Searching for a Common Language on Differentiated Instruction

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Literature Review

Differentiated Instruction (DI) has become the main focus of classroom teaching in today's classrooms. The demographics of the classroom are represented by students that are culturally and linguistically diverse, varying cognitive abilities, assorted background knowledge, and contrasting learning preferences (Huebner, 2010). The demographics listed have created a scenario for teaching that requires multiple skills and strategies be taught for discrete student learning. In addition, public and government demands for student achievement have compounded a challenging dilemma in which teachers are required to meet the instructional needs of all students (McTighe & Brown, 2005). Henceforth, Differentiated Instruction is a process that provides teachers a means to meet the differing student characteristics for learning (Tomlinson, 2005b) and provide them with a method for academic improvement (Rock, Greg, Ellis, & Gable, 2008). What is Differentiated Instruction? According to the literature differentiated instruction has a very common definition that has been circulated in the field of education for almost two decades (Holloway, 2000). Levy (2008) defines DI as a set of strategies that will help teachers meet each child where they are when they enter class and provide teaching for academic improvement. Anderson (2007) characterize DI as a belief system that focuses on student individual differences amongst themselves, how students learn, their learning preference, and individual interest for learning to take place. In general terms differentiated instruction is known as a process of determining what students learn, how they will learn it, and how will they demonstrate cognitive growth through application and synthesis (Rock et al., 2008; Tomlinson, 2005a). The latter definition is synonymous with using content, process, and product as major focal points for adapting instruction for individualized learning for differentiation (Parsons, Dodman, & Burrowbridge, 2013). In the most recent literature DI is termed as a philosophy of teaching that recognizes student differences for learning academic content (George, 2005; Loeser, 2014; Knowles, 2009). Regardless of how DI is defined, the research demonstrates that the "differentiated" process for teaching students is a concept that has become a mainstay in education.

Diane Heacox (2009) notes that differentiation has a large volume of publications that cover "tips and tricks" on differentiation and is often used synonymously with the term research based-best practices (Anderson, 2007). The term "best practices" is very generic and can be found in a plethora of research and educational manuscripts. The most common use of "best practices" is employed to explain a method, process, or activity which has proven to be the most effective in procuring a particular outcome. Huebner (2010) recognized that the research regarding DI as a specific practice was limited and found support for teaching practices that underpin differentiation such as: classroom management procedures, student engagement/motivation, assessing student readiness, learning styles, grouping for instruction and the zone of proximal development. There is a significant amount of strategies and practices listed that come directly from reading research, yet a best practice format or listing for DI is unfounded (Tulbure, 2011). However, DI is considered to be a part of best practice literature (Nazzal, 2011) without a true definition of "best-practice."

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Holloway (2000) reviewed Tomlinson's work and found that DI is recognized by classroom characteristics that demonstrate or reveal what practices should be delivered for a differentiated classroom, including the following:a)teachers begin where students are,b)teachers engage students in instruction through different learning modalities, c)student competes against himself/herself than others, d)teacher provide multiple ways for each individual to learn,e)teachers modify classroom time for learning, and f)teachers take a diagnostic approach for instruction on an individual basis. Throughout the literature best practices for differentiated instructions was found to be inconsistent and based on each authors' perspective or relegated to strategies for improved student learning (Anderson, 2007; Levy, 2008; Rock et al., 2008; Walker-Dalhouse, Risko, Esworthy, Grasley, Kaisler, McIlvain, & Stephan, 2009).

Methodology & Data Analysis

The purpose of this qualitative case study is to determine the understanding of higher education faculty perspectives on teaching and preparation of pre-service teachers in the delivery of DI in the classroom. This purpose was achieved using the following research questions:

R1 What are the perspectives of full time faculty regarding DI for the teaching and training of pre-service teachers for the delivery of DI?
R2 How do the perspectives of full time faculty on teaching and training of pre-service teachers for the delivery of DI compare to best practice in DI?

