Exploring Differentiation for Students with Disabilities

by

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Field Project

Submitted in partial fulfillment of the requirements for the

Master of Science Degree in Education

Graduate Studies

Martin Luther College

New Ulm, MN

April 2018

Signature Page

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Abstract

The number of students with disabilities is increasing, which means that teachers must know how to meet their different needs. The purpose of this project was to educate a WELS teacher on how to use differentiation. The goal was to determine if the teacher reported an increase in understanding and use of differentiation, as well as the impact the differentiation techniques had on student achievement. The project involved a classroom teacher and two of his students with disabilities. I provided the teacher with a questionnaire to gauge his understanding of differentiation. I used the results to educate the teacher on what differentiation means and how to implement it in the classroom. The teacher carried out differentiation techniques recommended by me, and then we gathered data on student achievement through a Maze Assessment and teacher observation. The results indicated that the teacher had significant improvement in his knowledge and use of differentiation, and the students had a slight improvement in achievement. I concluded that instructing teachers on differentiation enables them to differentiate more, but in order to see a significant impact on student achievement, the project would need to be carried out for a longer period of time.

Acknowledgments

I would first and foremost like to acknowledge our Lord. He is the one who has given me the knowledge and skills needed in order to accomplish the work for this field project, as well as the rest of my Master's work.

Secondly, I would like to thank my husband, Tyler. He has been a tremendous help, both with this field project and with all areas of my Master's work. I would have had a difficult time doing this on my own without his encouragement and support over the last couple years.

Lastly, I would like to thank my advisor, Dr. Cindy Whaley, who has been a great guide to me throughout all my work. Additionally, I would like to acknowledge my other committee members, Dr. Leslie Rogers and Professor Daryl Hanneman for their wisdom and support. I truly feel blessed to have had the privilege to work with all three of my committee members.

Table of Contents

List of Tables

Chapter I: Introduction

Identify the Issue

Throughout the little amount of teaching experience I have had, I have already been responsible for teaching a handful of students with disabilities. While I was teaching these students, I realized something—I really did not have a good knowledge of what to do. I had taken the required courses at MLC about students with disabilities, but I did not feel fully prepared to help these children. Therefore, I concluded that other WELS teachers might be feeling as unprepared as I was. Teachers who receive even a brief introduction about creating diverse lesson plans have been shown to include more modifications, alternatives for communications, and activities that involved students (King-Sears, 2008). Essentially, general education WELS teachers can benefit from more training in order to be successful at educating students with disabilities.

Importance of the Project

The number of students with disabilities is on a steady increase (Allsopp, Kyger, & Lovin, 2004). Unlike the public schools, most WELS schools are unable to provide the services public schools can offer. The Individuals with Disabilities Education Improvement Act (IDEIA) states that students with disabilities should progress and participate in the general education curriculum (King-Sears, 2008). Therefore, in order to continue teaching students with disabilities, WELS teachers need to have a good understanding on how to best educate them. Consequently, I see great importance in doing a field project that focuses on helping another WELS teacher learn how to differentiate to best serve his students. As my knowledge of helping students with disabilities has grown, I want to share that knowledge with fellow teachers, in order to

help those teachers and their students be more successful. Not only will this help another teacher and students, it will also help me to use and develop the knowledge I have acquired, enabling me to help more teachers and students in the future.

Project Purpose or Goal

During the field project, I have a few goals that I want to accomplish. Overall, I strive to educate another teacher on how to effectively differentiate for students with disabilities. I want to initially get an understanding of how prepared the teacher already feels. Then, we would identify the students he has with disabilities and what the teacher is already doing for these students. Following that, I would give the teacher research-based techniques to use for differentiating for those students. We would assess those techniques to make sure they are helping the students improve. And finally, I would determine if the teacher feels more prepared to differentiate for students with disabilities after the project. After the field project, I envision that the teacher will be able to better serve future students with disabilities.

My goals fit with several standards from the Council for Exceptional Children (Appendix A).

- Standard 1 promotes, "Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities." As the teacher and I determine differentiation for the students, we want to make sure they are matched with the students' capabilities.

- Standard 5 encourages, "Beginning special education professionals select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities." The field project will allow me to share evidence-based practices, and for the other teacher to learn and use them.
- Standard 7 upholds, "Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences. " This standard fits well with my goals since the other teacher and I will be collaborating as I share my knowledge with him.

Throughout this experience, these three standards will connect with the goals I want to accomplish.

Chapter II: Literature Review

Introduction

As the number of students with disabilities rises in schools, so does the need for differentiation. This is necessary for numerous different types of students with disabilities. More children with Down's Syndrome are enrolling in mainstream schools (Alton, 1998). Children who have social maladjustment and emotional disturbance require special education (Bray & Hughes, 2004). The list could continue with various other types of disabilities. Essentially, more students with disabilities equals more need for differentiation.

