RESPONDING TO DIVERSITY IN GRADES R to 9:

PRACTICAL APPROACHES TO
ENGLISH & MATHEMATICS CURRICULUM DIFFERENTIATION

Participants manual

August 2017
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INTRODUCTION

Creating a Climate of Success in a Learning-friendly Environment

A “learning-friendly” environment is “child-friendly” and “teacher-friendly”. It stresses the importance of learners and teachers learning together as a learning community. (CHANGING TEACHING PRACTICES – UNESCO 2004)

South African teachers are confronted with a wide diversity of learners, due to socio-economic differences, inequality and poverty, unemployment of parents, different religious backgrounds, social differences, ethnic and cultural differences, racial tensions, sexual orientation, gender violence and insensitivity, unequal provisioning of resources, including health services, as well as the many different languages learners speak. They come to school with different experiences, levels of education and care.

Creating a differentiated curriculum that includes this rich diversity, making every learner feel included, safe and cared for is no small task. We must set aside our own biases and stereotypes and refrain from using language that discriminates and makes assumptions that undermine certain groups.

Children come to school to learn, but as teachers we also need to be lifelong learners. Many learners need special support to learn to their fullest capacity. It is equally critical that teachers are also given practical tools to facilitate successful learning for all learners, ensuring accessible lessons, teaching strategies, assessments and learning support material.

The purpose of this Training Manual is to provide teachers with a practical perspective on how to become more inclusive in the classroom through curriculum differentiation. It is aimed at being an inspiration and support to teachers who are working in ever more diverse environments, making teaching more fulfilling for both learners and teachers.

In a recent interview at the University of Stellenbosch the world-renowned Professor Homi K. Bhabha who is the Director of the Mahindra Humanities Center at Harvard University in the United States said:

“The strength of South Africa depends on the diverse traditions that constitute it.”

Let us use our diversity as our strength!
SECTION 1: THE SIAS PROCESS

1.1. The SIAS Policy: An Introduction

1.1.1 The purpose of the Policy on Screening, Identification, Assessment and Support (SIAS) is to provide policy framework for the standardisation of the procedures to identify, assess and provide programmes for all learners who require additional support to enhance their participation and inclusion in school.

1.1.2 The SIAS policy is aimed at improving access to quality education for vulnerable learner and those who experience barriers to learning, including:

   a) Learners in ordinary and special schools who are failing to learn due to barriers of whatever nature (family disruption, language issues, poverty, learning difficulties, disability, etc.)

   b) Children of compulsory school-going age and youth who may be out of school or have never enrolled in a school due to their disability or other barriers.

1.1.3 The main focus of the policy is to manage and support teaching and learning processes for learners who experience barriers to learning within the framework of the National Curriculum Statement Grades R – 12.

1.1.4 The policy is closely aligned to the Integrated School Health Policy to establish a seamless system of early identification and effective intervention to minimise learning breakdown and potential dropout.

1.1.5 The policy directs the system on how to plan, budget and programme support at all levels.

1.1.6 The policy must further be seen as a key procedure to ensure the transformation of the education system towards an inclusive education system in line with the prescripts of Education White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001).

1.1.7 The policy provides clear guidelines on enrolling learners in special schools and settings which also acknowledge the central role played by parents and teachers (Education White Paper 6, p.7).

1.1.8 The policy includes a protocol as well as a set of official forms to be used by teachers, School-Based Support Teams and District-Based Support Teams in the process of screening, identifying and assessing barriers experienced by learners with a view to planning the support provision according to programmes and monitoring by the District Based Support Team.

1.1.9 The protocol outlines the role functions of staff appointed in district as well as school structures responsible for planning and provision of support.

1.1.10 It also regulates the composition and operations of the key coordinating structures required for the implementation of an inclusive education system, namely School-based Support Teams and District-based Support Teams which are transversal structures aimed at rationalising and maximising support provision at school and district level.

1.1.11 The Policy on Screening, Identification, Assessment and Support (SIAS) aligns with other Department of Basic Education strategies which aim to support teachers, managers, districts and parents in schools.
1.2. Aims of the SIAS Policy

1.2.1 To provide the framework for a standardised approach to screening, identifying, assessing and supporting learners who require additional support to enable them to perform to their potential in school.

1.2.2 To promote early identification of learners who experience barriers to learning, thus enabling learners to have a positive experience of participation and inclusion at school.

1.2.3 To assist teachers, School-Based Support Teams and District-Based Support Teams in their efforts to meet the needs of all learners and to provide quality teaching and learning.

1.3. SIAS Policy Relevance

1.3.1 The SIAS policy adopts a holistic approach to addressing the needs of learners, with the intent of supporting them in their current school and community, which is in keeping with an inclusive philosophy.

1.3.2 The SIAS policy provides a clear, step by step and user-friendly guide regarding what to do when a learner is not performing as expected and in terms of who is responsible for taking action at each step of the support process.

1.4. Determining the Support Needs of all Learners

(1) The Screening, Identification, Assessment and Support (SIAS) policy is structured in such a way that it ensures that teachers and schools understand the support needs of all learners to enhance delivery of the National Curriculum and Assessment Policy Statement (2011).

(2) The Screening, Identification, Assessment and Support (SIAS) process outlined in this policy is intended to assess the level and extent of support required in schools and in classrooms to optimise learners’ participation in the learning process.

(a) It outlines a process of identifying individual learner needs in relation to the home and school context, to establish the level and extent of additional support that is needed.

(b) It outlines a process to enable access to and provision of such support at different levels.

(3) Through a set of forms, this policy outlines the protocol that has to be followed in identifying and addressing barriers to learning that affect individual learners throughout their school career.

(4) It identifies the roles and responsibilities of teachers, managers, district-based support teams and parents/caregivers.
(5) It provides guidance on how further support and interventions must be made available to learners who have been identified through the screening processes conducted through the Integrated School Health Programme.

(6) It provides guidance to the school on how further support and interventions can be made available through the Care and Support for Teaching and Learning (CSTL) framework.

Resources for “SECTION 1: THE SIAS PROCESS”

A Policy on Screening, Assessment and Support; Department of Basic Education; 2014
SECTION 2: WHAT IS CURRICULUM DIFFERENTIATION?

If Curriculum adaptation and differentiation sounds very complicated, allow the following three facts to simplify the concept:

- Inclusive Education is about *good teaching, a positive attitude* and most often *common sense*.
- Our ultimate goal is to develop a learner to reach his or her *potential*.
- A barrier to learning is anything preventing a learner from reaching his potential.

For one to be able to do differentiation in class you have to understand the dynamics of the class and the strengths and the challenges of the specific child.

**Definition**

Curriculum differentiation is a key strategy for responding to the needs of learners with diverse learning styles and needs. It involves processes of modifying, changing, adapting, extending, and varying teaching methodologies, teaching strategies, assessment strategies and the content of the curriculum. It takes into account each learners ability levels, interests and backgrounds.

**Principles of curriculum differentiation**

- Acknowledgment that all learners are different
- Learner differences will influence HOW they learn.
- Teachers are capable of teaching all learners
- Teachers are responsible for providing opportunities for all learners to achieve their full potential.

**The importance of curriculum differentiation**

- Learners differ in their cognitive abilities
- A Learners mind is not an empty vessel; they bring with them some knowledge, which they have gained, from home or previous classroom or schools.
- We need to practise inclusion
- It is the responsibility of the teacher to ensure that learners learn together
- It is the teachers ethical responsibility to ensure that all learners are engaged positively with each other, the teacher and the learning content
- Learners are entitled to positive learning experiences
- Learners need to learn together (important for social cohesion)
- Teaching and learning therefore should be learner- paced and learner- based.

There are four main aspects in curriculum that needs to be adapted: (a) classroom environment; (b) curriculum content; (c) teaching methods; and (d) assessment strategies.
2.1. The Classroom Environment

Adaptation to the environment means to create a positive classroom environment in which learners feel valued, encouraged to take risks and actively participate, consider the following:

- **Position in room**
  Note that the sitting arrangement can be a hindrance for some learners. Since you know your learners better than anyone in the school, you need to encourage them to sit away from elements that may interfere with their concentration. For example, the learner who is easily distracted by movement may sit away from the window. Learners experiencing concentration problems find it sometimes difficult to sit close to the educator as her table is a beehive of activities.
  Consider their senses: is the learner sitting in a position where s/he can see the teacher or the board? For example, the learner with albinism (skin pigmentation) may not prefer to face light. Learners with low vision may prefer a front seat. A learner with hard of hearing may prefer to sit in the front seat to be able to read the teacher’s lips. Experience with different placement: in front/at the back/away from noise, window/back to the window/close to the teacher.
  The comfortability of the desk must also be considered. For example, learners who are not tall may prefer to elevate their desks using their bookcase etc. A taller learner may prefer to sit in front to allow his/her legs to stretch easily.
  Important: the teacher must invest in knowing the learner so as to understand her/him well.
The teacher needs to be approachable, inviting and welcoming to enable learners to discuss their needs openly.

- **Classroom management**
  How we manage our classes is our own choice. Without good class discipline there is no quality teaching and learning.
  Planning or rather lack of planning is the main contributing factor to poor discipline. Learners know when an educator is only trying to keep them busy. A file with extra activities is always very handy for the learner who finishes their tasks first. Too difficult activities also make learners restless.
  Know your learners: If learners believe that their teacher is interested in them as a person, they respond more positively to instructions. Asking learners to complete a simple questionnaire on their likes, dislikes, hobbies etc., will produce very valuable information.
  Rules: Rules should be simple and compiled by the learners. Every rule should have a linked consequence that is known to the learners. Rules should be written positively: “Put up your hand” instead of “Don’t shout out answers”.
  Routine: Stick to it!!! Learners feel safe and free in an environment where they know what is going to happen.

2.2. The Content

Content is what the teacher teach and what the learner is expected to learn.
The diagram illustrates in a nutshell how content differentiation can be done.

Ways to adapt the content.

- **Abstractness** – make it more concrete, or reduce it to chewable chunks, text must be interesting to the learners
  When doing reading, choose texts that have illustrations, but let them demonstrate the same knowledge, concepts and skills. The learner must be able to relate the content with what is in his/her environment-culturally relevant

- **Variety** – also give expanded opportunities. To cater for learners’ levels of functioning and their interests we need to expand the curriculum. For example, a child who has excellent reading skills might be given new and varied material to stop
them from getting bored.

Complexity – Many aspects of the curriculum can be very complex and difficult to understand for some learners. For example, understanding the different characters in a story is a more complex task than just relating the plot of the story. We also need to contextualise topics rather than using facts in isolation.

2.3. The Teaching Methodology

The method of presentation has to ensure responsiveness, participation and suit different learning styles and intelligences.

Different learning styles and intelligences determine teaching methods. The three main learning modalities are:

**Auditory learners**: want to listen and talk
(oral, role play, educator talks them through work while writing on the board, learner explain work orally to educator or peers).

**Visual learners**: want to see (videos, board, worksheets, etc.)

**Tactile or kinaesthetic learners**: movement, dramatize, role play, touching, building and doing experiments.

Learning materials e.g.
Graded material
Material may need to be adapted

Methods of presentation

- Picture or diagram simplified
- Picture or diagram replaced by written explanation
- Picture or diagram replaced with a familiar object that is available in the learner’s environment
- Unnecessary picture or diagram removed
- Amount of information reduced
- Inherently visual material replaced with equivalent non visual material

Scaffolding: refers to personal guidance, assistance, and support that a teacher, peer or task provides to a learner.

Flexible grouping

Different groupings (groupings done according to abilities)
- a) Enhanced enriched learning
- b) Unmodified learning
- c) Unwinding scaffolding also called designing down
- d) Straddling

Learning activities

Lesson organisations
Practical hints
- Use resources/pictures/demonstrations/tape recordings/videos
- Simplify instructions
- Use different coloured pens/chalk
- Modify the pace
- Repeat instructions
- Show visually when you change to another activity (flickering the lights, clapping your hands, do a brain gym exercise).

2.4. The Assessment
Differentiated Assessment is based on the notion that needs of different learners cannot be met in one way only. Remember that standards should never be compromised. Accept that individual and different methods are of equal value. Thus alternative assessment is to accommodate the different learning styles.

We differentiate assessment to minimise the impact of barriers on the performance of the learner. Alternate forms of assessment for learners with barriers to learning within the NCS
- Alternate Assessments Based on Alternate Attainment of Knowledge (content, concepts and skills). This is for learners with a significant cognitive disability (high level of support learners). Based on grade level content but reduced in depth, breadth and complexity.
- Alternate Assessment Based on Modified Attainment of Knowledge (content, concepts and skills). This is for learners with disabilities who are working on grade-level content in the general
assessment. Here the content is reduced or at a more functional level. Target learners can include learners with moderate intellectual disability, learners who are deaf and some learners on skills programmes.

Alternate Assessments Based on Grade-level Attainment of Knowledge. This is for learners with disabilities or learning difficulties that needs formats that provide them with equal opportunities to demonstrate their attainment of content and it is at the same grade-level as the general assessment.

Where do I start with differentiation?

(Sources: Guidelines for Responding to Learner Diversity in the Classroom, 2011)
SECTION 3: PRACTICAL IMPLEMENTATION OF DIFFERENTIATED TEACHING STRATEGIES

3.1. Differentiated Teaching: An Introduction

“If children can’t learn the way we teach, we teach the way they learn”.

Teachers should work from a premise that all children can learn, therefore differentiated teaching is a teacher’s response to the learners needs. Teachers would adhere to the general principals of differentiation. They will differentiate the content, learning environment, teaching method and the assessment according to the learners’ readiness levels, interest and learning profile.

Curriculum differentiation is a key strategy for responding to the needs of learners with diverse learning styles and needs. It involves processes of modifying, changing, adapting, extending and varying teaching methodologies, teaching strategies, assessment strategies and the content of the curriculum. It takes into account learners’ levels of functioning, interests and backgrounds.

All teachers in South Africa teach classes with a broad spectrum of diversity, subsequently we will focus on differentiated teaching methods i.e. multilevel teaching, scaffolded teaching, tiering and cooperative teaching.

3.2. Multi-level Teaching: What is a Multi-level Classroom?

Most teachers teach multi-level classes in some form. The following list shows different types of multi-level classrooms. The actual classroom may be a combination of two or more different types:

- Combined classes of different year levels
- Classes of mixed proficiency (ability) levels
- Classes with some learners having a different home language (HL) than the language of learning and teaching (LOLT)
- Classes of mixed motivation levels
- Different learning styles: Visual, Auditory, Kinaesthetic (tactile)
- Various intelligences in the class – Multiple Intelligences: Linguistic, Mathematical, Spatial, Kinaesthetic, Musical, Interpersonal, Intrapersonal,

ADVANTAGES OF THE MULTI-LEVEL CLASSROOM

For teachers faced with teaching a multi-level class, it is important to look at its advantages. The multi-level classroom can:

- Enable learners to develop the ability to work independently
- Increase learners' self-confidence and motivation
- Encourage a cooperative attitude
- Help learners develop organisational skills and manage their learning
- Allow learners to work at their own pace

3.2.1. Strategies for the Multi-level Classroom

Specific strategies and definite planning are needed for the multi-level classroom. The aim is to ensure that all learners are given an opportunity to learn at their level, so a learner centred, collaborative
approach is recommended.

a) Splitting the class
The teacher splits the class based on content level. This is often done when the teacher wants to give different input to the groups. Learners in one group can work with self-access resources while the teacher teaches the other group.

b) Differentiating tasks
All students are given the same basic task, but at different levels according to their abilities. Teachers can differentiate tasks by:
- language levels
- complexity of tasks
- amount of support provided

c) Focusing on abilities/skills other than language
Tasks and activities incorporating other abilities such as Maths, problem solving, using memory or general knowledge can motivate learners with lower proficiency levels, as they allow these students to participate by using strengths other than language. Including an element of chance in a game involving competition gives everyone the opportunity to win.

d) Using group/pair work – Flexible Grouping
Managing a classroom of students at these different learning levels can present a challenge for teachers; however, the use of grouping strategies has been found to be an effective management tool in multi-level settings to provide efficient use of teacher and student time. Examples include:
- Groups of mixed ability (whole class – large group)
- Groups of similar/same ability (small groups)
- Paired groups
- Interest groups
- Cooperate expert groups (jigsaw)
- Cluster groups (learners can belong to several clusters in different content levels)

With pair work and group work, teachers can decide, based upon the task, whether to match learners by mixed ability or same ability, as well as who to match with whom. A side benefit of ongoing and varied matching is the building of a strong, vibrant, comfortable, safe learning environment and classroom community.

e) Peer tutoring (use with caution)
When learners have mixed ability level in a pair/group work situation are encouraged to learn and help each other.
Sometimes the explanation of a peer will be particularly relevant or helpful, enabling the learner to grasp the lesson content. Learners may feel more comfortable asking their peers for repeated explanations, rather than the teacher.

f) Teaching assistants/mother tongue speakers
Utilizing people in the community to assist learners in class

g) Card games for Language and Mathematics
Games and activities using cards offer a good opportunity for differentiation. In groups with learners of mixed ability, more advanced learners can perform the harder tasks, e.g. reading from the cards while the others listen and comprehend. Alternatively, learners can form groups of similar levels of ability, and the same or different games can be played, with card sets of different language levels appropriate to the group’s needs.
Use Definitions/Concept Game Cards. The easier task is to read the definition/concept and learners listen and comprehend. In the more difficult version, learners pick up a word or picture card and make up a definition for others to guess. Learners of mixed ability can participate in the same activity when the focus is on skills other than language e.g. mathematics, memorization, general knowledge, dramatic ability etc.
Teachers decide which activities are applicable to their classes/groups

LEVELS OF PROFICIENCY IN THE MULTILEVEL CLASSROOM
When planning instruction for a multilevel class, teachers must first consider the varied proficiency levels of their learners. In general, many learners perform at the same or similar level; however, there are always learners who perform “below” level and others who perform “above” level.

