

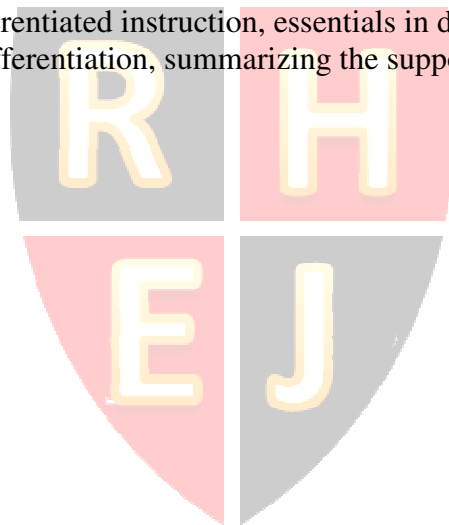
## Examining differentiated instruction: Teachers respond

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### ABSTRACT

Today's classrooms are more diverse than ever. In fact, research shows that there will be a steady increase in Hispanic, Asian Americans, and African American students in the coming years. Therefore, differentiated instruction may be the panacea that educators are searching for. This paper commences with an introduction and then segways into a review of the literature that will elaborate on the following areas: the major principles of differentiated instruction, the essentials necessary for differentiating, ways to implement, the clichés, barriers, and myths surrounding the practice, and the research studies and theories supporting differentiation. The last section explains the results of a survey administered to middle school teachers to determine their level of knowledge in providing differentiated instruction in the classroom.

Keywords: understanding differentiated instruction, essentials in differentiating, studies in differentiation, theories and differentiation, summarizing the support for differentiation, myths and barriers in differentiation



## **INTRODUCTION**

Differentiation is not a novel concept. The one-room schoolhouse is an ideal example of how teachers have attempted to meet the needs of all students centuries ago (Anderson, 2007). Though differentiated instruction seems to be a broad term, it mainly refers to those classroom practices embodying student learning styles, interest, and prior knowledge (Benjamin, 2002). Understandably, state standards represent the knowledge to be taught but differentiated instruction gives a meaningful way to teach those required standards (Protheroe, 2007).

Today's classrooms are now defined by diversity. By 2035, students of color will be a majority in schools with increasing populations of children of immigrant and migrant families. Half of all children will live in single-parent homes at some time during their school years (Tomlinson & Brighton, 2003). In the same way, the major purpose of differentiated instruction is to maximize each student's growth by meeting each student where he or she is (Hall, Strangman & Meyer, 2003). On the other hand, traditional instruction has been equated with teachers who teach to the middle or use the one-size-fits-all approach (Rock, Gregg, Ellis, & Gable, 2008). One popular way of adopting differentiated instruction has been developed by Carol Ann Tomlinson (1999).

## **THE REVIEW OF THE LITERATURE**

The review of the literature covers the following sections: 1) Major principles of differentiated instruction 2) Essential components 3) Suggestions for implementing differentiated instruction 4) Myths, clichés, and barriers in differentiated instruction and the 5) Research studies and theories supporting differentiation.

### **Major Principles**

In order to understand differentiated instruction, the principles for practicing must be articulated. O'Brien & Guiney (2001) clearly enumerated these as major principles of differentiated instruction: 1) Every child can learn and every teacher can learn 2) All children have the right to high quality education. 3) Progress for all will be expected, recognized, and rewarded. 4) Learners in a classroom have common needs, distinct needs, and individual needs. Other principles that are paramount to understanding differentiated instruction can be traced in Edyburn's article (2004) entitled, "Technology Supports for Differentiated Instruction." The principles are adapted from the work of Carol Ann Tomlinson (1999) and simply echo that teachers should focus on the essentials in learning, should attend to student differences, should collaborate with students on learning, and should not separate assessment from instruction. The teacher should constantly modify the content, process, and products produced from learning. Teachers must also allow students to participate in respectful work while maintaining a flexible working relationship.