Importance of Differentiation

Students with disabilities can benefit from inclusion. Empirical research supports the inclusion of children with mild disabilities in the general education classroom (Carter, Ernest, Heckaman, Hull, & Thompson, 2011). Children should be in the least restrictive environment, which is a federal mandate. When students with disabilities can be included in the regular classroom, they should be. Some people may think that students with disabilities will learn better in a specialized program. However, students with disabilities are capable of learning the general education curriculum (King-Sears, 2008). With a knowledgeable teacher who is successful at differentiation, students with disabilities can thrive in the regular classroom. Therefore, the general education teacher needs to know how to differentiate for individual students, based on students' unique strengths and challenges.

It is essential that teachers know how to differentiate for their students so that the students can succeed. Teachers need to acknowledge the academic struggles that students

may have with the core subjects. Students with disabilities often struggle with not only basic reading concepts, but all reading skills (Kostewicz & Selfridge, 2011). Since reading skills are necessary for other subject areas as well, a struggling reader may have a difficult time learning. In addition to academic problems, the teacher should also identify other difficulties the students may have that can prohibit them from succeeding in the classroom. In order for this to happen, the teacher needs to get to know the student. The contribution of individual, social, and environmental risk factors should be considered by the school and used for planning interventions (Bray & Hughes, 2004). Disabilities have various causes, and these causes can increase the severity of challenges. By teachers knowing what contributes to the disabilities and risk factors that could worsen the situation, they can take preventative measures and plan differentiation better. Furthermore, it is important that the child's difficulties are described in a manner that will result in the most appropriate treatment (Bray & Hughes, 2004). Only after the child's struggles are identified clearly and specifically can the teacher begin to determine how to best differentiate for the student.

After determining that a student is struggling, the teacher would need to decide the best course for differentiation. One of the ways to do this would be to establish how the student learns best. Teachers could think about the seven multiple intelligences in children to determine how various students think and prefer to learn (Beam, 2009). A tool for defining what type of intelligences students have is an interest inventory. It allows the teacher to know what types of learners are in the classroom, based on multiple intelligences, and helps the students better understand themselves (Beam, 2009).

Acquiring this knowledge will help teachers decide what instructional methods work best for their students.

Importance of Assessment

Differentiation can take some trial and error to determine what works best for individual students. When trying a new technique, teachers need to be patient as they work with the students. Allow students time to process and understand new information, and to prepare a response (Alton, 1998). Presenting new differentiation methods can be taxing on the students; therefore, teachers need to give students time to get acquainted with new techniques before determining if it is effective or not. If one approach is unsuccessful, then the teacher should try another. There are varied ways for content to be presented to students, as well as flexibility in how students express what they have learned (King-Sears, 2008). Teachers need to acknowledge the diversity of ways to instruct and assess students.

Constant assessment on differentiation techniques is necessary to determine if they are effective for the students. Students are automatically assessed through various means. No Child Left Behind (NCLB) required states to include students with disabilities in large-scale assessments (King-Sears, 2008). However, there are also informal means of assessment necessary for teachers to implement when establishing if a differentiation method is successful. Ongoing monitoring informs teaching and learning (King-Sears, 2008). When teachers constantly assess their students, it helps them decide how and what to teach next. Assessment should even take place in the midst of teaching. Flexibility is essential to allow teachers to adjust their lessons based on students' understanding, or

lack of understanding (Beam, 2009). This allows for instructional changes to be made when necessary. Assessment is a key component of differentiation.

Summary

In summary, since there are more students with disabilities, teachers need to have more knowledge in how to educate them successfully. It is beneficial to have students with disabilities included in the regular classroom, which dictates that teachers need to know how to differentiate. First of all, teachers need to clearly and specifically identify the struggles students have. Then, teachers can try different differentiation techniques. Afterwards, it is essential to assess how well the differentiation is working to determine if the student is on the road to success or if alternative techniques need to be implemented. The process of truly implementing differentiation is a long journey (Johnson, Tripp, & Weber, 2013). However, this journey will help students with disabilities succeed in the general education classroom.

Chapter III: Implementation

Introduction

Since not all teachers are fully prepared to educate students with disabilities, this field project focused on enhancing the ability of a WELS teacher to differentiate, keeping in mind the needs of his students with disabilities. The field project revolved around giving the classroom teacher research-based practices and then evaluating the effect these practices were having on the students' achievement.

