product that would help your colleague refine his or her understanding of differentiated instruction.

Analytical Task (Choose one.)

Create a flowchart that shows your colleague how to do one of the following. Include where things might go wrong and what to do if they do.

- A. Design a high-quality differentiated lesson.
- B. Design a pre-assessment.
- C. Write an appropriate KUD plan.
- D. Ensure that differentiation is respectful.

Practical Task (Choose one.)

- A. Write a brief vignette or draw and annotate a picture of a student you know whose needs are better met when working in a differentiated classroom.
- B. Role-play about a teacher who learned important things from giving a pre-assessment and what he or she did with the results.
- C. Use your own subject-area expertise to explain the difference between Know, Understand and Do goals.
- D. Give clear examples of the difference between respectful DI and disrespectful DI.

Summarizing the Components of Differentiation

Activity (Cont.)

Creative Task (Choose one.)

Devise an expanded metaphor, a parable, or a short skit that shows your colleague

- A. Why differentiation is important in **all** classrooms (including tracked classes).
- B. The role of pre-assessment in the differentiated classroom.
- C. The difference teaching to the “big idea” or for understanding can make to students.
- D. The difference between respectful differentiation and disrespectful differentiation.

My Task:

Tiered ThinkDots: Reflecting on Differentiation

Version A

Describe It

What vocabulary is associated with differentiated instruction? Define the terms.

**Associate It**

What child's toy does differentiation remind you of? Explain your thinking.

**Apply It**

Give an example of how you currently alter your instruction to meet specific learner needs in your classroom. What will you try next?

**Analyze It**

Think of a question that your students will likely have about differentiated instruction. How will you answer it?

**Compare It**

Compare differentiated instruction to more "traditional" instruction. Use all of your senses.

**Argue For or Against It**

Should a school require teachers to differentiate instruction? Explain your reasoning.



Tiered ThinkDots: Reflecting on Differentiation

Version B

Describe It

What are the characteristics of high-quality curriculum?

**Associate It**

What do you think of when you hear the term “differentiated instruction”?

**Apply It**

Think about your own experiences in school. What worked well for you? What was difficult?

**Analyze It**

How is good teaching like your favorite hobby?

**Compare It**

How does the typical classroom experience of a student who struggles compare with the experience of a student who is advanced?

**Argue For or Against It**

Classrooms today are so diverse that it is virtually impossible for teachers to meet the needs of their students.



Tiered ThinkDots: Reflecting on Differentiation

Activity

Part 1

- Work in groups of 3–6.
- The first person rolls the die and answers the prompt that corresponds to whatever number lands on top. Work for complete, thoughtful, and even insightful answers.
- Other team members add their own thoughts in response to the prompt.
- The second person rolls the die. If he or she rolls a different number, respond to that prompt; if your group has already answered that prompt, roll again.
- Stop once you have answered all prompts.

Part 2

Working alone, choose any *one* of the prompts.

- Why did you choose this prompt?
- What do you think the KUD goals were for this activity?
- On a separate page, write a brief journal entry in response to the prompt.



Evaluating Comfort Level with Differentiation

Rationale and Purpose

This tool models a variation on the cubing strategy and works well for a review of key principles of differentiation. In cubing, students are asked to roll a cube to determine the task they will do. Each side of the cube has a different question or set of instructions. This variation, called ThinkDots by its creator, Kay Brimijoin, associate professor of education at Sweetbriar College in Sweet Briar, Va., accomplishes the same objectives but in a slightly different format. Individual prompts are written on cards, and each card has a different number on it. Instead of rolling a cube, students roll a die to determine which numbered task they complete. Use this tool to foster a discussion about the key elements of a differentiated classroom.

