

## **A Case Study of Teacher with Hearing Impairment in the Inclusive Classroom Using a Balanced Literacy Approach**

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### **Abstract**

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Prospective teacher, Julie Mac (pseudonym) was born with normal hearing until the age of five. She contracted mumps which affected her hearing. No one was aware of her hearing problem until her Standard-three teacher observed that she was not responding to her when she called her name. The teacher contacted her parents, who took her to Trinidad and Tobago Association for the Hearing Impaired (DRETCHI), then to Gulf View Medical Center for a hearing test, which resulted in a diagnosis of hard-of-hearing. She lost most of her hearing in her right ear. She wears hearing aids. This school year (2015-2016), during October 19<sup>th</sup>, 2015 to November 6<sup>th</sup>, 2015, and January 12<sup>th</sup>, 2016 to March 11<sup>th</sup>, 2016, Ms. Mac conducted teaching practice using a balanced approach to literacy while implementing the thematically integrated curriculum of Ministry of Education of the Republic of Trinidad and Tobago (MOETT), in standard two (Grade 3) – Term 1 and Infant 2 (Grade 1) – Term 2 classes at a suburban school, while working on her Bachelor of Education degree in Special Needs and Primary education. Ms. Mac is one of three deaf prospective teachers working in the regular public schools of Trinidad and Tobago, teaching hearing students while using a balanced literacy approach to deliver an integrated thematic curriculum.

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**Key Words:** differently abled, teachers, hearing impairments, inclusive, balanced literacy, differentiation, assessment.

### **1. Introduction**

The researcher introduced Ms. Mac to the principal of C.P. school who was familiar with the deaf culture. The principal was willing to place Ms. Mac in a Standard 2 classroom for Term 1 and Infant 2 classroom for Term 2, with a sign language interpreter. However, Ms. Mac does not require sign language assistance for most of her delivery, since she has some hearing, wears a hearing aid, and the students can comprehend and follow her instruction 95% of the time.

### **2. Purpose of the Study**

This study seeks to illustrate that differently-abled teachers can effectively deliver instruction to non-disabled/disabled populations of children, once given the appropriate support.

#### **The researcher is interested in answering the questions:**

- 2.1 Can teachers who are differently-able, specifically those with hearing impairments, achieve success as their non-differently abled peers, while using a balanced literacy approach to implementing the thematically, integrated curriculum?
- 2.2 Should schools promote the inclusion of differently-abled teachers to deliver instruction to children in the general education setting?

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- 2.3 Can hearing impaired teachers meet success in implementation of curriculum once given the professional development to empower them to be effective?
- 2.4 Would differently-abled teachers, specifically those with hearing-impairments be able to administer assessment tools, e.g. oral listening?
- 2.5 Would differently-abled teachers, specifically those with hearing impairments, be able to analyze the testing data and successfully group students by instructional levels of literacy, if given appropriate support?

### **3. Methodology**

The study employed a single case study approach, which is descriptive in nature. Three prospective teachers with hearing impairments, reading for a Bachelor of Education degree in Special Needs and Primary education were trained and placed in primary (elementary) schools of Trinidad and Tobago with 27 non-disabled peers. These subjects were given explicit instruction to implement the Ministry of Education of Trinidad and Tobago (MOETT) thematically, integrated curriculum in inclusive school environments of Trinidad and Tobago. This study focused on Ms. Mac's performance in a suburban school district. The school consisted of 175 students, 94 boys, and 81 girls. Prospective teacher, Ms. Mac, who is hard-of-hearing, and three other hearing peers practiced at a suburban primary school for eight weeks (October 19th, 2015 to November 6th, 2015 and January 12th, 2016 to March 11th, 2016). Before placement, Ms. Mac and peers engaged in study treatment sessions that expanded their understanding of the balanced literacy learning processes utilizing MOETT integrated, thematic curriculum.

#### **3.1 Population**

Study participants included two young ladies and one young man, with hearing impairments (two deaf and one hard of hearing) and 35 hearing peers. Participants practiced in 11 primary public schools in Trinidad and Tobago, implementing a balanced literacy approach to instruction while utilizing the thematically integrated curriculum in Infant 1, Infant 2, Standard 1, Standard 2, Standard 3 and Standard 4 (Kindergarten – Fifth grade) for forty days.

