



## **Practicum Experiences of Prospective Teachers in Differentiating Instruction**

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### **ABSTRACT**

**This study examined the experiences of prospective teachers in differentiating instruction during a two-week practicum assignment in an inclusive environment. Several school types were used ranging from denominational and government-led primary schools with students of low socio-economic status, to special schools for the physically handicapped and hearing impaired students whose first language is sign language. The study employed a mixed-method research design aimed at triangulating quantitative and qualitative data obtained from questionnaires, focus group discussions, field notes from classroom observations, and student reflections. The sample for the study comprised twenty-two year three students pursuing a Bachelor of Education degree in Special Needs Education; two practicum advisors; and nine cooperating teachers. Findings of the study revealed that prospective teachers achieved a measure of success in implementing differentiated instruction in their practicum classrooms. However, some attention should be given to cooperating teachers who may not provide the support expected of a mentor or coach due to a general lack of understanding of the philosophy of differentiated instruction.**

**Keywords:** practicum experiences, prospective teachers, differentiated instruction

### **INTRODUCTION**

Classroom practice obtained through practicum has been considered as the most critical component of any teacher preparation programme (Beck & Kosnick, 2002; Bates, Ramirez & Dritis, 2009; Parkinson, 2008). Some studies have documented positive feedback from prospective teachers regarding their practicum experiences (Ferman-Nemser, 2001; Smith & Lev-Ari, 2005). Yet, many prospective teachers report that their field experience does not adequately prepare them for their professional role in the classroom (Gregory et al., 2011; Grudnoff, 2011). There is a wide body of literature that points to various challenges such as transition shock that beginning teachers experience in the classroom (Achinstein & Barrett, 2004), as well as lack of support from school principals (Stokking, Leenders, de Jong, & van Tartwijk, 2003).

### **LITERATURE REVIEW**

Studies show that many teachers also experience obstacles in attempting to integrate differentiation into the classroom. These include: a general lack of administrative support (Hertberg-Davis & Brighton, 2006); fear of lowering student test scores by deviating from the prescribed curriculum (VanTassel-Baska, 2006); challenge of dealing with student behavioural problems (Brighton & Hertberg-Davis, 2004; Knopper & Fertig, 2005; Westberg et al., 1993); teacher resistance to a change in teaching style (Tieso, 2004); lack of time to plan for differentiation (Brighton & Hertberg-Davis, 2004; Knopper & Fertig, 2005); and uncertainty

about parents' reaction to differentiation (Knopper & Fertig, 2005). Notwithstanding these obstacles, differentiation works best when teachers are motivated and when principals and school administrators provide the enabling environment to support the implementation of differentiation techniques in the classroom.

In a recent study, prospective teachers were exposed to differentiated instruction as an important teaching philosophy to be adopted in their practice. Almost all of these students (99%) expressed willingness to experiment with differentiated instruction in subsequent practicum sessions during their tenure at the university (Joseph et al., 2013). Part of the attraction to differentiation was the fact that instructors in the study were able to model how differentiated instruction can be achieved by modifying curriculum-related elements such as content, process, and product based on student readiness, interest, and learning profile (Tomlinson & Imbeau, 2010).

Strategies used in the study to differentiate content included the use of a variety of texts and resource materials for handling differences in reading readiness; grouping students according to interest levels and learning profiles; allowing students to work alone or with peers (Joseph et al., 2013). In the study, instructors also modelled strategies for differentiating process and product by using flexible grouping while providing various levels of scaffolding for students, as well as providing students with a variety of assessment choices (Joseph et al., 2013).

Instructors also modelled strategies for differentiating instruction according to student readiness, interests, and learning profile. These included the use of pre-assessment readiness data; allowing choices in various activities and grouping students based on common interests; varying the instructional format by sometimes offering the same experience for all students while sometimes purposely matching the students' preferences with particular activities.

While several studies have documented practicum experiences of pre-service teachers, few explore the experiences of prospective teachers in experimenting with differentiated instruction as part of practicum or field teaching experience. This study attempts to fill the gap.

### **Purpose of the study**

The purpose of this study, therefore, was to examine the experiences of prospective teachers in differentiating instruction during a two-week practicum assignment in an inclusive environment. Three research questions served to focus this investigation:

- What are the experiences of prospective teachers in differentiating instruction while on practicum?
- What are students' reactions to differentiated instruction?
- What are the perceptions of the practicum advisors about the performance of prospective teachers while on practicum?

