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Differentiated Instruction: Are University Reading Professors Implementing It?

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ABSTRACT

This qualitative study surveyed university professors of literacy education to explore “how” and “if” they modeled differentiated instruction in their own college classrooms. A survey in questionnaire format on “how” and “if” University Reading Professors differentiate instruction was sent to a purposeful sample of Reading Professors. A total of six professors returned the questionnaire. The study identified various methods of how the professors differentiated the content, the process, the product and the environment within their Reading graduate and undergraduate courses.

INTRODUCTION

As educators of Reading Instruction, we each have a vested interest in how instruction is differentiated in higher education reading courses. It is important that pre and in-service teachers are taught various methods of differentiating instruction to meet the needs of all students. In order to effectively do this, we have to consider the best way to both model and integrate these strategies into our own classrooms. Our students appreciate seeing the strategies first hand before using them alone. We felt in order to collect both new and revamped strategies we should survey other professors of Reading Instruction to see how or if they are differentiating their own reading instruction.

THEORETICAL FRAMEWORK

Differentiating the Content

Differentiation of instruction involves adjustments in educational planning and instruction that take into account students' learning needs, learning styles and preferences, and interests (Heacox, 2002; Tomlinson, 2001). According to Tomlinson (2001), instruction can be differentiated by modifying the content, process, and product. Differentiating the content of a lesson involves modifying or adjusting the curriculum being taught. Heacox (2002) refers to the

content as the “what” of a lesson (p. 10). When differentiating the content, the teacher considers what students already know and adapts the curriculum content to be presented accordingly. The teacher may choose to eliminate content or introduce certain content earlier, depending on the pace of student mastery (Heacox, 2002).

Tomlinson (2001) suggests that teachers differentiate content in response to students’ readiness levels, interests, or learning profiles. Thus, teachers can differentiate content based on students’ readiness levels by ensuring that the reading materials or information that students must encounter correspond with the student’s ability, that is, the material challenges students appropriately. Tomlinson also suggests that teachers can differentiate content based on students’ interests by including ideas from the curriculum that “build on current student interests or extend student interests” (p. 73). Differentiating content based on students’ learning profiles includes adapting content based on students’ learning preferences. When differentiating content based on student learning profiles, teachers present curriculum content to students in a variety of ways (e.g., audio books, information through video, and educational websites) that cater to the learning styles and preferences of the students.

Differentiating the Process/Activities

Differentiating the process involves providing students with a variety of activities catered to students’ learning styles and preferences in order to help students make sense of what they are to learn (Tomlinson, 2001). The process is how the content or curriculum is taught and the different ways in which students are asked to learn. Heacox (2002) describes the process as the “*how of teaching*” (p. 11).

In differentiating the content, students’ readiness, learning preferences, and interests must also be considered when preparing to differentiate the process (Drapeau, 2004; Tomlinson, 2001). When differentiating the process, a teacher selects activities that correspond to the student’s present level of understanding and that match the student’s learning style (e.g., visual, auditory, and kinesthetic) (Heacox, 2002; Tomlinson, 2001). Strategies such as learning centers, flexible grouping, the use of manipulatives (for kinesthetic/tactile learners), varying time lengths (to accommodate students who need more or less time for class activities), and project menus (i.e., a list of tiered activities that students can choose from during the class work period) can be used to differentiate the process (Drapeau, 2004; Heacox, 2002; Tomlinson, 2001). When differentiating the process based on students’ interests, teachers give students choices of how they will interact with the information they must learn. Tomlinson (2001) describes differentiating the process as giving students “choices about facets of a topic in which to specialize or helping them link a personal interest to a sense-making goal” (p. 80).

