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## Bridging Pedagogy and Practice: From Coursework to Field Experiences in a Teacher Preparation Program

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# Bridging Pedagogy and Practice: From Coursework to Field Experiences in a Teacher Preparation Program

## Abstract

In this study, two teacher educators, one special education faculty and one mathematics education faculty, examined ways to infuse educational theory into their practice to develop preservice teachers' ability to meet the demands of the 21<sup>st</sup> century classroom. The study took place at an urban university in the southeastern United States where the teacher education program prepares future educators for the most diverse classroom settings existing in U.S. public schools today. Results informed the teacher educators of relevant challenges preservice teachers experience with regard to instructional design that addresses the needs of diverse learners. The action research study took place over a 3-semester period during which time the teacher educators learned how structured supports enhanced their students' abilities to develop effective instruction for diverse learners.

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*Authors' note: For the purpose of this study, diverse learners are defined as (a) students with disabilities, (b) Culturally Diverse/English Language Learners, (c) gifted (accelerated) learners, and (d) students with instructional disabilities.*

## Keywords

Diverse Learners, preservice teachers, field experience, collaboration, Differentiated Instruction (DI), Universal Design for Learning (UDL)

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## Introduction

In the United States and across many parts of the world, teachers view the student teaching field experience as the most valuable and beneficial part of their teaching preparation (Cochran-Smith, Feiman-Nemser, McIntyre, & Demers, 2008; Feiman-Nemser, 2003; Guyton & McIntyre, 1990). In fact, most teachers claim that the majority of what they know comes from their first-hand student teaching experiences (Feiman-Nemser & Buchmann, 1985). Highlighting a time of cross-purposes, focused simultaneously on teaching effectively and learning to teach, the student teaching experience characterizes a unique and complex component of teacher preparation (Feiman-Nemser, 2001; Feiman-Nemser & Buchmann, 1985; Wildman, Niles, Magliaro, & McLaughlin, 1989). With current pressures for teacher education programs at Institutions of Higher Education (IHE) to prepare effective and quality teachers, teacher educators must question traditional models of student teaching, develop new models of practice based on these questions, and then research these models.

## Purpose

The impetus of this study came from a newly created position of an inclusion liaison from the special education department who would work with the content area middle and secondary education faculty in an urban university's college of education. In this capacity, the special education faculty provided professional development for both faculty and preservice teachers in the initial teacher preparation program in areas of inclusive educational practices. While taking advantage of the offered professional development, a mathematics teacher educator expressed interest in collaborating with the special education liaison to provide inclusive strategy training with her preservice teachers.

During the early stages of the collaboration, the two teacher educators reflected on their previous experiences working with preservice teachers. The teacher educators referenced written reflections and an end-of-program questionnaire from a previous cohort of preservice teachers to guide how they would blend their experiences and individual expertise from the general and special education fields. The preservice teachers' reflections expressed concerns about being able to provide appropriate accommodations for students with disabilities and having the necessary experiences to identify learning processes associated with specific disabilities. Similarly, the reflections identified the preservice teachers' desire to have additional assistance during their field experience to develop effective instructional strategies for diverse learners within their respective settings.

## Theoretical Framework

Based on the preservice teachers' feedback, the teacher educators became aware of their need to bridge the pedagogical content preservice teachers' gain from their university coursework to authentic implementation strategies in their field experience settings. By examining preservice teachers' lesson plan development for the inclusion of diverse populations, the teacher educators developed what they referred to as *structured supports* consisting of (a) professional development seminars, (b) a differentiated lesson plan template and lesson plan scoring rubric, (c) one-on-one meetings with the preservice teachers, and (d) direct observation of preservice teachers' teaching.

### Professional development seminars.

The teacher educators provided professional development seminars with a focus on specific strategies to address the needs of the diverse learning environments in which their

preservice teachers were placed. The special education liaison developed seminars for the preservice teachers in the areas of classroom management, Differentiated Instruction, and Universal Design for Learning. The preservice teachers attended the seminars during their first semester of their field placement. During the seminars, the preservice teachers received content and resources relative to their settings in which they taught.