3.3. Tiered Teaching
In a differentiated classroom, a teacher uses varied levels of tasks to ensure that students explore ideas and use skills at a level that builds on what they already know and encourages growth. While students work at varied degrees of difficulty on their tasks, they all explore the same essential ideas and work at different levels of thought. Groups eventually come together to share and learn from each other.

Tiered tasks should be:
- Different tiered work, not simply more or less work
- Equally active
- Equally interesting and engaging
- Fair in terms of work expectations and time needed
- Requiring the use of key concepts, skills, or ideas
BASIC TIERED ACTIVITY
Example: Completing a Character Map

<table>
<thead>
<tr>
<th>TIER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1: Low</td>
<td>How the character looks</td>
</tr>
<tr>
<td></td>
<td>- What the character says</td>
</tr>
<tr>
<td></td>
<td>- How the character thinks or acts</td>
</tr>
<tr>
<td></td>
<td>- The most important thing to know about the character</td>
</tr>
<tr>
<td>Tier 2: Middle</td>
<td>What the character says or does</td>
</tr>
<tr>
<td></td>
<td>- What the character really means to say or do</td>
</tr>
<tr>
<td></td>
<td>- What goals does the character have</td>
</tr>
<tr>
<td></td>
<td>- What the character would mostly like us to know about him or her</td>
</tr>
<tr>
<td></td>
<td>- What changes the character went through</td>
</tr>
<tr>
<td>Tier 3: High</td>
<td>Clues the author gives us about the character</td>
</tr>
<tr>
<td></td>
<td>- Why the author gives these clues</td>
</tr>
<tr>
<td></td>
<td>- The author’s bottom line about this character</td>
</tr>
</tbody>
</table>

TIERING CAN BE BASED ON CHALLENGE LEVEL, COMPLEXITY, RESOURCES, OUTCOME, PROCESS, OR ASSESSMENT.

1. Challenge Level:
Use Bloom’s taxonomy as a guide to develop tasks at various challenge levels.
Example: Elementary activities for book talk presentations.

<table>
<thead>
<tr>
<th>Bloom’s Level</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower level</td>
<td>• List story elements (knowledge)</td>
</tr>
<tr>
<td></td>
<td>• Book summary (comprehension)</td>
</tr>
<tr>
<td></td>
<td>• Support a conclusion about a character with evidence from the book</td>
</tr>
<tr>
<td>Higher Levels</td>
<td>• Discuss the theme or author’s purpose for writing the book (analysis)</td>
</tr>
<tr>
<td></td>
<td>• - Create a new ending for the story (synthesis)</td>
</tr>
<tr>
<td></td>
<td>• - Critique the author’s writing and support your opinion (evaluation)</td>
</tr>
</tbody>
</table>
2. Complexity:
When you tier by complexity, you provide varied tasks that address a student’s level of readiness, from introductory levels to more abstract, less concrete, advanced work. **Be careful to provide advanced work to the higher-level student, rather than just more work.**

Example:
After whole group class reading of a current events issue in a magazine such as global warming, students complete a related activity differentiated by complexity.

<table>
<thead>
<tr>
<th>TIER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier One</td>
<td>Students are asked to write a public service announcement using jingles, slogans, or art to convey why global warming is a problem and what people can do to prevent it.</td>
</tr>
<tr>
<td>Tier Two</td>
<td>Students conduct a survey of peer awareness and understanding of global warming. They design a limited number of questions and decide how to report their results such as with charts or in a newscast.</td>
</tr>
<tr>
<td>Tier Three</td>
<td>Students debate the issue about the seriousness of global warming, each side expressing a different viewpoint. They must provide credible evidence to support their opinions and arguments.</td>
</tr>
</tbody>
</table>

3. Resources:
Use materials at **various reading levels and complexity** to tier by resources.
Students using tiered resources may be engaged in the same activity, (such as find examples of listening and teaching texts), or they may be working on a different, but related activity, such as different groups researching the examples of listening and speaking texts e.g.:

- prepared speech,
- unprepared speech,
- prepared reading (reading aloud),
- unprepared reading (reading aloud)
- debate,
- dialogue,
- interview,
- report, (formal and informal),
- giving directions,
- instructions
- given oral presentation/report
- forum/panel discussion
- role play
- informal discussion/conversation
- introducing a speaker
- vote of thanks

- **Written texts for information examples:**
  - Dictionaries
  - Encyclopaedias
  - Schedules
  - Telephone directories
  - Textbooks
  - Thesaurus
  - Timetables
  - TV guides

- **Written text in the media examples:** (ENG FAL Gr 7 – 9, pg35)
- **Written form of audio texts examples:** (ENG FAL Gr 7 – 9, pg35)
- **Written interpersonal and transactional texts examples:** (ENG FAL Gr 7 – 9, pg35)
- **Written interpersonal texts in business examples:** (ENG FAL Gr 7 – 9, pg35)
- **Multimedia/visual texts for information examples:** (ENG FAL Gr 7 – 9, pg35)
- **Multimedia/visual texts for aesthetic purposes examples:** (ENG FAL Gr 7 – 9, pg35)
- **Multimedia/visual texts for enjoyment and entertainment examples:** (ENG FAL Gr 7 – 9, pg35)
  - Films
  - TV programmes
  - Jokes

4. **Outcome:**

Students all use the same materials, but what they do with the materials are different.

**Example: Pattern block Math**

<table>
<thead>
<tr>
<th>TIER</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Identify all the ways you can group your pattern blocks.</td>
</tr>
<tr>
<td>Tier 2</td>
<td>Identify all the different patterns you can make with your pattern blocks.</td>
</tr>
<tr>
<td>Tier 3</td>
<td>Create a bar graph to show all the different kinds of pattern blocks in your bag</td>
</tr>
</tbody>
</table>
5. Process:
Students work on the same outcomes, but use a different process to get there.

Example: What are the characteristics of a hero?

<table>
<thead>
<tr>
<th>TIER</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Make a chart of specific heroes and what they did to make them become a hero.</td>
</tr>
<tr>
<td>Tier 2</td>
<td>Choose two or three heroes and compare them in a Venn diagram.</td>
</tr>
<tr>
<td>Tier 3</td>
<td>List personal characteristics exhibited by heroes and rank them from most to least important.</td>
</tr>
</tbody>
</table>

6. Assessment:
Groups are formed based on learning preference, using Gardner’s multiple intelligences.

Example: For a unit on the solar system, Study of rotation and revolution of the earth.

<table>
<thead>
<tr>
<th>TIER</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Create a flip book, diagram, or model showing the rotation of the earth around the sun (visual-spatial)</td>
</tr>
<tr>
<td>Tier 2</td>
<td>Position and move three people to demonstrate the concept of revolution and rotation of the earth with respect to the moon and sun. (bodily-kinaesthetic)</td>
</tr>
<tr>
<td>Tier 3</td>
<td>• Make a timeline of a year detailing the position of your home town with respect to the sun. (logical-mathematical)</td>
</tr>
</tbody>
</table>
### EXAMPLES OF DIFFERENT ASSESSMENTS

<table>
<thead>
<tr>
<th>Map</th>
<th>Lecture</th>
<th>Book List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagram</td>
<td>Editorial</td>
<td>Calendar</td>
</tr>
<tr>
<td>Sculpture</td>
<td>Painting</td>
<td>Coloring Book</td>
</tr>
<tr>
<td>Discussion</td>
<td>Costume</td>
<td>Game</td>
</tr>
<tr>
<td>Demonstration</td>
<td>Placement</td>
<td>Research Project</td>
</tr>
<tr>
<td>Poem</td>
<td>Blueprint</td>
<td>TV Show</td>
</tr>
<tr>
<td>Profile</td>
<td>Catalogue</td>
<td>Song</td>
</tr>
<tr>
<td>Chart</td>
<td>Dialogue</td>
<td>Dictionary</td>
</tr>
<tr>
<td>Play</td>
<td>Newspaper</td>
<td>Film</td>
</tr>
<tr>
<td>Dance</td>
<td>Scrapbook</td>
<td>Collection</td>
</tr>
<tr>
<td>Campaign</td>
<td>Questionnaire</td>
<td>Trial</td>
</tr>
<tr>
<td>Cassette</td>
<td>Flag</td>
<td>Machine</td>
</tr>
<tr>
<td>Quiz Show</td>
<td>Scrapbook</td>
<td>Book</td>
</tr>
<tr>
<td>Banner</td>
<td>Graph</td>
<td>Mural</td>
</tr>
<tr>
<td>Brochure</td>
<td>Museum</td>
<td>Award</td>
</tr>
<tr>
<td>Debate</td>
<td>Learning Center</td>
<td>Recipe</td>
</tr>
<tr>
<td>Flow Chart</td>
<td>Advertisement</td>
<td>Test</td>
</tr>
<tr>
<td>Puppet Show</td>
<td>Tour</td>
<td>Puzzle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Timeline</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Toy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Article</td>
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<tr>
<td></td>
<td></td>
<td>Diary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Magazine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Photographs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Terrarium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Petition Drive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching Lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prototype</td>
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<tr>
<td></td>
<td></td>
<td>Speech</td>
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<tr>
<td></td>
<td></td>
<td>Club</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cartoon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biography</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Invention</td>
</tr>
</tbody>
</table>

### ACTIVITIES FOR TIERING

#### LOW PREPARATION DIFFERENTIATION

- Choices of books
- Homework options
- Use of reading buddies
- Varied journal Prompts
- Orbits
- Varied pacing with anchor options
- Student-teaching goal setting
- Work alone/ together
- Whole-to-part and part-to-whole explorations

#### HIGH-PREPARATION DIFFERENTIATION

- Tiered activities and labs
- Tiered assessments
- Independent studies
- Multiple texts
- Assessment accommodation
- Multiple-intelligence options
- Compacting
- Spelling by readiness
- Entry Points
### 3.4. Scaffolding to Improve Learning in the Classroom

Teaching scaffolds are temporary support structures put in place to assist students in accomplishing new tasks and concepts they could not typically achieve on their own. Once students are able to complete or master the task, the scaffolding is gradually removed or fades away—the responsibility of learning shifts from the teacher to the student.

**Why use teaching Scaffolding...**

One of the main benefits of scaffolded teaching is that it provides for a supportive learning environment. In a scaffolded learning environment, students are free to ask questions, provide feedback and support their peers in learning new material. This teaching style provides the incentive for students to take a more active role in their own learning. Students share the responsibility of teaching and learning through scaffolds that require them to move beyond their current skill and knowledge levels.

The need to implement a scaffold will occur when you realize a student is not progressing on some aspect of a task or unable to understand a particular concept. Scaffolds can successfully be used for an entire class.

<table>
<thead>
<tr>
<th>Flexible seating</th>
<th>Varying organizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varied computer programs</td>
<td>Lectures coupled with graphic organizers</td>
</tr>
<tr>
<td>Design-A-Day</td>
<td>Community mentorships</td>
</tr>
<tr>
<td>Varied Supplementary materials</td>
<td>Interest groups</td>
</tr>
<tr>
<td>Options for varied modes of expression</td>
<td>Tiered centers</td>
</tr>
<tr>
<td>Varying scaffolding on same organizer</td>
<td>Interest centers</td>
</tr>
<tr>
<td>Let’s Make a Deal projects</td>
<td>Personal agendas</td>
</tr>
<tr>
<td>Computer mentors</td>
<td>Literature Circles</td>
</tr>
<tr>
<td>Think-Pair-Share by readiness, interest, learning profile</td>
<td>Stations</td>
</tr>
<tr>
<td>Use of collaboration, independence, and cooperation</td>
<td>Complex Instruction</td>
</tr>
<tr>
<td>Open-ended activities</td>
<td>Group Investigation</td>
</tr>
<tr>
<td>Mini-workshops to reteach or extend skills</td>
<td>Audio/ video materials</td>
</tr>
<tr>
<td>Jigsaw</td>
<td>Teams, Games, and Tournaments</td>
</tr>
<tr>
<td>Negotiated Criteria</td>
<td>Choice Boards</td>
</tr>
<tr>
<td>Explorations by interests</td>
<td>Think-Tac-Toe</td>
</tr>
<tr>
<td>Games to practice mastery of information</td>
<td>Simulations</td>
</tr>
<tr>
<td>Multiple levels of questions</td>
<td>Problem-Based Learning</td>
</tr>
<tr>
<td></td>
<td>Rubrics</td>
</tr>
<tr>
<td></td>
<td>Flexible reading formats</td>
</tr>
<tr>
<td></td>
<td>Student-centered writing formats</td>
</tr>
</tbody>
</table>

| Lectures coupled with graphic organizers     | Community mentorships                           |
| Community mentorships                        | Interest groups                                 |
| Interest groups                              | Tiered centers                                  |
| Tiered centers                               | Interest centers                                |
| Interest centers                             | Personal agendas                                |
| Personal agendas                             | Literature Circles                              |
| Literature Circles                           | Stations                                        |
| Stations                                     | Complex Instruction                             |
| Complex Instruction                         | Group Investigation                             |
| Group Investigation                          | Audio/ video materials                          |
| Audio/ video materials                       | Teams, Games, and Tournaments                  |
| Teams, Games, and Tournaments               | Choice Boards                                   |
| Choice Boards                                | Think-Tac-Toe                                   |
| Think-Tac-Toe                                | Simulations                                     |
| Simulations                                  | Problem-Based Learning                          |
| Problem-Based Learning                       | Rubrics                                         |
| Rubrics                                      | Flexible reading formats                        |
| Flexible reading formats                     | Student-centered writing formats                |
### A SIMPLE STRUCTURE FOR SCAFFOLDED TEACHING

<table>
<thead>
<tr>
<th>STEPS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>First, the teacher does it.</td>
<td>In other words, the teacher models how to perform a new or difficult task, such as how to use a graphic organizer. For example, the teacher may project or hand out a partially completed graphic organizer and asks students to &quot;think aloud&quot; as he or she describes how the graphic organizer illustrates the relationships among the information contained on it.</td>
</tr>
<tr>
<td>Second, the class does it.</td>
<td>The teacher and students then work together to perform the task. For example, the students may suggest information to be added to the graphic organizer. As the teacher writes the suggestions on the white board, students fill in their own copies of the organizer.</td>
</tr>
<tr>
<td>Third, the group does it.</td>
<td>At this point, students work with a partner or a small cooperative group to complete the graphic organizer (i.e., either a partially completed or a blank one). More complex content might require a number of scaffolds given at different times to help students master the content.</td>
</tr>
<tr>
<td>Fourth, the individual does it.</td>
<td>This is the independent practice stage where individual students can demonstrate their task mastery (e.g., successfully completing a graphic organizer to demonstrate appropriate relationships among information) and receive the necessary practice to help them to perform the task automatically and quickly.</td>
</tr>
</tbody>
</table>
### 3.4.1. Types of Scaffolds

Table 1 presents scaffolds and ways they could be used in a teaching setting.

