Bush Grant Differentiation Committee
Valley City State University

Recommended Strategies for Improving Teaching through Differentiating Curriculum

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Forward
We had never met each other. The Bush grant and a shared passion—differentiation—brought us together to discuss improving teacher education. Our task was to make recommendations on how to better prepare preservice teachers to—upon entering the classroom—differentiate curriculum in order to meet the needs of diverse learners.

The topic of differentiation, itself, had the potential to lead to some unpredictable and perhaps explosive discussion, in part because there are no “official” definitions of differentiation, and in part because both special education and gifted education—often seen as two very different fields—have shared ownership of the word “differentiation”, of what differentiation involves, of what it should look like.

We began by simply talking about what differentiation is, and what it is not. “It’s meeting the needs of all students,” said one. “It’s good teaching,” said another. “It’s a way of thinking.” “It’s not just for students who are not proficient.” “It’s not scripted instruction.” “It’s a mindset.” “It’s not one size fits all.” “It’s a process.” “It involves changing the content, process, or product.” “It also might mean changing the environment.” “It’s doing whatever it takes to make sure that every student succeeds.”

Success, according to our understanding of the Bush grant, happens when all students achieve at least one year’s growth in any given school year. Our work, then, was to make sure that preservice teachers are prepared to “do whatever it takes” to assure at least one year’s academic growth in every student taught that first year and every year thereafter. Of course, the strategies used to obtain one year’s academic growth from a student who is working several years below grade level can look very different from the strategies used to obtain one year’s academic growth from a student who is working several years above level. We wanted to make sure our recommendations would include strategies for myriad needs.

Like K-12 students, preservice teachers have varying experiences, talents, abilities, and levels of achievement that they bring to their teacher training. From the onset of our work on this project, our committee believed that our approach to teaching preservice teachers how to differentiate needed to begin with preservice teachers experiencing differentiation in their
university coursework. We felt that preservice teachers were more likely to use strategies of differentiation with their future students if differentiation had been modeled in the university classroom and if the preservice teachers, themselves, had been the recipients of differentiated instruction. We found ourselves wanting not only to suggest strategies that we wanted preservice teachers to be able to use to differentiate instruction in their future classrooms, but wanting also to suggest strategies for differentiation that could be modeled and implemented in the university classroom, with the preservice teachers, so that preservice teachers could actually experience differentiation.

Recognizing that there are indeed differences between pedagogy (the art of teaching children) and andragogy (the art of teaching adults) we made every attempt to include in this handbook strategies for differentiation that we felt could be implemented within the university classroom. Within this handbook, then, you will find strategies for differentiation that have been successfully used in K-12 classrooms and can also be used successfully within the university classroom. We hope that they will be used extensively in both settings.

--Jackie Owen
Valley City state University
May, 2010
Section 1: Definition
Differentiation is...

Differentiation is a process of teaching to the needs of students by making adjustments to any of the following areas:

- Content
- Process
- Product
- Environment
- Assessment

. . . thereby doing whatever it takes to meet students’ learning needs and to maximize students' learning. The process and the type of adjustments will vary from classroom to classroom and with every new group of students.

Differentiation is also . . .

. . . a mindset, a way of thinking about students, about schools, about classrooms, about curriculum, about learning, about assessment, and about teaching.

Differentiation is not...

- Busy work
- Additional work (i.e., more problems, more vocabulary words)
- Using centers as the only means of meeting individual needs
- Giving extra assignments
- Simply more work for the student
- Assigning research papers
- Scripted lessons

"Differentiation is what we do if we intend to have every student understand what they are learning, why they are learning it, why they should care, and how it makes them more fully human."

--Carol Ann Tomlinson forward of Differentiation by Rick Wormeli
When defining differentiation, it is helpful to view differentiation as a set of common beliefs about students, classrooms, teaching, and learning.