### **Differentiated lesson plan template and scoring rubric.**

The teacher educators enhanced an existing lesson plan template to include a section for details on how the preservice teachers would address diverse learners in both teaching and assessment strategies. The preservice teachers developed each lesson plan using this template. In conjunction with the differentiated lesson plan template, the teacher educators created a lesson plan rubric as a tool to evaluate each lesson plan (see Appendix A).

### **One-On-One conferences.**

The teacher educators scheduled one-on-one conferences with the preservice teachers to review the score received on the lesson plan rubric. At that time, the teacher educators provided feedback, assisted the preservice teachers with any warranted revisions, and discussed implementation strategies.

### **Direct observations of preservice teachers' teaching.**

The teacher educators observed the preservice teachers' implementation of the reviewed lesson plans twice throughout the practicum field experience and three times during the full-time student teaching experience. A debriefing conference with the preservice teacher followed each observation. A research question was formulated to measure the effectiveness of the offered structured supports. The following question was examined through the lens of the participants:

*How do structured supports from teacher educators affect preservice teachers' abilities to design and implement lesson plans that address the needs of diverse learners in the 21st century classroom?*

## **Review of Literature**

From the preservice teachers' feedback, the teacher educators sought ways to provide preservice teachers with structured supports to meet the identified challenges. They identified the areas of Differentiated Instruction (DI) and Universal Design for Learning (UDL) as evidence-based approaches to develop competence in preservice teachers to address the challenges the preservice teachers expressed.

### **Differentiated Instruction.**

Differentiated Instruction (DI) is a broad term, mainly referring to classroom practices which embody students' learning styles, interests, and prior knowledge (Benjamin, 2002). DI gives a meaningful way to teach required state standards (Protheroe, 2007) and to maximize each student's growth by meeting the student at his or her current level (Hall, Strangman, & Meyer, 2003) as opposed to traditional instruction, which teaches to the middle as a one-size-fits-all approach (Rock, Gregg, Ellis, & Gable, 2008). Carol Ann Tomlinson (1999) developed DI with the premise that teachers should (a) focus on the essentials in learning, (b) attend to student differences, (c) collaborate with colleagues and students on learning, and (d) not separate assessment from instruction.

As an instructional theory, DI provides teachers with teaching strategies that reflect students' diverse needs when planning and delivering instruction (Tomlinson, 1999). Based on this theory, teachers should structure learning environments that address the variety of learning styles, interests, and abilities found within a classroom. The teacher educators provided explicit

instruction during the Professional Development Seminars related to DI to help preservice teachers create lesson plans that provided several learning options, or different paths to learning.

### **Universal Design for Learning.**

Universal Design for Learning (UDL) is a process that maximizes learning for all students, minimizes the need for individual accommodations, and eventually benefits every learner by considering the way that students' minds are activated. It is somewhat comparable to DI; however, UDL differs in that it addresses learner diversity at the beginning of curriculum and lesson design; builds tools and methods of differentiation directly into the curriculum; and provides students with mechanisms to become more self-aware of how to take charge of their learning rather than rely on the teacher to make modifications. The Center for Applied Special Technology (CAST, 2008) stated, "The burden of adaptation should be placed on the curriculum not the learner . . . because most curricula are unable to adapt to individual learning differences" (p. 2). The three essential principles of UDL include using multiple means of representation, expression, and engagement. In doing so, UDL eliminates the one-size-fits-all mentality of lesson planning. To prepare teachers for developing a differentiated approach through the process of UDL, there should be provisions for training, resources, and time to discuss and reflect on the process (Gregory & Chapman, 2007; Logan, 2009; Protheroe, 2007; Wormeli, 2005).

In the Higher Education Opportunity Act of 2008, UDL is defined as

a scientifically valid framework for guiding educational practice that—(a) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and (b) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient [Higher Education Opportunity Act, P.L. 110- 315, §103(a) (24)]. (National Center for Universal Design for Learning, 2011)

Embedding the theoretical frameworks of Differentiated Instruction and Universal Design for Learning into the planned structured supports created a need to investigate their relevance in teacher preparation coursework and authentic student teaching experiences.