This research was conducted at a public university in the southern portion of the United States. It is a large university with nearly 25,000 students. Two departments in the College of Education participated in the study: the Department of Early and Elementary Childhood Education, and the Department of Secondary and Middle Grades Education. The population consisted of 55 full time faculty members who teach in the initial certification programs in these departments. The entire population received the open survey that contained 5 questions vetted by experts, and 22 of the faculty members returned it. Data was gathered from 40% of the population and was analyzed thematically using open coding. The themes have been recorded on the following charts that show the percentage of participants that responded under that particular theme. Following the chart is the raw data and a short explanation of each theme. The first question that appeared on the survey was: Will you describe any formal education/training you've had on differentiated instruction (e.g. participated/delivered professional developments, participated/delivered courses specific to differentiated instruction, or written articles on differentiated instruction)? This is an anonymous survey - please do not include any identifying information. The data gleaned from this question is as follows:

Chart 1: Question 1 Responses
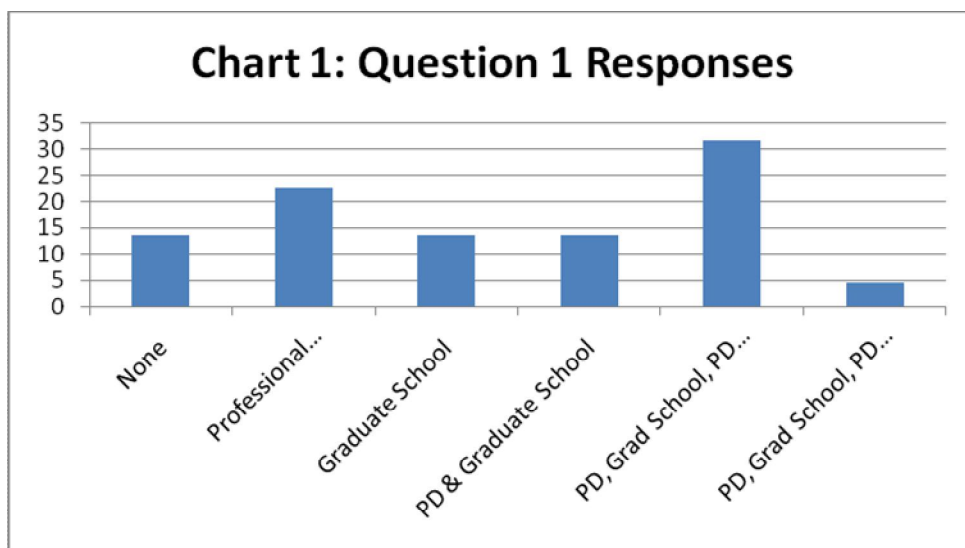
Out of the 22 faculty members that responded, three of them self-reported that they had no training in the area of differentiated instruction. Five of them self-reported they had some training in the form of a professional development, delivered at their schools when they were a K-12 teacher, or during their time as a university professor.
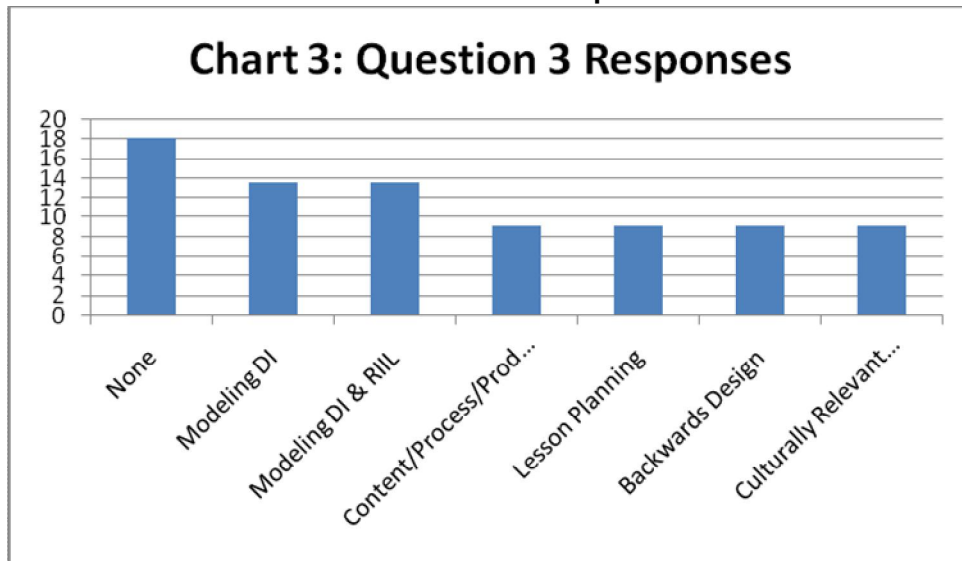