Procedures

The field project was composed of three main parts. The first part was about the classroom teacher's understanding of differentiation, as well as how to improve his knowledge and skill set in this area. The second focus was on an eighth grade student, John, who has a SLD (specific learning disability). John struggles with reading comprehension, which results in him not reading at a pace appropriate for his grade level. He also struggles with putting spaces between words when writing or typing. The third focus was on a sixth grade student, Lee, whom the classroom teacher has for only math and science. He also has a SLD in the area of reading. He has difficulties decoding words, especially multi-syllable words, and also struggles with reading comprehension. This affects his work in word problems for math and whenever science homework requires him to read to find answers.

Part one. I initially gave the classroom teacher a questionnaire (Appendix B), to determine how knowledgeable and prepared he was with differentiating for students with disabilities.

Table 1

Results of Initial Teacher Questionnaire

Question	Score
I know what differentiation means.	3
I feel comfortable using differentiated instruction.	3
I plan my lessons with differentiation in mind.	3
I differentiate the content (what is being taught).	1
I differentiate the process (how it is taught).	3
I differentiate the product (how the students demonstrate learning).	3
I give pre-assessments to my students.	4
I am aware of my students' capabilities.	4
I clearly state my objectives for lessons.	3
I use flexible grouping (alone, pairs, small groups).	5
I provide a variety of support strategies (organizers, study guides, study buddies).	4
I use tiered instruction.	3
I am aware of my students' interests.	4
I am aware of my students' learning preferences.	5
I use a variety of materials during my lessons.	4
The pace of my instruction varies based on my students' needs.	4
I use informal assessment in the middle of my lessons.	5
I allow students to have choices when completing assignments.	5
I use technology as a tool for differentiation.	4
Note. The score range was from 1-5, with 1 being completely disagree and 5 being completely agree.	

After the classroom teacher took the questionnaire, he and I discussed each of the questions, so that I could address any misconceptions he had, as well as get a better understanding of what I needed to explain to him. Through the discussion, I discovered that he thought differentiation was the same thing as learning styles. After I explained to him what differentiation meant, he said that he probably should have put a lower score for the first three questions. He also did not understand why we should differentiate content. He thought this meant that he should teach one topic to one group of students and teach another topic to a second group of students. I also discovered through our discussion that he differentiated the process and product from subject to subject, but

within the subject those two components he generally did not differentiate. While taking the questionnaire, he stopped to ask me what tiered instruction means. After I explained it, he recalled that he would work with students one-on-one when they struggled with a concept, but he usually did not use small groups. For learning preferences, he believed that Lee is an auditory and kinesthetic learner, and John is a visual learner. The informal assessments he reported using during math were using mini whiteboards, during science he used questions, and during reading he used discussions. The way he used technology for differentiation was by allowing John to access a website that reads novels aloud to him.

Based on my discussion with the classroom teacher, I realized he might benefit from a clearer picture of what differentiation means and what it looks like in the classroom. I composed a list of research-based techniques for the teacher to use, and I categorized the list by content, process, and product. My goal was to ensure that the teacher knows how to differentiate effectively using all three components.

Part two. For John, the classroom teacher and I worked toward addressing his biggest struggle, reading comprehension. We started by giving him a Maze Assessment (Appendix C). The benchmark score for his grade is 20 correct. He completed 15 correct with 0 errors. Between the results of this maze assessment and the classroom teacher's observation, we concluded that John can comprehend text, but not as effectively as he should be able to. This results in him reading at slower rate because he struggles with knowing effective methods for drawing meaning from the text.

Content. I gave the classroom teacher a differentiation idea for content. Currently, in reading class, the teacher had all the students read the same novel. I recommended that

the teacher have John read novels written just a little above his current level. “If a student finds the work too easy, he or she will not learn. If the work is too difficult, the result is the same. Everyone learns the best when the work is a little above our current level and there is a system in place to help us bridge the gap” (Cox, 2008). Since John was reading novels too difficult for him, he was not able to learn as well, but reading novels closer to his level would help him to grow.

The teacher understood the importance of this differentiation recommendation. At the start of the field project, the teacher had already planned to begin a new novel with the students. Since his students are at various reading levels, I suggested the teacher use multiple novels and have students in groups of similar reading ability. We used the standardized testing the students had recently taken to get John’s Lexile score. Based on his score, the teacher selected a book that would hopefully match with John’s abilities. I took a running record of John reading from the novel, and I found that he was reading it with 94% accuracy, which means the novel was at his instructional level.

***Process*.** I had two differentiation recommendations for process. Currently, the classroom teacher allowed John to access a website that read the novel to him, rather than having John read it himself. I recommended that John actually reads the novel; otherwise he does not practice his reading skills, which increases the gap between him and his peers. “If we want to foster reading development then we must design lessons that provide opportunities for struggling readers to actually read” (Allington, 2013, p.16). The second differentiation strategy for process I recommended was for John to interact with the book by practicing self-monitoring and fix-up strategies for when he does not

comprehend something. These tools help to increase student achievement in reading (National Reading Panel, 2000).