### **Methodology**

The teacher educators used action research methodology to determine if the structured supports would meet the challenges expressed by the preservice teachers. According to Mills (2007), "action research has the potential to be a powerful agent of educational change. Action research helps to develop teachers and administrators with professional attitudes, who embrace action, progress, and reform rather than stability and mediocrity" (p. v). The action research process was participatory as the teacher educators aligned with Kemmis and McTaggart's (2000) action research spiral to engage in the self-reflective cycles of (a) planning a change, (b) acting and observing the process and consequences of the change, (c) reflecting on those processes and consequences and then re-planning, (d) acting and observing, and (e) reflecting.

### **Participants.**

The study's participants included preservice teachers enrolled in a Master of Arts Initial Teacher Preparation Program with a concentration in Secondary Mathematics at a large, urban university in the southeastern United States. The study took place over a three-semester period as the preservice teachers completed their last semester of coursework followed by two semesters of field experience requirements (i.e., practicum and student teaching). The teacher educators referred to the three-semester period of time as phases. Of the original 19 preservice teachers, 11 completed all components of the three-phase study.

## **Procedure**

In the first phase of the study, preservice teachers enrolled in a methods course where they began preparing for their field experiences. In the next phase, the first two structured supports were implemented. The teacher educators conducted professional development seminars and focused on differentiated lesson plan development. The last phase of the study occurred during the student teaching experience. The teacher educators completed one-on-one conference meetings with the preservice teachers and conducted direct observations of the preservice teachers implementing the lessons.

### **Phase One (summer term).**

The first phase of the study took place during the summer semester coursework where the teacher educators facilitated microteaching experiences for the preservice teachers during their class meetings. Allen (1967) introduced microteaching in the mid-1960s to help teachers acquire new skills. The goal was to give preservice teachers confidence, support, and feedback by giving them an opportunity to practice teaching among friends and colleagues in a nonthreatening environment.

During class, each participant designed a mini lesson to teach to his or her classmates. The classmates took on a specific roleplaying assignment to create a laboratory classroom setting. The assigned roles included a student exhibiting challenging behavior, an accelerated student, a student with a learning disability, and an English Language Learner. Near the end of the class, the teacher educators facilitated class discussion, feedback, and clarifications regarding the observed teacher, student, and diverse learner roles. The feedback enabled the preservice teachers to reflect constructively on their performance and served as an evaluative tool to improve their teaching.

### **Phase Two (fall term).**

During phase two of the study, the preservice teachers participated in their practicum field experiences and attended professional development seminars that included topics of Differentiated Instruction (DI) and Universal Design for Learning (UDL). The teacher educators met with the preservice teachers in private conferences to review lesson plans developed prior to their implementation. In preparation for the conferences, the teacher educators scored the preservice teachers' lesson plans using a lesson plan scoring rubric which aligned components within the lesson plan to DI and UDL strategies with a scaled score (see Appendix A). The teacher educators discussed the results of the rubric score with the preservice teacher and assisted them with any necessary revisions and implementation strategies. The teacher educators observed the preservice teachers' implementation of two different reviewed lesson plans during this phase of the study.

### **Phase Three (spring term).**

During phase three of the study, the teacher educators examined the extent to which the structured supports of the professional development seminars and the lesson plan development of the first two phases impacted the preservice teachers' ability to implement strategies related to DI and UDL during their student teaching experiences. The teacher educators' structured supports in this phase included one-on-one conferences with the preservice teachers before and after their student teaching observations conducted around the mid-point and the end of the semester.

During the one-on-one conferences, the preservice teachers reviewed their lesson plans with the teacher educators prior to their implementation. As in phase two, the teacher educators evaluated the initial draft of the preservice teachers' lesson plans using a rubric created to assess the components relative to the study's goals. Using the reviewed lesson plans, the teacher educators observed the preservice teachers as they implemented the lesson plans during their student teaching

At the mid-point of phase three, the teacher educators additionally facilitated a focus group discussion with the preservice teachers. The discussion focused on the topic of differentiation to ascertain the level to which the preservice teachers implemented the strategies they developed in their prepared lesson plans. The discussion was an opportunity for the preservice teachers to share their experiences thus far and for the teacher educators to collect qualitative data.