<table>
<thead>
<tr>
<th>Scaffold</th>
<th>Ways to use Scaffolds in a teaching Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance organizers</td>
<td><em>Tools used to introduce new content and tasks to help students learn about the topic:</em> Venn diagrams to compare and contrast information; flow charts to illustrate processes; organizational charts to illustrate hierarchies; outlines that represent content; mnemonics to assist recall; statements to situate the task or content; rubrics that provide task expectations.</td>
</tr>
<tr>
<td>Cue Cards</td>
<td><em>Prepared cards given to individual or groups of students to assist in their discussion about a particular topic or content area:</em> Vocabulary words to prepare for exams; content-specific stem sentences to complete; formulae to associate with a problem; concepts to define.</td>
</tr>
<tr>
<td>Concept and mind maps</td>
<td><em>Maps that show relationships:</em> Partially or completed maps for students to complete; students create their own maps based on their current knowledge of the task or concept.</td>
</tr>
<tr>
<td>Examples</td>
<td><em>Samples, specimens, illustrations, problems:</em> Real objects; illustrative problems used to represent something.</td>
</tr>
<tr>
<td>Explanations</td>
<td><em>More detailed information to move students along on a task or in their thinking of a concept:</em> Written instructions for a task; verbal explanation of how a process works.</td>
</tr>
<tr>
<td>Handouts</td>
<td><em>Prepared handouts</em> that contain task- and content-related information, but with less detail and room for student note taking.</td>
</tr>
<tr>
<td>Hints</td>
<td><em>Suggestions and clues to move students along:</em> —place your foot in front of the other,</td>
</tr>
</tbody>
</table>
Prompts | A physical or verbal cue to remind—to aid in recall of prior or assumed knowledge. Physical: Body movements such as pointing, nodding the head, eye blinking, foot tapping. Verbal: Words, statements and questions such as —Go, —Stop, —It’s right there, —Tell me now, —What toolbar menu item would you press to insert an image?[], —Tell me why the character acted that way.

Question Cards | Prepared cards with content- and task-specific questions given to individuals or groups of students to ask each other pertinent questions about a particular topic or content area.

Question Stems | Incomplete sentences which students complete: Encourages deep thinking by using higher order —What if questions.

Stories | Stories relate complex and abstract material to situations more familiar with students: Recite stories to inspire and motivate learners.

Visual Scaffolds | Pointing (call attention to an object); representational gestures (holding curved hands apart to illustrate roundness; moving rigid hands diagonally upward to illustrate steps or process), diagrams such as charts and graphs; methods of highlighting visual information.

Source: (Alibali, 2006)

3.4.2. Preparing to Use Scaffolding
As with any teaching technique, scaffolds should complement instructional objectives. While we expect all of our students to grasp course content, each of them will not have the necessary knowledge or capability to initially perform as we have intended. Scaffolds can be used to support students when they begin to work on objectives that are more complex or difficult to complete. For example, the teaching objective may be for students to complete a major paper. Instead of assuming all students know how to begin the process, break the task into smaller, more manageable parts.

First, the teacher provides an outline of the components of the paper
Then students would prepare their outline
The teacher then provides a rubric of how each paper criteria will be assessed
Students would then work on those criteria and at the same time and self-evaluate their progress
The pattern would continue until the task is completed (although scaffolds might not be necessary in all parts of the task)

Knowing your subject well will also help you identify the need for scaffolding. Plan to use scaffolds on topics that former students had difficulty with or with material that is especially difficult or abstract.
Hogan and Pressley, (1997) suggest that you practice scaffold topics and strategies they know well. In other words, begin by providing scaffolded instruction in small steps with content you are most comfortable teaching. See Table 2.

Table 2. Illustrative Model of Scaffolding

<table>
<thead>
<tr>
<th>What students can now do on their own as a result of the scaffold</th>
<th>New Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaffold fades or is removed</td>
<td>Provided from the teacher</td>
</tr>
<tr>
<td>Scaffold</td>
<td>Scaffold</td>
</tr>
<tr>
<td>That students cannot do on their own</td>
<td>Scaffold</td>
</tr>
<tr>
<td>New Task</td>
<td>Scaffold</td>
</tr>
<tr>
<td>What the students can already do</td>
<td>Scaffold</td>
</tr>
<tr>
<td>Foundational Knowledge</td>
<td>Scaffold</td>
</tr>
</tbody>
</table>

3.4.3. Guidelines for Implementing Scaffolding
The following points can be used as guidelines when implementing instructional scaffolding (adapted from Hogan and Pressley, 1997).

- Select suitable tasks that match curriculum goals, course learning objectives and students’ needs.
- Allow students to help create goals (this can increase students’ motivation and their commitment to learning).
- Consider students’ backgrounds and prior knowledge to assess their progress – material that is too easy will quickly bore students and reduce motivation. On the other hand, material that is too difficult can turn off students’ interest levels.
- Use a variety of supports as students progress through a task (e.g., prompts, questions, hints, stories, models, visual scaffolding—including pointing, representational gestures, diagrams, and other methods of highlighting visual information).
- Provide encouragement and praise as well as ask questions and have students explain their progress to help them stay focused on the goal.
- Monitor student progress through feedback (in addition to teacher feedback, have students summarize what they have accomplished so they are aware of their progress and what they have yet to complete).
- Create a welcoming, safe, and supportive learning environment that encourages students to take risks and try alternatives (everyone should feel comfortable expressing their thoughts...
without fear of negative responses).
- Help students become less dependent on instructional supports as they work on tasks and encourage them to practice the task in different contexts.

3.4.3. Benefits of Teaching Scaffolding
Challenges students through deep learning and discovery
Engages students in meaningful and dynamic discussions in small and large classes
Motivates learners to become better students (learning how to learn)
Increases the likelihood for students to meet instructional objectives
Provides individualized instruction (especially in smaller classrooms)
Affords the opportunity for peer-teaching and learning
Scaffolds can be —recycled for other learning situations
Provides a welcoming and caring learning environment

3.4.5. Challenges of Instructional Scaffolding
Selecting appropriate scaffolds that match the diverse learning and communication styles of students.
Knowing when to remove the scaffold so the student does not rely on the support.
Not knowing the students well enough (their cognitive and affective abilities) to provide appropriate scaffolds. Instructional scaffolds promote learning through dialogue, feedback and shared responsibility.
Through the supportive and challenging learning experiences gained from carefully planned scaffolded learning, instructors can help students become lifelong, independent learners.

3.5. Practical Examples: Mathematics

METHOD 1: Jigsaw/ Expert Grouping

Lesson: Data Handling (Grade 1 – 9)

Objective: The mean, median, mode and range from the given data

Task: 1. Divide learners into groups of 4 learners per jigsaw groups.
   2. The groups should be diverse in terms of gender, ethnicity, race, ability.
   3. Appoint one learner from each group as the leader.
   4. Initially, this learner should be the strongest learner in the group.

STEP ONE:
Instruction for Groups: Divide the work into four parts.
   1. Solving for the mean from grouped, ungrouped data
   2. Solving for median from the given grouped, ungrouped data
   3. Solving for the mode of the given grouped, ungrouped data
   4. Finding the range of the given data.
STEP TWO:
1. Assign each learner to learn one part, making sure learners have direct access only to their own part.
2. Give learners time to read over their part at least twice and become familiar with it.
3. There is no need for them to memorize it.

STEP THREE:
1. Form temporary "expert groups" by having one learner from each jigsaw group join other learners assigned to the same part.
2. Give learners in these expert groups time to discuss the main points of their part and to rehearse the presentations they will make to their jigsaw group.

STEP FOUR:
1. Bring the learners back into their original jigsaw groups.
2. Ask each learner to present her or his part to the group.
3. Encourage others in the group to ask questions for clarification.

STEP FIVE:
Teacher’s role is to observe the process in each of the groups
1. Float from group to group, observing the process.
2. If any group is having trouble (e.g. a member is dominating or disruptive), make an appropriate intervention.
3. Eventually, it is best for the group leader to handle this task.
4. Leaders can be trained by whispering an instruction on how to intervene, until the leader gets the hang of it.

STEP 6:
Application of lesson:
1. At the end of the session, give a quiz on the material so that learners quickly come to realize that these sessions are not just fun and games but really count.
2. Give each learner a worksheet.

METHOD 2: Think- Pair- Share (gets its name from three stages of learner interaction)

LESSON: Solving Word Problems involving Addition and Subtraction of Fractions.

OBJECTIVE: A can solve the word problems

KEY IDEAS:
1. equivalent fractions
2. common denominators
3. adding & subtracting mixed numbers
4. renaming in subtraction

**TASK: Learning Task:**

1. The teacher will provide a worded problem.
2. The teacher will demonstrate how to solve the problem using a step-by-step procedure.
3. While the teacher is solving the problem the learners think through the process as well.
4. The teacher will deliberately leave out the final answer.
5. After a few moments, the teacher will ask the learners to find a partner, and discuss their solutions to each other.
6. They should come up with a single solution for the given problem.
7. While partners are discussing their solutions, the teacher will roam around to see which partnered learners were able to make it correctly and which are not.
8. The teacher will randomly select a partner to share their solutions to the class by explaining it in front and solving it using the blackboard.

**STEP ONE:**

1. Teacher writes a new problem on board.
2. The teacher provokes learners’ thinking with a (learning task)
3. The learners should take a few moments (not minutes) just to **THINK** about the question

**STEP TWO:**

1. Using designated partners, or nearby peers, or a desk mate, learners **PAIR** up to talk about the answer each came up with.
2. They compare their mental or written notes and identify the answers they think are best, most convincing, or most unique.
STEP THREE:

1. After the learners talked in pairs for a few moments, the teacher calls for pairs to SHARE their thinking with the rest of the class.
2. The teacher can do this by going around in round-robin fashion, calling on each pair; or the can take answers as they are called out (or as hands are raised).
3. Often, the teacher or a designated helper will record these responses on the board or on the laptop & data projector/ overhead.

3.6. Practical Examples: Languages

How learners learn vocabulary in general:

Typically, learners will often learn new vocabulary by simply writing lists of new vocabulary words and then memorize these words by rote. Unfortunately, this technique often provides few contextual clues. Rote learning helps "short term" learning for exams etc. Unfortunately, it does not really provide a "hook" with which to remember new vocabulary. Vocabulary charts such as a MindMap activity provide this "hook" by placing vocabulary in connected categories thus helping with long-term memorization.

Vocabulary development is also the foundation for learning and understanding the English language. It should be taught in context as other language skills are taught and developed. The skills of listening, speaking, reading and writing cannot be put into practice without a sound knowledge of language structure and using it. Learners also need a wide vocabulary, which is perhaps the single most important factor enabling a person to communicate well. A wide vocabulary is essential for all language skills but especially for reading and writing.

What is a Vocabulary Chart Graphic Organiser?

Vocabulary charts come in a wide variety of forms. Using charts can help focus in on specific areas of English, group together words, show structures and hierarchy, etc. One of the most popular types of chart is a Mind Map. A Mind Map is a way to organize information. As learners master the Mind Map chart teachers can gradually introduce some other graphic organisers into teaching English lessons. This strategy can be used for all English content areas such as Listening and Speaking, Reading and Viewing, Writing and Presenting and language Structures and Conventions from grade 1 – 9.

OUTLINE OF LESSON:

LESSON: Vocabulary development
**OBJECTIVE:** To help learners widen their passive and active vocabulary based on related word group areas.

**TASK:** Awareness raising of effective vocabulary learning techniques followed by vocabulary Mind Map in groups.

**STEP ONE:**

1. Begin the class by brainstorming on how to learn new vocabulary asking for learners input. Learners will mention writing lists of words, using the new word in a sentence, keeping a journal with new words, and translating new words.
2. Explain the concept of short term and long-term learning and the importance of contextual clues for effective long-term memorization.
3. Ask learners how they memorize new vocabulary.
4. Present the idea of creating vocabulary charts to help learners learn specific content related vocabulary.
5. On the board, choose an easy subject such as the city and create a Mind Map placing the city at the centre and each category as an offshoot. From there, you can branch out with activities done in each category.
STEP TWO:

1. Divide learners into small groups asking them to create a vocabulary charts based on a particular subject area.
2. Example: my home, sports, the school, the aquarium, the farm, my body, earth, pollution, animals, plants, etc.
3. Next, choose a topic for the group of the selected topics and create a Mind Map on a topic of your choice.
4. Learners create vocabulary charts in small groups.
5. It is best to keep your subject general so that you can branch out in many different directions. This will help you learn vocabulary in context as your mind will connect the words more easily.
6. Do your best to create a great chart, as you will share it with the rest of the class.
7. In this way, you will have lots of new vocabulary in context to help you widen your vocabulary.

STEP THREE:

Distribute the learner created vocabulary charts (Mind Maps) to other groups. In this way, the class generates a large amount of new vocabulary in a relatively short amount of time.

STEP FOUR:

Using the Frayer chart learners still in small groups they illustrate the understanding of one word in context on the chart.

**Example completing the Frayer Chart**

<table>
<thead>
<tr>
<th>DEFINITION (explanation/drawing)</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skyscraper</td>
<td>1. Construction: <strong>Skyscrapers</strong> have a skeleton frame, made of internal steel or reinforced concrete, which is strong enough to support the weight of a building with many stories.</td>
</tr>
<tr>
<td>Skyscraper</td>
<td>2. Height: <strong>Skyscrapers</strong> must be taller than they are wide.</td>
</tr>
<tr>
<td>A very tall building</td>
<td></td>
</tr>
</tbody>
</table>
### OTHER EXAMPLES OF GRAPHIC ORGANISERS

<table>
<thead>
<tr>
<th>Type</th>
<th>What is can be used for</th>
<th>What does it look like</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Map</td>
<td>To take a closer look at vocabulary items based on parts of speech and structure.</td>
<td><img src="image" alt="Event Map Diagram" /></td>
</tr>
<tr>
<td>5 Paragraph Essay Planner</td>
<td>Can be used to plan essays</td>
<td><img src="image" alt="5 Paragraph Essay Planner Diagram" /></td>
</tr>
<tr>
<td>Timelines</td>
<td>Can be used to focus on tense usage.</td>
<td><img src="image" alt="Timeline Diagram" /></td>
</tr>
<tr>
<td>Venn Diagramme</td>
<td>Can be used to find common terminology.</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Main Idea Web</strong></td>
<td>Can be used to help to structure the sequence of events in a story</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A step by step organiser for the learner to write down the sequence of events as it happened in the story</td>
<td></td>
</tr>
</tbody>
</table>

![Diagram](image-url)
**Resources** for “SECTION 3: Practical Implementation of Differentiated Teaching Strategies”


Selected Resources


SECTION 4: PRACTICAL APPROACHES: MATHEMATICS LESSON CURRICULUM DIFFERENTIATION

4.1. Mathematics Lesson Differentiation: An Introduction

The Annual National Assessment (ANA) and other international/ regional statistical analyses indicate that South African learners perform below average in Mathematics as compared to other countries. A high proportion of learners have clearly not mastered basic mathematical skills (Heyd-Metzuyanim & Graven, 2016). A number of intrinsic and extrinsic factors that contribute towards the poor performance in Mathematics have been found. These factors include learners’ different backgrounds and teachers’ teaching strategies (Ogbonnaya, Mji, & Mohapi, 2016).

Therefore, Mathematics teachers should know how to cater for diverse learners in their day-to-day teaching by employing curriculum differentiation. Curriculum differentiation is an organised and yet flexible way that teachers could use to proactively adjust their teaching and learning to meet the needs of diverse learners (Tomlinson, 1999). Mathematics teachers should bear in mind the following model:

Please note that in the above diagram, the term “process” is also known as “teaching methodology”, “product” is also known as “assessment”. Teachers can differentiate classroom elements (content, process, product and learning environment) according to learners’ characteristics (readiness, interest and learning profile) through a range of instructional and management strategies. The model will help them to ensure that diverse learners benefit from the learning process. The next section outlines practical approaches that Mathematics teachers could employ to differentiate the curriculum.