The classroom teacher incorporated these two differentiation strategies. For the new novel, the teacher informed John that he was not allowed to listen to it on the computer, but that they were going to actually read it. The classroom teacher and John met one-on-one three or four days a week to teach John self-monitoring and fix-up strategies. They began with the classroom teacher reading the novel aloud to John, pausing along the way to use teacher think-aloud to model self-monitoring and fix-ups. After John understood how to do these, they reversed roles with John reading aloud and using think-aloud to demonstrate how he was self-monitoring and using fix-ups.

Product. I provided the classroom teacher with a recommendation for differentiating the product. For several of the previous novels the class had done, the teacher had the students answer comprehension questions about each chapter. I suggested that the teacher also gives John opportunities to summarize what he is reading (Cunningham & Allington, 2002). This would provide another product that both the teacher and John could use to check John's comprehension. I suggested that the summarizing could also be done formatively while John is reading as a way for John to self-monitor and demonstrate his comprehension progress.

The classroom teacher agreed to vary the product by incorporating summarizing. One way he did this is when he met one-on-one with John. While the teacher was doing think-aloud, he modeled for John how to summarize periodically as he read. When John took over reading aloud, the teacher had John stop periodically as well to summarize.

This enabled John to demonstrate his understanding, as well as give the teacher an opportunity to correct any misconceptions.

Part three. For Lee, the teacher and I worked toward finding differentiation techniques that addressed how his reading comprehension affected his work in math and science. We tested Lee's reading comprehension with a Maze Assessment (Appendix D). The benchmark score for his grade is 18. He scored 16 correct, but he also had 9 errors. The Maze Assessment is designed that there is one correct answer, one near distractor (similar in part of speech or another way to the correct answer), and one far distractor (randomly chosen word comparable to the words in the passage). After examining the assessment, I noticed that a majority of the errors Lee made were the near distractor. The incorrect word he selected would often make sense with a word or words nearby, but not with the sentence as a whole. Based on the assessment and teacher observation, we concluded that Lee tends to skim or read only a part of sentence rather than taking in the whole meaning of the sentence.

Content. The way the teacher used to teach science to Lee and his classmates was to read the lesson from the textbook aloud with them and they all took notes together. I recommended that he incorporate another manner in which to present the information to the students since the science textbook is above Lee's reading level. When students try to read texts that are too difficult for them, their progress is hindered (Allington, 2013). For math, they were studying how to write equations from word problems. Since this is a struggle for Lee, I recommended the teacher use think-aloud to demonstrate how to understand a word problem. Effective teacher think-aloud can increase student

achievement, can be used across different text formats and genres, and has been shown to positively affect struggling readers (Ness & Kenny, 2016).

The teacher used these new ideas in math and science. For science, he used videos to demonstrate the topic at hand. The videos were in student-friendly language, and allowed Lee to hear and see the information, in addition to reading it from the textbook. In math, the teacher modeled with teacher think-aloud on how to solve the word problems. He made sure to break apart the word problems, demonstrating how to understand and use all the information given in the text.

Process. Since the teacher was reading the science textbook and taking notes with the students, I recommended that he add another way in which the students interact with the information to aid Lee's understanding. I suggested he do this through think-pair-share. "Using think-pair-share not only engages learners in what can be higher-order thinking but also provides an immediate gauge of the degree and quality of student understanding of the course content" (Cooper & Robinson, 2000). Think-pair-share would allow Lee to think more deeply about the topic, and then demonstrate his understanding to his peers and teacher.

The teacher adapted think-pair-share into his lessons for both math and science. For science, the students used to mostly work alone, but he started to put them in pairs more often. As they went through the lesson, he would stop periodically and have the students think about something, share it with their partner, and then come together as a class to discuss. For math, the teacher would sometimes have the students explain to a partner how to solve a problem.

Product. I had a recommendation for the teacher to differentiate the product for science class. Before, the teacher had usually printed off the worksheets the curriculum provided and had the students do those. However, some of the questions were written above Lee's reading level. As Allington (2013) states, teachers cannot give students texts that are too difficult for them to read. I suggested to the teacher that he use an assessment that is written at Lee's reading level.

The teacher followed my recommendation and differentiated the assessments for science. Instead of photocopying the worksheets supplied, he created his own questions for the students to answer. He made sure that all the questions were written at a level that would be easily understand by Lee. This allowed Lee to demonstrate his understanding of the science learning target, rather than doing poorly on the assignments because he did not fully understand what the questions were asking.