## **Instruments**

Data were collected using three instruments to measure the outcomes of the structured supports: (a) pre- and post-study questionnaires completed by the preservice teachers to serve as a means to measure outcomes related to the research questions, (b) rubrics for rating lesson plan development, and (c) anecdotal notes resulting from one-on-one conferences, the focus group discussion, and the end-of-study interviews with the preservice teachers. The pre-study questionnaire consisted of 9 questions with response options ranging from 1 (*never*) to 4 (*always*). Preservice teachers completed the questionnaire at the mid-point during their practicum field experience, which occurred during the second phase of the study. The intent of the questionnaire was to ascertain the extent to which the preservice teachers employed the pedagogical strategies of DI and UDL in their lesson plan development. At the end of phase three, the teacher educators administered the post-study questionnaire (the same 9 questions included in the pre-study questionnaire) to the preservice teachers at the end of their full-time student teaching experience. The intent of the pre- and post-study questionnaire design was to compare the pre- and post-data to determine the effectiveness of the structured supports the teacher educators provided during the preservice teachers' field experiences.

The final form of data collection resulted from the end-of-study interviews which consisted of open-ended questions to ascertain the study's outcomes. The teacher educators determined (a) the preservice teachers' attitudes about the support they received during the lesson plan development and implementation and (b) the confidence level they felt addressing the needs of diverse learners from the beginning to the end of their experience.

## **Findings**

Upon collecting the responses from the pre- and post-study questionnaires and the anecdotal notes from the one-on-one interviews, the teacher educators compiled the data for analysis (see Appendix B). The teacher educators coded the collected data for individual and holistic patterns that highlighted beneficial implications regarding the preservice teachers' growth with respect to instructional design and implementation as well as their perspective toward the support they received from the structured support activities. The teacher educators coded the data using a qualitative data analysis software program. Three salient themes emerged from the coding process, which included (a) differentiated lesson plan development, (b) collaboration, and (c) outcomes.

### **Differentiated lesson plan development.**

From the pre- and post-study questionnaire (see Appendix B), the preservice teachers indicated increased awareness and confidence in their ability to develop and implement lesson plans that addressed the needs of diverse learners in their respective settings. The preservice teachers reflected on the importance of knowing their students' individual needs and learning styles to direct instructional planning using the evidence-based strategies of DI and UDL. To investigate the frequency at which the preservice teachers included differentiated strategies for three specific groups of students, pre- and post-study questionnaire items 2, 3, and 4 (see Appendix B) were compared.

At the beginning of the study, approximately half of the preservice teachers indicated they “never” or “sometimes” used differentiated instructional strategies when planning instruction for students with disabilities. By the end of the study, all of the preservice teachers reported planning and using differentiated strategies “often” or “always” when working with students with disabilities. Preservice teachers who reported they “never” or “sometimes” planned differentiated strategies when working with gifted students decreased from 50% to 27.3% and when working with English Language Learners decreased from 71.4% to 9.0%. The teacher educators attributed this improvement to the structured supports that were addressed in the Differentiated Lesson Plan Template. Preservice teachers were given the tools needed to plan appropriate strategies for diverse learners in their respective classrooms.

In the pre- and post-study questionnaire, Question 6 (see Appendix B) surveyed the preservice teachers’ knowledge of the pedagogy related to the process of DI, specifically the content, process, and product model espoused by Tomlinson (1999). The preservice teachers’ use of this model in their lesson planning increased from 46.1% to 100% as “often” and “always.” While this pedagogical construct was previously included in teacher preparation coursework, the teacher educators learned that preservice teachers needed explicit, focused, and intentional professional development to enhance the implementation of what they learned. With these results, the teacher educators learned the value of providing the DI seminar as it facilitated preservice teachers’ abilities to plan and implement these evidence-based strategies for effective instruction.