### **Practicum Overview**

The practicum exercise is designed to deepen the field experience of year three students pursuing a four-year Bachelor of Education degree programme. It is part of a series of eight practicum sessions aimed at exposing prospective teachers to different classroom environments as part of their preparation for professional teaching. In this study, year three students in their fifth practicum session were exposed to a two-week teaching assignment in primary schools throughout the country where they worked in pairs for the duration of the exercise. Some of the objectives of this course were for students to make links between theory

and practice of teaching and learning in authentic classroom environments; build communities of learners who engage in critical self-reflection to improve professional practice; and explore a range of innovative instructional strategies and methods.

### **Context of the Study**

Participants for this study were largely third-year students pursuing a Bachelor of Education degree with specialization in Special Needs Education at the University of Trinidad and Tobago. All of these students were exposed to differentiated instruction while in their second year of studies. As a matter of fact, these twenty-two (22) students formed part of an earlier study in which an attempt was made to model differentiated instruction for students pursuing a course in curriculum studies. These students indicated interest in experimenting with differentiated instruction in subsequent practicum sessions during their tenure at the university (see Joseph et al., 2013). Several school types were used for the practicum exercise. These schools ranged from denominational and government-led primary schools with students of low socio-economic status, to special schools for the physically handicapped and hearing impaired students whose first language is sign language. Practicum advisors made several school visits during the two-week practicum period to assess participants' performance in differentiating instruction in the various school settings.

### **METHODOLOGY**

The study employed a mixed-method research design aimed at triangulating quantitative and qualitative data obtained from questionnaires, focus group discussions, field notes from classroom observations, and student reflections. The total population comprised fifty-two year three students pursuing a Bachelor of Education degree in Special Needs Education; twenty-four cooperating teachers, and five practicum advisors. The sample size comprised twenty-two students, nine cooperating teachers, and two practicum advisors.

Questionnaires were used to obtain student information regarding participants' experiences in preparing to teach in an inclusive environment; the reaction of students as well as the level of support obtained from cooperating teachers. The questionnaires also captured information about successes and challenges participants experienced in attempting to differentiate content, process, product, and the learning environment.

Focus group interviews were conducted to obtain qualitative data for the study. All focus group sessions were audio-taped and information from the recording was reviewed several times to obtain verbatim accounts of participants' experiences. This technique ensured creditability or validity of the process. Information from the focus group sessions served to triangulate information obtained from questionnaires. There were two focus groups comprising six persons each. Both groups were exposed to the same questions to facilitate consistency in analysis.

Field notes from classroom observation also served as important data for the study. During the two-week practicum period, practicum advisors made several school visits to assess participants' performance in differentiating instruction in an inclusive environment. Student reflections also provided useful insights into students' accounts of their classroom practice.

Procedures for data analysis included sorting or organizing the data; generating themes and patterns; checking the emerging theories, inferences and postulations against the data; and searching for alternative explanations (Marshall and Rossman, 2010). Frequency tables were developed for recording and tabulating demographic responses with the aid of the Statistical Package for the Social Sciences (SPSS) software. These demographic responses included

questions related to gender, teaching experience, level of teaching, and type of training. In this study, there were twenty females and two males with teaching experience ranging from 0–4 years to over 30 years (see Table 1).

**Table 1. Years of Teaching Experience**

Years of Teaching	No. of Teachers
0–4	15
5–10	5
11–15	1
16–20	1

Based on the distribution of years of teaching experience in Table 1, the majority of participants possess less than five years’ teaching experience, while only one respondent has over fifteen years’ teaching experience.

**Table 2. Level of Teaching and Type of Training**

Teaching Level	No. of Teachers	Type of Training	No. of Teachers
Primary	20	Pre-Service	9
Secondary	2	In-Service	13

Table 2 shows that the majority of the participants (20) teach at the primary level, while only two (2) of the teachers operate at the secondary level of the school system. The table also shows that the majority of the participants (13) are in-service teachers with some prior experience in teaching, while 9 are pre-service teachers without any prior teaching experience.

## RESULTS/DISCUSSION

Twenty-two prospective teachers were asked to participate in a survey which required them to share their experiences in implementing differentiated instruction while on practicum. In Table 3 below, survey items 5-12 addressed the experiences of prospective teachers in differentiating instruction in an inclusive environment.