4.2. Differentiating the Mathematics Lesson’s Classroom Environment

Differentiating the learning environment in Mathematics involves paying attention to the psychological, social and physical factors. The psychological and social factors include aspects of satisfaction, well-
being and ability to perform effectively. The physical factors include aspects like whether the classroom space is conducive and neat, furniture has been well arranged, the noise level is controlled, the class size has been planned for, classroom displays are visible and attractive, resources are sufficient and concrete etc.

EXAMPLE

![Classroom Scene]

REFLECTIVE QUESTIONS

- Are you able to manage an overcrowded classroom?
- How do you do it? (E.g. grouping learners and facilitating their progress, attracting the learner’s attention by using Power Point presentations/charts, Videos).
- Do you embrace all learners?
- Do you give learners exciting tasks?
- Are you able to manage learners with behavioural difficulties/learning difficulties (e.g. ADHD, withdrawn/passive learners, aggressive or bullying behaviour)?

ACTIVITY 1

Case study
Bongi is Grade 2 learner at your school. Her parents recently died in a car accident and she has been transferred from another province to your school. Her language of learning and teaching has changed. She was learning in isiZulu and is now learning in English. In addition, Bongi is partially sighted and always quiet during group discussions. She recently scored below average in a formal task and the teacher thinks Bongi has a learning difficulty in Mathematics due to her limited receptive and expressive vocabulary in English. If you were Bongi’s teacher, how will you differentiate the learning environment to ensure that Bongi also benefits from the learning process?

4.3. Differentiating the Mathematics Lesson’s Content

ACTIVITY 2

Think about learners in your class and list all things that prevent them from performing well in Mathematics.
To ensure inclusive teaching in Mathematics, keep the following in mind:

- Learners are from different backgrounds – may respond different to text.
- English is not their first language – may be difficult to understand key concepts.
- Abstract content should be simplified to the learners.
- Shorten tasks or break them up into smaller chunks.
- Select texts and books which are culture sensitive.
- Use audio-visual aids and technology.

**EXAMPLE**

**Measurement (Length): Grade 2**

**Learning Outcomes**

By the end of this learning, learners should have:

- Practiced using a 30cm ruler to measure a variety of objects in class.
- Practiced using a 1metre ruler or a rope to measure their desks, tables and the chalkboard
- Compared various objects in their classroom using the concepts ‘longer than’ and ‘shorter than’.

**Resources:** 30cm ruler, 30 cm robe, class desks, chalkboards, measuring tape

**Teaching strategy**

1. Present learners with a measuring tape, a 30cm ruler and a 1metre ruler
2. Let learners identify objects in their classroom that could be measured using the instruments.
3. Other learners should demonstrate the use of each measuring tool.
4. Other learners should calculate the length of objects.
5. Other learners should apply the concepts ‘longer than’ and ‘shorter than’ using the following example from their workbook:

**ACTIVITY 3**

_in your Mathematics class, you have learners who display huge diversity in terms of abilities. Despite this diversity, the whole class is interested in mastering Mathematical skills. Design a differentiated lesson for one hour. Use the grade and content area of your choice. Consider: outcomes, teaching strategies and resources_

**4.4. Differentiating the Mathematics Lesson’s Teaching Methodology**

There are various pathways to reach the same destination. Teaching strategies that could be employed to cater for diverse learners include: Multi-level Teaching, Straggling and Scaffolding.
EXAMPLE
Grade R (Triangle-2D shape)

Learning outcomes
Learners should be able to: recognise triangles, identify triangles, name triangles and describe triangles

Teaching strategies
- Multi-level teaching

Start by introducing the concept of a triangle to the whole class; continue to teach at low level using a picture and a real item. Thereafter, the teacher will teach at an abstract level to cater for the above-level learners (giving an oral explanation).

- Scaffolding and designing down

Provide learners with guidance or guidelines to clarify expectations before they start working on the classroom activity. Teacher breaks down the task into steps, and goes one step at a time (designing down).

ACTIVITIES demonstrating differentiation according to Multiple-intelligences

In groups, learners will use ropes to create a large shape of a triangle and use glue to paste on the blank charts they have been provided with. They will then use crayons to draw (trace) it (Spatial learners).

Learners will walk around the shape observing the features of the triangle (Bodily/Kinaesthetic learners). While walking let learners say: “I am walking along the triangle. One, two, three sides and one, two, three corners (Auditory learners).

Thereafter, learners will draw a triangle in the air or sand provided (Logical/Mathematical learners). They will be told to identify triangles in the class (on the roof, ceiling, windows, books etc.).

The teacher will then put a variety of different sized shapes in a “feeling bag”. Move the bag amongst groups and let each and every learner feel and pick out one triangle amongst other shapes in the bag without looking in.
In their pairs or group of 4, learners will form a triangle with clay or play dough. They will then tell their partners about those triangles (Interpersonal and Verbal-linguistic). Lastly, a well-known song will be sung or rapped using features of a triangle as lyrics (musical intelligence).

**ACTIVITY 4**

Choose one topic based on the two figures below. The topic should be from any content area and for any grade from Grade R-9. Thereafter, design differentiated teaching strategies that you could employ to teach the topic to diverse learners in your Mathematics class.

4.5. Differentiating the Mathematics Lesson’s **Assessment**

In Mathematics, teachers are encouraged to conduct a baseline assessment in the first term. Learners’ results in the baseline assessment should not be used to label their ability, but rather to decide how to pitch the initial activities and to assess what aspects of work need more attention. Learners develop at different rates. Some learners have a slow start, but with appropriate intervention, they may progress quickly in Mathematics.

The following assessment model could be helpful for teachers:
A variety of tools can be used to reward learners’ efforts during or after an activity. While conventional ‘ticks’ and ‘crosses’ are still popular with teachers, other tools (such as rubrics, checklists, etc.) can prove valuable alternatives during assessment. Two main techniques of formal and informal assessment have to be continuously used to collect information on a learner’s achievement. Different kinds of assessments are appropriate to the skills and concepts necessary for different topics at different age groups.

**ACTIVITY 5**
Develop a rubric or a checklist that you will use to assess one activity you have planned on Group Activity 4.

**Using rubrics to assess problem-solving**
Problem-solving can be assessed using a rubric.

What is considered to be an appropriate way of solving a problem,

- changes as learners develop and increase their understanding of number concept and their operational skills; and
- depends on both the number range in the problem and the nature of the problem.

<table>
<thead>
<tr>
<th>GRADE 1</th>
<th>Rubric problem-solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not know where to start or does something inappropriate.</td>
<td>1</td>
</tr>
<tr>
<td>Understands problem and starts but cannot finish correctly.</td>
<td>2-3</td>
</tr>
<tr>
<td>Understands problem and solves using drawings (marks) or counters. Can explain. May make small errors.</td>
<td>4-5</td>
</tr>
<tr>
<td>Completes problem correctly. Can explain own and others’ thinking competently.</td>
<td>6-7</td>
</tr>
</tbody>
</table>
### GRADE 2

**Rubric problem-solving**

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not know where to start or does something inappropriate.</td>
<td>1</td>
</tr>
<tr>
<td>Understands problem and starts but cannot finish correctly.</td>
<td>2-3</td>
</tr>
<tr>
<td>or Understands problem and solves using drawings (marks) or counters only.</td>
<td></td>
</tr>
<tr>
<td>Understands problem and solves using numbers, but makes small errors. Can explain.</td>
<td>4-5</td>
</tr>
<tr>
<td>Completes problem correctly using number knowledge and techniques like breaking down and recombining numbers, doubling, halving, number lines etc. Can explain own and others’ thinking competently.</td>
<td>6-7</td>
</tr>
</tbody>
</table>

* The number range with which Grade 2 learners work begins to make it inefficient to calculate by drawing pictures and counting them. Learners’ number sense needs to be sufficiently developed for them to use numbers in problem-solving and calculating.

### GRADE 3

**Rubric problem-solving**

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not know where to start or does something inappropriate.</td>
<td>1</td>
</tr>
<tr>
<td>Understands problem and starts but cannot finish correctly, or uses marks (drawings) or counters.</td>
<td>2-3</td>
</tr>
<tr>
<td>Understands problem and solves using numbers. Can explain.</td>
<td>4.5</td>
</tr>
<tr>
<td>Completes problem correctly using number knowledge and techniques like breaking down and recombining numbers, doubling, rounding and compensating, number lines etc appropriately. Can explain own and others’ thinking competently.</td>
<td>6-7</td>
</tr>
</tbody>
</table>

Examples of how to apply this rubric to problems solved by Grade 1 - 3 learners

**A dog has 4 legs. How many legs do 12 dogs have?**

**Grade 1: Rating: 1.**
The learner does not understand the problem, so he or she uses an inappropriate strategy or operation.

**Grade 2 learner, Rating 4**
The learner has understood the problem, using appropriate number and operational symbols for Grade 2.

**Grade 3 learner: Rating 4**
The learners have understood and solved the problem in an adequate way. However, they do not get an outstanding rating since they have not shown the techniques and operations available to Grade 3 learners i.e. multiplication using breaking down and recombining numbers: see below.

**The farmer plants 6 rows of trees with 13 trees in each row. How many trees does he plant all together?**

**Grade 1: Rating 6**
The learner has understood the problem, solved the problem in an appropriate way for Grade 1 and can explain the problem.

**Grade 2: Rating 4**
The learner has understood and solved the problem. However, a grade 2 learner should be using number and operational symbols to add repeatedly (or multiply, depending on the time of year).
Conservation of length

Jean Piaget (1953) has described the cognitive developmental phenomenon called conservation. Conservation refers to the learner’s ability to recognise the constancy of objects irrespective of their distortions or transformations (Smith, Trueblood, & Szabo, 1981). Piaget has been a pioneer in devising a way of assessing learners’ understanding of conservation of length (Sawada & Nelson, 1967). For the teacher to assess learners in conservation of length, he or she should not use sticks of different lengths, but should use sticks of the same length. To assess learner’s understanding of the length concept, Piaget would place two sticks of equal length side by side in front of the learners (see figure 1).
As a teacher, like Piaget, ask learners if stick A and stick B are equal in length. If learners’ responses are positive that the two sticks are equal in length, then the teacher may ask learners about stick C and stick D after shifting stick D forward or stick C backward as Piaget suggested. The question for the learners should be, which stick between stick C and D is ‘longer’ or ‘shorter’ or whether they have the same length? If learners would maintain that stick D is longer than stick C, then how would you address the misconceptions learners may have possessed and how would you discover those misconceptions? Sawada and Nelson (1967) indicated that if learners interpret the word length as alignment of end points of the sticks, then when one stick is shifted either forward or backward, the end points are no longer aligned and therefore the length of a stick has changed. The activity below will help you to identify learners who grapple with acquisition of conservation of length concept.

**ACTIVITY 6 (Grade 4)**

Cut two strings of equal length and demonstrate the activity by placing the two strings on the table in front of the learners. Distort or transform one of the strings in front of the learners and ask learners,

a) Which string is longer or shorter or are they equal?

b) Allow your learners to give reasons for their answers.

**Feedback**
Conservation is related to any object retaining its size whether transformed or distorted. If some of the learners maintain that the length of two strings is not equal in length, then those learners lack knowledge of conservation of length concept. Those learners have perceptual judgement that the length of a string can be looked by its end points which ultimately make them to say the other string is longer than the other. But, if some of the learners maintain that the strings are equal in length irrespective of their transformations or distortions, then the learners have acquired the knowledge of conservation of length concept, and they are ready to proceed with measurement. If the learner can explain that the length stays the same even after distortions or transformations, saying the string retains its shape, then the learner has the understanding of the reversibility concept.

Area concept

Whilst area is a measure of two-dimensional space inside a region (Van de Walle, 2014), for learners to understand the concept of area, it is not enough to teach the formula $length \times breadth$ (Machaba, 2016). The concept of area should be developed through activities that have learners covering space and comparing areas of figures. As with the length concept, learners should first acquire knowledge of the attributes of area before actual measurement of area. The measuring of the area of a region means the number of square units (e.g. cm or mm) covering that particular region. One can use 1 square centimetre tiles and transparency sheets to measure the area. The definition of area appears not adequately been covered in lower grades, when learners merely define the area as the product of length and breadth ($A = l \times b$), which is completely divorced from the idea of covering the surface in a particular space (Dickson, 1989, p. 79). In order for learners to understand the area concept they must be provided with resources like bricks and cuttings that they can fit, fold, match and count (Gauteng Institute for Curriculum Development, 1999) to represent the area. For learners to acquire knowledge of area concept, they should first understand the perimeter concept as most of the learners confuse it with area concept. To determine the perimeter of any shape, we simply have to add the sides of that shape. For example, to determine the perimeter of a rectangle, learners should add the lengths of the four sides. Most of the learners assume that shapes of the same perimeter must have the same area or vice-versa (Van de Walle 2014).
ACTIVITY 7 (Grade 6)

Ask your learners to accurately draw four rectangles with the same perimeters but different areas, allow learners to indicate their dimensions of the rectangles on their figures.

Feedback

Allow your learners to draw four different rectangles of the same perimeter but differ in areas. Results of the perimeter and area of each rectangle have to be recorded so that learners can draw a conclusion that rectangles of same perimeter have different areas.

ACTIVITY 8

One of the learners in your class says "Area = length × breadth". How will you help this learner to understand area concept. It is the task of a teacher to introduce concept of measurement in a practical area. Design an activity that would enable learners to develop the formula to calculate the area of rectangle.

Feedback

Give your learners square grids or square tiles to develop rectangles of different sizes and allow them to record their results in tables i.e. the number of squares that fit into the rectangles. Also, allow learners to choose sides of those rectangles, for example the side on which the rectangle sits is called the base. The length of the base of the rectangles can be labelled as the length. The shorter side is called the breadth. Your learners should ensure that all the sides of the rectangles are labelled as length and breadth. Allow your learners to look at the patterns in their results in the tables and let them generate a rule that can be used to calculate the area of a rectangle.

A circle is another shape whose area learners should be able to calculate. In particular, how the formula to calculate the area of a circle is derived.
Equally importantly, learners need to understand the relationship between the circumference and the diameter of a circle.

**ACTIVITY 9 (Grade 8)**

(Think about how the following were constructed)

**Feedback**

The relationship between the circumference (the distance around the circle or perimeter) and the diameter (the line through the centre joining two points on the circle) is of the interesting part that learners can discover. The circumference of every circle should give learners about 3.14 times as long as the diameter. Allow learners to cut a circle into eight or more sectors and rearrange them to form a near rectangle with the dimensions of half the circumference by the radius (Van de Walle, 2014).

They should also be given time to think about how plans of a circular house are being designed.
Learners should also know how to calculate the area of a triangle using the formula. As indicated earlier, learners should have an understanding of how the formula used to calculate a triangle is derived.

ACTIVITY 10

In teaching your learners how to calculate the area of a triangle, you have to start by explaining how the formula used to calculate the area of a triangle can be developed. Supply drawings to demonstrate your answer.

Feedback

Learners should determine the area of rectangle(s) or parallelograms by using squares to measure. The rectangle(s) can be divided into two equal triangles with squares inside the rectangles. Learners would discover that the area of a triangle is half the area of a rectangle or a parallelogram.

Surface Area of shape

Surface area of solid objects is referred to as a measure of the total area of all faces of the object. If learners have acquired knowledge of how to calculate the area of a two-dimensional object, then they will be able to calculate the surface area of three-dimensional objects by adding the areas of all faces of the object. One of the best approaches to teaching surface area of three-dimensional figures is to create rectangular prisms, cylinders or cubes with sides held together by all pieces (Van de Walle, 2014). For learners to be able to calculate the surface area of three-dimensional shapes, they should first start to understand how the formulas of those objects are developed. You will be engaged with the following types of shapes, rectangular shapes, cylinders and triangular shapes in order to develop the surface area formulas. An example from a workbook could be used to help understanding.
ACTIVITY 11 (Grade 11)

Design an activity that will enable your learners to understand how the surface area of a rectangular prism and a cube is developed. Use concrete materials to demonstrate your answer for learners to understand how the formula,

$$SA = 2l \times w + 2l \times h + 2w \times h$$

avoid your learners to memorise it.

Feedback

Grade 9 learners may choose the faces as bases and unfold the three-dimensional shape to see the net faces.