### **Essential Components**

In conjunction with the principles, teachers must engage in several key components for successfully conducting differentiated instruction in the classroom. Anderson (2007) insisted that the teacher must provide students with choice, flexibility, on-going assessment, and creativity in

differentiating the concepts taught. At the same time, a teacher has to understand how students process and develop understanding of concepts and skills. Additionally, the teacher has to know the level of knowledge students must tap into when asked to develop products or projects to demonstrate learning.

Tomlinson identified three components that should be differentiated (Hall, Strangman & Meyer, 2003): content (elements and materials used in reaching learning goals and in teaching concepts, principles, and skills that students will learn), process (how you will teach the content, flexible groups or whole-group discussion of content or small groups or paired groups; groups are not fixed), and products (students are allowed choices in products or final assessments which should offer a variety of ways for expression, degree of difficulty, and types of evaluation).

Langa & Yost (2007) reminds that three key components for differentiating is to assess each child's readiness level (where they are in relation to a particular understanding or skill), interest level (their curiosity or passion for a particular topic or skill), and learning profile/style (how students learn as influenced by intelligence, preferences, gender, culture or learning style) before modifying content, process, and products. The teacher should use assessment data gathered from each child during the beginning of the school year. However, the teacher should continue to collect data daily on students' readiness for particular skills and ideas, their interests, and their learning profiles/styles. Here are some possibilities for modifying content, process, and products (Langa & Yost, 2007):

Content (Materials & elements)

1. Select a variety of books and resource materials for handling variety in reading levels
2. Select specific areas of interest within the focus area
3. Use Learning contracts with students
4. Group students according to readiness levels or interest levels
5. Reteach to small groups who need support or explanations; exempt those who have mastered the material
6. Establish learning centers or stations
7. Allow students to work alone or with peers.

Process (how students gain understanding of main ideas and information)

1. Use tiered activities (a series of related tasks of varying complexity)
2. Use learning contracts based on readiness, interests, or learning profile of student
3. Use independent learning
4. Use choice boards, flexible grouping, reading buddies, learning centers and peer teaching

Products (ways students will demonstrate their knowledge or understanding of a topic)

1. Write a story or a poem
2. Write a book report, a play, or perform a play
3. Debate or investigate an issue
4. Design a model or a game
5. Create a mural or a song
6. Compare or contrast

### **Suggestions for Implementing Differentiated Instruction**

In getting started with differentiated instruction, Anderson (2007) has several easy to follow suggestions. Begin with creating learning profiles. This will require the teacher to collect profiles of each student that include learning preferences, family structure, favorite hobbies,

interests, state assessment scores, lexile reading scores and fluency in reading recordings. Another suggestion deals with introducing students to differentiated instruction by modifying the process of a few lessons. This could include using a choice board in which students choose activities constructed from various reading levels in the classroom. Students could select two out of six activity options to demonstrate skill toward lesson objective. A teacher could very easily introduce differentiated projects for assessments. Suppose students are doing a unit on the state of North Carolina, students might draw a map of land forms or businesses, or could research another state and identify similar regions or create a travel brochure for a primary region to include points of interest, food, lodging, historical features and fun things to do. The last suggestion would allow students the right to work in small groups, alone, or with a partner.

Rock, Gregg, Ellis & Gable (2008) have designed a blueprint for differentiating instruction called Reach. The first activity requires teachers to reflect on what it will take to change to differentiated instruction. The second activity requires teachers to evaluate the curriculum with a survey including what students should know, what most know, and what standards they must be held accountable for. The next activity involves analyzing groups and individual students to determine readiness, interests, preferences, strengths, and needs. The teacher should then craft research-based lessons that include graphic organizers, opportunities for students to work in small groups, whole-class, or individualized instruction units. The teacher would allow for student response through dry boards, choral responses, cooperative learning groups, class-wide peer tutoring and assistive technology such as, books on tape, talking calculators, and manipulatives. The teacher should prepare to hone in on the data by using pre-assessments or diagnostic assessments such as checklists, interviews, surveys, observations at the outset to collect data on student interests, thinking styles, and readiness for teaching content and skills. The teacher should use formative assessments during the instruction process through the use of questioning, quizzes, probing, learning logs, work samples, or think alouds. The use of a summative assessment is also valuable after instruction, for example, the use of unit or chapter tests, projects, or portfolios.