**Table 3. Experiences of prospective teachers in implementing differentiated instruction in an inclusive environment.**

Survey Items	Participants’ Responses
5. What was your experience like in preparing differentiated instructional units and lesson plans for your practicum?	Seventeen of the twenty-two participants indicated that the experience was challenging and time consuming, while only five described the experience as fun and exciting.
6. How receptive were students to your attempts to differentiate instruction?	The majority of participants indicated that students were very excited about working in a differentiated instructional environment. Only two of the twenty-two participants reported low student interest.
7. In what ways did your cooperating teacher support your attempts to differentiate instruction?	The majority of the participants reported that support from cooperating teachers came in the form of providing assistance in developing materials; managing work stations; and participating in classroom activities. Two respondents reported, however, that their cooperating teachers were very critical of what they regarded as a new approach to teaching. Two other participants did not have any cooperating teacher present in the classroom.

8. What was your greatest achievement in attempting differentiated instruction? The majority of participants cited heightened student engagement as their greatest achievement in attempting differentiated instruction. One respondent explained that her greatest achievement was sharing with the cooperating teacher new ways to meet the needs of all learners in the class.
9. What challenges, if any, did you face in implementing differentiated instruction in your classroom? Some of the challenges reported included the following:
- ✓ time constraints
  - ✓ classroom discipline
  - ✓ high cost of teaching materials
  - ✓ lack of basic technology
  - ✓ limited classroom space
10. How often did your students work in groups? Seven of the twenty-two participants reported that students worked in groups some of the times, while the majority of respondents indicated that students worked in groups most of the times.
11. If your students did work in groups, how were the groups organized? Eight participants reported grouping students randomly, while ten indicated that students were grouped according to learning profiles. Four participants did not provide any response.
12. How often were students given choices in how they complete their assignments or projects? The majority of participants indicated that students were given choices either some or most of the times, while only two respondents provided choices all of the time.

### Summary of Focus Group Findings

Two focus group sessions were conducted to probe deeper into the practicum experiences of prospective teachers over a two-week period of teaching in an inclusive environment. Each group comprised six participants who provided responses to the following five questions:

- What was your experience like in preparing differentiated instructional units and lesson plans for your practicum?
- In what ways did your cooperating teacher and the school principal support your attempts to differentiate instruction?
- How did you go about differentiating content, process, product, and the learning environment?
- What assistance do you need to improve your skills in differentiated instruction?
- What are some of the challenges in differentiating instruction in an inclusive environment?

In response to the first question, all of the students expressed satisfaction with the level of support and guidance they received from their practicum advisors in preparing differentiated instructional units and lesson plans for field teaching. However, participants reported several challenges regarding meeting the needs of each learner while at the same time trying to fulfil the requirements of the primary school curriculum which emphasized a new thematic/integrated approach to learning and teaching. Speaking on behalf of the group, one participant summarized the whole experience as very time consuming.

Participants reported different experiences regarding the level of support obtained from the cooperating teacher at the school. While some respondents obtained support from their cooperating teachers in setting up work stations and preparing visual aids, many participants found such support to be severely lacking. One prospective teacher stated that although her cooperating teacher graduated with a Bachelor of Education degree, she did not support any attempts to differentiate instruction. Another respondent indicated that her cooperating teacher could not understand the concept of differentiation as well as the value of using work stations as activity centres for students.

A few prospective teachers were impressed, however, by the level of support they received from the principal of the school. One respondent recalled feeling a sense of satisfaction when the principal complimented her work after observing one of her lessons. The principal later requested that the teacher return for another practicum session at the school. Even the students seemed to appreciate the new instructional approach used by the prospective teachers. One respondent observed that the students who habitually missed classes, started coming to school regularly during the two-week practicum period. The prospective teachers believe that this change in student behaviour was largely a result of the application of a differentiated instructional approach to classroom teaching and learning.

When asked to explain how they went about differentiating content, process, product and the environment, one participant admitted to experiencing some measure of difficulty when attempting to differentiate content, process, and product at the same time. She found product differentiation to be easy to manage, since she would engage students either in drawing, using technology or simply writing. Another participant recalled the excitement students experienced when she differentiated the surroundings by changing the classroom into a jungle to teach a lesson on the environment. She explained that there is a greater degree of student engagement when she transforms the classroom. She further explained that when she differentiates the surroundings, students get a better feel for their environment and they want to learn more.