#### **3.2. Instrumentation**

Participants administered the Eckwall/Shanker Reading Inventory (ESRI, 2014) on Day 1 and 2 of Field Observation Days as a pre-test. On day 15 and 40, prospective teachers administered the alternative form of the ESRI as post-tests.

#### **3.4. Differentiated groupings**

Using the pre-test data, Ms. Mac formed five guided reading/guided math groups by instructional levels. The groupings enabled Ms. Mac to differentiate instruction to meet the needs of all students. In term 2, Ms. Mac's class included a nine-year-old student with cerebral palsy, two students exhibiting ADHD tendencies and 15 "emergent readers."

#### **3.5. Research Site**

C.P. is in a suburban school district of the MOETT. It is one of the eight school districts in the local education area (LEA). C.P. is currently on "Academic Watch" for 2015. Its Annual Performance Index is 213 out of 800 on the National Test (MOE, 2015). Ninety percent of the students at CP receive free lunch since they come from families who are in the low socio-economic strata of Trinidad and Tobago. The school established in 1890 and rebuilt in 1990 can hold 200 students. It houses 15 enclosed classrooms, a library, computer lab, pan (music) room, a resource room, a non-functional science lab, staff room, principal office, staff support room and two assembly halls.

### **4. Balanced Approach Literacy**

In a balanced approach to literacy instruction, teachers use authentic reading and writing experiences so that students learn how to use literacy strategies and skills and have opportunities to apply what they are learning. The 10 components of a balanced approach are:

Reading	Literature
Phonics and Other Skills	Content-Area Study
Strategies	Oral Language
Vocabulary	Writing
Comprehension	Spelling



**Figure 1: Balanced Approach to Literacy**

In this photograph, Ms. Macis using a balanced approach to literacy instruction in her standards-two classroom. She is teaching a social studies focus unit on Pollution. Theme: My Country: The Environment of Trinidad and Tobago, subtheme: Land – The positive and negative side of our environment.

#### 4.1. Core Curriculum

MOETT thematic, integrated curriculum is used to teach the core subjects of English Language Arts, Mathematics, Social Studies, Science, Agriculture Science, Spanish, Visual and Performing Arts (VAPA), Values, Culture and Citizen Education (VCCE) with Health and Family Life Education (HFLE). (MOETT, 2014).

#### Placement

**Table 1: Class Placement during Practicum**

Period	Class	Theme
<b>Term 1</b> <b>October 19 – November 6<sup>th</sup>, 2015</b>	Standard 2	My Country: The Environment of Trinidad and Tobago – Land
<b>Term 2</b> <b>January 12<sup>th</sup> - March 11<sup>th</sup>, 2016</b>	Infant 2	My Sense of Belonging: People – Heroes in my Life

Ms. Mac completed her practicum for the first term (October 19<sup>th</sup> – November 6<sup>th</sup> 2015) in Standard 2 (Grade 3) class and the second term (January 12<sup>th</sup> to March 11<sup>th</sup>, 2016) in Infants 2 (Grade 1).

#### 4.2 Assessment

On October 1<sup>st</sup>, 2015, three weeks before the beginning of field teaching which began October 19<sup>th</sup>, 2015, Ms. Mac visited the C.P. school to conduct her orientation and to assess the students in the Standard 2 class to which she was assigned, for Term 1. Ms. Mac evaluated 21 second-standard students in her assigned class using Eckwall/Shanker Reading Inventory ((ESRI), 2014). In her report, she outlined the process of her assessment:

1. Use of the Graded Word List (GWL) test 10 of the ESRI, also known as the San Diego Quick Assessment, used to obtain an estimate of the students' independent, instructional and frustration reading levels.
2. Use of the oral reading and listening comprehension test, test 11A of ESRI.
3. Use of the silent reading comprehension test, Test 11B of the ESRI.
4. Use of the Emergent Reading tests, Test 1a1, 1a2, 1a3 and 1a4 to test their phonemic awareness skills, or concepts of print and letter knowledge.