In making differentiated instruction manageable (Lawrence-Brown, 2004), teachers must build upon personal strengths and talents (e.g., teacher may have interest in on-line projects or in the arts, or in botanic garden projects). Teachers should build a collection of resources from libraries, the department, local professional associations, or the district. Teachers should not try to do everything at once but start with highest priority first and work with a collaborative team to set goals. Remember that all lessons do not need the same amount of support. Teams can decide which students need various supports.

### **Clichés, Myths and Barriers of Differentiated Instruction**

Benjamin (2002) exposed a number of clichés from teachers on responses to teaching differentiated instruction. First, differentiation was thought of as just throwing the baby out with the bathwater. Second, differentiation means abandoning basic skills and trying to reinvent the wheel, but that things cannot be made any better than they already are. Third, differentiation is just another phase and the pendulum will swing the other way soon because the emphasis on testing will not last forever. The final cliché dealt with bringing a horse to water but that one cannot make him drink.

Barriers to differentiation according to Carolan & Guinn (2007) asserted that teachers lack the time for it, and teachers do not get the professional development resources and the

administrative support needed for these endeavors. Teachers see differentiated instruction as another bureaucratic mandate heaped upon them. For teachers, it means teaching everything three different ways like a dinner buffet.

Tomlinson (1995) summarized the barriers to differentiation as a fear of faddism or just the thing to do this year and as a fear of not being able to manage a classroom with a number of learning activities happening at once. There is a fear of not knowing how to assess the readiness level of students, and how to match appropriate resources with teaching. Finally, there is a fear of concept-based teaching with the pressure of standardized tests. Teachers also fear that there are no teacher models to talk to about this process.

Benjamin (2002) explained that the common myths harbored pertained to the idea that differentiated instruction consisted of students doing exercises in self-correcting workbooks. The others say that teachers do not present any information to student (no whole-group teaching). Differentiated instruction is mainly for students with deficits in learning. Differentiated instruction does not work in a classroom where students need to master information for standardized testing. Brighter students are used to teach other students. The differentiated classroom has to do with dividing the class groups into bluebirds and redbirds.

## Research & Evidence

The initial studies will share the results of how differentiated instruction was used in the classroom with a variety of content areas. The second half of the research will summarize the basic theories and studies on three areas that support the practice of differentiated instruction: readiness, interest, and learning profile (Tomlinson & McTighe, 2006). The final section will summarize another aspect that supports differentiated instruction (Tomlinson & McTighe, 2006), homework research.

These studies review the use of differentiation in math, reading, and science instruction at the elementary, high school, and middle school level. Tieso (2001) looked at a qualitative study of teachers and students who took part in a 3-week enhanced unit in math and found that the students evidenced positive levels of engagement, motivation, and excitement about learning. Fisher, Frey & Williams (2003) documented that the average student in their high school read at a 5.9 grade level but moved from 5.9 to 8.2 after 4 years of differentiated instruction. Baumgartner, Lipowski & Rush (2003) used differentiated approaches in reading which included flexible grouping, student choice of various tasks, increased self-selected reading, and access to various reading materials. They saw improvements in instructional reading levels, number of comprehension strategies used, phonemic and decoding skills, and attitudes toward reading. Tieso (2005) examined the effects of curricular differentiation with between-and-within-class grouping on student achievement. After giving a curriculum-based assessment as a pre- and post test measure, she inferred that the students with diverse abilities who received differentiated instruction scored significantly higher in mathematics achievement than those students who did not. Mastropieri, Scruggs, Norland, Berkeley, McDuffie, Tornquist & Conners (2006) compared quantitative outcomes associated with classwide peer tutoring using differentiated hands-on activities vs. teacher-directed instruction for students with mild disabilities in inclusive 8<sup>th</sup> grade science classes. The results indicated that collaborative hands-on activities statistically facilitate the learning of middle school science content on posttests and on state high-stakes tests for all students. Students also enjoyed using the activities.