**The 20 Foundational Beliefs of Differentiated Classrooms**

1. All people share common feelings and needs.
2. Schools should help people understand and respect their commonalities.
3. All children can learn.
4. Individuals differ significantly as learners.
5. Schools should help people understand and respect their differences.
6. Intelligence is not fixed; it is dynamic.
7. There are many ways to be smart.
8. The art of teaching is maximizing our students' success in learning.
9. The central goal of schools should be to increase the likelihood that all students will learn and succeed in reaching learning goals.
10. Students are at the center of the classroom; it is not about what we teach, but what they learn.
11. Students should be actively involved in making sense of the world around them.
12. All students represent a unique profile of readiness needs, learning preferences, and interests.
13. Effective teachers know their students' readiness needs, learning preferences, and interests, and act on this knowledge as they plan for instruction.
14. Because of the unique profiles of students, not all students will do the same thing at the same time in the classroom.
15. All students require respectful, engaging, and rigorous learning experiences.
16. Students' feelings of confidence and competence in learning are enhanced through success in learning experiences at the edge of their competencies that offer challenge and require effort.
17. Learning should be about individual growth and progress and not about comparisons to others.
18. Teachers and other adults need to help students accept responsibility for their growth and learning progress.
19. Students and teachers deserve schools and classrooms that are communities of respect, safety, and learning.
20. Parents can be partners in encouraging and supporting students' success in learning.
Section 2: Differentiation at VCSU
Differentiation in methods classes at VCSU, 2009-2010:

- There is more focus on teaching preservice teachers about low achieving students.
- There is some focus on teaching preservice teachers about gifted students.
- Professors offer some choice of activities.
- There are many group projects/collaboration.
- Instructors show awareness of student differences.
- VCSU offers a strong emphasis on educational technology.
- Instructors utilize and model methods of formative and summative assessments.
- Instructors incorporate the university model: Plan, Implement, Evaluate, Reflect
Our Vision for Differentiation at VCSU:

1. Instructors at VCSU will teach differentiation by modeling differentiation so that students can experience differentiation.

2. Preservice teachers will enter the classroom ready to differentiate curriculum by:
   - Getting to know students through inventories, including interest inventories, learning styles inventories, multiple intelligences inventories, and communication styles inventories.
   - Discerning differences in student abilities and achievement through student conferences, journal writing, and student files.
   - Identifying what students know and can do in the content area through Pre-assessment of content knowledge and skills.
   - Using both summative and formative assessments.
   - Creating and using rubrics to evaluate learning.
   - Creating and using anecdotal notes/observation.
   - Selecting and applying strategies for differentiating content, process, product and environment, which match students' interests, abilities, learning styles, and/or academic needs and which maximize the likelihood of one year's academic growth for each student—from students who are achieving below grade level, to students who enter a grade achieving above grade level.

Our Goal: By the time students graduate from VCSU they will have experienced multiple strategies for differentiation as students, so that they are able to take these strategies into their own classrooms and use them to differentiate instruction for their own students.

It should be noted that while our assignment for this project was to create a handbook of recommended strategies for differentiation that could be used in methods courses, we unanimously agreed that strategies for differentiation should be taught and utilized in ALL education classes.
What differentiation might look like in a university methods course:

<table>
<thead>
<tr>
<th>Instructors of methods courses could incorporate the following:</th>
<th>Students, in methods courses could, in turn:</th>
<th>So that when they enter the K-12 classroom they will be more likely to differentiate by using:</th>
</tr>
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<tbody>
<tr>
<td>Pre-assess students to find out what they already know.</td>
<td>Have a chance to experience what it is like to demonstrate what they already know, and have new learning build upon their current knowledge.</td>
<td>A variety of pre-assessment techniques</td>
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<td>Post-test using a variety of assessment techniques.</td>
<td>Have the opportunity to experience what it is like to test in various formats.</td>
<td>A variety of post-assessment techniques.</td>
</tr>
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<td>Incorporate a choice of activities in coursework.</td>
<td>Have the opportunity to experience what it is like to choose and complete course work that matches their interests, level of experience, learning style, etc, while still meeting course objectives.</td>
<td>Approaches that incorporate a choice of learning activities.</td>
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<td>Substitute assignments based on students’ strengths and weaknesses.</td>
<td>Have the opportunity to experience what it is like to have assignments adjusted to match learning abilities.</td>
<td>Alternate assignments based on students’ strengths and weaknesses.</td>
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<td>Create assignment choices based on differing learning styles, multiple intelligences, etc.</td>
<td>Have the opportunity to experience what it is like to complete an assignment based on a specific learning style or a specific area of intelligence.</td>
<td>Assignment choices based on differing learning styles, multiple intelligences, etc.</td>
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<td>Use best practices (Marzano) in teaching methods courses. For example, have the students make and use Venn diagrams, compare/contrast charts, graphic organizers; have students create metaphors for concepts taught; have students summarize and use writing frames in completing written assignments.</td>
<td>Have the opportunity to experience what it is like to look at similarities and differences, create metaphors for concepts learned, use graphic organizers, summarize, use writing frames, etc.</td>
<td>Best practices (Marzano) in teaching methods courses.</td>
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<tr>
<td><strong>Instructors of methods courses could incorporate the following:</strong></td>
<td><strong>Students, in methods courses could, in turn:</strong></td>
<td><strong>So that when they enter the K-12 classroom they will be more likely to differentiate by using:</strong></td>
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<tr>
<td>Model specific strategies for differentiating content, process, product, and environment.</td>
<td>Have the opportunity to at times learn different content than other students in the course, or learn through different processes than other students in the course.</td>
<td>Specific strategies for differentiating content, process, product, and environment.</td>
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<td>Scaffold project-based learning.</td>
<td>Have the opportunity to dialogue one-on-one with an instructor, and modify an individually selected project based on the outcome of the dialogue.</td>
<td>Scaffolding in facilitating project-based learning.</td>
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<tr>
<td>Encourage students to reflect on their learning. Their reflections should include the ways the course has been differentiated to meet different student needs, and how this knowledge of differentiation could be transferred to the classroom.</td>
<td>Be motivated as teachers to try different strategies for differentiation, based on their own experiences as a learner with differentiated curriculum in their methods courses.</td>
<td>Their own and their students’ reflections to adjust learning activities to meet student needs.</td>
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Section 3: Strategies for Differentiation
Strategies for Getting to Know Students:

1. Have students “Present their Profile.” Assign students to create a one-page powerpoint including their picture and information about themselves. Ask them to include at least one fact that is relevant to the class they are enrolled in.

2. Teach students about Multiple Intelligences. Have students identify the intelligence or intelligences that they believe best represents the way they learn. Keep a written record of the types of intelligences represented in your class. Design learning activities accordingly.

3. Use a multiple intelligence checklist to have students rate each other’s intelligence. Have the students chart the intelligences represented in the class. Whenever you introduce a new assignment, have students make recommendations on how that assignment could be differentiated to fit different intelligences. Allow students to complete differentiated versions of the assignment.

4. Have a student or small group of students adapt a multiple intelligence survey or learning styles survey so that it can be given via computer.

5. Have students create a “Self Bibliography”—a list of ten books that have been life-changers for them. Have them present and explain their bibliographies in class. Variation: Allow students to include websites and other media in their bibliographies.

6. At the beginning of a course, survey students to find out their skills and interests. Sample questions could include: To date, what has your favorite course been at VCSU? Why? What kinds of activities and assignments do you feel help you learn the most? Why? What kinds of activities and assignments do you struggle with the most? Why? What kinds of activities and assignments do you dread? Why? What kinds of activities and assignments are like Listerine—you dislike them, but you know they are good for you? What learning experience at VCSU has
changed you the most? How did it change you? What course has been most difficult for you so far? Why? What course has been easiest for you so far? What made it so easy? What horror stories have you heard about this class? What are your expectations from this class? What are your expectations from me, as an instructor? If you could design your own class for teacher education, what class would you design? What concepts would be taught in that class?

7. Have students redesign the survey in the previous strategy so that it could be used with one of the following: a group of high school students, a group of middle school students, or a group of elementary school students.

**Strategies for Discerning Differences in Student Abilities and Achievement:**

1. Pretest students on modules or units of study.

2. Use KWL charts to introduce curriculum—even at the college level. Have students complete KWL (what we **K**now, what we **W**ant to know, what we **L**earned) charts for course objectives.

3. Have students “Journal their Journey” through your course.

4. Conduct beginning of the semester “Five Minute Interviews” with each student on an individual basis to gain information their abilities and achievements in the content area you are teaching.

5. Conduct five minute “Exit Interviews” with each student at the end of the semester. Ask specific questions to help students reflect on what they learned in your class.
6. Create a Facebook page for your course and allow time during class for students to comment, reflect, answer questions, ask questions, and post links relevant to the topic presented in class.

7. Identify a different group recorder each time your class meets. This works just as in a professional meeting, where there is a group recorder who takes notes and provides each member of the group with a copy. The class group recorder takes notes for the assigned day, then posts them on the “Class Notes” discussion board forum you have created in Blackboard. Students who miss class are able to refer to the posted notes, students who attended are free to clarify notes by replying to the thread, and you are able to assess the learning and understanding of the student who posted the notes. Students with disabilities benefit from this strategy because they don’t have to rely on a note-taker each week; they can simply consult the group notes.