### 4.3 Group Review

#### 4.3.1 Group 1: Tier 1

After pre-assessment Test 11A, this group performance in the GWL revealed one student at standard-three (Grade 4), one student at Standard 2 and two students in Standard 1. The students in this group performed above grade level. One student was one grade level above and two were two grade levels above Standard 2. In this group, Ms. Mac used guided and shared reading to improve the students' comprehension skills.

#### 4.3.2. Group 2: 2A and 2B: Tier 2

Group 2 consisted of nine students. This group was divided into two groups, Group A and B. These groups performance on the GWL revealed that students' instructional levels were Infant 2 (Grade 1). This meant that they read below their grade level. In these groups, Ms. Mac used appropriately guided and shared reading material to help improve the reading comprehension and vocabulary knowledge.

#### 4.3.3. Group 3: Tier 3

Students in this group were at Instructional level Infant 1 (Grade K). The students in this group had problems with word recognition and some issues with phonemic awareness and phonics among other things. Skills focused lessons were conducted during their guided reading sessions.

#### 4.3.4. Group 4: A and B (Emergent readers)

Students in this group were at frustration/potential level at the Pre-primer level and hence the emergent tests of 1a1, 1a2, 1a3, 1a4 of ESRI were administered to further diagnose the nature of the difficulty that they experienced. Intense work was done with these groups in blending and segmenting, phonics, sight words and sight phrases. A synthetic phonics approach was adopted for remediation.

### 5. Instruction

Given the balanced approach to literacy for the implementation of the thematically, integrated curriculum several levels of materials were prepared for the class.

**Table 2: Unit Plan - Term Theme: My Country: The environment of Trinidad and Tobago**

#### 5.1. Subtheme: Land

##### 5.1.1. Topic: Environmental hazards

Unit 1/Week 1 Pollution	Unit 2/Week 2 Uses of Land
ELA – Shared Reading MOE Standards The Environment Land Pollution Demonstrate understanding of literary texts in one's personal and creative response. Apply knowledge of writing conventions appropriate to the level. Generate sentences orally and in writing using homophones in context. Use of sight words.	Guided reading – Grp. 2 <i>Keep It Clean</i> by Colette Brown Group 3: Pollution by Julie Mac Group 4 – Video activities Review of conventions

## Materials

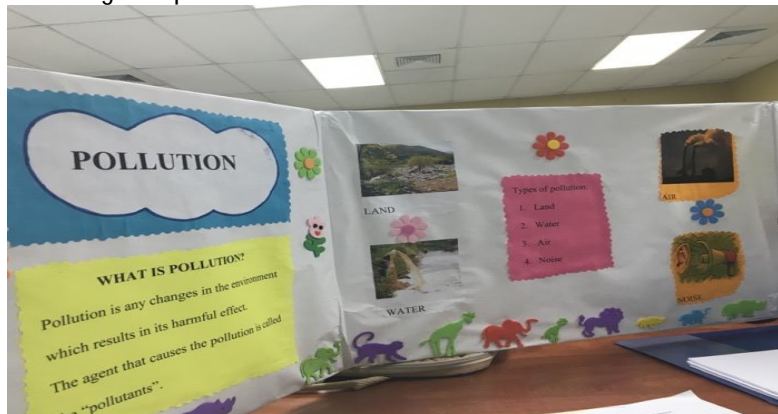
### 5.1.2. Shared literacy Land Pollution video

What is Land pollution - Video for kids?

Guided Reading

Group 1 Guided Reading: The Environment: Land Pollution

Group 3 Guided Reading: Keep It Clean



**Figure 2: Pollution by Ms.Mac**

The text *Pollution*, used as the shared reading text to start the class. This text was reproduced as small books for students in Tier I group.



**Figure 3: Highlights of Ms. Mac's teaching in Standard 2**

In the collage, Ms. Mac deliver instruction, differentiating the content of the thematic, integrated curriculum to Standard 2 students at a suburban school in the Caroni school district of Trinidad and Tobago.



Period	Class	Theme
Term 2: January 12 <sup>th</sup> – March 11 <sup>th</sup>	Infants 2	My Sense of Belonging: People – Heroes in my Life

**Figure 4: “Randolph and The Heroic Mouse”**

In this Balanced literacy approach - shared reading, Ms. Mac and her Infant 2 students dramatize the story “Randolph and the heroic mouse.” This is an adaptation of the fable “The Lion and the Mouse.”