The net may be seen as a pair of congruent bases and a large rectangle to represents the remaining faces. The total area of the net gives the total surface area of the prism.
ACTIVITY 12 (Grade 9)

A cylinder is another simple three-dimensional object that will give learners basic understanding of how its formula can be developed. It will give learners an advantage of understanding how the formula \( SA = 2\pi r^2 + 2\pi h \) is developed and it would be easy for them to apply instead of memorising it. Use some concrete materials to enable your learners to discover how the formula is derived.

Feedback

The concept of surface area of a cylinder can be developed by using the parts of the net. As in the diagram below, learners will have two discs which is twice \( \pi r^2 \) as the top and bottom of the cylinder are circles, as well as a middle section which, when unfolded reveals a rectangle whose breadth represents the height of the cylinder and the length represents the distance around the circles. (Copied from Online Math Learning)

ACTIVITY 13 (Grade 9)

One of the learners say the surface area of a triangular shape is \( SA = bh + (s_1 + s_1 + s_1)H \), without understanding what does this formula mean. Assist the learner understand the meaning of the formula. Also, use concrete materials to demonstrate the development of the surface area of triangular prism.
Feedback

To demonstrate an understanding of developing the formula to calculate the surface area of a triangular prism, you have to use a net to get two-dimensional shapes of each face of the three-dimensional figure or maybe unfolding the three-dimensional shape. Find the measure of all the sides of the faces of the unfolded shape in order to be able to add the total areas of the faces.

\[
\text{Triangular Prism}
\]

\[
\text{Surface Area}
SA = 2 \left( \frac{1}{2} (bh) \right) + 2as + ab
\]

or

\[
SA = bh + 2as + ab
\]

(Copied from Online Math learning)

Volume of shapes and irregular shapes

Volume and capacity are both terms for measuring the size of three-dimensional regions, a topic begins in grade 5 with continuing emphasis in grade 6 and grade 8 (Common Core State Standards, CCSSO, 2010). Capacity is generally referred to the amount that the container can hold, while volume refers to the amount of space occupied by three-dimensional objects. Standard units for capacity include, litres and millilitres while the standard unit for the volume include cubic centimetres (Van de Walle, 2014). To understand the volume of three-dimensional objects, one can use cubes to demonstrate the development of the volume concept to construct rectangular prisms. The building of rectangular prisms or other structures using small cubes is a popular way to teach volume and the formula for a rectangular prism.
ACTIVITY 14 (Grade 8)

Design an activity that you can use to teach learners how to develop the formula for the volume of a rectangular prism. Use concrete materials to develop the formula for the volume of a rectangular prism. Allow your learners to record the findings of each step in order to generate a rule that can be used to calculate the volume.

Feedback

For Grade 8 learners to understand the volume of a rectangular prism, they should start by packaging square blocks together. Learners can be given empty boxes to pack the cubes in those boxes. Learners are to pack a bottom layer and then find the volume, which will be a layer of 1cm high, and the area of the base of the box will reveal the volume of the bottom layer. A Rubik’s cube is quite familiar to learners. It can be used to calculate the volume of a cube using the formula (Adapted from R Paulsen).

(from Online Math Learning)

A cylinder is one of three-dimensional shapes that can enable learners to understand the volume. The formula used to calculate the volume of a cylinder is \( V = \pi r^2 h \). It is important to note although the formula is a very handy tool, but this is not the point of departure when teaching measurement.
ACTIVITY 15 (Grade 9)

Most of the learners know how to calculate the volume of a cylinder using the formula \( V = \pi r^2 h \). How will you make these learners to understand the volume of a cylinder? Demonstrate an understanding of the volume of a cylinder using concrete materials.

Feedback

Developing the volume of a cylinder, one should consider the base of the cylinder as the circle whose area is \( A = \pi r^2 \). The volume of a cylinder is derived by taking the area of the base and multiply it by the height.

ACTIVITY 16 (Grade 9)

Design an activity that will demonstrate an understanding of determining the volume of irregular objects such as a stone, an orange etc.

Feedback

You can use the displacement method to determine the volume irregular objects.
Conservation of volume

Volume is the amount of space taken up. In testing for conservation of volume you could use the same balls of clay that you used in the tests for conservation of mass. Show the learner two balls of clay which have the same mass, and which therefore have the same volume. Let her satisfy herself that the two balls have the same volume. You can also use two glasses of water which have the same amount of water in them: the one long and thin and the other short and stout. Ask learners which one has more water? (adapted from R Paulsen).

4.7. Conclusion to Section 4

In the end, all learners need your energy, your heart and your mind. They have that in common because they are young. How they need you, however, differs. Unless we understand and respond to those differences, we fail many learners.
Resources for “SECTION 4: PRACTICAL APPROACHES TO MATHEMATICS LESSON CURRICULUM DIFFERENTIATION”


Machaba, F. 2016.


SECTION 5: PRACTICAL APPROACHES TO LANGUAGE LESSON CURRICULUM DIFFERENTIATION

5.1. Learners with moderate intellectual disabilities: An Introduction

Students with intellectual disabilities can learn language skills; they just need to be taught in a different way. Curriculum differentiation in Languages will be done on the level of learning environment (includes psychosocial and physical environment), the content, teaching methods and assessment. Some resources refer to content, process and product.

According to CAPS, language teaching happens in an integrated way. The structure of each lesson engages the whole class before practicing in groups and applying the new skill individually.

5.2. General Guidelines for Language Lesson Differentiation

5.2.1. Differentiating the Language Lesson’s Classroom Environment

- The teacher should know the learners, their needs, strength, weaknesses, interests and learning styles. To achieve this, use information in learner profiles, work collaboratively with families and other stakeholders. A questionnaire with simple questions for learners can also be very helpful.
- Allow the learner to sit where s/he will feel combatable—where s/he will be able to see and hear the teacher. The front seat may not be a better sit for the learner.
- Background noise should be eliminated. Keep the learner’s desk clear.
- The positions of the teacher or another learner speaking and that of the learner experiencing a barrier are very important.
- Use old tennis balls on legs of chairs to eliminate the sound of the chair on the floor.
- Learners should not be permanently seated in ability groups, but should be seated according to the task at hand. This implies varying the groups according to the task being done.
- Make use of the buddy system: Pair the readers: a strong and a weaker reader.
- Provide a rich language environment using displays on the walls. Put up words for incidental reading.
- Do not correct learners’ pronunciation mistakes very often while they are speaking or reading. Allow the learner to pronounce words in his/her own way and encourage other learners to understand that we all speak differently. (Correction should not distract learner from his or her speech)
- Provide positive feedback like “Your presentation was really good” or “That was a good job”.
- Sending the learner to take messages to other classrooms/teachers/pupils builds up confidence and gives children opportunities to use their spoken language outside the classroom.

Teachers prepare learners for higher education, the workplace or schools of skills

Don’t FORGET!

PRACTICAL TIPS!
5.2.2. Differentiating the Language Lesson’s Content

5.2.2.1 Abstractness
Learners with intellectual disabilities may find it easier to access the content on a more concrete level.

- Pictures and real objects are very important.
- Flashcards that learners can handle themselves are crucial.
- When learning new vocabulary: Match the word with the picture. Or paste picture at the back of the flash card or ask learner to draw a picture.
- Provide the vocabulary that students need in speaking or reading activities beforehand.

5.2.2.2 Complexity (It’s all about chewable chunks!!!!)

- Present the material at an appropriate reading level to ensure all learners will read with understanding and should not have conceptual difficulties.
- Learners do not have to cover all the activities that the other learners are doing. Select the easier examples from the textbook and leave the complicated abstract reading text. Give other options relevant to the learners’ interest and context. Be careful not to water down the curriculum for the learner.

5.2.2.3 Variety
It is important to focus on survival reading (e.g. Classified advertisements, filling out application forms, road signs, simple maps, bus departures, etc.) for some learners with learning difficulties.

5.2.3. Differentiating the Language Lesson’s Teaching Methodology (adapting process)

5.2.3.1. Differentiating activities in Listening & Speaking
When giving instructions take the following into consideration

- Ask the learner to repeat the instruction to you.
- Rephrase questions and sentences rather than merely repeating.
- When giving instructions, the following is key: speech tempo and clarity, shorter sentences, less information per sentence (not too wordy), longer pauses between sentences.
- Gaining eye contact and lowering your body to the learner’s eye level are also helpful.
- Break verbal instructions down to two or more steps at a time
5.2.3.2. Differentiating activities in Reading and Viewing

Phonological Awareness: Auditory Sound system – Phonemes - Grapheme

- Unfortunately many learners with intellectual disabilities in grades 4-6 might not have mastered the phonics yet. Make use of a set of flash cards with self-correcting pictures at the back to teach learners the phonics.

Sight words

- It is very important that learners know the first 300 sight words as indicated in the CAPS document for foundation phase. If not, the teacher must include this in the individual support program of the learner.

PRACTICAL TIP!

Phrased text:
- It was a cool day
- in January
- and the under-11 soccer team
- jumped off
- the bus.
- They were on their way
- to play

Example: phrasing from the selected text in the green box below differentiated into the blue box below:
For each phrase question starting with WHO, WHAT, WHEN, WHERE or HOW can be asked to enhance comprehension.

- After some exercises learners can be asked to draw the “/” at the ending of a phrase.
- Teach learners how to highlight important sentences and concepts.

Writing and Presenting

- Use the “hamburger approach” to write an essay or a story.
  - With this approach, each layer on a hamburger serves a purpose.
  - Give visual clues e.g. Sequence cards.
  - Shuffle sentences and ask learners to write it in the correct order
  - Give them flashcards with the needed vocabulary on it.
  - Give flashcard to use for compiling a sentence.
  - Assign only a few spelling words to learn.
  - Give extra time.
  - Avoid excessive copying from the board.
    *(Near point copying is usually easier for learners with learning difficulties)*
  - Decrease the number of written words.

5.2.4. Differentiating the Language Lesson’s Assessment (adapting the product)

When we adapt assessment we have to offer learners different ways to demonstrate what they have learnt. We should take the different multi-intelligences and the different learning styles into consideration. There should be choices in how a question can be answered, keeping in mind what we want to evaluate. When preparing an assessment, the teacher can use Bloom’s taxonomy. This will allow learners to use different cognitive skills ranging from memorization to creation.

Alternate assessment based on modified attainment of knowledge: in certain subjects a learner will be working on the content of a lower grade than the one he/she is currently in. The learner should be assessed accordingly. The learner needs more time to progress to the appropriate level. Target learners could include learners who have moderate intellectual disability. *(Draft Procedural Manual for the Assessment of learners who experience barriers to Assessment; Sept 2016)*
Practical guidelines for differentiated assessment.

- Make use of the learners’ different learning styles and intelligences. Ask yourself the question:

  “Can the learner demonstrate the same outcome if they draw a picture, or writes a poem, or finds a picture in a magazine?”

- Allow extra time for completion of task.
- Ask yourself: “What do I want to assess?” In grammar it is the structure of the language and not the spelling. Give alternative options to demonstrate understanding e.g.: drawing a picture, pasting a picture, making a poster or acting it, etc.

**Example:**

Using the table above, the educator wants to assess if the learner understands what a noun is (she is not assessing spelling). Thus, an alternative task can be:

“Cut pictures of 5 common nouns from a magazine. Paste it in your book”

OR

“Draw pictures of 5 common nouns in your book.”

- If the Teacher is not assessing writing, the learner can make use of a Scribe. If not testing reading, the learner can make use of a Reader.
- Straddling is also part of adapted assessment. This means a learner in Gr. 5 can be working and assessed on the content of Gr. 4. This should be reported on a specific schedule as provided in the SIAS document.

5.3. Listening Speaking / Reading - Phonics Foundation Phase

<table>
<thead>
<tr>
<th>COMPONENTS OF LANGUAGE</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THE SIZE OF THE TASK</strong></td>
<td></td>
</tr>
<tr>
<td>Listening and Speaking HL Grade 2 Term 1</td>
<td>• Level 1 learners repeat only the first part of the story.</td>
</tr>
</tbody>
</table>

62
<table>
<thead>
<tr>
<th><strong>Reading and Phonics HL</strong></th>
<th><strong>Listening and Speaking HL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 2 Term 2</strong></td>
<td><strong>Grade R Term 4</strong></td>
</tr>
<tr>
<td>Builds 3, 4 and 5-letter words using the consonant blends and vowel digraphs taught this term</td>
<td>Uses language to investigate and explore</td>
</tr>
</tbody>
</table>

**TIME ALLOCATION**

<table>
<thead>
<tr>
<th><strong>Reading and Phonics HL</strong></th>
<th><strong>Listening and Speaking HL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 3 Term 2</strong></td>
<td><strong>Grade R Term 4</strong></td>
</tr>
<tr>
<td>Uses table of contents, index and page numbers to find information</td>
<td></td>
</tr>
</tbody>
</table>

- Level 2 learners repeat the rest of the story.
- Level 3 learners summarise the whole story and say what could have happened next.
- Level 1 learners build five -ea- words consisting of three and four letters, e.g. *tea eat, read* (can be done with a peer).
- Level 2 learners build at least eight -ea- words consisting of four letters with or without a peer.
- Level 3 learners build at least ten -ea- words consisting of at least four letters (individual work).

- Level 1 learners build a ten-piece puzzle within ten minutes.
- Level 2 learners build a sixteen-piece puzzle (with or without a peer) within ten minutes.
- Level 3 learners build a puzzle consisting of twenty-four or more pieces on their own within ten minutes.
- Level 1 learners are given three minutes to find a poem in the index and turn to the correct page number.
- Level 2 learners are given two minutes to find a poem in the index and to turn to the correct page number.
- Level 3 learners are given one minute to find a poem in the index and to turn to the correct page.
METHODOLOGY

Listening and Speaking HL

*Grade R Term 3*

Listens to a complex string of instructions and acts on them

- Level 1 learners are given fewer instructions. Before responding, they must repeat them first. Then ask: “What must you do first? And then?” Thereafter the learners perform the actions.
- Include body language when giving instructions.

LEVEL OF SUPPORT

**Listening and Speaking HL**

*Grade 1 Term 2*

Sequences pictures of a story communicating through retelling the sequence of ideas

- Level 1 learners sequence three pictures. The teacher puts the first picture in place.
- Level 2 learners work with a peer and sequence the same three pictures.
- Level 3 learners sequence the same pictures without help. Thereafter Level 1 learners retell what is happening in the first picture. Level 2 learners retell what is happening in the second and third picture while Level 3 learners say what could have happened next.

**Reading and Phonics FAL**

*Grade 2 Term 4*

Groups common words into word families (e.g. hug, mug, jug; bag, rag, wag; hip, tip, rip)

- Level 1 learners sequence three pictures. The teacher puts the first picture in place.
- Level 2 learners work with a peer and sequence the same three pictures.
- Level 3 learners sequence the same pictures without help. Thereafter Level 1 learners retell what is happening in the first picture. Level 2 learners retell what is happening in the second and third picture while Level 3 learners say what could have happened next.

**DBE Rainbow Workbook Grade 3 HL Book 1 (Terms 1 and 2) page 52 (Tumi gets lost)**

- Level 1 learners sort words of which the last two letters have been written in colour. The teacher sorts the first group with the learners.
- Level 2 learners work with a peer and sort the given words into word families.
- Level 3 learners

*Participants indicate how to differentiate activities by using scaffolding.*
**Reading and Phonics HL**
*Grade 2 Term 1*
Recognises vowel digraphs such as ‘oo’ as in moon and ‘ee’ as in tree

**Reading and Phonics FAL**
*Grade 3 Term 3*
Uses the reading strategies taught in HL to make sense and monitor self when reading (phonics, context clues, structural analysis, sight words)

- Ensure that learners do not act on instructions before the time. They must wait for the teacher to give a hand signal (e.g. clicking fingers) or say a magic word (e.g.”Jelly beans”)
- Use a multisensory approach to teach the -oo- sound.
- Play simple games such as *Snap, Bingo, Snakes and Ladders* (using -oo- words instead of numbers).

*Participants indicate which method/s they would use to teach sight words.*

---

**LEVEL OF DIFFICULTY**

**Listening and Speaking HL**
*Grade R Term 1*
Uses language to think and reason: Identifies and describes similarities and differences

**Listening and Speaking FAL**
*Grade 3 Term 1*
Identifies an object from a simple oral description, for example, ‘I am a very big animal. I am grey. My skin is rough. I have sharp tusks and a long trunk. Who am I?’

