



# Differentiation Tips for Teachers: Practical Strategies for the Classroom, Part 2: Content, Process, Product

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The first part of the series (*Challenge*, Winter 2005) explored the first two essential questions that lead to a differentiated learning experience. The key question with planning is “What do I want students to know, understand, and be able to do?” The second key question is the preassessment one: “Who already knows, understands, and/or can use the content or demonstrate the skill?” This installment explores the last essential question.

## **DIFFERENTIATION: What can I do for him, her, or them so they can make continuous progress and extend their learning?**

Before you can explore differentiating the lesson or unit itself, it’s critical to realize that learning experiences combine content, process, and product.

The matching of any one of those components to a student’s needs, interests, or abilities creates a differentiated learning experience. In order to do that though, you must understand those components fully.

## **CONTENT: What do you want the students to learn?**

National and state standards should drive the content in your classroom. National standards have been adopted in all major content areas (see box on page 14), plus most states have dovetailed on those for their particular students. In Kentucky, for example, the Program of Studies and Core Content Standards prescribe content for all grade levels and all subjects.

Differentiation comes into play with children who have already mastered the content. A pretest for each unit determines mastery. Students should receive credit for that mastery, then be able to explore the content vertically. As educators, you know that any content in your curriculum could be taught on the graduate level. In-depth exploration of content challenges the learner in your classroom who has already mastered the material in your lesson.

## **PROCESS: What do you want the students to do cognitively?**

Another component to differentiation is the process, the kind of thinking that occurs. As you educators are acutely aware, Bloom along with others (1956) created a taxonomy of cognitive thinking skills. The revision of that taxonomy, (Anderson & Krathwohl, 2001) focuses on the action of thinking. In terms of differentiation, Bloom’s approach matches naturally.

Some children may be ready to consider the solar system, for example, on the lowest levels: remember and understand. They may be challenged to remember the names and order of the planets. Other children, though, may be ready to think about the planets on higher levels. Perhaps they can apply the criteria of what makes a planet a planet to another celestial body in order to determine the difference between the two. Maybe they’re challenged by analyzing the atmosphere of the planet in terms of supporting life. But for them to only think about the planets’ order doesn’t even require them to think. For some children, analyzing and applying won’t challenge them. They need to evaluate and predict in order to learn more about the solar system. So while their classmates may be exploring atmospheres, they may be considering what would happen to the solar system if an asteroid hit the earth. Or perhaps they’re evaluating whether that “tenth planet” is really a planet and why.

So the content is essentially the same: the solar system. But their think

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## YOU CAN LOCATE THE NATIONAL CURRICULUM STANDARDS AT THE FOLLOWING WEBSITES:

**American Association for the Advancement of Science: Benchmarks for Science Literacy**  
<http://www.project2061.org/publications/bsl/online/bolintro.htm>

**American Council on the Teaching of Foreign Languages: Standards for Foreign Language Learning**  
<http://www.actfl.org/i4a/pages/index.cfm?pageid+3392>

**Center for Civic Education: National Standards for Civics and Government**  
<http://www.civiced.org/stds.html>

**National Center for History in the Schools: National Standards for History for Grades K-12 and National Standards for World History Grades 5-12**  
<http://nchs.ucla.edu/standards>

**National Council for the Social Studies: Curriculum Standards for Social Studies**  
<http://www.socialstudies.org/standards>

**National Council of Teachers of English: Standards for the English Language Arts**  
<http://www.readwritethink.org/standards/index.html>

**National Council of Teachers of Mathematics: Principles and Standards for School Mathematics**  
<http://standards.nctm.org>

**National Geographic Society: Geography Standards 1994**  
<http://www.nationalgeographic.com/xpeditions>

**National Research Council: National Science Education Standards**  
<http://www.nap.edu/html/nses>

**National Standards for Arts Education**  
<http://artsedge.kennedy-center.org/teach/standards.cfm>



ing, how they process this concept, differs greatly. And it must be so in order for them to have continuous progress.

Teachers can also differentiate creative thinking skills, for example, by using Torrance's (1963) flexibility, elaboration, fluency, and originality. The process of learning a concept must be challenging to the individual learner.

### **PRODUCT: How do you want the students to show or demonstrate what they have learned?**

In addition to content and process, product is another component in the learning process that can be differentiated to meet the needs of learners. In fact, you can approach differentiation of product in a couple of ways.

When the product is an integral part of the learning (e.g., students are learning PowerPoint or the art of writing essays), you can differentiate through your levels of expectation. A child gifted in language arts should be held to higher standards than a child below grade level if the product is a written one. Everyone is still expected to write, but the assessment for the gifted child or child of high ability needs to be more sophisticated and stringent. For example, one rubric could assess complex syntax while another looks for complete sentences. Each would prove challenging for the writer – as long as appropriate preassessment occurs.

Please note: no where does the assessment call for more (more pages, more paragraphs, etc.) for the gifted child. It calls for different!

Another approach to differentiating the product is appropriate when the content is more important than the product. If your goal is for students to explore the Bill of Rights, whether they demonstrate their understanding by a speech, pamphlet, or model, is of little consequence to you. Your goal is content. Differentiating occurs when you encourage your students to demonstrate their learning in products that match them: their learning style, their interests, their multiple intelligence. And the assessment of those products holds all children to high standards.

Product. Process. Content. Any one of these learning components can be differentiated so that a match is made between learning and learner.

Anderson, L., Krathwohl, D., Airasian, P., Cruikshank, K., Mayer, R., Pintrich, P., et al. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives* (Abridged ed.). New York: Longman.

Bloom, B. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York: Longman.

Torrance, E. P. (1963). *Education and the creative potential*. Minneapolis, MN: University of Minnesota Press.