[Once hot day a lion, was asleep in his cave. Suddenly, a mouse ran over his paw. The lion woke up with a loud raw. He grabbed the mouse by his paw, and opened his big jaws to swallow him.

"Pardon, O King!" cried the little Mouse, "Forgive me this time. I shall never repeat it and I shall never forget your kindness. And who knows, I may be able to do you a good turn one of these days!".....Just then the little mouse happened to pass by. On seeing the lion's plight, he ran up to him and gnawed away the ropes that bound him, the king of the jungle. "Was I not right?" said the little mouse, very happy to help the lion.]

MORAL: Small acts of kindness will be rewarded greatly.

**Table 3: Term 2 Placement**

Using a balanced literacy approach, Ms. Mac and her Infant 2 class dramatizes the storyof “Randolph and the heroic mouse”

### 6.1. Drama Lesson Plan

**Theme:** My Sense of Belonging - People: Heroes in my Life

**Lesson Title:** Drama (The Mouse and the Lion)

**Content Area:** ELA (Shared Reading)

**Integrated Subject:** Drama, ELA, Social Studies

**Class Level:** Infants Two

**Author:** Julie Mac

**School:** C.P. Primary

**Date:** 10/03/16

**Length of time:** 20 minutes

### 6.2. Brief Description of Unit / Lesson:

This lesson is aimed at helping students to improve their learning and communicating skill through listening, acting, and working in groups. They will be asked to use their creative/critical thinking in acting and dramatizing the story. Each child will be given an opportunity to participate in this Drama.



### 6.3. MOE Trinidad and Tobago Content Standards:

#### Standard Numbers and Exact Wording

#### 6.3.1. Content

2.1.1 Create a story based on a theme/topic.

#### 6.3.2. Skills

2.2.1 Develop scenarios based on a given theme/topic.

#### 6.3.3. Dispositions

2.3.1 Co-operate in group activities and appreciate the work of others.

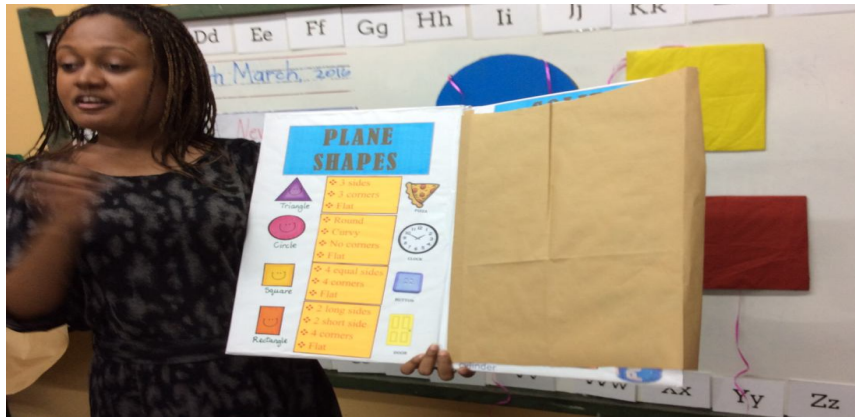
#### 6.3.4 Outcomes

2. Create a story and depict scenarios from the story.

#### 6.3.5 Elaborations

- Collaborate in small groups to create a short story based on a given theme/topic.(2.1.1, 2.3.1)
- Develop and depict one scenario from the story. (2.2.1, 2.3.1)

Guided/Shared/Mathematics



**Figure 5: Balanced Literacy approach to introduce Plane shapes**

In Figure 5, Ms. Mac reviews plane figures by reading from a plane shapes book she created.

#### 7.1. Balanced literacy Lesson Plan

**Theme:** My Built Community – People: Heroes in my life

**Lesson Title:** Geometry (MOETT Curriculum Guide, 2014)

**Topic:** Plane Shapes

**Content Area and Grade level:** Mathematics/Infant 2

**Author:** Ms. Julie Mac

**School:** C. Primary School

**Class Level:** Infant 2

**Integrated Subject:** ELA, VAPA

#### 7.2 Brief Description of Unit/Lesson:

The aim of this lesson is to educate the students about different types of plane shapes and be able to identify plane shapes around them e.g. desk tops.