**Reading and Phonics HL**
*Grade 3 Term 2*
Answers a range of higher order questions based on the passage read, e.g. “How would you describe the behaviour of the troll?”

- Level 1 learners identify and describe only the similarities between two objects such as two cups.
- Level 2 learners identify and describe similarities and differences between two objects such as two cups.
- Level 3 learners identify and describe the similarities and differences between three objects such as three cups.
- Level 1 learners are given two descriptions, e.g. “I can bounce. You can play with me. What am I?”
- Level 2 learners are given three descriptions, e.g. “I am a small animal. I have a shell and I move slowly. What am I?”
- Level 3 learners are given five descriptions as in the example.
(Have a few objects on display as cues for all learners.)
Participants use the story ‘Tumi gets lost’ and prepare differentiated activities making use of Bloom’s taxonomy.

**ASSESSMENT**

<table>
<thead>
<tr>
<th>Listening and Speaking FAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 2 Term 2</strong></td>
<td></td>
</tr>
<tr>
<td>Talks about objects in a picture in response to the teacher’s instructions, for example, “What can you see in the picture?”</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Reading and Phonics HL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 2 Term 2</strong></td>
<td></td>
</tr>
<tr>
<td>Identifies key details in what was read such as main character and setting</td>
<td></td>
</tr>
</tbody>
</table>

| Level 1 learners are given simple questions, e.g. “Can you see a bird?” (Yes / No) |
| Level 2 learners are given options, e.g. “Can you see a tree or a flower in the picture?” (A tree) |
| Level 3 learners are asked questions requiring short answers, e.g. “Where is the bird?” (In the tree) |

| Level 1 learners act out the main character and setting. |
| Level 2 learners illustrate the role of the main character and setting. |
| Level 3 learners |

**RESOURCES / LTSM**

<table>
<thead>
<tr>
<th>Listening and Speaking HL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade R Term 3</strong></td>
<td></td>
</tr>
<tr>
<td>Sings songs / rhymes and performs actions on their own.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reading and Phonics FAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 3 Term 3</strong></td>
<td></td>
</tr>
<tr>
<td>Recognises at least five new vowel digraphs (e.g. ‘ai’ as in pain, ‘ay’ as in pay, ‘oi’ as in coin, ‘oy’ as in boy, ‘ou’ as in round)</td>
<td></td>
</tr>
</tbody>
</table>

| Musical instruments (home-made by learners, e.g. shakers) |
| Commercial musical/percussion instruments such as tambourines, shakers, bells, triangles and drums |
| Piano / guitar / recorder |
| Body percussion |
| CD’s / tape recorder |
| YouTube |

| Body alphabet |
| Letter cards for word building |
| Unifix cubes with letters written on small stickers (word building) |
| Multisensory material such as puffy paint |
| Letters covered with sandpaper |
- Light box
- Non-permanent transparencies and pens
- Magazines
- Art and craft material
- Hand, finger and wooden spoon puppets
- Games such as *Bingo*, *Snakes and Ladders* (replace numbers with sounds) and *Snap*
- Commercial games
- Hop scotch
- DBE Rainbow workbooks
- Internet

### CURRICULUM DIFFERENTIATION

#### SPECIFIC TYPES OF CURRICULUM DIFFERENTIATION

#### HANDWRITING AND WRITING (HL AND FAL)

<table>
<thead>
<tr>
<th>COMPONENTS OF LANGUAGE</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THE SIZE OF THE TASK</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Handwriting HL</strong></td>
<td></td>
</tr>
<tr>
<td><em>Grade 1 Term 2</em></td>
<td></td>
</tr>
<tr>
<td>Development of letter formation in formal handwriting lessons</td>
<td></td>
</tr>
<tr>
<td>Copies and writes short, simple sentences from writing strips, blackboard</td>
<td></td>
</tr>
<tr>
<td><strong>Writing HL</strong></td>
<td></td>
</tr>
<tr>
<td><em>Grade 2 Term 4</em></td>
<td></td>
</tr>
<tr>
<td>Shared, Group and Independent writing</td>
<td></td>
</tr>
<tr>
<td>Writes at least two paragraphs (ten sentences) on personal experiences or events such as a family celebration</td>
<td></td>
</tr>
</tbody>
</table>

- Level 1 learners copy one sentence containing three words from a writing strip, e.g. *I can run.*
- Level 2 learners copy two sentences containing four words from a writing strip, e.g. *My dog can run.*
- Level 3 learners

*Participants plan activities for learners on three levels.*

- Level 1 learners
- Level 2 learners
- Level 3 learners
<table>
<thead>
<tr>
<th>TIME ALLOCATION</th>
</tr>
</thead>
</table>
| **Handwriting HL**  
*Grade 3 Term 3*  
Learners must be able to transcribe from print to script, e.g., in a book, into the joined script or cursive writing  
Writes with increasing speed |

| **Writing HL**  
*Grade 2 Term 3*  
Uses dictionaries for children (monolingual and bilingual)  
See DBE Rainbow workbook English HL (Book 2) Grade 2 Terms 3 and 4 (page 130). |

| **Participants plan differentiated activities on three levels.** |

| **Participants plan differentiated activities on three levels.** |

<table>
<thead>
<tr>
<th><strong>LEVEL OF SUPPORT</strong></th>
</tr>
</thead>
</table>
| **Handwriting HL**  
*Grade 2 Term 2*  
Copies and writes one paragraph between 3-4 lines from a printed text (a story, poem, etc.) |

| **Writing HL**  
*Grade 1 Term 3*  
Begins to use capital letters and full stops, including capital letters for names |

| **Participants plan differentiated activities on 3 levels.** |

| **Participants plan differentiated activities on 3 levels.** |

| **Level 1 learners transcribe two short sentences from print to cursive within five minutes, e.g. *He sees a truck.*** |
| **Level 2 learners transcribe three short sentences from print to cursive within five minutes.** |
| **Level 3 learners transcribe four longer sentences from print to cursive within five minutes, e.g. *The porridge is too hot.*** |

| **Level 1 learners are given a text with many words that are the same, e.g. *Poem: Rain.* The teacher writes the first two words in the first line and learners complete it. The teacher writes the first word of the second line and learners complete it. Then learners complete the rest of the poem.** |
| **Level 2 learners transcribe a poem containing longer words, e.g. *Poem: Twinkle go my fingers.* The teacher writes the first word in the first and second line and learners complete the line.** |
| **Level 3 learners transcribe a more advanced text without any support, e.g. *Poem: Shadow, Shadow.*** |

| **Participants plan differentiated activities on 3 levels.** |
## METHODOLOGY

### Handwriting HL

*Grade 3 Term 1*

Forms all lower and upper-case letters in joined script or cursive writing and begins to join various letters and to form words in the selected joined script or cursive writing

- Level 1 learners trace over the writing strips on a non-permanent transparency or tracing paper. (The letters on the writing strips should be slightly bigger for learners who have more serious challenges.)
- Level 2 learners
- Level 3 learners

Participants plan differentiated activities on 3 levels. *(Make use of a strategy such as COPS.)*

### Writing HL

*Grade 3 Term 2*

Reads and edits own writing by correcting spelling, punctuation, etc.

### LEVEL OF DIFFICULTY

#### HANDWRITING HL

*Grade 1 Term 4*

Copies patterns, letters and words

- Level 1 learners trace words containing two letters, e.g. *to, am, be* (or phonic words.) Thereafter they copy the words independently.
- Level 2 learners copy words containing two and three letters, e.g. *go, we, and, but, did* (or phonic words)
- Level 3 learners copy words containing four and five letters such as *hand, Mpho, plays* (including phonic words)

Participants plan differentiated activities on 3 levels.

#### WRITING FAL

*Grade 3 Term 1*

Writes a simple text (e.g. a birthday card

- Level 1 learners trace over words containing two letters, e.g. *to, am, be* (or phonic words.) Thereafter they copy the words independently.
- Level 2 learners copy words containing two and three letters, e.g. *go, we, and, but, did* (or phonic words)
- Level 3 learners copy words containing four and five letters such as *hand, Mpho, plays* (including phonic words)

Participants plan differentiated activities on 3 levels.
**ASSESSMENT**

Participants indicate how writing skills can be assessed taking differentiation into consideration.

**RESOURCES / LTSM**

Participants add more resources / LTSM that could be used for the teaching of handwriting and writing skills.  
- Light box for handwriting  
- Non-permanent transparencies and pens  
- Writing strips  
- Multisensory materials e.g. shaving cream, slimy glue  
- “Scaffolded” worksheets  
- Sequence cards  
- Graphic organisers  
- DBE Rainbow book
Bong and Ann were looking after Bong's sister. Tumi. Tumi is four years old.
Tumi was playing with Ben, the dog. Then, Bongi and Ann noticed that the door was open.
Tumi and Ben were gone.

The girls ran down the street, looking and calling for Tumi as they went.
They were afraid because it was getting dark.

When they reached the corner, they found Tumi and Ben sitting with a lady who was selling food.
Tumi and Ben were eating a cake.
5.4. Intermediate Phase

<table>
<thead>
<tr>
<th>LANGUAGE SKILLS IN ENGLISH HOME LANGUAGE GR.4-GR.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening and Speaking (oral)</td>
</tr>
<tr>
<td>The usage of Language Structures and Conventions are integrated within the tome allocation of the four skills</td>
</tr>
</tbody>
</table>

All learners should be **motivated**

ALL learners should **experience success**

ALL learners should **access the curriculum**

ALL learners should **participate in class activities**

ALL learners should have a **positive self esteem**

**Practical example from gr. 4 text book:**

It was a cool day in January and the under-11 soccer team jumped off the bus talking loudly. They were on their way to play their final match for the season. As they walked across the field towards the stadium they could hear the vuvuzelas and the cheering of the children.

Read the story to the whole class. While reading to the class the following adaptations to suit the needs of different learning styles and different ability groups can already be made:

- Pause occasionally throughout the story. When the teacher pauses, she can say “listen” and she clap once. The learners will say “listening” and clap twice before she continues with the story.
- While reading the story visual cues on flashcards can be shown to the learners.
• Stop half-way through a story and encourage them to predict what might happen next. Discuss the characters and the relationships...
  ...e.g. “Who does Ana remind you of?” or “What do you think the bus looked like?” etc.
• Listening can be supported with non-verbal cues such as gestures, signs, facial expressions (don’t overdo or exaggerate) and pictures to assist with comprehension of vocabulary or concepts. Never assume that the learner understood what you said. Check by asking questions.

**Example:** “What does a stadium look like?”
Show them a picture and discuss it.

• When learners are in their ability groups, teach auditory perception skills. This will include analyzing and synthesis of sounds, auditory memory and auditory discrimination.
• The re-telling of the stories or events. Spend specific time asking them to re-tell a sequence of events. If they find this hard, talk it through with them first, perhaps with picture cues, and then ask them to tell someone else.

If they find the activity to difficult, move to a less complicated story for the specific group, example:

• Some learners with intellectual disabilities may be very shy, allow them to use puppets to portray the different characters in the story.
• Learners can also act some parts of the story.
• Try to involve each learner in every speaking activity; for this aim, practice different ways of learner participation

5.5. Senior Phase

OUTLINE OF LESSON:

LESSON: Teaching Comprehension (Duration - 3 lessons)

OBJECTIVE: Teaching the struggling learners how to become proficient in comprehension skills of the below text:

THE HISTORY OF ZIMBABWEAN MARIMBAS

Background Most African instruments have existed for so long that it is impossible to trace their history all the way back to their origins. However, the Zimbabwean marimba is an exception. This instrument has only existed for about forty years, and during this time its popularity has grown tremendously. Today, Zimbabwe-style marimba bands can be heard not only in Zimbabwe and its neighbouring countries, such as Botswana and South Africa, but also in the United Kingdom, Scandinavia, Australia, Canada and the United States. For an instrument with such a short history, it has certainly travelled far.

Kwanongoma College of Music:

Birthplace of Zimbabwean marimbas the city of Bulawayo is the second largest city in Zimbabwe. Harare is the largest, and is the capital. Bulawayo lies in the province of Matabeleland, home to many of the Ndebele people of Zimbabwe. The Ndebeles are the second largest ethnic group in the country, after the Shonas who form the majority.

In 1961, Bulawayo was home to the Rhodesian Academy of Music, and its incumbent director was a retired city electrical engineer and classical flautist named Robert Sibson. As a musician, Sibson appreciated the sweet, rich musical traditions of both the Shona and Ndebele people, which were woven into the very fabric of rural society. However, he was concerned about the potential loss of these musical traditions as people moved from rural to urban areas in search of work. Moreover, none of this music was being taught in schools. Sibson’s solution to this problem was to establish a college dedicated to the study of African music, with the goal of training primary school music teachers who would then be able to teach African music in the schools. This college was founded in 1961 as a branch of the Academy of Music, and was named Kwanongoma, “the place where drums are played”, or “the place of singing”.

Having established Kwanongoma as an African music college, Robert Sibson proposed that some type of African musical instrument should be used for instruction. To find a suitable instrument, Sibson consulted a number of people who were leaders in their fields. These people included Hugh Fenn, who was Director of the Rhodesian Academy of Music before Sibson; South African ethnomusicologist Andrew Tracey, who was the son of renowned ethnomusicologist Dr. Hugh Tracey; Dr. James McHarg, vice-chancellor of the University of Rhodesia; Trevor Lea-Cox, who was General Manager of the Rhodesia Railways; and Nelson Jones, the city electrical engineer. After much discussion, the instrument chosen for Kwanongoma was the marimba. This instrument was uniquely African, but was not indigenous to Zimbabwe itself. Nevertheless, marimba instruments could be found in neighbouring countries, such as Zambia and Mozambique. The Chopi people of Mozambique had the most highly developed marimba tradition, with large ensembles consisting of various instruments ranging in pitch from double bass to soprano. The idea for Kwanongoma was to create not just a marimba, but an entire marimba band, similar to the ensembles found in Mozambique.

Since the purpose of Kwanongoma was to train music teachers, students at the College were instructed not only in marimba, but also in voice, performance, theory, piano, guitar, drums and mbira. The mbira is a traditional Shona instrument played with the thumbs and index fingers. It has a fascinating history of its own, which is beyond the scope of this book. The first Director of Kwanongoma College was Leslie Williamson. He was succeeded by Olof Axelsson in 1972. When Axelsson left in 1981, long-time marimba instructor Alport Mhlanga became Director of Kwanongoma until his move to Botswana in 1987. In 1971, Kwanongoma was moved from its previous site on Khami Road to a new site on the Old Victoria Falls Road. At that time, it became the music department of the United College of Education.

**TASK: Comprehension Text – The History of Zimbabwean Marimbas**

Group guided reading with whole class.

**STEP ONE:**
- **Before reading, the reader engages in the following:**
  - Previews the text by looking at the title and the print to evoke relevant thoughts and memories.
  - Builds background by activating appropriate prior knowledge through self-questioning about what they know about the topic, the vocabulary, and the format of presentation.
  - Sets purposes for reading by asking questions about what the reader wants to know.

**STEP TWO:**
- **During reading, the reader engages in the following:**
  - Checks understanding of the text by paraphrasing the author’s words.
Monitors comprehension by using context clues, to figure out new words, and by imaging, imagining, inference, and predicting. Integrates new concepts with existing knowledge, continually reviewing purposes for reading.

STEP THREE:

- After reading, the reader engages in the following:
  - Summarizes what has been read by retelling the plot of the story, or the main idea of the text (working in pairs – “each one teach one/ pair- share”)
  - Applies ideas in the text to situations, broadening these ideas.

STEP FOUR: How to use the strategies

1. QUESTIONING “Think Aloud” (Lesson 1)
   
   Teacher: The title “The history of the Zimbabwean marimba”
   What comes to mind when you hear the word “history” ...its uhm... We study this in Social Sciences.
   Learner: Studying the past.
   Teacher that’s right. In this way the teacher unpacks all the difficult vocabulary in the text by making use of vocabulary charts/ Mind Maps
   The social context of this activity will advance the learners understanding, expand or revise their knowledge through listening to, and interacting with peers.