Three of them self-reported they had training in graduate school. Seven of them, which are the majority of those who responded to this question, self-reported they had training in the form of professional development, graduate school, and have actually given professional development in the area of differentiated instruction to local schools. One responded that she/he had received professional development, had training in graduate school, had given professional development in the area of differentiated instruction, and had published in the area of differentiated instruction. Two respondents chose to skip the question. The second question on the survey was: Do you believe the pre-service teachers in undergraduate courses in ECE and/or SMGE are receiving adequate training in differentiated instruction? Can students in our program effectively differentiate for the populations they encounter in the field once they graduate? Please share your thoughts. The data gleaned from this question is as follows:
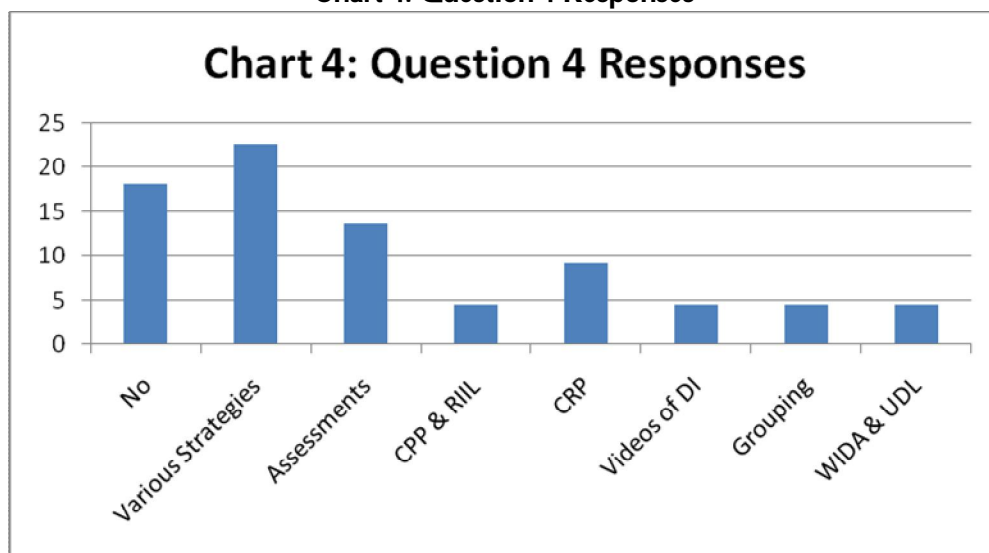
Chart 2: Question 2 Responses
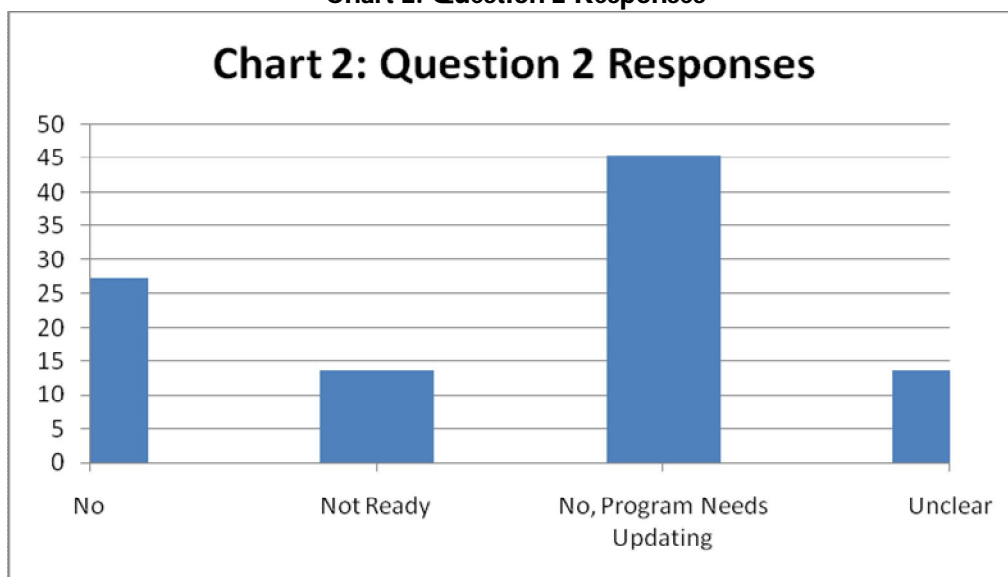
The participants responded in four different ways to this question. Six of them responded that graduates from the initial cert program at this university are not ready to differentiate for their classrooms. Three of them responded that new teachers are not ready to learn how to differentiate properly, and will likely not learn that until they participate in professional development as a certified teacher. Ten of the respondents, the majority who responded to this question, stated that graduates from the initial certification program were not ready to differentiate for their classrooms because the program at this university could use some updating in this area. Three of the participants perceive that graduates know that differentiated instruction is important and they are taught how to differentiate, but they are unclear of whether or not the graduates are prepared. The third question on the survey asked: What methods/strategies do you use in your undergraduate courses to help prepare pre-service teachers to differentiate for their students once they graduate? Do youfeel these methods/strategies are effective? Please explain. The responses from this question were as follows:

Chart 3: Question 3 Responses

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A bar chart with a y-axis from 0 to 20 (in increments of 2) and the following categories and approximate values: None (18), Modeling DI (13), Modeling DI & RIIL (13), Content/Process/Prod... (9), Lesson Planning (9), Backwards Design (9), Culturally Relevant... (9).

There were seven different ways that the participants responded to this question. Four respondents, the largest of those surveyed, stated that there was no differentiated instruction in their courses. Three of the participants perceived that they modeled DI in their classrooms. Three perceived that they modeled DI and they also taught Readiness, Interests, Instructional Preference, and Learning Profile (RIIL) to their students. Two of the respondents taught DI in the form of content, process, and product (CPP). Two of them perceived that they taught DI in how they taught their lesson planning. Two of them perceived that they taught DI when they taught Backwards Design. Two of the participants perceived that they taught DI when they taught Culturally Relevant Pedagogy (CRP). One participant perceived they taught DI when they taught grouping and cooperative learning strategies. One participant perceived they taught DI when they taught combination of content, process, and product along with learning modalities. One participant perceived they taught DI in the form of questioning strategies. One participant perceived they taught DI through the use of technology. The fourth question asked on the survey was: What do you perceive is best practice in regards to differentiated instruction? Do you feel that you are differentiating in your undergraduate courses according to best practice? Please share your thoughts. The results of this question are:

Chart 4: Question 4 Responses

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A bar chart with a y-axis from 0 to 25 (in increments of 5) and the following categories and approximate values: No (18), Various Strategies (22), Assessments (13), CPP & RIIL (4), CRP (9), Videos of DI (4), Grouping (4), WIDA & UDL (4).