Readiness explores the basic knowledge, understanding, and skill a student has (Tomlinson & McTighe, 2006). Learners need to be challenged, and if their tasks are too easy, they become bored and do not learn. Motivation is lessened when tasks are consistently too difficult. Learners should be moderately challenged. Fisher (1980) determined that when teachers diagnose the skill level and assign appropriate tasks, students can learn more effectively. Hunt (1971) found that students learn more effectively if task structure is matched with appropriate developmental level. Csikszentmihalyi (1993) found from a five-year longitudinal study of adolescents that when students were underchallenged by tasks that they demonstrated low involvement in learning activities with a lessening of concentration.

Interest is important because it explains a student's affinity for and engagement with a topic (Tomlinson & McTighe, 2006). When a student's interest is tapped, learning is likely to be more rewarding and the student may become an autonomous learner. Engagement with learning is maximized and so is productivity. The student is more likely to work hard and work in a sustained fashion. Hennessey & Zbikowski (1993) concluded that student motivation can be maintained if teachers allowed time for students to discuss feelings, share ideas, and interests. Collins & Amabile (1999) suggested that, if students are given the freedom to choose questions and topics for study, that it can lay the ground work for creative achievement. Positive influences on learning can occur both short and long term if students are interested in what they study (Hébert, 1993; Renninger, 1990).

Learning profile pertains to modes of learning or the best processes students need in learning (Tomlinson & McTighe, 2006). Keep in mind that one's learning profile is shaped by culture, gender, learning style, and intelligence preference. A classroom's environmental, emotional, sociological, and physical features can influence student attitude about learning and learning itself. Attention control, memory systems, language systems, motor systems and higher-order thinking systems affect how students learn. Gender can influence the way people see and interact with the world, including the classroom. A person's culture shapes his or her modes of communication, sense of identity, cognitive style, points of view, and frames of reference. Dunn & Griggs (1995) reported that when student profiles were addressed for elementary students, secondary students, students with emotional difficulties, learning disabilities as well as for Native Americans, Hispanic, Asian, and Caucasian students, positive learning effects occurred. Delpit (1995) concluded that the success of students from many minority groups is likely to be undermined when cultural differences are ignored. Students achieved significantly better when classroom instruction was matched to their preferred learning patterns (Grigorenko & Sternberg, 1997; Sternberg, 1997; Sternberg, Torff & Grigorenko, 1998).

Homework is another aspect of differentiated instruction. Homework fits well with the concepts of differentiation based on readiness, interests, and learning profile (Tomlinson & McTighe, 2006). Two researchers are discussed here. Harris Cooper (2001) analyzed 17 studies involving 3,300 students in 85 classrooms and 30 schools in 11 states. He found that the average student completing homework had a higher achievement score than 55 percent of the students who did not complete homework. Cooper also found that the greatest positive effects of homework by subjects were found in mathematics assignments, followed by reading, English, science, and social studies. He also reported that homework effectiveness increases with the age of the child and had its greatest effects on high school students. Cooper suggested that homework should be viewed as a diagnostic tool rather than an opportunity to test. Homework should focus on practice, integration of concepts learned during the day, and simple introductions to the next lessons. James Strong (2002) agreed with Cooper in that homework should be about practice,



preparation, and elaboration. He also pointed out that high school students who spend an additional 30 minutes per night on homework may increase their grade point average by a half-point. Elementary school children need to be trained early to complete homework each day.