7.2.1 **Objectives:** at the end of this lesson, the students will

- State the names of plane shapes with no errors.
- Create the shapes with the materials given with no error.

## 7.2.2 MOE Trinidad and Tobago Content Standards:

### 7.2.3 Content

Develop an understanding of classification of plane shapes.

### 7.2.4 Skills

Classify plane shapes and give reasons for classification.

### 7.2.5 Disposition

Demonstrate critical thinking when classifying plane shapes.

### 7.2.6 Outcomes

Develop an understanding of the properties of plane shapes.

### 7.2.7 Elaborations

- Describe plane shapes using appropriate vocabulary (e.g. big, small, flat, round, thin, pointed) related to geometric attributes (e.g. size, shape, position).
- Classify plane shapes (e.g. size, shape), according to one or more common attributes including student's criteria, and explain reasons for classification (e.g. colour, size, shape, function). [2.1.1, 2.2.2, 2.3.1]

The teacher dresses using each of the enlarged shapes and reads a poem about the shapes.

**New Words:** plane, shape, triangle, square, circle, oval, rectangle, size.

### Activities: Teacher

Shows a YouTube video with song on plane shapes

1. Introduces the concept of plain shapes using a shapes book.
2. Places students in groups to do an activity.
- 2.2 Students will be placed in two groups:
  - 2.2.1 Group 1 will be given play dough to make a shape and
  - 2.2.2 Group 2 will be given a sheet of paper and the four shapes to trace out on the paper.
3. Students follow the video and use their hands to make each shape.
4. **Activity: In groups, students will use their body to make a shape on the mat provided. Each group will make one shape.**
5. Group 1 will make a shape using play dough and group 2 will trace out the shapes on the paper given.

**Table 4: Ministry of Education Trinidad and Tobago Standards**

MINISTRY OF EDUCATION STANDARDS:				
CONTENT	SKILLS	DISPOSITIONS	OUTCOMES	ELABORATIONS
ELA - Reading				
13.1 Identify, discriminate, memorize, sequence, isolate and comprehend sounds that are associated with the sound-symbol relationship.	13.2.4 Blend and segment onsets and rimes of one and two-syllable words.	13.3 Be confident as developing readers.	9. Demonstrate knowledge of spoken words, syllables and sounds when reading level-appropriate texts with fluency and, show confidence with reading fluency skills.	Create words using consonant blends at the beginning and end of words [14.2.5]

### 1. What enduring understandings are desired?

Ability to identify plane shapes based on different characteristics using ICT.

### 2. What essential questions will guide this unit and focus both the teaching and learning?

How will knowing about plane shapes help me compare objects in the environment and its meaning?

### 3. What key knowledge and skills will students acquire as a result of this unit?

Identify, describe, and differentiate plane shapes found in the environment.



#### 4. What evidence will show that students understand?

##### 1. Pre-Assessment (pre-test, concept maps, KWL, surveys, etc.)

During class discussions, students will state examples of plane.

##### 2. Performance Tasks:

Work in groups to complete tasks:

- demonstrate and state names of plane shapes
- identify and sort the shapes

##### 3. Summative Assessment (quizzes, test, prompts, projects, etc.)

Make the shapes with play dough and state the shape name. Trace the shapes on paper provided

##### 4. Formative Assessment (dialogues, observations, work samples, etc.)

Observation and work sample.

#### What sequence of teaching and learning experiences will equip students to develop and demonstrate the desired understandings?

##### Major Learning Activities:

- Identify the target names of plane shapes
- Identify plane shapes using concrete representations
- Work in groups to make the shapes
- Compare the different plane shapes.

##### Materials, Supplies and Resources (Technology and Print):

- Concrete representations
- Shapes book
- Worksheets
- Youtube video

##### Classroom Management:

- Whole, small group and individual activities.

##### Support Services and Special Teacher Note:

- Manage behavior using 'Quiet' (sign language) signal and behavior tree.

#### What specific differentiated instruction strategies will be used in the lesson/unit?

##### Differentiated Product:

Students will complete the following group activities:

- Identify the target names of plane shapes
- Identify plane shapes using concrete representations
- Work in groups to make the shapes
- Compare the different plane shapes.