2. PREDICTING “What happens next” (Lesson 2)
   
   Learners will predict the information, which they believe, will be in the text
   Then they read the text, and compare their predictions with the information contained in the text. Learners write predictions on “Direct reading –thinking” graphic organiser.

<table>
<thead>
<tr>
<th>Stopping point</th>
<th>What do you think will happen? (Prediction)</th>
<th>What really happened in the text</th>
</tr>
</thead>
<tbody>
<tr>
<td>After reading the title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After reading 1st part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After reading 1st part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After reading 2nd part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After reading conclusion</td>
<td></td>
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</tr>
</tbody>
</table>

This active form of processing enhances the development of effective comprehension strategies

3. Summarizing (Lesson 3)

Summarizing and Sequencing (suggested for intermediate to advanced learners)

Language teaching happens in an integrated way, with the teacher modelling good practice, the learners practising the appropriate skills in groups before applying it on their own
The Senior Phase learner should have the ability to summarize and able to delete important information in the text, and this gives practice in sequencing.

**Procedure:**

1. The teacher introduces the text; the learner read one paragraph at a time then stops.
2. The teacher instructs the groups (not more than 5 in a group) in writing one or two sentence summaries for a small portion of the text.
3. On the second reading of the text, the learners will be assisted in determining the most important ideas, and how to combine these ideas and summarize on each page.
4. Learners will code summaries, cut summary statements, mix them; then they rearrange them in sequence on the summary wheel.

**Writing Summaries:**

1. Look for the most important ideas that help us to know about the problem or the solution.
2. State important ideas in your own words.
3. Combine ideas into one or two sentences.
4. Delete anything that repeats information.

---

**SUMMARY WHEEL FOR SEQUENCING OF EVENTS**

1. Look for the most important ideas that help us to know about the problem or the solution.
2. State important ideas in your own words.
3. Combine ideas into one or two sentences.
4. Delete anything that repeats information.
<table>
<thead>
<tr>
<th>CURRICULUM KEY AREAS</th>
<th>AT WHAT LEVELS DO WE DIFFERENTIATE</th>
<th>WHICH ASPECTS TO DIFFERENTIATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTENT</td>
<td>1. <strong>ABSTRACTNESS</strong>&lt;br&gt;Adapt the content to the level of the learner, teach down for those who need to access the content on a more concrete level or teach up for those who can work on a more abstract level</td>
<td>Pictures of real objects&lt;br&gt;Real life scenes (video clip)&lt;br&gt;Have learners draw images from text</td>
</tr>
<tr>
<td></td>
<td>2. <strong>COMPLEXITY</strong>&lt;br&gt;Contextualise topics rather than using facts</td>
<td>Break the text up into manageable chunks.&lt;br&gt;Reread the same text multiple times.&lt;br&gt;Pair good and poor readers for activities.&lt;br&gt;Reduce the complexity of the reading material by contextualising topics. Provide a glossary of content related terms.</td>
</tr>
<tr>
<td></td>
<td>3. <strong>VARIETY</strong>&lt;br&gt;Use new and varied materials</td>
<td>Use visual aids, such as whiteboard, overhead, PowerPoint, or charts&lt;br&gt;Use visuals &amp; manipulatives</td>
</tr>
<tr>
<td>LEARNING ENVIRONMENT</td>
<td>1. <strong>PHYSICAL</strong> – arrangement of furniture to accommodate flexible grouping, classroom displays and resources&lt;br&gt;2. <strong>PSYCHOSOCIAL</strong> – classroom and school culture</td>
<td>Block out extraneous stimuli (cover all text except section being read)</td>
</tr>
<tr>
<td>TEACHING METHODS</td>
<td>The key to differentiated teaching methods is the flexible use by teachers of a wide range of learning materials, methods of presentation, lesson activities and lesson organisations&lt;br&gt;Methods of Teaching:&lt;br&gt;1. <strong>explicit</strong> (directly taught),&lt;br&gt;2. <strong>systematic</strong> (sequenced so that skills build on one another, not left to incidental learning),&lt;br&gt;3. <strong>scaffolded</strong> (supported instruction that is gradually withdrawn as students become more proficient)&lt;br&gt;4. <strong>Modelled</strong> (teacher models both the task/skill and the thought processes to complete the task/skill).</td>
<td>Use flexible grouping strategies so that students can work on key skills in small groups&lt;br&gt;Teach pre-reading strategies&lt;br&gt;Teach vocabulary strategies&lt;br&gt;Teach comprehension strategies (e.g. summarization, prediction, clarification, inferences, questioning)&lt;br&gt;Teach learners how to identify main ideas&lt;br&gt;Teach visual imagery of ideas in text&lt;br&gt;Teach self-monitoring of comprehension</td>
</tr>
<tr>
<td>DIFFERENTIATED ASSESSMENT</td>
<td>For learner who are more than <strong>ONE</strong> behind straddling should be allowed. Learner works on the same thematic knowledge concept and skills but at</td>
<td>Picture stories&lt;br&gt;Pictures and words&lt;br&gt;Shorter texts</td>
</tr>
</tbody>
</table>
a lower grade or phase level (SBST must apply for this assessment accommodation)
Three key types of alternate assessments can be used for learners experiencing barriers to learning, including learners with disabilities (LSEN in the mainstream)
1. Alternated attainment of knowledge
2. Modified attainment of knowledge
3. Grade-level attainment of knowledge

Extra time
Enlarged texts
Reader
Reader & scribe
Mp3, use of computer

5.6. Conclusion to Section 5
Teachers often present the same content, use the same methods, resources and assessment methods hoping that ‘one size will fit all’. In the process, some learners experience very little success and leave others unchallenged. Curriculum differentiation should offer all learners an opportunity to grow and learn *albeit* that some learners reach their goals at a slower or faster pace. It is the teacher’s responsibility to make use of curriculum differentiation to help all learners in the class to reach their full potential.
Resources for “SECTION 5: PRACTICAL APPROACHES TO LANGUAGE LESSON CURRICULUM DIFFERENTIATION”


Department of Basic Education. 2017. Rainbow workbook: English Home Language Grade 3. Book 1. Terms 1, 2, 3 and 4


http://www.davidsongifted.org
http://www.thirteen.org/edonline/concept2class/coopcollab/implementation.html
http://www.teach-nology.com/edleadership/curriculum_development/differentiation/
http://www.learnnc.org/lp/pages/5074–Scaffolding
http://examples.yourdictionary.com/examples-of-mnemonics.html
http://www.brighthubeducation.com/test-taking-tips/51293-list-of-mnemonic-devices-for-memorization-help/om,
https://Thecornerstoneforteachers.com/how-to-get-students-to-follow-directions
https://sites.google.com/differentiation/differentiation-techniques-for-special-education

http://blog.trainerswarehouse.com/communication-and-listening-exercises/
https://blog.udemy.com/listening-skills-exercises/
http://www.wolaver.org/teaching/listeningskills.htm
http://www.slideshare.net/smileyriaz/listening-skills-11545165

NEPS Good Practice Guide, 201

Department: Basic Education. Guidelines for responding to learner Diversity in the classroom. (NCS).


DBE (2017) Gr. 4 Prescribed Text Book Eng. HL
SECTION 6: PRACTICAL APPROACHES: CURRICULUM DIFFERENTIATION FOR NEURO-DIVERSITY

6.1. Neuro-diversity: An Introduction

Neuro-diversity implies that the brain and nervous system differences between individuals are to be recognised and respected as any other human variation. This means that within the huge variety of human diversity, we can all have different abilities that can affect the way we learn, interact, socialise and live. These are considered on a spectrum from neuro-typical to neuro-diverse. When we see this as no different to the fact that some of us are tall or short, brown-eyed or green-eyed, we start to create space in society (and our classrooms!) for learners of varying abilities. Acceptance of difference is essential to understanding, accepting, and benefiting from the contributions of everyone in our society, thus allowing all people to live up to their potential.

The neuro-differences that we encounter are often labelled Attention Deficit Hyperactivity Disorder (ADHD), Autistic Spectrum, Dyslexia, Dyspraxia, Dyscalculia, Tourette Syndrome, among others. This can include intellectual disabilities (sometimes known as learning disabilities) or traumatic brain injuries. The presence of such learners in the classroom often lead to behavioural situations that can be problematic to classroom management and the learning process for learners in the class.

Adopting an approach of neurodiversity of individual neurological differences, creates a space where labelled people are viewed in terms of their strengths as well as their needs. Such an approach requires us to adapt our approaches to teaching and learning so as to create a flexible and versatile environment of inclusivity to all. Curriculum adaption or differentiation lies at the heart of this philosophy of inclusivity to all learners (irrespective of their ability or dis-ability). In addition, adapting curricula helps strengthen the teaching and learning for all learners allowing the entire class to benefit from the results of such differentiation.

Practical approaches illustrating the following curriculum differentiation areas:

Over the next few pages are short examples of curriculum topics from the CAPS guidance around English and Mathematics. Curriculum differentiation according to content, learning environment, teaching methods and assessment areas are detailed in each example to include neuro-diverse learner achievement. As far as possible, these examples are drawn directly from the 2017 Mathematics and English FAL workbooks and are intentionally devised to be low-resource intensive to allow for a wider application in school settings. There are some workshop attendee prompts in some of the examples, so please look out for these and attempt them to enhance your development in this area.
6.2. Neuro-diverse Language Lesson Differentiation Examples

**INTERMEDIATE PHASE (Grade 3)**

**SUBJECT THEME: Celebrations**

Framework used to illustrate the example:

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Example derived from the 2017 English FAL workbook:
This English FAL lesson topic (page 36 of the workbook) relates to a picture of a festive occasion. It explores learners’ understanding of the picture using the accompanying sentences below the picture.

**Content differentiation:** Interpretation of facial expressions and social cues may prove challenging for learners in a neurodiverse group. To achieve a level of differentiation that may be suitable for such a class, adapting the “Everyone looks unhappy” sentence prompt may be necessary. An additional prompt to achieve such differentiation could be:

“No-one is smiling”

Possible enrichment exercise for higher-level learners: write a simple letter to Santa.

**Learning Environment Differentiation**

Where time permits, environment differentiation could involve the use of a song in the form of a Christmas carol to help illustrate the festive occasion in the picture. Groups of learners could learn and perform the carol (musical intelligence) in an in-classroom/school-hall/out-of-classroom environment as relevant to accommodate learners for whom diversity of location is needed.

**Teaching Methods Differentiation:**

If resources are available, learning material around the topic could be audio-visual: a festive clip of unhappy Christmas situations from an age-appropriate film could be shown. Teacher-facilitated discussions around this unhappy Christmas scenario can be held.

As an additional alternative activity, learners could be divided into groups of mixed abilities and encouraged to plan, write and act out an alternative ending to the above scene or picture above (co-operative learning).

A further alternative activity could involve the teacher facilitating a discussion exercise to elicit learner knowledge of other faiths’ festive occasions or celebrations (curriculum integration of the Life Orientation curriculum). This would help widen the variety of the topic theme and provide other contextual examples for learners to synthesise knowledge and demonstrate their language proficiency.

**Assessment Differentiation:**

Assessing learner comprehension in the written task is according to their responses in the worksheet. This could be in the form of the assessment rubric.
Further differentiated assessment can be done in learners’ oral expression within verbal discussions, compiling and performing in short sketches. This assessment method is useful for learners with attentional deficits as oral expression of language concepts can point to proficiency, or lack thereof.

Finally, written expression of the enrichment exercise for higher-level learners is assessed in the relevant learners’ “Letter to Santa”

**SENIOR PHASE (Grade 9)**

**CONTENT: Literature**

*Framework used to illustrate the example:*

The context for this example refers to the differentiating of a Grade 9 English literature lesson for a neuro-diverse class. The various levels of differentiation are now embedded within the example below:

Students are expected to read, and role-play an excerpt of a 3-Act play. Differentiation examples are indicated in **bold, highlighted text** within each point.

- Roles in the play could be differentiated so that all students can participate. Different kinds of roles could be made available: speaking and non-speaking (*content differentiation*); or include activities with different levels of complexity.
- For some of these activities, some students may need guidance/worksheets to organize their thoughts before performing. This may be effective for neuro-diverse learners’ who have difficulty conceptualizing concepts such as complex human emotions or social conventions demonstrated within the play.
- Activities could be formulated to be performed by more than one student (*co-operative learning*) e.g. the sharing of a role or task.
- For the students who have problems remembering lines or reading from the script, the teacher could allow improvisation, provided it’s within the context of the scene (*content differentiation*).
- Performance of the scene in a different location to the classroom (school assembly area, school/community hall) or a performance for a local retirement community would help
- Learners who are stimulated by out-of-classroom learning opportunities (*environment differentiation*).
- *Enrichment exercise for higher-level learners*: designing an advertisement for the performance of the play, or a 250-word background story of a character.
- *Assessment differentiation* with the use of assessment rubric: teacher assessing verbal expression; written worksheets that organised thoughts for the complex roles; imagination and contextual understanding of the ad-lib/improvisers; overall understanding of the learners’ comprehension of the text; adverts produced for the enrichment exercise also represent assessment opportunities.

**TASK FOR WORKSHOP PARTICIPANTS:**
What other forms of differentiation can you spot in the above example?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
What are the other forms of differentiation possible in this example?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**6.3. Neuro-diverse Mathematics Lesson Differentiation Examples**

**FOUNDATION PHASE (Grade 2)**

**CONTENT: Shapes**

**Framework used to illustrate the example:**

This Mathematics lesson on shapes comes from the 2017 Mathematics workbook:
This lesson example involves learners being requested to identify and count shapes in the picture, and then draw a picture making use of these basic shapes as shown in the picture (left).

While this lesson uses diverse skills such as drawing, it can be further differentiated.

The various levels of differentiation are now embedded within the example below. Differentiation examples are indicated in bold, highlighted text within each point:
• Verbal prompts of the questions (**assessment differentiation**).
• Getting learners to large draw shapes outside the classroom in the sand, or with chalk on the cement (**environment differentiation, content differentiation**).
• **Paired group facilitated** discussion about their favourite shapes to elicit learner understanding of shape properties and deployment of shapes in real-world examples (beyond the classroom **assessment differentiation**).
• **Small group** work activity to discuss which shape learners identify with e.g. “If you were a shape, which would you be? Why did you choose this?” (**multiple intelligence: intrapersonal/emotional** to demonstrate knowledge of the self).
• Making each of the above shapes using their bodies while out in the playground using fingers, joining hands to make a large circle, joining shapes to make a drawing (**spatial multiple intelligence, environment differentiation, bodily-kinaesthetic**).
• **Enrichment possibility**: simple shape Origami activity to create a folded paper animal.

**Intermediate Phase (Grades 4-6)**

**Content: Data Handling**

**Topic: Analysing, interpreting and reporting data**

**Framework used to illustrate the example:**

This example is derived from the Mathematics Grade 6 Workbook 2017:
Please note that this example details a *Revision worksheet* from this workbook. As such it is a Grade 6 activity that *straddles* Grade 6 and Grade 5 as it revises Grade 5 “Data Handling” knowledge. In this example we take a look at the differentiation possibilities surrounding assessment.
Assessing this exercise would involve the teacher confirming with learners their understanding of the content; their analysis and interpretation of the data; and finally their ability to report on their interpretation.

For learners with neuro-divergent profiles, assessment could take the form of a **body-kinaesthetic** activity as follows:

1. The teacher would group the learners according to various transport modes in the exercise.
2. The group sizes would be in proportion to the frequency per transport represented in the figure (e.g. 15 cars could be represented by 3 learners in a group).
3. The various groups would be given an opportunity to re-create the noises or actions of the transport modes or to perform a song related to their transport mode.
4. The teacher would then use the questions in the worksheet to verbally assess the learners’ understanding of the concepts.
5. Specific analytic concepts such as the interpretation of the data could be accessed by learners in a different means according to their style.
6. The written/completed worksheets can also be used as a tool to assess learners who are more effective in written expression.
7. Higher-level learners can be prompted to think of the energy efficiency of the various modes and in their groups can facilitate brief discussions of this.
In this example, **multiple intelligences** (*body-kinaesthetic, visual-spatial and musical*) are used during the lesson.

Write down where these are embedded in the above example?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

These same multiple intelligences indicated above are used in the verbal assessment of the learner’s learning.