**Strategies for Identifying What Students Know and Can Do in the Content Areas:**

1. Pretest students on the essential professional language presented in your course. Within the course, emphasize professional language that was less understood by students; give less emphasis to professional language that most students already understand.

2. Use Blackboard quizzes as an accountability tool to encourage students to keep up with assigned readings from the textbook and other sources. Check results and adjust lectures accordingly.

3. Allow collaboration during testing. Provide each student with an individual copy of the test, but encourage dialogue between students as the test is completed. Students still turn in individual tests (and may submit answers different from those agreed upon by the group). However, the test, itself, becomes a tool for learning, and the instructor is able to assess group understanding.
4. Instead of having students take a test, have small groups of students design assessments for major course objectives. Assign each group an test style: T/F, multiple choice, short answer essay, fill in the blank, etc. Have each group present the assessment they designed and defend their choice of questions for that style of assessment.

5. Have students complete KWL (what we Know, what we Want to know, what we Learned) charts for course objectives.

**Strategies for Differentiating Content:**

1. Use WICR in creating differentiated assignments and activities for students. WICR stands for Writing, Inquiry, Collaboration, and Reading. Content can be differentiated by creating assignments that offer students a variety of possibilities/choices in each area. For example, students could be given a choice of writing assignments for a particular learning module. The assignment possibilities could include choosing one of the following: taking textbook notes, taking lecture notes, keeping a journal, keeping a learning log, writing a reflective paper, posting on a discussion board, creating a class wiki, etc. Inquiry assignments could include having students generate questions based on Bloom’s taxonomy or Kaplan’s icons for depth and complexity. Collaboration assignments could include grouping students in tutorial groups or in mock grade level groups, then assigning them a problem-based project or having them participate in a simulation. Reading assignments might include having students choose readings from a textbook, from journal articles, or from case studies.

**Example of WICR in the college classroom:** Students use their textbook and three other sources to READ about a specific disability. Students COLLABORATE to design a presentation based on the disability. The students use INQUIRY to research beyond the textbook so that the presentation includes at least two media components, one group participation activity, and a handout. Groups take turns each class session presenting their
assigned disability. When all disabilities have been presented, each student is assigned the role of a teacher at a given grade level. Each “teacher” individually WRITES a profile of a fictitious K-12 student in his or her class who has an exceptionality of some kind. The “teachers” meet in grade levels to discuss their “students,” what accommodations have been made for the students, what other accommodations can be made, and whether or not the students should be referred to student study team. During subsequent class sessions the “teachers” COLLABORATE by participate in student study team meetings, pre-referral team meetings, referral team meetings, and IEP meetings. Ultimately, the “teachers” write IEPs, behavior plans, etc. for the fictitious students. After each meeting, the “teachers” meet to reflect on what they did during that step of the referral process.

2. Encourage Independent Study—Pretest students on smaller units or modules covered in your course. Allow students who pass the pretest to complete an independent study project in lieu of completing the required assignment for that unit or module. Encourage students to go beyond research papers when designing projects. Could they create a model to represent a concept? Design a webquest for other students to investigate an idea? Create a video to illustrate a specific teaching strategy? Prepare a set of materials that could be used in the classroom? Contact and interview an experienced professional in connection with the unit or module? Create a list of 50 unanswered questions they have about a specific concept or topic?

3. Use Kaplan’s Icons for Depth and Complexity to pose questions for class discussion or online discussion boards using Kaplan’s icons for depth and complexity for gifted and talented students. The icons are:

- **DETAILS**
- **PATTERNS**
When using icons of depth and complexity to differentiate instruction, embed the name of the icon into the question, as in the samples below.

**Example:**

![Big Idea Icon] Explain the BIG IDEA of teaching phonics as part of a balanced literacy program.
Describe the recent TRENDS in math instruction promoted by the National Council of Teachers of Mathematics.

More than one icon can be embedded in a single question, thus increasing the complexity of the question:

**Example:** DETAIL the RULES that states must follow in implementing the requirements of No Child Left Behind.

How have the TRENDS in reading instruction CHANGED OVER TIME?