Participants were also asked to identify some of the challenges they experienced when attempting to differentiate instruction in an inclusive environment. The following challenges were reported: space limitations; inability of cooperating teachers to practise differentiation; and a high level of absenteeism among students.

The final question asked participants to indicate what additional assistance they might need to improve their skills in differentiated instruction. Speaking on behalf of the group, one respondent quipped: *"We need more lecturers at the university who understand differentiated instruction."*

Based on responses provided through questionnaires and focus group discussions, it can be concluded that many of the participants had positive experiences in preparing differentiated instructional units and lesson plans, as well as obtaining student buy-in for the new approach to teaching and learning in an inclusive environment. While the majority of participants in the questionnaire reported that cooperating teachers generally supported their efforts in the classroom, further probing in focus group discussions revealed a different picture. It appears that several cooperating teachers did not readily support the efforts of prospective teachers to differentiate their classrooms. However, focus group discussions revealed that some school principals demonstrated support through encouraging words and actions.

### **Classroom Observation**

During the two-week field teaching period, practicum advisors documented their findings of student performance based on observation of classroom practice as well as careful evaluation of lesson plans. These field notes also served as important data for the study. Prospective teachers were required to engage in team teaching working in groups of twos. The following comments were made regarding prospective teachers' ability to differentiate content, process and product, based on student readiness, interest, and learning profile. Using an appropriate rubric, practicum advisors rated prospective teachers on a scale of 0-4 in specific areas such as establishing a learner-centred classroom environment; grouping of students; teaching

materials; content, process and product differentiation. The following observations were made on a sample of four prospective teachers:

**Prospective Teacher A:** *This lesson was well executed. Both teachers worked well together. Although there was no cooperating teacher for this group, prospective teachers were able to use a systematic approach to adjusting the learning environment to fit the needs of their students. Two students in the class needed extra support in learning how to socialize with other students. These students used sign language as a means of communication. As part of their preparation for the field visit, both prospective teachers learned sign language in order to communicate with students.*

This group obtained an overall rating of 3.8 out of a total score of 4.

**Prospective Teacher B:** *"This lesson was planned to differentiate the content, process and product. Execution of the lesson was skillfully done. Teachers worked well together in pairs. They were able to have all students engaged throughout the lesson and were able to deal with the disruption from other students who wanted to participate in the lesson."*

This group obtained an overall rating of 3.6 out of a total score of 4.

**Prospective Teacher C:** *"Although this lesson was differentiated on content and process, there was need also to differentiate the product in order to meet the needs of two students in the class. Both teachers paid more attention to Jonathan (ADHD student) and very little attention was given to Brianna who seemed to be able to cope with the work well. Perhaps there was need to assess Brianna to determine whether she knew the sound of letter 'C' and to differentiate to her needs."*

This group obtained an overall rating of 2.8 out of a total score of 4.

**Prospective Teacher D:** *"This lesson was taught to a class of students ranging from 14 -18 years old. Some of the students were physically handicapped, while others had cerebral palsy. The objective of the lesson was for students to understand the concept of adjectives. However, much more thought should have been put into the actual planning of the lesson to ensure that the needs of all students were met. The physically handicapped students needed greater assistance in working independently. The prospective teachers need further coaching in differentiated instruction."*

This group obtained an overall rating of 1.6 out of a total score of 4.

## Student Reflections

During the two-week practicum period, prospective teachers were asked to reflect on their classroom experience. The following reflections represent the views of students who completed their two-week field teaching assignment.

**Student #1:** *At the Enterprise Government Primary School, we had an opportunity to teach ten differentiated lessons at the infant two level. During this time, we discovered some of our strengths and weaknesses since we were presented with real life classroom challenges. Differentiated instruction offers flexibility in the content, process, and product of lessons, as a result, students appreciated the different activities they were engaged in during the lessons... Although most of our lessons were successful, there were some areas we must improve on as a team and individually. We observed that we worked well collaboratively since we were able to benefit from each other's strengths. However, individually, we need to become more confident in our*

*delivery in order to be more effective. During future field teaching experiences, we must also learn to manage our time since most lessons exceeded the allotted time required for delivery.*