## **SUMMING UP THE RESEARCH**

Though differentiation is recognized as a compilation of many theories and practices, unfortunately, little research has been completed on the effectiveness of differentiated instruction (Edyburn, 2004). Based on the literature review, “the package” is lacking empirical validation (Hall, Strangman & Meyer, 2002). There is more and more research emerging within the field of education supporting the potential for differentiated instruction but more teachers need to investigate their applications of differentiated thinking toward instructional planning and implementation of lessons through action research projects, professional conference presentations, and other projects (Anderson, 2007). Tomlinson & McTighe (2006) insisted that more studies are needed to indicate which elements of differentiation do or do not benefit particular students and to what degree and under what circumstances benefits do not show gains. There is a need to add to the body of research on factors that encourage and discourage teachers in attending to student differences.

## **METHOD**

The purpose of this study was to examine what teachers specify as key components of differentiated instruction. It also served to expose what differentiated instruction is or is not. The study was guided by the belief that educators may not possess a clear understanding of what differentiation is, that the key components for implementing, as well as, the myths that surround the practice of differentiated instruction. Two questions emerged relating to differentiated instruction: will teachers agree on what is essential to differentiating instruction in the classroom and will teachers agree with the myths surrounding the practice?

## **PARTICIPANTS AND SETTING**

This study was conducted in a school district located in southeast Georgia. In the spring of 2008, 141 teacher-participants responded to the survey. The examiner visited 5 of ten middle schools in a public urban school system of 33,400 students. Due to preparation for standardized testing, some schools were not visited. Over one-half of the schools in the districts are Title I schools and receive free or reduced lunch. The population of the school system is comprised of 65.8% African American, 28.5% white, 2.2% Hispanic, 1.8% Asian, .2% American Indians, and 1.4% multi-racial.

The teacher-participants in this sample consisted of 38 (26.9%) males with 103 (73%) females. There were 41 (29.0%) Blacks, 89 (63.1%) Caucasians, 7 (4.9%) Hispanics, and 4 (2.8%) Asians. In years of experience, 17% had taught from 1-3 years, 14.1% from 4-6 years, 10.6% from 7-10 years, 14.8% from 11-15, and 43.2% from 16-35 years. The participants taught 5<sup>th</sup> grade (1.4%), 6<sup>th</sup> (51.7%), 7<sup>th</sup> (23.4%), and 8<sup>th</sup> (23.4%). Their subjects ranged from language arts (18.4%), math (17.0%), science (14.8%), social studies (15.6%), physical education (4.2%), special education (9.2%), reading (2.1%), art (2.1%), music (2.1%), band (0.7%), Spanish

(2.8%), technology (1.4%), Latin (0.7%), drama (0.7%), and other courses (7.8 % e.g., Connections).

## **INSTRUMENT**

The qualitative survey used in the study was called Examining Differentiated Instruction for Novices: Teachers Respond (2008). The survey was based on data gathered from an extensive review of the literature. It contained 16 questions that pertained to 1) the essential principles 2) the essential components and 3) the common myths surrounding differentiated instruction.

The questions were developed from the work of (Jacobsen, Eggen, & Kauchak, 2006; Rock, Gregg, Ellis, & Gable, 2008; Tomlinson, 1999; Wormeli, 2005). The survey consisted of Section #1 Demographics. Participants were asked to fill in or check the appropriate items including these: content area, grade level, experience, sex, and race. Section #2 of the survey engaged participants in 16 questions that asked participants to choose a response and then circle. Some examples of the survey questions are “differentiated instruction should focus on essential skills and ideas in each content area” and “differentiating instruction in the classroom will not prepare students to compete in the real world.” The survey responses contained a likert-style scale consisting of strongly agree, agree, disagree, strongly disagree, and not sure. The examiner, for the most part, visited school sites minutes before faculty meetings to conduct the survey. The survey took 15 to 20 minutes to complete. See as indicated in Table 1 (Appendix). Final note-at the school sites, principals were very complimentary about the survey and wanted additional copies from the examiner.