4. Scaffold learning with graphic organizers, guide sheets, writing frames, etc.

**Example:** Kaplan’s icons for depth and complexity can be used as graphic organizers. (See next page)
Kaplan’s DETAIL icon used as a graphic organizer:

DETAIL the parts of an IEP on each of the daisy petals below.
5. Increase rigor by having students use reciprocal questioning using Kaplan’s icons for depth and complexity and Bloom’s taxonomy. Provide guide sheets; have students generate a specified number of questions for each icon and/or each level of Bloom’s.

Sample guide sheet for Bloom’s:

<table>
<thead>
<tr>
<th>Given what you know about <strong>at-risk learners</strong>, write one question for each of the following levels of Bloom’s taxonomy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge:</td>
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<tr>
<td>Comprehension:</td>
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<tr>
<td>Application:</td>
</tr>
<tr>
<td>Analysis:</td>
</tr>
<tr>
<td>Synthesis:</td>
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<tr>
<td>Evaluation:</td>
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</tbody>
</table>
Sample guide sheet for Kaplan’s icons for Depth and Complexity:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌸</td>
<td>Given what you know about the history of education, write one question for each of the following icons for Depth and Complexity:</td>
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<tr>
<td>⚪⚪⚪</td>
<td></td>
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<td>🏛️</td>
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</table>
6. Provide a choice of learning activities for at least part of your course.
   One way to do this is to offer a menu of learning activities.

Example of choice of learning activities currently in use in a college syllabus:

You are required to complete five mini projects for this class this semester. Here is a list of some possible mini projects for this course:

1. **Journal Your Journey**—Keep a journal of your field experience. I would expect an entry of 1-2 pages for every session spent in class.
2. **Interview a Staff Member**—Design a set of twelve interview questions, none of which can be answered yes or no. Then interview a staff member at the school in which you are completing your field experience.
3. **Work with a Student**—When you begin your field experience, find out from the teacher what student needs extra tutoring or mentoring. Work with that student for a specific amount of time each day during your field experience. (If you are at Washington School, Mr. Denault can also set you up with a student who needs extra help.)
4. **Design a Bulletin Board**—With your cooperating teacher’s approval, design a teaching bulletin board (as opposed to a decorative bulletin board) for a concept that will be taught during your field experience. Introduce the bulletin board to the class.
5. **Teach a Small Group**—Have your cooperating teacher assign you a small group to work with on a regular basis during your field experience.
6. **Attend a Cultural Activity**—Attend a cultural activity in town, such as a play, a musical performance, an art show, etc. However, part of your experience needs to include a “behind the scenes” look at the event. Share what aspects of the behind the scenes perspective, as well as the event itself, would make a good field trip for students.
7. **Create a Sociogram**—Research sociograms on the internet ([http://www.behavioradvisor.com/Sociogram.html](http://www.behavioradvisor.com/Sociogram.html) is a good place to start), then create one for your class.
8. **Explore a New Interest**—Part of teaching is lifelong learning. Learning new things also gives you important perspective as a learner. Learn to do something you’ve always wanted to do—knit, play the guitar, snow ski. Share your experience.
9. **Share a Passion**—Do you have an interest or hobby that you are passionate about? Share your passion in class or, with permission from the cooperating teacher, share your passion in the class to which you have been assigned for your field experience. Make part of your sharing a hands-on look at the “tools of the trade” so that your audience will develop new vocabulary as a result of your presentation.
10. **Risk!**—Think of risk as the following: DESIRE + FEAR + ACTION = RISK. Is there something you’ve always wanted to do, but you’ve been too afraid or insecure to try it? Take a risk and try the activity this semester, share your experience, and get credit for it.
11. **Practice Your Penmanship**—Effective communication includes the ability to write with readable penmanship. This is especially true for teachers. For this activity, put yourself through the paces of handwriting practices, using preprinted handwriting practice pages as well as practice on a white board. Share your results.
12. **Sample Some Software**—Sample a single piece of educational software in-depth, or peruse a wider variety of software with a specific goal in mind. Prepare a presentation to share what you learned.

13. **Teach from a Textbook**—With your cooperating teacher’s permission, teach a lesson following the outline in the teacher’s guide.

14. **Attend a School Board Meeting**—Find out when the local school board meetings are held. Sit through one from beginning to end. Share your experience.

15. **Establish a Network**—Introduce yourself to the following people at your school site and carry on a conversation with each of them for at least two minutes: the principal, the school counselor, the school custodian, the office manager, and one of the special education staff members.