Artifacts

The results can be broken down into three main parts. The first part is about how the teacher's understanding and use differentiation changed. The second part is about the effect differentiation had on John's reading comprehension. And the third part is about the effect differentiation had on Lee's reading comprehension.

Part one. I gave the teacher the same questionnaire (Appendix B) that I had given him at the start of the project. I used this to compare how knowledgeable he was about differentiation at the beginning and end of the project.

Table 2

Results of Final Teacher Questionnaire

Question	Initial Score	Final Score
I know what differentiation means.	3	5
I feel comfortable using differentiated instruction.	3	5
I plan my lessons with differentiation in mind.	3	5
I differentiate the content (what is being taught).	1	5
I differentiate the process (how it is taught).	3	5
I differentiate the product (how the students demonstrate learning).	3	5
I give pre-assessments to my students.	4	4
I am aware of my students' capabilities.	4	4
I clearly state my objectives for lessons.	3	4
I use flexible grouping (alone, pairs, small groups).	5	5
I provide a variety of support strategies (organizers, study guides, study buddies).	4	5
I use tiered instruction.	3	4
I am aware of my students' interests.	4	4
I am aware of my students' learning preferences.	5	4
I use a variety of materials during my lessons.	4	5
The pace of my instruction varies based on my students' needs.	4	5
I use informal assessment in the middle of my lessons.	5	5
I allow students to have choices when completing assignments.	5	5
I use technology as a tool for differentiation.	4	5
Note. The score range was from 1-5, with 1 being completely disagree and 5 being completely agree.		

After giving the teacher the final questionnaire, he and I discussed it again. He reported that he now fully understood what differentiation means and he knows how to use it in all three areas (content, process, and product). The questions that involved these aspects had the biggest improvement in score. For the rest of the questions, he either reported the same score or one close to it. As he and I discussed the questions, he also shared with me that he differentiated with the recommendations that I had, but he also tried to differentiate in other ways and in other subjects as well.

Part two. John was given a Maze Assessment at the beginning and end of the project. His initial score was 15 correct and 0 wrong. His second score was 16 correct and 1 wrong. He had a slight improvement in score and the one he answered incorrectly was the near distractor. I also discussed with the teacher whether he has observed any changes in John's work in class or on homework since the start of the project. He stated that he has noticed a higher quality of answers from him. John used to try to give funny answers in the past, but he has been giving actual answers lately.

Part three. Lee was given a Maze Assessment at the beginning and end of the project. His initial score was 16 correct and 9 wrong. His second score was 16 correct and 3 wrong. A possible reason for the decrease in incorrect answers is that Lee read more carefully the second time, making sure his answers fit in the sentence and not just with the word or words surrounding the answer. The teacher noted that he has observed an increase in the quality of answers in Lee's homework. Lee demonstrates a higher understanding of the content material than he has in the past.

Results

The initial and final questionnaires were used to determine how much improvement the teacher had made with understanding and using differentiation. The results of the questionnaire demonstrate that the teacher has reported a significant increase in his knowledge of what differentiation means, as well as how to implement it in the classroom. Between the Maze Assessments and teacher observation, the two students have had some improvement in their reading comprehension, but not a substantial amount.

Chapter IV: Reflective Essay

Introduction

Classrooms are filled with students of different abilities, especially students with disabilities. Teachers need to know how to meet the needs of all their students. The purpose of this field project was to increase the knowledge a classroom teacher has on differentiation, enabling him to meet the various needs of his students, particularly those with disabilities. Additionally, this field project examined how the implementation of differentiation affected student achievement.

Conclusions

Teacher knowledge. The field project revolved around increasing a classroom teacher's knowledge and use of differentiation. I accomplished this by first solidifying how much the teacher knew and implemented before the field project. I gave the teacher a questionnaire to determine this. After I discussed the questionnaire with him, I got a much clearer picture of what to teach him than I would have from the questionnaire scores alone. Since he did not have a clear understanding of what differentiation means, or three ways to implement it (content, process, product), the majority of our discussions revolved around those topics. I related to him what differentiation means, what three areas of differentiation are, and I gave him examples of how to differentiate in those three areas. Based on the second questionnaire and a subsequent discussion with the teacher, the results indicate a significant improvement in his knowledge and use of differentiation, which was my main goal for the project. Throughout this field project, I learned how I could help fellow teachers by sharing with them what I have been taught.