Differentiating the Product

Differentiating the product entails allowing students to demonstrate or present what they have learned in a variety of ways. Heacox (2002) defines the product as the “end results of learning” (p. 11). The student product may be verbal (e.g., discussion, speech), tangible (e.g., poster, booklet, model), or in the form of an action (e.g., skit, dance) (Heacox, 2002). When differentiating the product, teachers give students the choice and opportunity to demonstrate what they have learned in a way that suits their learning strengths and interests (Anderson, 2007; Heacox, 2002). Anderson (2007) states:

Differentiated products challenge students at all levels to make decisions, be responsible for their own learning, as well as affording them opportunities to demonstrate what they know through products that are representative of their own unique learning preferences, interests, and strengths (p. 51).

Differentiating the Environment

The environment in which a student learns must also be differentiated, or adapted to students' individual learning styles, preferences, and needs. Yatvin (2004) suggests that teachers that desire to differentiate instruction consider differentiating their classroom space. Because differentiated instruction involves students working on a variety of activities throughout the classroom simultaneously, classroom space will need to be adjusted in order to allow students to move and work freely and comfortably in completing their assigned tasks.

Tomlinson (2000) refers to the environment as the *learning* environment, that is, the way in which the classroom operates and feels. Accordingly, differentiating the learning environment includes providing work spaces that accommodate students that need to work quietly with few distractions, as well as students that need to engage in discussion when working. Other strategies for differentiating the learning environment are providing materials that reflect different cultures, developing routines that allow students to appropriately assist one another if the teacher is not available, and helping students understand and respect the differences in learning preferences among their peers.

Purpose of the Study

The purpose of this qualitative case study was to better understand how university professors are differentiating instruction in their undergraduate and graduate level reading courses. Differentiating Instruction (DI) has become a seemingly "hot topic" in education. As university professors, we are expecting that undergraduate students have an understanding of the topic while asking graduate students to implement DI strategies and discuss how they affect their students' learning. Since demands have been placed on teachers to differentiate instruction, the researchers wanted to know if university professors were differentiating instruction while teaching undergraduate and graduate level courses.

METHOD

Participants

The researchers sent surveys to a purposeful sample of reading professors that were known by the researchers. A total of six surveys were returned to the researchers. The professors who were sent surveys teach in Florida, Mississippi, and Kentucky. All professors have doctorate degrees with an emphasis in Reading or Literacy Education.

Materials Section

This qualitative study consisted of the researchers' self-designed survey seen in Appendix A. The survey asked university professors to (1) define differentiated instruction, (2) identify the type of differentiated instruction professional development experiences they have had, and identify the differentiated instructional strategies taught in (under)graduate courses and how much time is dedicated to differentiated instruction lessons; (3) identify if the university offers a master level differentiated instruction course; (4) identify if any differentiated instruction strategies the university professors use while teaching their courses (undergraduate or graduate level); and, lastly, (5) identify from a list the type of differentiated instruction strategies (i.e., Bloom's Taxonomy, Gardner's Multiple Intelligence, Tic-Tac-Toe, Tiered Assignments, etc.) the university professors have used.

DATA COLLECTION

Data Analysis

Bogdan and Biklen (1998) define data analysis as the process of systematically searching and arranging interview transcripts, field notes, and other materials that are accumulated to increase understanding of the data, as well as to present the discovered themes and patterns to other professionals. All surveys were collected and sorted into categories to reduce the information not related to the research question. The categories were broken into themes that assisted the researchers to make conclusions. The two researches organized the data received into four themes based on Tomlinson's (2000; 2001) view of differentiated instruction: differentiating the content; differentiating the process, differentiating the product and differentiating the environment. The researchers analyzed and synthesized the data before assigning it to one of the four themes.

FINDINGS

How University Professors Define Differentiated Instruction

In the survey the researchers asked the professors to define Differentiated Instruction. A wide range of definitions were received that the researchers found were replicated in the overall responses given on the surveys. Differentiated Instruction was defined as:

"Designed to meet the varying needs of students within a specific classroom or school",
"... it occurs in a variety of ways and may be related to content, process, or product."

"Providing opportunities for students to learn at their instructional level by knowing all about them- then tailoring academic instruction based on what you know."