### Guided Math Differentiated Activities

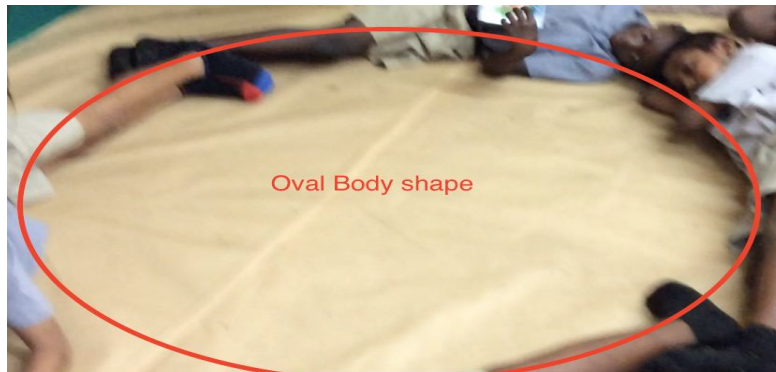


Figure 6: Students form an oval shape with their bodies on the mat

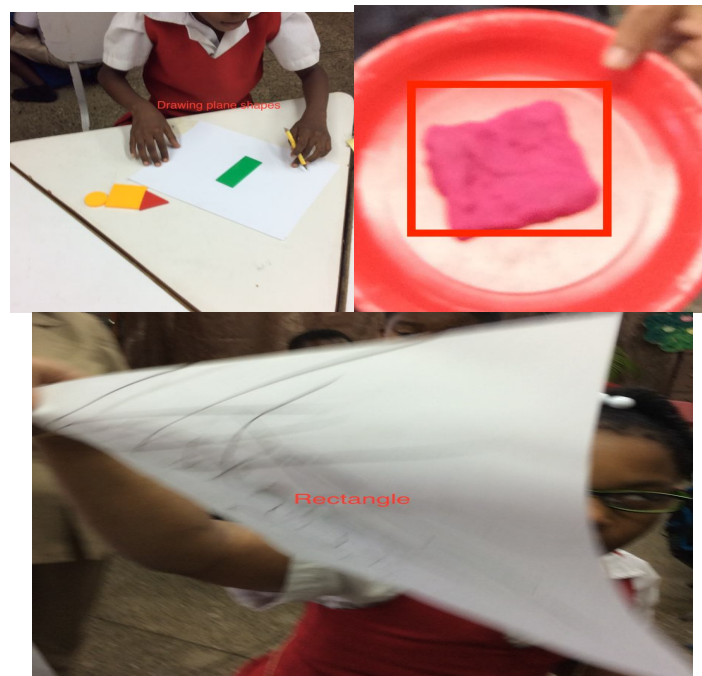


Figure 7: Student with Cerebral Palsy demonstrating a rectangle she created

### Discussion

Placing Ms. Mac in the public school setting was a success. She engaged the students in all of her planned lessons. She sought to meet the needs of all her students using a balanced literacy/numeracy approach while implementing the integrated thematic curriculum. She was able to assess students reading and group them appropriately by instructional levels. Using a balanced literacy approach, Ms. Mac used numerous teaching strategies to help strengthen her students' reading and writing abilities. Students were able to master the skills needed for communication with an emphasis in the areas of reading, writing, speaking, listening, and viewing. Ms. Mac used balanced literacy strategies to adapt methods and instruction to match the students' developmental progress. During her dramatization of "Randolph, the Heroic mouse," students were encouraged to be active participants in their education, helping to shape and define curriculum. Students during her math classes were able to use their bodies to form shapes.

### **Balanced literacy skills and knowledge for teachers**

A balanced literacy approach doesn't require a precise set of skills to implement. The approach helped Ms. Mac to meet the needs of her students. Assessing and placing them in instructional groups, enabled her to use guided reading techniques at their current reading and writing levels and to work with her students to develop growth from their point of need through individualized instruction and scaffolding that takes into account students' individual interests. In both of her classes, she was able to choose texts that vary by level, yet preserved the theme. Throughout her practice, her students were totally engaged.