Student achievement. As a result of the teacher using differentiation, I was expecting to see an increase in achievement for John and Lee. I attempted to accomplish this by tailoring the differentiation strategies to the students' needs. I made recommendations for how the teacher could differentiate the content, process, and product in order to meet these students' needs, and consequently improve their achievement. The results of the Maze Assessments and teacher observation indicated a slight improvement in student achievement. I would have liked to see a more significant increase, since that was one of my goals for the project. Throughout the field project I learned two things, in regard to student achievement. The first is that in order to see a significant improvement, the field project would need to be carried out for a longer period of time, testing the students periodically along the way. Secondly, I discovered how difficult it is to help students by only hearing from the teacher what the students' struggles are, rather than observing it myself. I would need to have more active involvement with the students to get a clearer picture of what to do.

Recommendations

I recommend some further research on this topic, but with a few changes. The biggest change would be to lengthen the amount of time for the project. Student progress is a process that takes time before being able to see significant results. If this project was carried out for a longer time, I think we would have a better picture of the effects of differentiation on student achievement.

The second recommendation would be for me to get more involved with the students. Hearing second-hand from the teacher was he was observing, and what the students struggled with, made it more difficult to know exactly what to suggest to him for

differentiation techniques. I recommend that I should test the students myself and observe them in class so I can get a clearer picture.

The last recommendation is to observe the teacher using the differentiation strategies. I instructed him on what to do, and he reported back to me on how it went. However, I should have observed the teacher using the differentiation techniques in the classroom to ensure that he was carrying them out effectively. This would also tie in with student achievement. The differentiation techniques need to be done effectively and correctly in order to improve student achievement. These three recommendations would help to improve the quality and results of the project.

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Appendix A: Council for Exceptional Children Initial Preparation Standards

1. Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.
2. Beginning special education professionals create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well being, positive social interactions, and self-determination.
3. Beginning special education professionals use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.
4. Beginning special education professionals use multiple methods of assessment and data sources in making educational decisions.
5. Beginning special education professionals select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities.
6. Beginning special education professionals use foundational knowledge of the field and their professional ethical principles and practice standards to inform special education practice, to engage in lifelong learning, and to advance the profession.
7. Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.

Appendix B: Teacher Differentiation Questionnaire

Please rate the following on a scale from 1-5. *1- completely disagree; 2- somewhat disagree; 3-neutral; 4-somewhat agree; 5- completely agree*

1. I know what differentiation means. 1 2 3 4 5

2. I feel comfortable using differentiated instruction. 1 2 3 4 5

3. I plan my lessons with differentiation in mind. 1 2 3 4 5

4. I differentiate the content (what is being taught). 1 2 3 4 5

5. I differentiate the process (how it is taught). 1 2 3 4 5

6. I differentiate the product (how the students demonstrate learning). 1 2 3 4 5

7. I give pre-assessments to my students. 1 2 3 4 5

8. I am aware of my students' capabilities. 1 2 3 4 5

9. I clearly state my objectives for lessons. 1 2 3 4 5

10. I use flexible grouping (alone, pairs, small groups). 1 2 3 4 5

11. I provide a variety of support strategies (organizers, study guides, study buddies).

    1 2 3 4 5

12. I use tiered instruction. 1 2 3 4 5

13. I am aware of my students' interests. 1 2 3 4 5

14. I am aware of my students' learning preferences. 1 2 3 4 5

15. I use a variety of materials during my lessons. 1 2 3 4 5

16. The pace of my instruction varies based on my students' needs. 1 2 3 4 5

17. I use informal assessment in the middle of my lessons. 1 2 3 4 5

18. I allow students to have choices when completing assignments. 1 2 3 4 5

19. I use technology as a tool for differentiation. 1 2 3 4 5

Appendix C: Eighth Grade Maze Assessments

CORE Reading Maze Comprehension 8-A

Name_____ **Grade**_____ **Date**_____

Basketball Saturday

On almost every Saturday morning, Henry and his friends did the same thing. As soon as there was enough (**light, bridge, warm**) to see, they met at the (**nest, park, brown**) near his house for a few (**stares, games, knock**) of basketball. Afterward, they went down (**an, mud, to**) the firehouse for a pancake breakfast.

(**About, When, Spot**) Henry arrived at the park, Christie (**was, land, few**) already there. They were usually the (**first, great, empty**) to arrive, and the rest of (**way, took, the**) players trickled in over the next (**cloudy, fifteen, stopped**) minutes. Christie was standing beside a (**picnic, kitten, threw**) table laying out enormous sheets of (**soup, round, poster**) paper. On the paper were the (**station, results, closer**) of games that had been played (**up, am, day**) to the current date.