A similar outcome occurred in the pre- and post-study questionnaire responses as related to UDL. On Question 5 (see Appendix B), 53.3% of the preservice teachers initially responded as “never” or “sometimes” employing UDL principles in their planning, while 100% of the preservice teachers reported using UDL principles “often” or “always” at the end of the study. The teacher educators attributed this increase to the notion that the preservice teachers had minimal exposure to the principles of UDL as it related to planning and instruction in their coursework. As UDL was originally developed within the field of Special Education, it was not until the special education inclusion liaison collaborated with the education faculty that the preservice teachers were exposed to this curricular model in their content areas. The preservice teachers’ use of UDL principles in their design of instruction was what the teacher educators hoped to see as a mechanism to guide preservice teachers in their ability to bridge what they learned into their practice.

These changes demonstrated the professional growth of the preservice teachers, which were also evident in the following preservice teachers’ comments in the end-of-study interviews:

*“The template we used for the lesson plans...directed questions where it said differentiation [and] what are you doing for these kind of students, with this ability or not?...those [questions] were really helpful.”*

*“I remember several times where I’ll show how to do a problem one way and then I showed them more of a visual, a tangential, a method of working out the problem and then I get the ‘Oh! Ah! Now I get it!’”*

*“We were able to talk with our university professor a lot about differentiation and universal design for learning and just designing lessons with diverse learners in mind...this was very helpful.” “And so, I feel these are successes [with differentiation] when they didn’t get it the first time, when I showed them a different way they get it.”*

*“If I notice the whole class is not getting it I change my lesson plan and the next day we’ll refocus, do some different activities.”*

*“Differentiation is hard. It takes a lot of time and you really have to understand where the students are and what help they need.”*



## Collaboration.

Another pertinent theme that emerged from the preservice teachers' professional development involved the importance of utilizing resources accessed from their colleagues in their placement school, their university supervisors and professors, and their independent research. The one-on-one conferences demonstrated the importance of collaboration with educational partners to inform practice. A comparison of pre- and post-study questionnaire responses indicated a transformative shift in collaborative behavior. At the beginning of phase two, the preservice teachers reported little interaction with their mentor teachers or other professionals. By the end of phase three, the end of their student teaching experience, 91% of the preservice teachers reported they were collaborating with their mentor teachers and other professionals on a regular basis. The following comments offered during the end-of-study interview substantiated the questionnaire results:

*"In the beginning, we would kinda collaborate during the planning time, then we would say little things in between classes, then we would meet after school. Now we have each other's cell phone numbers, email, text. Sometimes we talk on the weekends."*

*"We collaborate on a daily basis so we're always talking, discussing our plans and our strategies that we're going to use."*

*"Not having a mentor teacher who knows a lot about it [differentiation], I banked on the fact that I could go to the university staff...and then, research on my own, on the Internet and also ask people at my school."*

*"I had two other teachers to collaborate with and we would designate what we would be doing the next couple of days...the lesson planning was on me but the format and the pacing, we talked about together."*

*"At times, the inclusion teacher has come up with different ideas that have been helpful."*

*"I think the thing that was most helpful was interacting with the advisors [faculty instructors] here about differentiated instruction."*

## Outcomes.

The teacher educators observed positive outcomes from the study as the preservice teachers became aware of the importance of reflection on their practice to direct their instruction. When comparing the preservice teachers' responses to the pre- and post-study questionnaires, the first item asked the preservice teachers to rate their level of confidence regarding their ability to plan effective instructional practices, which met the needs of diverse learners. Initially, 64.3% of the preservice teachers rated themselves as "somewhat confident" in response to this item, suggesting that despite the amount of coursework the preservice teachers completed, many of them entered their field experiences with limited confidence in their ability to bridge what they learned into instructional practice. After the study, none of the participants rated themselves as "somewhat confident." Instead, 27.3% rated themselves as "confident" and 72.7% rated themselves as "very confident." The following comments offered by the preservice teachers further supported the questionnaire responses:

*"My confidence level is much, much higher. I don't think twice, I don't second guess myself when it comes to a lesson. I just do it. I'm more prone to trying things before I just completely count it out now."*

*"At the beginning, I was getting used to things to think about and what to do but now I'm definitely a lot more structured and more comfortable with giving a lesson."*

*"Knowing the students' thinking and reflecting makes sense now...we gave a lot of attention in classes about reflecting on students."*

The findings from the comparative analysis of the pre- and post-survey as well as the final interview answered the teacher educators' question: *How do structured supports from teacher educators affect preservice teachers' abilities to design and implement lesson plans that address the needs of diverse learners in the 21st century classroom?* Every preservice teacher in the study

reported increased confidence in their ability to implement appropriate instructional strategies for the diverse needs of the students in their classrooms. The teacher educators learned not to assume that the knowledge and exposure to pedagogy in the teacher preparation coursework naturally transfers into authentic practice without intentional guidance from teacher educators. Thus, the benefit resulting from the structured supports became clear.

## **Implications**

Through examination of the differentiated lesson plan development and its implementation in the preservice teachers' classrooms, the study provides implications for the context in which the teacher educators realize the need for horizontal expertise across not only content and specialty expertise but across campus with school professionals involved with the preservice teachers. The teacher educators conclude with a plan to enhance teacher preparation programs for future preservice teachers.

### **Teacher educators benefiting from professional development.**

Throughout the study, the teacher educators learned from each other and from the preservice teachers. The special education inclusion liaison offered professional development that incorporated DI and UDL strategies to help preservice teachers with their lesson plan development and implementation. The active collaboration between colleagues and persistent professional development for the preservice teachers indicated that the inclusion of diverse learners in teaching and learning was highly valued. In addition to the preservice teachers being mindful of varying differentiation strategies that would best benefit their students' needs, the mathematics teacher educator also learned from these opportunities to improve her practice as a teacher educator. Likewise, the special education inclusion liaison learned how to guide the preservice teachers' lesson plan development from a content-specific perspective. As a result, the special education inclusion liaison had to understand the content-specific skills being taught to a certain extent to recommend relevant teaching strategies for the preservice teachers' lesson planning and implementation.

### **Cultural diversity of the college and school classrooms.**

The cultural diversity of the university and 6-12 classrooms within the urban setting made it possible for both teacher educators and preservice teachers to have hands-on experiences with diverse learners. With the increase of diverse learners in urban classrooms, there is a demand to prepare teachers to work in diverse urban settings (Enright & McCloskey, 1992; Loewenberg Ball & Forzani, 2009; Sobel & French, 1998). More so, there is a call for reforming preservice teacher education, which includes the need to improve the quality of field experiences (Sobel & French, 1998; Taylor & Sobel, 2001). By offering structured supports to help preservice teachers address the needs of diverse learners, the preservice teachers indicated increased ability and confidence in being able to incorporate differentiated strategies in their lesson plans.

### **Our plan for future preservice teachers.**

Preservice teachers' responses toward the teacher preparation program gave attention to the situations where they expressed the need to spend more time in practice teaching. Additionally, about half of the preservice teachers wished they were matched with mentors with more experience in differentiation to gain the support they desired to plan effective instructional strategies. These concerns were specific to the logistics of their placement, which will be addressed at the program and department level for effective preservice teacher placement assignments.

Additionally, the teacher educators are hopeful that they can continue this work of

facilitating preservice teachers in a comprehensive model to benefit all stakeholders and particularly the preservice teachers whose impact on all learners is critical in our 21st century classrooms. As teacher educators work on the inroads to this model, other content area faculty members at the university must also gain traction to do this work.

## Limitations

The teacher educators acknowledge the limitations of the study. The 11 participants who completed all components of the three-phase study constituted a small group of preservice teachers. All participants were graduate level students in a Master of Arts Initial Teacher Preparation Program with a concentration in Secondary Mathematics, resulting in a select group. The future plan is to expand the study with other content areas to work toward establishing general outcomes for enhancing structured supports as an approach to assist preservice teachers in designing and implementing effective lesson plans and to improve the practice of teacher educators. Also, future plans will study the intentional integration of DI and UDL during the preservice teachers' internships for effective practice.