## **ANALYSIS & RESULTS**

Generally, the analysis of this qualitative data required labeling, categorizing, recording, tabulating, calculating, and inferring. This was an exciting task. This process began by sorting all 141 surveys by five schools. The examiner, with the assistance of a graduate student, developed two separate frequency tables (per school) for counting and recording the responses under Section I. Demographics (i.e. grade level, sex...) and Section II. Survey Questions (i.e. strongly agree, agree, disagree, etc.). After counting and recording all responses, the second step consisted of developing another chart for displaying the numbers and the data. Demographics were represented by symbols (e.g. B for Black, F for Female).

Responses to the survey questions were represented by symbols such as Q1 (Question #1), SA (Strongly Agree), D (Disagree) and so on. The third step consisted of recording totals from all data and responses per question and then calculating percentages for each. Finally, in an effort to determine to what degree participants agreed or disagreed per question, this examiner chose to add the sum of strongly agreed to the sum of agreed to get a combined total so percentages could be calculated. This same process was also used for items where participants tended to disagree. Percentages were also determined for those participants counted as Not Sure (NS). See as indicated in Table 2 (Appendix).

Teachers agreed at 94.3% in question # 16 that they must show respect for their learners' commonalities and differences in many ways in the differentiated classroom. Question # 2 on whether differentiated classrooms should be responsive to individual student differences, teachers agreed at 92.1%. Question # 1 on whether differentiation should focus on essential ideas



and skills in each content area, teachers agreed at 89.3%. Question # 15 on whether teachers collaborate with students about their learning in the differentiated classroom, teachers agreed at 85.8%. Thus, these responses are all representative of those vital principles (Tomlinson, 1999) that differentiated instruction is built on. The results may imply that teachers may understand and do agree on the essential principles.

Secondly, it is also necessary to denote here that teachers agreed that processes (88.6%, question#5), products/assessments (87.2%, question #6) and content and materials (85.8%, question #4) must constantly be modified in the differentiated classroom (Tomlinson,1999). These responses may imply an understanding of essential components necessary in carrying out differentiated instruction in the classroom. Additionally, teachers agreed with question #14 at 85.1% that teachers should assess the readiness level, interest level, and the learning profile/style of their learners which is another essential component in carrying out differentiated instruction in the classroom (Langa & Yost, 2007).

In reference to myths that surround differentiated instruction, teachers disagreed on two important ones. First of all, teachers disagreed at 90.7% on question #13 that there is only one way to differentiate instruction. This is indeed significant because this myth is considered to be the most prevalent myth surrounding differentiated instruction. Wormeli (2005) asserts that there is no set form or scripted program for differentiated instruction. It is about understanding the developmental level of students and differentiated practices.

Secondly, teachers disagreed at 85.8% on question #10 that all students must demonstrate mastery on the same day of grading. Disagreement with this myth is important because this may say that teachers are beginning to modify their thinking about grading in the differentiated classroom. Actually it does not matter when students demonstrate mastery if they sincerely work along the way for students should be allowed to retest and redo assignments (Wormeli, 2005).

There were other interesting responses to myths. In question #12, there were only 79.4% of the participants who disagreed with the myth that differentiated instruction creates unfair workloads among students. However, this is worth discussing because apparently some recognize that differentiation is about providing challenges and motivating individual students differently. Also, in the differentiated classroom, students are given fair and developmentally appropriate work and are held accountable for more and they can achieve more (Wormeli, 2005).

On the myth that differentiation is only individualized instruction, 56.0% disagreed, 41.1% agreed, and 2.8% were unsure for question #8. There appears to be a split between teachers on this issue. This myth is simply not accurate. Wormeli (2005) discusses differentiated instruction as utilizing a sundry of teaching methods including whole-group teaching and small groups. Individualization is used only temporarily.

Question #9 revealed that only 76.5% disagreed, 14.1% agreed, with 9.2% unsure on the mistaken point that differentiated instruction does not use whole group instruction (Wormeli, 2005). This myth shows perhaps a lack of understanding of the many teaching processes that can and should be practiced by the differentiated teacher.