Balanced thematically integrated literacy activities that Ms. Mac was observed delivering:

- Modeling reading and writing skills.
- Shared reading
- Shared writing
- Guided reading and writing
- Guided mathematics
- Independent reading and writing

### **Evaluation of balanced literacy**

At the beginning and end of her practice, Ms. Mac used the Eckwall/Shanker Reading Inventory pre- and post- test to determine the level of success of her students. She was also observed using continuous assessment to determine her students' growth. Did a balanced literacy approach meet the goals set forth by MOETT learning standards?

Ms. Mac used a myriad of assessment techniques including:

- Teacher observations
- Oral reading samples
- Writing and spelling samples
- Informal Reading Inventory
- Integrated ICTs in all her lessons
- Integrated core subjects while maintaining the theme prescribed for the grade.

Additionally, Ms. Mac collected student artifacts throughout the term to measure and assess progress on an ongoing basis.

### **Benefits of balanced literacy**

A balanced literacy approach offers a way to thematically integrate the curriculum and help teachers in Trinidad and Tobago meet the MOETT learning standards. This approach doesn't ignore traditional ways of focusing on basic skills; rather, it helps teachers provide differentiated instruction and scaffolding that meets the needs of their students.

The balanced literacy approach, as demonstrated by Ms. Mac enables teachers to deliver the new curriculum by enabling them to integrate the nine core subjects that they are expected to teach, while paying attention to the five considerations set out by the MOETT.

Ms. Mac identified some challenges in both assignments.

1. Her students' literacy levels were distributed from emergent to Grade 3. She was pressed to form eight groups by instructional levels. This made it difficult for her to frequently conduct guided reading sessions in small groups. She worked with the neediest groups twice per week and her more abled group once per week.
2. Some of her students had behavioral problems e.g. standing during class, distracting others, disrespecting authority, fighting when working independently in groups. At times, given the school noisy environment, Ms. Mac was unable to hear and had to depend on the interpreter to identify the location of the chatter. For the students with extreme behavior problems, at times Ms. Mac was oblivious of the disruptive behaviors.

## Findings

1. Can teachers who are differently-able, specifically those with hearing impairments, achieve success as their non-differently abled peers, while using a balanced literacy approach to implementing the thematically, integrated curriculum?

Ms. Mac via observation and documented success demonstrated that it is entirely possible.

2. Should schools promote the inclusion of differently-abled teachers to deliver instruction to children in the general education setting?

The success experienced by Ms. Mac demonstrates that given appropriate training and adequate support, differently-abled teachers should be included as teachers in regular and inclusive school settings.

3. Can hearing impaired teachers meet success in implementation of curriculum once given the professional development to empower them to be effective?

Ms. Mac demonstrated that her training in balanced literacy was understood and that she was able to implement the curriculum with ease.

4. Would differently-abled teachers, specifically those with hearing-impairments be able to administer assessment tools, e.g. oral listening?

With the appropriate support, Ms. Mac assessed her students using the Eckwall/Shanker Reading Inventory. She was ably supported by the interpreters.

5. Would differently-abled teachers, specifically those with hearing impairments, be able to analyze the testing data and successfully group students by instructional levels of literacy, if given appropriate support?

Ms. Mac analyzed the testing data and successfully grouped her students by instructional levels to prepare them for guided reading and math instruction. Her post test results demonstrated that students move at least one grade level equivalence at the end of her practice.

## References

- How balanced literacy strengthens reading and writing (n.d.). Retrieved from <http://online.cune.edu/balanced-literacy-defined/>
- Ministry of Education of the Republic of Trinidad and Tobago (MOETT), (February, 2014). Primary School Curriculum Teacher's Guide. Retrieved from: <http://www.moe.edu.tt/learning/primary/curriculum/item/267-primary-curriculum-guides-sept-2013>.
- Primary Curriculum Guides (FEB 2014) - Ministry of Education. (n.d.). Retrieved from: <http://moe.edu.tt/learning/primary/curriculum/item/267-primary-curriculum-guides>.
- Shanker, J. (2014) 6<sup>th</sup> Edition. Eckwall/Shanker Reading Inventory. ISBN13: 978-0132849968  
ISBN10: 0132849968: Allyn & Bacon, Inc.