## Conclusion

In this research study, the teacher educators investigated how preservice teachers enrolled in an Initial Teacher Preparation (ITP) university program were supported in their design and implementation of effective instructional strategies for diverse learners during their participation in field experiences. The study revealed potential benefits to improving teacher educators' practice by examining the effectiveness of structured supports provided for preservice teachers during their field experiences. The teacher educators aimed at giving aspiring teachers the opportunity to bridge pedagogy into their practice. The result guided the preservice teachers in learning how to integrate what they learned in their university coursework into their day-to-day teaching practice. As the teacher educators assisted the preservice teachers in developing their skills to make professional decisions about their teaching, they learned valuable strategies for their own professional development as teacher educators. The results of this study provide timely evidence that structured supports are essential for teacher preparation programs to showcase preservice teachers' readiness to teach.

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### Appendix A

#### Differentiation Component of Lesson Plan Template

<b>Differentiated Instruction</b>	
Alternative or additional strategies, resources, or activities to engage students at varying levels of readiness, modalities, and interests that will be operated during the lesson.	
Differentiation Strategy: What will the teacher do to meet the students’ needs?	Assessment: What will the student do to display learning with specific differentiation: How will you assess the students’ learning?
<b>Students with Special Needs</b>	
<b>Students who are Accelerated Learners</b>	
<b>Students of Culturally Diverse Backgrounds</b>	

#### Differentiation Component of the Lesson Plan Scoring Rubric

	<b>Beginning 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>
<b>Level of Differentiation</b>	The lesson plan does not mention differentiation.	Lesson plan includes minimal differentiated instruction, limited to either gifted students OR students with special needs OR English-language learners.	Lesson plan includes some differentiated instruction for gifted students, students with special needs, and English-language learners.	Lesson plan clearly offers appropriate, and well-integrated challenges for students of all levels, including gifted students, students with special needs, and English-language learners.
<b>Differentiation of Content</b>  (What the student needs to learn?)	<i>Content</i> is not differentiated.	Lesson plan includes minimal differentiation of <i>content</i> .	Lesson plan includes some <i>content</i> differentiation for gifted students, students with special needs, and English-language learners.	Lesson plan clearly offers appropriate, strategies to present <i>content</i> for students of all levels, including gifted students, students with special needs, and English-language learners.

### Appendix B

#### Participants' Responses to Pre-/Post- Questionnaire

Questionnaire Item	Never		Sometimes		Often		Always	
	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-
1. I would rate my confidence level regarding my ability to plan effective practices which meet the needs of diverse learners as:	0	0	64.3	0	21.4	27.3	14.3	72.7
2. When developing lesson plans, I included differentiated strategies for students with disabilities.	14.3	0	37.5	0	35.7	54.5	14.3	45.5
3. When developing lesson plans, I included differentiated strategies for students who are gifted.	7.1	0	42.9	27.3	35.7	63.5	14.3	9.2
4. When developing lesson plans, I included differentiated strategies for English language learners.	14.3	0	57.1	9.0	14.3	45.5	14.3	45.5
5. When designing instruction, I employed the Universal Design for Learning principles.	7.1	0	46.2	0	38.5	54.5	7.7	45.5
6. When designing lesson plans, I	7.7	0	46.2	0	38.5	54.5	7.7	45.5

	differentiated the content, the process, and the product features of my instruction.								
7.	In order to address the needs of the students with disabilities in my classroom, I collaborated with the special education professional in my school.	7.1	0	42.9	0	35.7	27.3	14.3	72.7
8.	I collaborated with my mentor teacher to develop lesson plans to include integrated strategies for the diverse learners in our classroom.	14.3	0	7.1	9.1	42.9	90.9	35.7	0
9.	My mentor teacher assisted in modifying my lesson plans to address the needs of diverse learners in our classroom	14.3	0	14.3	45.5	42.9	54.5	28.6	

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