Directions

- Before the session:
 - Make copies of the ThinkDots prompts provided. You will need one copy of the six prompts for every 3–6 teachers.
 - Working with one sheet at a time, cut the ThinkDots squares apart, punch a hole in the upper left-hand corner of each card, and thread the cards onto a key ring or staple them together at the side.
- Place teachers in groups of 3–6. Distribute one set of cards and a die to each group of teachers.
- Show the Differentiated Classroom in Balance mobile (p. 57). Tell teachers they will use this visual as a springboard for small-group discussion about the joys and challenges of working in a differentiated classroom.
- Once teachers have completed the activity, discuss the ThinkDots strategy and how they might use it in their own classrooms. Ask teachers:
 - What makes this a good activity? What did you like about it? What concerns do you have?
 - What was the purpose of this activity? What might the KUD goals be?
 - In what way(s) was this activity differentiated? What other ideas for differentiation can you think of?
 - How and when might an activity like this be used in your own classroom?

Tips and Differentiation Options

- Use the last question as an exit card to check for practical application.
- Collect the writing exercise (Part 2) to help you evaluate participants' knowledge and understanding of key elements of differentiation.
- Laminate cards for durability.
- Let teachers self-select their groups, as the prompts require a degree of self-disclosure. Teachers are likely to be more comfortable doing so with people they trust.







- Notice that the activity is not differentiated until the last step, where teachers answer the prompt they are most interested in. For the whole activity to be considered differentiated, the cube prompts would have to vary according to some specific need.
- Ask teachers to brainstorm ways to differentiate the prompts for interest, learning profile, or readiness.
- To differentiate the cubes for interest, you might ask teachers to focus only on the element on the mobile they find most interesting and change the prompts to the following:
 1. Why did you choose this particular element as your focus today? What are your strengths and weaknesses with this element?
 2. Why did Carol Ann Tomlinson include this element on her mobile? What is its connection to high-quality differentiated instruction?
 3. Look at the subcategories under your element. Define the terms. What would you add to that layer of the mobile?
 4. Make a case for this element being the most important element on the mobile.
 5. To what degree is this element evident in a “traditional” classroom? What role does it play?
 6. Describe this element from the perspective of a student in a differentiated classroom.

What to Look For

- Circulate while teachers complete the activity. Jot down particularly insightful thoughts you hear to share in follow-up discussions.
- A KUD plan for this activity might look like:
 - **Know:** Elements of an effective differentiated classroom
 - **Understand:** Classroom differentiation can be viewed as a complex system in which several elements work together to ensure success, growth, and satisfaction for both teachers and students.
 - **Do:** Use the vocabulary of differentiation to examine beliefs and practices about differentiation.

Evaluating Comfort Level with Differentiation

ThinkDots Prompts

<p>Which of the categories on the mobile are you <i>best</i> at? With which category on the mobile do you need the most help to grow? What makes you say so?</p> 	<p>What is one way <i>you</i> work to build a sense of community among your students? What is one way leaders in your school work to build a sense of community among the teaching staff? The entire staff?</p> 
<p>What does “high-quality curriculum” mean to you? Describe what you think it looks like. Tell why it’s important for differentiated curriculum to spring from good curriculum.</p> 	<p>What does the responsibility ratio look like in your classroom? In other words, what percentage of the responsibility for learning falls on the kids? On you? What percentage of the responsibility for classroom organization and management falls on the kids? On you? Are you happy with these ratios? Why or why not?</p> 
<p>In your classroom, when or where is it easiest for you to be flexible? When or where is it hardest? Give specific examples for each. What would help you become even more flexible in your teaching?</p> 	<p>Think about your curriculum. What about this curriculum facilitates your ability to connect it to your students’ varied interests, learning preferences, and readiness levels? What about your curriculum hinders this connection?</p> 

Evaluating Comfort Level with Differentiation

Activity

Part 1:

- Work in groups of three to six.
- The first person rolls the die and answers the prompt that corresponds to whatever number lands on top. Work for complete, thoughtful, and insightful answers.
- Other team members add their own thoughts in response to the prompt.
- The second person rolls the die. If he or she rolls a different number, respond to that prompt; if your group has already answered that prompt, roll again.
- Stop once you have answered all prompts.

Part 2:

Working alone, choose *one* of the prompts:

- Why did you choose this prompt?
- What do you think the KUD goals were for this activity?

On a separate page, write a brief journal entry in response to the prompt.



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