**Student #2:** *Preparation for practicum really took a lot out of me. The instructional materials were costly and travelling wore me out. Yet, I was at the school every day ready to bring something new to the students. Hopefully for the next semester, I could learn to differentiate even better than I am doing now and be able to systematically and explicitly deliver all of my lessons.*

**Student #3:** *Our experience at Lady Hochoy School was rewarding since it showed us how to deal with special needs students in the classroom. It also showed us how exceptional these students are even though they have a disability. Yes we did have a lot of challenges with getting the right methods to teach our students as well as to control the class. Once we found a good method that worked with them we just stuck to it and we overcame the challenge. Our lessons had to be differentiated in many ways. In one lesson, we differentiated the content by using a lot of videos and visual representations. This was done because we had many different learning abilities but all responded well to the videos, and songs. Visual representations were incorporated into all of our lessons. We also had games and other activities for students to have fun and to have a more concrete approach to the lesson.*

**Student #4:** *During the practicum period, our attempt at differentiation was faced with many challenges. Children in our first year class had various learning abilities. Some of our students grasped the lessons as we were explaining it verbally, while others understood the concept better through the use of technology. The use of technology increased their enthusiasm to learn, and they became less distracted by what was going on outside of the classroom.*

**Student #5:** *Our experience in practicum was very fruitful. We encountered students who would forever remain in our hearts. They were students who despite their disabilities, performed above our expectations as well as those of the cooperating teachers. This experience for us opened our eyes to see that every student can learn... We maintained professionalism and control even when the students were a bit challenging. The students were all different, which means that our lessons had to be projected in multiple ways to meet their needs and ensure that learning was taking place. They were all special in their own ways, and it taught us that every child deserves the opportunity to reach their fullest potential.*

### CONCLUDING COMMENTS

This study examined the experiences of prospective teachers in differentiating instruction during a two-week practicum assignment in an inclusive environment. Accounts of these experiences were obtained through questionnaires; focus group discussions; field notes from classroom observation; and student reflections of their practice.

Survey findings of the study revealed that the majority of respondents found preparation for field teaching to be challenging and time consuming. However, respondents were generally pleased with students' positive reactions to their attempts to differentiate instruction. These findings were confirmed in focus group discussions with all of the participants agreeing that preparation for differentiated instruction requires "*a lot of work and it's time consuming.*"

The role of the cooperating teacher is important in supporting the efforts of prospective teachers while on practicum. Cooperating teachers are expected to act as the student teacher's model, mentor, coach, and evaluator. Seperson and Joyce (1973) reported that cooperating



teachers substantially influenced the classroom behaviour of student teachers either 'for good or for ill' (p.151). In this study, the majority of respondents in the questionnaire reported some level of support from their cooperating teachers. However, further probing in a focus group setting revealed that some cooperating teachers provided little or no support largely because of their limited understanding of differentiated instruction. In some cases, the cooperating teachers were the ones who benefitted most from the experience.

Field notes from classroom observations revealed that while there is room for further growth and development, prospective teachers made a successful attempt at differentiating instruction during their two-week field teaching assignment. This success came as a result of the initial support and guidance obtained from practicum advisors in assisting prospective teachers with differentiated instructional units and lesson plans for field teaching.

In their reflections, prospective teachers also pointed to successes achieved from attempts to differentiate instruction. However, they also highlighted a major challenge in terms of time for preparation. Brighton and Hertberg-Davis (2004) and Knopper and Fertig (2005) also identified in their studies, the problem of lack of time to plan for differentiation. Despite these challenges, efforts of prospective teachers can be strengthened if support is given by cooperating teachers and school administrators. In this study, one respondent reported "feeling nice" when the school principal took the time to observe and compliment her practice in the classroom.

### RECOMMENDATIONS

Findings from this study revealed that prospective teachers are eager to hone their skills in differentiated instruction in a practicum setting. However, some attention should be given to the following:

- The need for more systematic and explicit instruction in key content areas to further bolster student confidence in the delivery of differentiated instruction
- The need for professional development sessions for cooperating teachers who may not provide the level of support expected of a mentor or coach largely because of their lack of understanding of the philosophy of differentiated instruction
- Further research should be conducted to determine the extent to which cooperating teachers continue to perform the traditional role of mentor and coach in the practicum setting, or whether there is a paradigm shift based on the level of training among cooperating teachers.

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