Finally, it must be noted that only 73.0% disagreed, with 21.9% agreeing, and 4.9% unsure of the myth in question #11 that differentiated instruction does not prepare students to compete in the real world. Differentiated instruction is not about lowering standards. Teachers do not differentiate all the time but only as needed. In the real world, differentiation occurs, for instance, when military recruits get many opportunities to disassemble and reassemble an assault rifle and when the driver's test can be taken more than once (Wormeli, 2005).

## DISCUSSION

Though this survey shared some positive results, the next area that must be explored here is why more middle school teachers are not agreeing (or disagreeing). Research suggests that teacher education programs are falling short in preparing pre-service teachers for academically diverse classrooms (Tomlinson, Callahan, Tomchin, Eiss, Imbeau & Landrum, 1997). The points noted from the research revealed that pre-service teachers seldom experienced differentiated instruction in their teacher preparation programs and generally had one class on academically diverse learners with little guidance on what to do with them. It was noted that pre-service teachers were almost never encouraged to differentiate by education professors, university supervisors, or master teachers and had few, if any, opportunities to see multi-tasking classrooms.

The other side of the problem lies with the public school. They must also take responsibilities for teacher-training. They can help prepare teachers by providing according to (Wormeli, 2003; Protheroe, 2007; Gregory & Chapman, 2007; Kise, 2007) resources on differentiating instruction and time for teachers to discuss the process. Schools can provide training in strategies, such as, curriculum compacting and learning centers. Schools can teach concrete details on how to differentiate instruction. Teachers need site visits to schools and teachers' classrooms plus help on developing on-target assessments. Teachers need the knowledge on the processes involved in differentiated instruction and an understanding that not every part of a lesson or even every unit needs to be differentiated.

Other factors that may be significant to this discussable point of why more teachers are not agreeing (or disagreeing) on differentiating were introduced in these brief studies: From a nationwide survey of middle school teachers, 50 percent said that they do not differentiate instruction based on readiness, interest or learning profile because they saw no need to do so (Moon, Tomlinson & Callahan, 1995). Most general educators feel ill prepared to teach students with diverse learning needs (Schumm & Vaughn, 1991, 1995). General education teachers may also reject adapting instruction for individual learner needs because they feel doing so calls attention to student differences (Schumm & Vaughn, 1995). Archambult (1993) concluded that third and fourth grade teachers, who were not trained, would not differentiate in their gifted classrooms. This was even true for experienced teachers involved in the study (i.e., average years over 10 years). A study by Sally Reis and her associates (1993) showed that teachers will differentiate if given the support to do so. Specifically, Reis trained teachers to do curriculum compacting (an effective way to eliminate already mastered content through pre-testing or some form of assessment).

Professors must, as often as possible, engage in professional conversations about differentiation by agreeing to serve as mentors to first-year novice teachers and by offering workshops on college campuses and at school sites. Education professors can find ways to incorporate this topic in all education courses. University professors, superintendents, and school administrators and teachers must present at state, national, and international venues to share what works. This examiner can attest to the exorbitant amount of books, articles, and websites available on implementing differentiated instruction.

## CONCLUSION

Differentiated instruction belongs in middle school because this is where student differences are more apparent. Thus it is there, where teachers can be instrumental in helping students to reach their heights and potential. Schools have a responsibility to adjust to the developmental needs and levels of students. The National Board for Professional Teaching Standards (1989) has recognized that good teachers must respond to individual differences in students and must match their teaching styles to fit. Teachers must move away from a pedagogy of poverty (Haberman, 1991) to a pedagogy of plenty (Hodges, 2001). In doing so, educators who are risk-taking, flexible, empathetic, organized, tenacious, and are fleet of foot, that is, they will take whatever steps that are necessary to make ideas clear to their students, must be chosen. (Wormeli, 2001). Haim Ginott (1993) reminds us that teachers create the environment in their classrooms and possess the power to make a child's life miserable or happy but most importantly, teachers are part of a team that believes that all students are capable of learning.