"Designing and implementing instruction for individual students at their specific level; meeting students' instructional needs."

"Different assignments for different students."

Overall, differentiated instruction can clearly be defined as a modification of the curriculum that enables all students to learn (Theroux, 2004).

How University Professors Differentiate the Content

Several of the professors indicated that they allowed for project choice in their courses. Some of these choices were very basic in nature. In one graduate course students were allowed to choose the topic of their research. Others allowed the students to choose an area of interest when they created their lesson plans. One said that she wanted her students to understand that they could not “do it all.” She wanted to model differentiated instructional strategies that were “actually doable” rather than showing them everything at one time. Her reason for this was that she felt that the literature was very overwhelming for students who were new to the process. One professor indicated that she uses literature circles and discussion groups based around the students’ interests in a particular book of their choice. Another discussed how sometimes the content had to be changed or be “scaffold” in her graduate classes for those students who had not taught before or did not have the prior knowledge that more seasoned classroom teachers might have.

How University Professors Differentiate the Process

Two professors indicated that they allow for textbook choice in some of their classes. One stated that she had not found a textbook that she really liked as a main text. Consequently, students were allowed to choose a text from the professional literature on the topic. This allowed them to gain different perspectives to share with the class.

Many of the professors discussed how they used various means of grouping students for projects and presentation. Sometimes they would be assigned by instructor or they might be based on interests and background or based on their proximity to each other (for those traveling long distances to class). Some just indicated that the students were allowed to choose who they worked with for their own reason.

One professor went into specific detail about how he used tiered assignments based on students’ abilities and comfort levels for his project work. The professor stated, “Students who can’t read well, can operate the camera or participate in interviewing. They can acquire the concepts for a unit of study by also participating in discussions, making presentations, and listing what was learned from interviews with resource people invited to the classroom.”

One professor described her mini conferences which she held “as needed” after direct instruction. She stated that she begins her lessons teaching to the masses and then holds individual conferences for those who still need extra help. This was necessary for some who really needed the individual attention she could not give within a bigger class setting. Another discussed how she might give a specific lesson on Sheltered Instruction and how to implement it and then she might ask the students to evaluate their own teaching or that of a cooperating teacher using the same protocol. Another professor discussed how she gave her students the choice of type of response to a particular assignment or topic. They will get to choose if they will work alone or with a group.

How University Professors Differentiate the Product

A few of the professors indicated the use of project-based learning as a way they differentiated the product. One discussed teaching the students using essential questions that

students and activities that students have the option to select. The texts and activities match the concepts of the course but the students get to choose how they reach that point.

Mixed media project selections were a choice given to students by one professor. She said that they often preferred this mode because the students are given the freedom to choose whatever way they feel comfortable to communicate their learning. This same professor gave students the choice of the format and weight of particular tests or portions of tests and quizzes.

How University Professors Differentiate the Environment

Professors who were surveyed suggested several methods of changing the learning environment for the students. One gave students the choice of resources and locations to complete assignments such as the computer lab, classroom, or library resource center. Another discussed taking the students on field trips to classrooms to see real teaching or differentiation taking place. Others discussed having guest speakers come into class who were ‘experts’ on a particular topic allowing for various perspectives.

Why University Professors Feel it is Important to Model Differentiated Instruction as a Classroom Practice?

Several responses stuck out in our minds as we went through the surveys as to why professors would want to model these strategies. Such as this statement by one university reading professor, “I want my students to be prepared and conversant with the terminology and techniques.” One professor stated, “I feel having the students actually using the strategies themselves or being involved in them helps them to develop a deeper understanding and appreciation for why (they) are important, how they work, and how to use them.” And finally, “I know I am teaching in a way that is congruent with theory.”