16. **Sample the Stars**—Over the years, Hollywood has produced a number of movies about teachers. Organize a double-feature movie night and watch two of the following: Teachers, Conrack, Radio, The Ron Clark Story, Stand and Deliver, Paper Clips, Freedom Writers, Mr. Holland’s Opus, Fame, Knights of the South Bronx, Lean on Me, Hoosiers, Remember the Titans. Share your reflection on the movies’ treatment of teachers.

17. **Read More About It**—Read and respond to one of the following books: any book by Torrey Hayden (One Child, Somebody Else’s Kids, Murphy’s Boy, Ghost Girl are some of the titles); any book on effective teaching by Robert Marzano (there are about 12 titles in the library); The Essential 55 or The Essential 11 (Ron Clark).

18. **Capture the Memories**—Create a digital photographic memory album of your field experience. Include pictures of you working with students, pictures of bulletin boards that you wish to remember, pictures of lessons and activities that show active learning, pictures of student-created projects, etc. Use power point or other presentation software to share your album.

If you have an idea for an out of class assignment, please present it to me. I am always looking for new ideas, and students often generate great ones!

We will share mini-projects every Friday. Whoever is ready will share. When you share, you are to use the Plan, Implement, Evaluate, Reflect Model. That is, you are to share what you did to plan your project, how you implemented it, and you evaluated its success. Then, you are to reflect on the project. What aspects of the project better prepared you for teaching? What aspects could be carried over to a classroom? What did you learn about students, about teachers, about teaching, and/or about yourself by completing this project?

Another way to provide a choice of learning activities for some assignments is to use an assignment menu with many alternative assignments that meet the same objective. Assign points to the assignments based on their level of depth and complexity. Allow students to pick whatever assignments they want from the menu, providing the points equal a predetermined amount.

Feel free to try new strategies…then try them again if they don’t work as expected the first time.
Strategies for Differentiating Process

1. Flexible Grouping—Group your students differently for different activities and assignments.

**Example 1:** At the beginning of the semester, count off students into groups that can be rearranged. For example, assign students numbers and letters, A1, A2, A3, A4, A5, B1, B2, B3, B4, B5, etc. Then, have students group either by number or by letter to complete different activities.

**Example 2:** Each time you meet as a class, divide students into mock grade level groups. Have the students approach concepts and activities introduced that day from the perspective of a teacher or student at that grade level. (Note that this overlaps into Icons for Depth and Complexity: Multiple Perspectives)

2. Bloom’s Taxonomy Questions—Develop questions for in-class discussions, discussion boards, writing assignments, etc., using the higher levels of Bloom’s Taxonomy. Teach students how to ask you questions using Bloom’s Taxonomy. At the end of every lesson, require your class to ask—not answer—at least five questions, only one of which can be based on the lower levels of Bloom (Knowledge, Comprehension).

3. Use Multiple Intelligence Model to Plan Lessons—Teach students about Multiple Intelligences. Have students identify the intelligence or intelligences that they believe best represents the way they learn. Keep a written record of the types of intelligences represented in your class. Design learning activities accordingly.

4. Use a multiple intelligence checklist to have students evaluate each other’s intelligence area. Have the students chart the intelligences represented in the class. Whenever you introduce a new assignment, have students make recommendations on how that assignment could be
differentiated to fit different intelligences. Allow students to complete
differentiated versions of the assignment.

5. Teach students independent study techniques. Teach students how to focus on a topic from your course that excites or intrigues them, narrow the topic, determine what materials should be used for research, and how to decide on a possible product to demonstrate mastery of the topic.

**Strategies for Differentiating Product**

1. Use choice boards—Create a display that offers a variety of choices to show mastery of a specific objective. Students choose a specific number of activities to complete. Vary the activities to meet the needs of students of all learning styles.

2. Project based learning—offer students the option of designing a project that involves a product other than a written paper. For any given topic, what would knowledge of that topic look like if it were presented in a powerpoint? A video? A poem? A song? A piece of art? A newspaper article? A segment on Oprah? Challenge students to substitute unique products for written assignments. Note: Scaffolding will be necessary. Students will need to be guided on how to select a project that matches the topic, etc.

3. Teach students to make and use anchor posters, Anchor posters are posters and charts that organize information, and are displayed on the walls of the classroom so that they can be referred to repeatedly in class discussions, writing assignments, etc.