The most (**hungry, numbered, interesting**) part of this basketball league was (**some, that, camp**) every player was a member of (**several, frightened, evening**) teams. On the same Saturday, each (**circus, slowly, player**) would be part of at least (**sky, two, get**) teams. Although it sounds confusing, the (**system, branch, already**) worked well for a number of (**sounds, reasons, terrible**). Everybody got to play on at (**least, bounced, rocky**) one winning team. Players who weren't (**if, bus, so**) good were often on a team (**down, with, ready**) some of the best players, and (**paints, nights, players**) never became angry with members of (**the, hot, face**) other teams because they would eventually (**if, put, be**) on the same team as the (**others, changes, picked**).

Henry helped Christie put the poster (**brother, string, paper**) up on the bulletin board near (**are, the, wait**) basketball court. If someone who didn't (**ring, afraid, know**) the system looked at the team (**cutting, standings, planted**), they would think that hundreds of (**players, footprints, answers**) were involved.

"Your record keeping system (**is, or, ate**) very impressive," said a voice from (**into, behind, card**) them. Henry and Christie turned to (**bat, fill, see**) one of the high school basketball (**breads, coaches, silver**) behind them. She was a regular (**visitor, haircut, widest**) to the Saturday morning games, as (**ride, face, was**) the coach of the boys' team. (**Us, In, Lay**) addition to these coaches, some of (**the, car, lion**) parents often came to the games (**try, and, sure**) joined the players for breakfast afterward.

(**Day, Jar, All**) of the players were a little (**embarrassed, snowflake, mountain**) to be playing in front of (**mouths, adults, closes**), but they also felt a sense (**of, an, fun**) pride. Over the years, many of (**rat, the, like**) players from the Saturday league were (**points, chosen, shade**) for the high school teams. Christie (**bat, lake, and**) Henry spent a few minutes talking (**with, since, well**) the coach, and then they excused (**anybody, themselves, frightened**) when other players started arriving. They (**would, hurry, bumpy**) warm up for a few minutes, (**sea, give, and**) then the first game of the (**Saturday, ground, wonder**) Morning Basketball League would begin.

Number Correct _____ Number of Errors _____

CORE Reading Maze Comprehension 8-B

Name_____ **Grade**_____ **Date**_____

The Perfect Trip

The bus climbed to the top of the hill and made a sharp left turn. Everyone on the bus caught a (**chuckle, glimpse, sighing**) of one of the most spectacular (**sights, crowd, become**) they would ever experience. Before them (**tear, bow, lay**) the sea, glistening in the sunlight. (**But, Sir, The**) rocky coast here tumbled below them (**with, for, tea**) hundreds of feet. On the other (**side, note, cause**) was a sheer cliff rising for (**a, if, to**) thousand feet.

The students were on (**on, a, by**) class trip to Europe, something that (**speak, damp, none**) of them could have imagined. They (**act, milk, had**) entered a contest to come up (**down, with, stuff**) a practical solution to a problem (**up, lap, in**) their area, and their submission had (**been, speak, cellar**) the national winner. The solution they (**exercised, developed, passenger**) and implemented was so simple that (**they, sank, best**) couldn't believe no one had done (**am, it, jet**) before.

The students had requested that (**the, why, beg**) town council let them adopt a (**holiday, borrow, network**) of connected sidewalks. They would turn (**the, map, lie**) sidewalks into multiuse paths that led (**or, to, mix**) the busiest parts of town, including (**was, shy, the**) schools. With relatively little expense, the (**carvings, sidewalks, certain**) became attractive and safe places for (**rewards, charged, walkers**), skaters, and boarders. A bicycle lane (**was, for, air**) marked on the road beside each (**it, pan, of**) the sidewalks, and parking was restricted (**am, to, not**) the other side of the street.

(**Under, Catch, Within**) a matter of months, something remarkable (**had, feed, swim**) happened in the town. The number (**her, of, all**) cars had diminished considerably, and the (**basket, number, shape**) of walkers had increased more than (**tonight, bring, anyone**) had imagined. Downtown no longer had (**traffic, minute, engine**) congestion and parking problems, but it (**dry, fire, was**) busier than ever because more people (**were, fish, box**) walking. Even the school buses had (**shopped, changed, spring**) their routes and no longer came (**but, zoo, all**) the way to school. They stopped (**unless, cover, instead**) at a parking area several blocks (**away, when, swim**). Students walked the rest of the (**bed, way, cow**) to school on the multiuse path.

(**Just, Been, When**) they heard they had won the (**contest, light, silly**), the students in the class had (**if, add, a**) unanimous vote and decided to do (**a, to, nap**) tour of some towns in Europe. (**Or, It, Pat**) was these towns, with a long (**kitchen, history, welcome**) of walking and convenient public transportation, (**leaf, deck, that**) had been the inspiration for their (**journey, project, disappear**). They couldn't think of a better (**straw, nearly, place**) to take a vacation and see (**at, in, job**) person where their ideas had come (**from, past, dust**).

