Fact Sheet #4 - Performance Standard 4: Differentiated Instruction

DIFFERENTIATED INSTRUCTION

The teacher challenges and supports each student's learning by providing appropriate content and developing skills which address individual learning differences.

Effective teachers differentiate instruction and individualize for the range of student needs, abilities, and preferences in the classroom. Instead of using uniform strategies for all students, effective teachers design instruction that motivates each student and they communicate content in such a way that students are able to comprehend based on their individual prior learning and ability. Because students learn in a variety of ways and at a variety of rates, teachers should deliver their lessons with appropriate variety. As Weiss explained, differentiation to maximize the learning of individual students is the cornerstone of effective teaching. He pointed out that "we do our kids a disservice by choosing one pedagogy and using it all the time."[1]Carolan and Guinn stated that: "Diversity is a gold mine. It offers all members of a diverse group multiple ideas, perspectives, and solutions to problems. Teachers can nurture this diversity early on by maximizing the potential of each student in their classroom."[2]Effective teachers tend to recognize individual and group differences among their students and accommodate those differences in their instruction.[3] They adapt instruction to meet student needs, which requires careful assessment and planning for all students in the classroom, as well as the ability to select from a range of strategies to find the optimal match to the context.[4]Differentiation requires teachers to reflect on students as individuals. They also need to be clear about what students should know, understand, and able to do as the result of a segment of learning, and they also need to have a repertoire of instructional approaches to manage and facilitate flexible student-centered instruction.[5]

Studies on student achievement and on perceptions of teacher effectiveness have emphasized the importance of appropriate differentiation in instruction, including the following findings:

- Students are most engaged and achieve most successfully when instruction is appropriately suited to their achievement levels and needs.[6]
- Instructional differentiation requires careful monitoring and assessment of student progress, as well as proper management of activities and behavior in the classroom. Placing students into groups based on ability without tailoring instruction to the different groups is insufficient to support academic success.[7]
- Effective teachers know and understand their students as individuals in terms of their abilities, achievement, learning styles, and needs and give greater emphasis to individualization in their teaching.[8]

A meta-analysis of the extant research suggests that instruction based on learning styles is positively related to student attitudes and achievement.[9] Dunn et al. conducted a meta-analysis of 36 experimental studies to examine the effects of teaching students through their learning-style preferences.[10] They found that instructional interventions designed to meet the learning needs of the students showed a statistically significant difference in achievement over students not being accommodated, with an effect size of .353. That means students whose learning styles are accommodated would achieve 75% of a standard deviation higher than their counterparts whose learning styles are not accommodated. Dunn et al. also extended this finding to at-risk students, reporting that mean achievement increased nearly one standard deviation (i.e., approximately 84th percentile versus 50th percentile) when teachers accommodated for learning styles.[11] Implementing a variety of classroom techniques and strategies also enhances student motivation and decreases discipline problems.[12] Furthermore, differentiated instruction enables teachers to adjust their curriculum, materials, learning activities, and assessment techniques to ensure that all students in a mixed-ability classroom can have different avenues to process

new knowledge and develop skills, while having equal access to high-quality learning.[13]

Studies have found that a learning unit that has been enhanced or modified based on student learning abilities can improve students' learning outcomes compared with a regular textbook unit.[14] Furthermore, students from all socio-economic backgrounds and of different prior achievement levels make significant gains during the implementation of a differentiated unit. They also present higher motivation for learning. These studies indicate that teachers can differentiate the regular teaching materials, through the use of flexible grouping practices based on pre-assessment of student learning, and the increase of the breadth (i.e., interest, choices, and learning style variation) and depth (lessons for different ability levels), to create more meaningful learning for students. Beck also noted that accommodating student differences can be beneficial in many ways.[15] First, it motivates teachers to broaden their instructional versatility and creativity. Second, students are more likely to respond favorably to the subject content that is presented in a way that is compatible to their learning preferences. Third, students' positive attitudes can lead to higher commitment to learning and decrease behavioral problems. Research and best practice indicate that teachers can differentiate at least three classroom elements as shown in Figure 4, according to students' readiness and preference

How to Differentiate[16]

Content	What do we want our students to know? How do we present the curriculum so that all children can learn the content?	Differentiation can take the form of varying the modalities in which students gain access to important learning, for example by (a) listening, reading, and doing; (b) presenting content in incremental steps, like rungs on a ladder, resulting in a continuum of skill-building tasks; and (c) offering learners a choice in the complexity of content with which they will begin a learning task that matches their current level of understanding and from which every learner can experience academic success.

Process	What do we want our students to be able to do? How can we integrate basic and higher-level thinking skills into the curriculum?	Differentiation takes the form of grouping flexibly, for example, by (a) varying from whole class, to collaborative groups, to small groups, to individuals, and (b) providing incentives to learn based on a student's individual interests and current level of understanding.
Product	What do we want our students to create? How can we teach them to become more self-directed learners?	Differentiation can also the take the form of varying assessment methods, such as (a) providing students a menu of choices that may include oral responses, interviews, demonstrations and reenactments, portfolios, and formal tests; (b) keeping each learner challenged at his or her level of understanding with content at or slightly above his or her current level of functioning; and (c) allowing students to have some choice in the means in which they can express what they know for example, writing a story, drawing a picture, or telling about a real-life experience that involves what is being taught.