CONCLUSION

Throughout the research of this study, several conclusion points were made that the researchers felt summed up the article on whether university Reading professors are indeed differentiating instruction. All instructors responded that “Differentiated Instruction” is both embedded and taught explicitly in their graduate and undergraduate classes. One professor taught a graduate class entitled “Differentiated Instruction” and explained that due to the nature of this course Differentiated Instruction was strongly emphasized within the content. Another professor taught an undergraduate course—“Reading 2”—and felt the entire course was related “By knowing how to assess and provide instruction appropriate for every child in your class, a pre-service teacher is learning some of the basic concepts of differentiation.” Other professors stated that between one to two class periods were dedicated to teaching lessons related to “Differentiated Instruction.” One professor stated that “50%” of total teaching time is spent on modeling “Differentiated Instruction” strategies. Another professor stated, “I have found that when I give my students a lot of freedom or choice in designing how they respond to course material... the process... as well as the product that what they come up with is more powerful than if I had designed the response.” Appendix B identifies the specific types of differentiated instruction strategies that were used by the participants in the study.

After the researchers analyzed the questionnaires, it was found that all the study participants differentiated the content, the process, the product, and the environment based on the works of Yatvin (2004), Heacox (2002), and Tomlinson (2000; 2001). The researchers found this to be very rewarding for when they researched and analyzed data from three classroom teachers, none of the participants differentiated the product. Research by Ernst and Ernst (2005) clearly states that college students respond and have more of an interest in the topic when professors differentiate the instruction.

Additional studies are needed on university professors differentiating the instruction in order to meet the academic needs of all students. This teaching strategy is important for not just elementary and secondary level students, but college students can benefit from differentiated instruction as well.

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Appendix A. Differentiated Instruction Survey—University Level

Differentiated Instruction Survey—University Level

Name:

Position:

University Affiliation:

Reading Classes you teach/level (grad/ under):

Directions: Please fill out the survey the best that you can and return it to Thea or Jennifer.

1. How would you define Differentiated Instruction (DI)?
2. What type of/any Professional Development have you had on Differentiated Instruction?
3. Do you teach Differentiated Instructional strategies in your undergraduate courses? If yes, are they imbedded in your lessons or taught explicitly? How much time do you dedicate to Differentiated Instruction lessons?
4. Do you teach Differentiated Instructional strategies in your graduate courses? If yes, are they imbedded in your lessons or taught explicitly? How much time do you dedicate to Differentiated Instruction lessons?
5. Do you have a Master's level course entitled Differentiated Instruction or something similar at your university? If so, what is the title and what are the Student Learning Objectives for the course?
6. Do you feel you use Differentiated Instructional strategies while teaching your university level course?
7. Do/have you use(d) any of these strategies? Please check all that apply. If you are unsure of what one is, do not check it.

- ☐ Blooms Taxonomy for Creating Tests
- ☐ Gardner's MI for Projects/Presentations
- ☐ Tiered Assignments
- ☐ Contracting
- ☐ Tic Tac Toe Learning
- ☐ Mixed grouping for Projects/Presentations
- ☐ Blooms Taxonomy for Projects/Assignments
- ☐ Book Choice
- ☐ Environment Changes
- ☐ Group Choice
- ☐ Other Differentiated Instructional Strategy

8. Please explain how you used any of the strategies above.
9. If you have not used any of the above strategies- please explain why not.
10. If you have- explain why you did. Would you use them again? Why or why not?

Thank you for your time with this survey. We know your time is valuable. If we may contact you further please provide us with your contact information below.

Name:

Email Address:

Appendix B. Specific Types of Strategies Identified by Research Participants**Strategies Identified**

- 2 Blooms Taxonomy for Creating Tests
- 2 Gardner's MI for Projects/Presentations
- 2 Tiered Assignments
- 1 Contracting
- 1 Tic-Tac Toe Learning
- 6 Mixed Grouping for Projects/Presentations
- 4 Blooms for Projects/Assignments
- 6 Book Choice
- 3 Environment Changes
- 5 Group Choice
- 3 Other Differentiated Instructional Strategy