**Strategies for Differentiating Environment**

1. Cluster group most capable students. Suggest that four or five students (who have already proven themselves to be well above the rest of the class in their depth of understanding) group together to complete an in-depth study and/or project connected with that
study. Debrief with both the group and the class. What benefits might there be to cluster grouping the most capable students and allowing them to go beyond the curriculum? What problems could there be? Etc.

2. When using cooperative learning, group everyone in mixed groups EXCEPT the most capable students. Instead, group them together. (Research in gifted education has shown cooperative learning results in no academic growth for gifted students.) Debrief with both the group and the class. What benefits might there be to grouping more capable students together whenever you are using cooperative learning? What problems could arise? Etc.

3. Provide self starting activities for students as they are entering the classroom. Use Wong’s strategy of having an activity for students to self start on each time your class meets. At the end of the semester, reflect with the students on the use of this strategy. How was it helpful to their learning? What problems did they encounter? How would they recommend this aspect of your class be modified in the future? How could self starting activities be used at different grade levels and subject areas in K-12 classrooms? What kinds of self starting activities would they use? What kind of self starting activities do the students recommend for this course in the future? Etc.

4. Use anchor activities--In a truly differentiated classroom, student progress at different rates through the content and materials you offer. Anchor activities provide additional learning activities for students who finish the class assignment early. The goal is to enhance and solidify their understanding by engaging them further with the content. Anchor activities must be self-paced, meaningful, content-driven tasks that students can complete independently during a unit, week, grading period, or longer period of time.
• Examples of Anchor Activities: WebQuests, Logic puzzles, Newspaper searches, Create a board game, Develop interview questions, Write a commercial, Create a bulletin board, Create a powerpoint presentation, Reading, Journal Writing, Keeping a Process Log, Working on a Portfolio, Working on a Learning Packet or Task Card, Working at a Learning or Interest Center, Practicing skills related to content that students learned in their small group lessons, Working on an Extension Menu or Cubing activity, or Task Cards

5. Teach time management—include a brief unit or webquest on time management in each of your courses at the beginning of the semester. Have students map out their semester in terms of due dates, then work backward from each due date to allot enough time to complete each assignment. This is especially helpful when assigning projects.

6. Incorporate extended deadlines—Use flexible deadlines for much of the coursework in your class. At the end of the semester, reflect with your students on the use of flexible deadlines. How were flexible deadlines helpful? What problems arose with flexible deadlines? What adjustments do they recommend to your deadlines next time you teach the class? Why? How might the concept of flexible deadlines be carried over to the K-12 classroom? What issues might there be in using flexible deadlines in K-12 that didn’t present in a college setting? Etc.

**Strategies for Differentiating Assessments**

We have intentionally left this section blank at this time, as formative assessments are the focus of another workgroup.
Selecting and Applying Strategies for Differentiation

There are hundreds of strategies for differentiation. The few that have been outlined in this handbook are simply starting points. You may already be using some of the strategies discussed. On the next page is a menu of strategies that have been listed in this handbook. One way to begin differentiating curriculum or improve your use of differentiation is to X off strategies from the menu that you have already tried or already use, then X off another square on the menu every time you try a new strategy. Note that there are empty squares in the menu for other strategies that you might discover or create yourself for differentiating instruction. Those strategies can be written in the empty spaces.
# Menu of Strategies for Differentiation

**X each box that represents a strategy you have used.**  
**X new strategies as you try them.**  
**Fill in the empty boxes as you discover or create new strategies.**