There were eight different ways in which the participants responded to this question. Four participants responded that they did not use differentiated instruction in their classroom, and did not know what best practice in DI was. Five, which is the majority of the participants, self-reported that they do teach DI in their classrooms, and that they do so through various best practice strategies, but they did not name those strategies.

Three participants responded that they do teach DI in their classrooms, and that they believe that differentiating via assessments is best practice. Three participants responded that they do teach DI in their classrooms, and that content, process, product along with readiness, interest, instructional preference, and learning profile is best practice. Two responded positively that they teach DI in their classrooms and that doing so through culturally relevant pedagogy is best practice. One responded that they teach DI in their classroom and that watching videos of educators practicing DI is best practice. One responded that they teach DI in their classrooms and that grouping strategies and cooperative learning is best practice. One responded that they teach DI in their classroom and that doing so through World Class Instructional Design and Assessment (WIDA), as well as Universal Design for Learning (UDL) was best practice. Two participants skipped this question. The final question that was asked on the open survey was: Would you appreciate further training in differentiated instruction in the form of a professional development (PD) or a manual? Please share your thoughts. The results from this question were:

Chart 5: Question 5 Responses
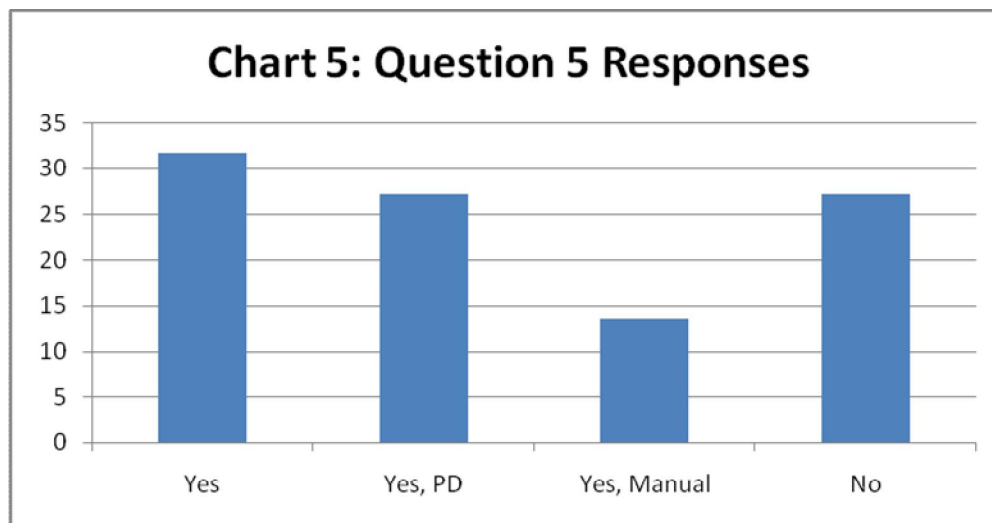
There were four ways in which the participants responded to this question. The largest number of responses, seven, was that the participants would appreciate some additional training in differentiated instruction. Six of the participants stated that they would appreciate a professional development. Three of the participants stated that they would appreciate a manual that explained how this university would like it to be taught. Six participants felt that they did not need additional training in the area of differentiated instruction.

Results & Recommendations

The results of this qualitative case study reflect the fact that faculty at an institution in the southern United States self-reported very different ideas on the implementation and delivery of differentiated instruction. In reviewing the literature, the results align because there really is no uniform best practice in differentiated instruction. The literature does not point to one specific practice, and does not lend itself to a common language on differentiated instruction. There are several models, and faculty at this institution are teaching those models. Unfortunately, because that message is so different from faculty member to faculty member, there is a chance that it is not being received by the pre-service teachers these faculty are instructing. The researchers would recommend further study to include a wider range of faculty members spanning multiple universities, and a follow up study to include recent graduates from educator preparation programs. The follow up study should allow faculty and students to self-report the definition of differentiated instruction, in hopes of finding some common language on this practice that would help inform instructional practice for faculty in initial certification educator preparation programs.

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