As general education classrooms are increasingly inclusive, differentiation is becoming more essential to enable all students to achieve their optimal levels of learning. Despite the importance of differentiation, teachers are still not implementing it on a regular basis. Many teachers are resistant to differentiation because:

- They do not receive administrative support.
- They fear that straying from the mandated curriculum may result in lower standardized test scores.

- They have classroom management or student behavioral problems.
- They are resistant to long-term changes in teaching style.
- They do not have time to plan for differentiation.
- They fear that students' parents may not agree with the practice.[17]

Carolan and Guinn pointed out that many educators mistakenly think that differentiation means teaching everything in at least three different ways. A differentiated classroom does look different from a one-size-fits-all classroom, but often the differences between students are

less dramatic. For instance, differentiation can be in form of developing a metaphor matched to a student' cognitive ability and personal interests, or pushing the thinking of an advanced student during a whole-class discussion.[18] Through observations and interviews with five outstanding teachers, they found that their strategies that addressed student individual needs had four common characteristics:

- Offering personalized scaffolding, often inventing supports on the spot as a student faltered. In order to deliver tailored explanations, these teachers had a rich mental database of examples, metaphors, and enrichment ideas to draw on.
- Using flexible means or multiple paths to reach defined ends.
- Mining subject-area expertise. These teachers not only knew the landscape of their subject matter, they also showed multiple ways to navigate it and translate it into their instruction in a manner that led to student learning.
- Creating a caring classroom in which student differences in ability, culture, language, or interests were seen as assets, rather than hurdles.

Sample Performance Indicators for the Professional Knowledge of Teachers
- Differentiates the instructional content, process, product, and learning environment to meet individual developmental needs.
- Provides remediation, enrichment, and acceleration to further student understanding of material.
- Uses flexible grouping strategies to encourage appropriate peer interaction and to accommodate learning needs/goals.
- Uses diagnostic, formative, and summative assessment data to inform instructional modifications for individual students.
- Develops critical and creative thinking by providing activities at the appropriate level of challenge for students.
- Demonstrates high learning expectations for all students commensurate with their developmental levels.

Sample Student Evidence that Teacher met the Criteria for Level III
- Meet the same standards through the same content/process but may demonstrate learning through differentiated products.

- Discover and examine their strengths, talents, interests, and resources with teacher guidance.
- Complete individualized activities designed to achieve success in specific content and/or skills.
- Participate successfully in group learning activities designed to help peers of varied academic strengths and weaknesses work together.
- Practice leadership and support roles in groups with teacher's help.
- Provide feedback to the teacher about how they learn best, when they are confused, and what help they need.
- Learn and enact explicit roles and responsibilities (e.g., group member, listener, partner, worker, etc.)
- Learn in ways that are comfortable and productive for them.
- Explain different group options typically used by the teacher.
- Grasp the meaning, not just the facts, of the content they learn.
- Explain and demonstrate how they can meet or have met the standards.
- Explain personal learning goals and how they have met them.
- Use agenda (or other forms of communication) to record individual learning goals.

Sample Conference Prompts
- How have you determined which differentiation strategies are appropriate for your students?
- How have you adapted instruction?
- How have you worked with teachers to develop differentiation strategies for special needs and gifted students?
- How do you use technology and resources to differentiate instruction?
- What is your process for determining how to group students for particular lessons?
- How do you use data to support your grouping practices?
- How do you determine whether or not a group is working well? How do you make adjustments to improve effectiveness?
- How do students set their own learning goals in the classroom?
- How do you support student goal-setting and self-assessment during your lesson?

Georgia Department of Education
Teacher Keys Effectiveness System

Teacher Self-Assessment Checklist
Performance Standard 4: Differentiated Instruction

Quality		Level IV	Level III	Level II	Level I
Differentiating Content	Increase the breadth of learning materials to enhance student learning motivation.				
	Offer students choice regarding the complexity (depth) of content they want to start with so that they can experience academic success.				
	Offer multiple modes of learning for students to be exposed to the target content through their learning-style preferences (such as reading, listening, or doing).				
	Re-teach an idea or skill in small groups of struggling learners.				
	Extend and enrich the thinking or skills of advanced learners.				
Differentiating Process	Vary instructional strategies and activities for students.				
	Vary types of assignment to assess student learning.				
	Routinely combine instructional techniques that involve individual, small-group, and whole-class instruction.				
	Monitor and pace instruction based on the individual needs of students.				
	Draw on a mental database of examples, metaphors, and enrichment ideas to provide personalized scaffold.				
	Offer optimal amount of support/intervention and structure learning tasks to ensure the learning demand is appropriately challenging.				
Differentiating Product	Provide students with choices regarding the method to express required learning, such as presentation, portfolios, or formal tests.				
	Use rubrics that match and extend students' varied ability levels.				
	Encourage students to produce their own product assignment.				
	Allow students to work alone or in small groups on projects.				
Learning Environment	Create an environment in which student differences in ability, cultural background, academic needs and interest are respected and treated as assets.				
	Know and understand students as individuals in terms of ability, achievement, learning styles, and needs.				

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