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**APPENDIX - TABLE 1**

**Survey: Examining Differentiated Instruction for Novices: Teachers Respond (2008)**

Section #1 Demographics- Please fill in or check the appropriate items below.

Content Area Presently Teaching: \_\_\_\_\_

Grade Level: \_\_\_ 5 \_\_\_ 6 \_\_\_ 7 \_\_\_ 8

Years of Experience: \_\_\_ 1-3 \_\_\_ 4-6 \_\_\_ 7-10 \_\_\_ 11-15 \_\_\_ 16-35

Sex: \_\_\_ Male \_\_\_ Female

Race: \_\_\_ Black \_\_\_ Caucasian \_\_\_ Hispanic \_\_\_ Asian \_\_\_\_\_ Other

Section #2 Survey Questions- Please choose a response and then circle it- Strongly Agree, Agree, Disagree, Strongly Disagree or Not Sure.

1. Differentiated instruction should focus on essential ideas and skills in each content area.
2. Differentiated instruction should be responsive to individual student differences.
3. Differentiated instruction in the classroom is determined from teacher assessments.
4. Differentiated instruction demands a constant reconfiguring of content and materials to meet individual students' levels of prior knowledge, critical thinking, and expression style.
5. Differentiated instruction demands a constant reconfiguring of the processes used for teaching to meet individual students' levels of prior knowledge, critical thinking, and expression style.
6. Differentiated instruction demands a constant reconfiguring of final products/assessments offered to meet individual students' levels of prior knowledge, critical thinking, and expression style.
7. Using differentiated instruction in the classroom will not prepare students to take standardized tests.
8. Differentiated instruction is simply individualized instruction.
9. Teachers in differentiated instructed classrooms do not use whole group instruction because students work individually or in small groups.
10. In the differentiated instructed classroom, all students must demonstrate mastery on the same day of grading because it is unfair to give them the same full credit if they do not.
11. Differentiating instruction in the classroom will not prepare students to compete in the real world.
12. When teachers differentiate instruction, they create unfair workloads among students.
13. There is only one way to differentiate instruction.
14. In the differentiated instructed classroom, the teacher should assess each student's readiness level, interest level, and learning profile/style.
15. Teachers collaborate with students about their learning in the differentiated instructed classroom.
16. Teachers must show respect for their learners' commonalities and differences in many ways in the differentiated instructed classroom

**APPENDIX – TABLE 2**

	<u>SA*</u>	<u>A</u>	<u>Total</u>	<u>%</u>	<u>D</u>	<u>SD</u>	<u>Total</u>	<u>%</u>	<u>NS</u>	<u>%</u>
Q#1	51	75	126	89.3	6	2	8	5.6	7	4.9
Q#2	60	70	130	92.1	4	0	4	2.8	7	4.9
Q#3	33	74	107	75.8	19	4	23	16.3	11	7.8
Q#4	48	73	121	85.8	9	4	13	9.2	7	4.9
Q#5	51	74	125	88.6	10	1	11	7.8	5	3.5
Q#6	41	82	123	87.2	13	1	14	9.9	4	2.8
Q#7	5	30	35	24.8	68	28	96	68.0	10	7.0
Q#8	16	42	58	41.1	61	18	79	56.0	4	2.8
Q#9	5	15	20	14.1	82	26	108	76.5	13	9.2
Q#10	4	9	13	9.2	82	39	121	85.8	7	4.9
Q#11	8	23	31	21.9	63	40	103	73.0	7	4.9
Q#12	5	16	21	14.8	72	40	112	79.4	8	5.6
Q#13	4	5	9	6.3	64	64	128	90.7	4	2.8
Q#14	29	91	120	85.1	14	3	17	12.0	4	2.8
Q#15	35	86	121	85.8	6	3	9	6.3	11	7.8
Q#16	46	87	133	94.3	3	0	3	2.1	5	3.5

\*SA-Strongly Agree A- Agree D- Disagree SD- Strongly Disagree NS- Not Sure