<table>
<thead>
<tr>
<th>Allow collaboration during testing</th>
<th>Encourage students to suggest and create independent study projects</th>
<th>Use Bloom’s taxonomy to develop discussion questions</th>
<th>Pretest students’ knowledge of professional language used in your course</th>
</tr>
</thead>
<tbody>
<tr>
<td>When using cooperative learning, group most capable students together</td>
<td>Teach students to ASK questions based on Bloom’s taxonomy</td>
<td>Teach students to make and use anchor posters</td>
<td>Scaffold learning with graphic organizers, guide sheets, writing frames, etc.</td>
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<tr>
<td>Survey students skills and interests</td>
<td>Have students create assessments rather than take them</td>
<td>Use Kaplan’s icons for depth and complexity to develop discussion questions</td>
<td>Conduct exit interviews at the end of a course</td>
</tr>
<tr>
<td><strong>Discuss and model working conditions for independent study</strong></td>
<td>Use KWL charts for course objectives</td>
<td>Cluster group the most capable students and allow them to complete an in-depth study in lieu of several assignments</td>
<td>Use flexible grouping</td>
</tr>
<tr>
<td>Conduct “Five Minute Interviews” at the beginning of a course</td>
<td>Teach students to ASK questions based on Kaplan’s icons for depth and complexity</td>
<td>Use WICR (Writing, Inquiry, Collaboration, Reading) when creating assignments</td>
<td>Use Blackboard quizzes as accountability tools</td>
</tr>
<tr>
<td>Have students “Journal their Journey” through your course</td>
<td>Teach and model time management</td>
<td>Create an assignment menu to vary assignments</td>
<td>Have students “Present their Profile” at the beginning of a course</td>
</tr>
<tr>
<td><strong>Use an assignment menu to vary assignments for one objective</strong></td>
<td>Use flexible deadlines</td>
<td>Provide self starting activities at the beginning of each class</td>
<td>Pretest students on modules or units of study</td>
</tr>
<tr>
<td>Assign class recorders to take notes for a group memory of each class</td>
<td>Encourage students to suggest assignment alternatives based on multiple intelligences</td>
<td>Offer students the option of a product rather than a written paper</td>
<td></td>
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</table>
# Articles on Differentiation

<table>
<thead>
<tr>
<th>Author</th>
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<tbody>
<tr>
<td>Brimijoin, Kay, et al</td>
<td>Using Data to Differentiate Instruction</td>
<td><a href="http://www.ascd.org/publications/educational_leadership/feb03/vol60/num05/Using_Data_to_Differentiate_Instruction.aspx">http://www.ascd.org/publications/educational_leadership/feb03/vol60/num05/Using_Data_to_Differentiate_Instruction.aspx</a></td>
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<td>Mann, Rebecca L.</td>
<td>Differentiation at the Secondary Level</td>
<td><a href="http://www.geri.soe.purdue.edu/PDF%20Files/IAG_2009_-_Different1.pdf">http://www.geri.soe.purdue.edu/PDF%20Files/IAG_2009_-_Different1.pdf</a></td>
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<td>Tomlinson, Carol Ann</td>
<td>Deciding to Teach Them All</td>
<td><a href="http://www.ascd.org/publications/educational_leadership/oct03/vol61/num02/Deciding_to_Teach_Them_All.aspx">http://www.ascd.org/publications/educational_leadership/oct03/vol61/num02/Deciding_to_Teach_Them_All.aspx</a></td>
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<td>Mapping a Route Toward Differentiated Instruction</td>
<td><a href="http://www.ascd.org/SearchResults.aspx?equals=mapping%20s%20route&amp;c=1&amp;n=10&amp;p=0">http://www.ascd.org/SearchResults.aspx?equals=mapping%20s%20route&amp;c=1&amp;n=10&amp;p=0</a></td>
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<td><a href="http://www.ascd.org/publications/educational_leadership/sept00/vol58/num01/Reconcilable_Differences%C2%20Standards-Based_Teaching_and_Differentiation.aspx">http://www.ascd.org/publications/educational_leadership/sept00/vol58/num01/Reconcilable_Differences%C2%20Standards-Based_Teaching_and_Differentiation.aspx</a></td>
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<td>Wormeli, Rick</td>
<td>Busting Myths about Differentiated Instruction (also includes two additional articles by other authors: Differentiating Instruction: Meeting Students Where They Are and Research into Practice)</td>
<td><a href="http://www.wilson.k12.pa.us/77032081816511420/lib/77032081816511420/Busting_Myths_about_DI.pdf">http://www.wilson.k12.pa.us/77032081816511420/lib/77032081816511420/Busting_Myths_about_DI.pdf</a></td>
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<td>Wormeli, Rick</td>
<td>Differentiating Instruction: A Modified Concerto in Four Movements</td>
<td><a href="http://users.manchester.edu/Student/GJTribbett/Webpage/Differentiating%20Instruction.pdf">http://users.manchester.edu/Student/GJTribbett/Webpage/Differentiating%20Instruction.pdf</a></td>
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Eidson, Caroline, Bob Iseminger, and Chris Taibbi. 2007. Demystifying Differentiation in Middle School: Tools, Strategies, & Activities to Use Now. Marion, IL: Pieces of Learning


Selected Readings on Differentiation