Number Correct _____ Number of Errors _____

Appendix D: Sixth Grade Maze Assessments

CORE Reading Maze Comprehension 6-A

Name_____ **Grade**_____ **Date**_____

Not So Boring

Sighing deeply, Jill sat on the bench in the park. A few of her school friends (**been, were, scent**) lounging on the grass. Spending time (**in, off, shy**) the park was something they did (**floor, ruler, almost**) every evening during the summer, and (**green, tonight, course**), they were waiting for a local (**DJ, bat, fear**) to put on some music.

"This (**bird, fact, town**) is so boring," said Jill, and (**next, most, pine**) of the others agreed, adding that (**there, else, case**) was nothing to do other than (**wish, cow, hang**) out in the park.

"I don't (**know, plan, spill**)," suggested Larry, "how about hiking to (**ran, the, fold**) top of the cliff? We all (**call, harm, like**) to do that, and what about (**name, tonight, blaze**)? We're going to get to dance (**to, up, bud**) music that we picked out."

Rita (**think, flower, nodded**) her head and smiled. "The best (**miss, hike, belt**) is the one we take after (**the, sit, cart**) last day of school. What about (**catch, dark, rafting**) down the river? I think that's (**open, even, while**) better than hiking the cliff, and (**it's, lines, age**) a lot easier. Besides, our parents (**step, wait, neat**) for us and have a picnic (**sadly, throat, afterward**)."

Almost everyone agreed with Rita except (**every, wear, Gary**), who argued for cross-country skiing across (**less, the, bay**) lake. "Skiing across Lake Washington is (**something, party, hold**) that most people have never done. (**Toe, I, Cab**) love calling my cousin in Texas (**and, why, top**) telling her how much fun it (**bow, lap, is**) every time we do it."

By (**if, now, tie**), Jill was rethinking her comment. "Okay, (**under, argue, maybe**) this isn't as boring a place (**as, so, cane**) I suggested. After all, we're only (**hot, a, side**) few hours from New York City, (**low, dart, and**) all of us have taken the (**bus, air, main**) there with our parents. Remember when (**those, ugly, we**) went in for that ice-skating show? (**Above, From, Seem**) now on, when I do that (**logged, room, boring**) thing, maybe you should remind me (**to, in, as**) think before I start complaining."

Number Correct _____ Number of Errors _____

CORE Reading Maze Comprehension 6-B

Name_____ **Grade**_____ **Date**_____

The Morning News

As he walked in front of the camera, Matthew felt a little nervous. Even though this was just the (**school, cold, ever**) news broadcast, he was still worried. (**To, Add, He**) didn't like speaking in front of (**cover, groups, joke**), and now he would be speaking (**almost, in, sun**) front of thousands of people. He (**wouldn't, paint, song**) see them, but they could see (**by, ship, him**).

The school news broadcast was an (**deer, idea, weigh**) that started two years ago. A (**clean, need, few**) students and the technology teacher thought (**of, or, hop**) the idea while watching the local (**deer, news, cloud**). They decided a show that reported (**the, wet, hello**) news for their school and town (**reach, full, would**) be interesting to other students and (**own, the, hair**) people in the town. The students' (**spin, your, news**) broadcast was soon showing on the (**school, line, belong**) network and the local cable system.

(**Ticket, Students, Brave**) in the school took turns doing (**the, why, lion**) jobs needed to make the broadcast. (**Where, Hold, Each**) student signed up for several jobs, (**to, and, like**) names were selected at random for (**each, then, ring**) job. The newer students received training (**off, read, from**) more experienced students. Over the past (**sleepy, two, paint**) years, every student in the school (**had, show, thin**) been part of the broadcast.

Catherine (**hide, table, was**) the director of today's show. She (**sinks, hurried, soft**) around, getting things in order, including (**showing, easier, long**) Matthew where to sit. She could (**wag, big, see**) he was a little nervous, so (**bit, she, glad**) tried to help him feel more (**secretly, garden, confident**). "You always do a wonderful job (**when, around, spot**) we make presentations in class, so (**you, than, past**) won't have any problems," she said. (**Who, Stay, Their**) teacher agreed and helped straighten out (**jokes, Matthew's, painted**) collar and tie while they were (**waiting, sleepy, deeper**) for the broadcast to begin.

Everyone (**began, clock, walked**) away from the desk where Matthew (**thought, sat, doll**), and the spotlight came on. He (**tripped, magic, cleared**) his throat, waited for Catherine's signal, (**and, with, bark**) then began speaking. "Good morning, everybody. (**Why, This, Smell**) is Matthew, and I'm today's morning (**log, news, swing**) reporter."

Number Correct _____ Number of Errors _____