With the higher-level enrichment exercise, the use of **mixed-ability flexible grouping** and **co-operative learning** strategies facilitate the teaching and learning.

What are the other forms of differentiation possible in this example?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**6.4. Conclusion to Section 6**

In the examples detailed within this section, varying neuro-diverse needs are accommodated within the classroom setting. A deliberate choice was made not to specify the neuro-developmental difficulty, as such conceptual labels can sometimes have accompanying expectations or biases. When we start to view our mainstream classroom neuro-developmental diversity as a spectrum from lower-functioning/higher-need through to high-functioning/low-need, we can start to plan our curricula adaptations accordingly and enhance our teaching and learning provision.
Resources for “SECTION 6: PRACTICAL APPROACHES: CURRICULUM DIFFERENTIATION FOR NEURO-DIVERSITY”

https://neurodiversitysymposium.wordpress.com/what-is-neurodiversity/
http://autisticadvocacy.org/about-asan/position-statements/
http://www.jemh.ca/issues/v2n2/documents/JEMH_V2N2_Theme_Article2_Neurodiversity_Autism.pdf
http://www.institute4learning.com/resources/articles/neurodiversity/
SECTION 7: PRACTICAL APPROACHES TO CURRICULUM DIFFERENTIATION FOR AUTISM

7.1. Curriculum Differentiation for Autism: An Introduction

A different way to learn is what the kids are calling for . . . . All of them are talking about how our one-size-fits-all delivery system—which mandates that everyone learn the same thing at the same time, no matter what their individual needs—has failed them.

Seymour Sarason
The Predictable Failure of Educational Reform

Differentiation can be an incredibly daunting activity to tackle as a teacher. However, it is a very useful way to ensure that the learners ALL achieve their potential. It allows us the opportunity to get to know our learners, and use our creativity as teachers to ensure that all our learners, regardless of ability or disability, are able to learn, and learn in an environment that is conducive to learning.

What is differentiation?

Differentiation refers to a wide variety of teaching techniques and lesson adaptations that educators use to instruct a diverse group of students, with diverse learning needs, in the same course, classroom, or learning environment.

Differentiation Definition”, 2017.

Differentiation looks at the learners’ interests as a basis for planning, and considers both their strengths and weaknesses. The learners also start to take responsibility and accountability for their learning. They are no longer passive learners, but are now active in their learning. It makes accommodation for advanced learners, in-between learners as well as weaker learners (Tomlinson Carol Ann., 1999).

The teacher is no longer the problem solver, but rather works with the learners to solve problems – often allowing other learners to help solve that problem. The teacher is more of a facilitator rather than teaching information to the group and then asking them to complete a worksheet (Tomlinson Carol Ann., 1999).

7.2. Differentiated Classroom Hallmarks

When we start using differentiation in the classroom, we need to get to know our learners. It is very important that you get to know your learners. Once you’re your learners, you begin to understand them, and recognise their differences, you begin to find out the strengths and weaknesses of your learners. Each one will have different strengths and weaknesses. With this information, you can begin the process of differentiation (Tomlinson Carol Ann., 1999).
To start off, start where the learners are! The only way to know where they are, is to know your learners. Remember that each learner is very different. They all come from different backgrounds – religious, socio-economic, political, they have all had different life experiences, been raised with different parenting styles. We need to be cognisant of these differences (Tomlinson Carol Ann., 1999).

Use different learning modalities to ensure that you are able to capture all learners’ attention, remember that all learners have different interests. Vary your rate of instruction – some of your learners might understand the key concepts a lot quicker, while others might need more time to understand – remember with autism, we are often dealing with a processing delay, so very often they will need the extra time. Ensure that you have tiered learning tasks available – this reduces boredom in the classroom, thereby reducing behavioural problems (Tomlinson Carol Ann., 1999).

Learn from each other – everyone is going to differentiate differently. This is going to depend on you as the teacher as well as the class that you are teaching – you may find that what has worked for you one year, may not work for you the next year.

7.3. What are the principles of the differentiated classroom?

- Focus on the essentials
  - What do you want your learners to achieve – what outcomes do you want them to come out of the lesson with, think about your key concepts.
- Attends to student differences
  - What are the learners’ strengths and weaknesses, where do they come from – what’s their background? Also; what are their interests?
- Assessment and instruction are inseparable
- Teacher modifies:
  - Content
  - Process
  - Products
- Students ALL participate in work
- There is student and teacher collaboration
7.4. Traditional Classrooms versus Differentiated Classrooms: A Comparison

<table>
<thead>
<tr>
<th>Traditional Classroom</th>
<th>Differentiated Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment is most common at the end – “Who got it?”</td>
<td>Assessment is ongoing; looks at how to make instructions more responsive to learners needs.</td>
</tr>
<tr>
<td>Planning does not look at students interests, strengths and weaknesses</td>
<td>Student differences are studied as basis for learning</td>
</tr>
<tr>
<td>Narrow sense of intelligence prevails</td>
<td>Looks at using multiple forms of intelligence</td>
</tr>
<tr>
<td>Single definition of excellence exists</td>
<td>Excellence is seen as individual growth</td>
</tr>
<tr>
<td>Student interests are ignored</td>
<td>Students are guided by interest-based learning choices</td>
</tr>
<tr>
<td>Whole class instruction is the dominant method of instruction</td>
<td>Many instructional strategies</td>
</tr>
<tr>
<td>Traditional Classroom</td>
<td>Differentiated Classroom</td>
</tr>
<tr>
<td>Single option assignments</td>
<td>Multi-option assignments</td>
</tr>
<tr>
<td>Teacher directs student behaviour</td>
<td>Teacher facilitates student’s skills at becoming more self-reliant</td>
</tr>
<tr>
<td>Teacher solves the problems</td>
<td>Students and teachers help other students together to solve problems</td>
</tr>
<tr>
<td>Students are assessed in a single way</td>
<td>Students are assessed in multiple ways</td>
</tr>
</tbody>
</table>
7.5. Differentiating Instruction for Autism

For many educators, students with autism are among the most difficult students to reach because of their distinctive learning styles.

Scott, et al., 2000

Structured teaching or the TEACCH method is used when differentiating for the autistic learner – this can be used effectively in an inclusive setting, as this method will work for all learners with learning disabilities. Structured teaching enables the teacher to split the class into two groups, while one group works at the work stations, the teacher is able to work with the second group (Mesibov & Howley, 2003).

Structured teaching evolved as way of matching educational practices to the different ways that people with ASD understand, think and learn. Structured teaching is designed to address the major neurological differences in autism. (Mesibov & Howley, 2003).

Structured teaching focusses on the visual learning modality. Autistic learners are visual learners, and so this method is the best way for them to learn – it is strength of theirs. It also provides predictability and structure – our autistic learners require predictability, structure and routine. By giving them this, we are able to reduce the anxiety, provide them with independence, increase their self-esteem and help them to learn (Mesibov & Howley, 2003).

Why does structured teaching seem to work?

- Receptive language
  - Receptive language can be difficult to understand – we might presume the autistic learner understands more than they do
  - There might be difficulties following through with instructions, or following through with what we have asked them to do verbally
- Expressive language
  - “Expressive communication requires a degree of initiation, organisation and comprehension that is sometimes beyond what these otherwise skilled youngsters with autism can produce.” (Mesibov & Howley, 2003).
- Attention and memory can also be problematic
  - Working memory, particularly is a problem.
  - Once something is stored in long-term memory, it seems to stay there
- Organisation
  - Organising their materials, their activities, time management and keeping their space ordered can be a challenge
  - New materials, activities are often met with high levels of anxiety – there is a preference for mastered activities where the routine is familiar.
- Interacting with others is also tricky – “social rules are mysterious to them.” (Mesibov & Howley, 2003).
o Often we see inappropriate behaviours because of the lack of understanding of social rules
o This might result in behaviours that challenge:
  ▪ Seeking negative attention
  ▪ Withdrawal
• Sensory Difficulties
  o People on the spectrum have very different sensory profiles to neurotypicals – they may be hyper or hypo-sensitive to stimuli
  o We need to ensure we create an ‘Autism friendly’ environment using a low arousal approach.

By using structured teaching with autistic learners, we are allowing them to use their strengths for learning. This in itself, is already differentiation. These strengths include structure, routine and a strong visual learning style.

These settings can be applied to both the inclusive environment as well as the special education classroom

7.6. Elements of Structured Teaching
(Mesibov & Howley, 2003).

• Physical layout of the classroom
  • Clearly marked areas for different activities
    • Having a classroom with clear visual information about the areas that different activities take place in, will help to reduce any anxiety our learners may have
    • This will also help with their independence – hopefully avoiding prompt dependence

(Taken from:https://rinconespecial.wordpress.com/2013/03/28/metodoteacch/)
• The age of your learners will also impact the degree of structure and layout you will require

• Well organised classroom
• Consider the needs of your learners
  • Learners who need more support will need more organisation
  • Learners who need less support will not require as much organisation
• Materials in the classroom must always be clearly marked – this provides autistic learners with a visual cue
  • This needs to be done at each learners’ level of understanding
    • Objects
    • Photographs
    • Pictures
    • Symbols
    • Words
• Appropriate work areas
  • Bear in mind: Natural distractions in a classroom
  • Work areas must be placed with minimal distractions
  • Account for student differences
  • Keep visual stimuli to a minimum

• Visual Schedules
  • These help to provide autistic learners with predictability – reducing anxiety by providing clarity of what is expected of them
  • General
  • Individual
  • Designed specifically for each learner
  • Can use objects, pictures, symbols or words
  • Can be put in notebooks; placed on students’ desks or classroom walls
  • Providing schedules will again help with developing independence – reducing the need for the teacher to continuously prompt the learner
    • Checking schedules can also help with transitions
    • You can break schedules down into half day schedules, or even just include a few activities at a time – this again, will depend on the level and the ability of the learner
• Individual Work Systems
  • Promotes independent learning
  • Helps with organisation
  • Helps learners know what is expected of them and when
  • Task initiation and task completion
  • The tasks provided in a work station, will differ depending on the learner
  • They help the learner with the concepts of start and finished – these are clearly defined visually.
  • Presents information visually and asks the following:
    1. What to do
    2. How much work is expected
    3. How to know when they are finished
    4. What happens when the work is finished
  • Provides learners with a sense of accomplishment

• Visual Structure and Information
  • Tasks or activities need to be visually structured. This includes:
    1. Visual clarity
      • E.g. A sorting task for the younger learner, clearly shows what needs to be sorted
      • A classroom that visually demarcates certain areas – where the carpet is, indicates morning ring
      • Highlighting important parts of a worksheet, or a sentence in a paragraph for a comprehension activity
    2. Visual organisation
      • Ensuring that materials are organised and clearly labelled will help reduce any distractions, and may also aid in reducing sensory overload
      • Breaking down larger areas, or difficult worksheets into more manageable bite size pieces
        • E.g. A learner cleaning a large table may become overwhelmed – mark out sections of the table, making it more manageable for them to clean. OR numbering a worksheet, so they know which order to complete the activity.
    3. Visual instructions
      • This could be a visual representation of what the learner needs to do to complete the task- this might also be in the form of written instructions

PRACTICAL TIPS!
• It may help provide our learners with flexibility – something that does not come easily to learners.

• Outline of the lesson
• Pre-organised notebook
• Transcript of the lecture/lesson
• Schedule of tasks for an assignment or a project

**Tiered Assignments**
• Based on the core idea
• Multiple outcome measures and performance tasks

**Be aware of yourself as well**
• Recognise and identify any biases you might have
• Teach each learner as an individual
• Avoid language that is biased
• Don’t make assumptions about the learners in your class
• Look at the unique needs of each learner
• Constantly re-evaluate your own teaching methods – reflection
• Create opportunities for all in the class to learn

### 7.7. Differentiating a lesson

**Identify the Key Concepts**

What is your key concept or concepts for all the learners in the class?
• What is your activity? Is it going to motivate and engage all learners?
• How are you going to relate the key concept to their own experiences or understanding?
• Are their opportunities for them make connections between what they know and what are still learning?

**What are your outcomes for the lesson?**

• Can the students accomplish these reasonably?
  • Look at using fewer outcomes, partial outcomes or even outcomes from a different grade if needed.
  • What will the learners be able to demonstrate after the learning activity?
  • What accommodations, modifications and adaptations are needed?

**Assessment**

• What evidence will you use to show that your learners have achieved the outcome?
• What is the best way for the learners to show that they have achieved the outcome?
• Prepare for alternative assessments:
  • Tape recording of the test
  • A scribe to write their answers
  • Someone to read the questions aloud
  • Time extension
  • Fewer questions
  • Record important dates on a calendar

Learning Activities
• How will learners apply their learning?
• Are there opportunities for different learning styles? E.g. visual, auditory, kinaesthetic
• Break down tasks into smaller steps for those who may need it
• Clear and concrete instructions
• Ensure you have extension activities for those who may need it

Grouping your learners
How will you organise your learners’ groups – this might be activity or subject dependent
• This is where you will use your independent working stations
  • Split your class into 2 or 3 groups (size dependent)
  • 1 group is working at the work stations – Independently
  • 1 group is working with the teacher
  • 1 group is working with the assistant
  • If you only have 2 groups, your assistant could be overseeing the work stations

Resources
• Having an idea and a list of your resources needed, ensures that you have planned adequately and you are ready to teach

Consider your timeline for the lesson

Ensure that the learning environment is ready
• Do you have areas set up for group work and for individual work?

Showing an autistic learner how a worksheet is structured in a visual format might help them understand what is required of them.
7.8. Curriculum Differentiation for Autism: Case Studies

Case Study 1 - Foundation Phase:
Michael is a 9-year-old learner diagnosed with autism spectrum disorder (level 2). He has mild behaviours, and has hyperlexia. Michael’s interest is sport, particularly cricket – and he plays cricket as an after school extra-mural. Michael has mild behaviours – very infrequent meltdowns, but is easily overwhelmed in big groups. He is currently working at a grade 1 level. Literacy is his strong point, however he struggles with writing neatly, and has difficulty with mathematics. Most of his class is also working at a grade 1 level, however in mathematics, Michael is slightly behind and occasionally needs to achieve the outcomes that are set at a grade R level. The teacher has split the class into two groups for both mathematics and languages. Michael is in Group 2 for maths and Group 1 for languages. Group 2 is for the learners who are need more support in the learning areas, group 1 is for the more advanced, stronger learners.

Michael’s teacher wants to present a lesson to the class on measurement, and is looking at 4.1 – Time. Her learning outcome for the class is to order regular events from their own lives.

Case Study 2 - Intermediate Phase:
• Languages: English
Thando is in a grade 5 class. Her strength is in language, particularly English. For some activities she is able to work at a grade 6 level. Her mathematics skills are a little bit weaker. The teacher of the class uses a differentiated model in her planning. For her next planning activity, she would like all her learners to complete the following – A creative writing exercise that focuses on the descriptive element of writing. The teacher asks the class to write a story about a myth or a legend – either one that they...
know, or one that they have thought up themselves. Some of the key concepts are;

- Using animal characters
- Developing the plot, characters and settings
- Links sentences coherently.

For the plot setting, the teacher has asked the learners to come up with a plan first before they begin to write.

Again, this class is broken down into two groups. Thando is in group 1 for English and group 2 for mathematics. She has a special interest in the Harry Potter book series. Thando is a relatively shy child, and struggles with orals, but is an excellent writer. However, she struggles with handwriting, and therefore needs a laptop to write, she is also a visual thinker.

**Case Study 3 - Senior Phase:**

- Mathematics

Shaun is a 17-year-old working at a grade 8 level. He has difficulties in both languages and maths. However, he can tell you everything there is to know about the T.V show Pokémon. He has a special interest in creating the characters from the show and is very good at modelling these. Shaun’s parents and teachers are concerned about what he is going to be able to do when he leaves school.

The teacher is planning a lesson on data handling. Based on the curriculum for grade 8 learners, this includes posing questions relating to social, economic and environmental issues, finding appropriate sources. Designing a simple multiple choice type questionnaire. The class will then need to organise and summarise the data.

Again, the class is divided into two groups. Group 1 for the stronger learners, and group 2 is for the weaker learners. Shaun is in group 2 for both learning areas.

**Case Study Memoranda**

**Case Study 1: Foundation Phase**

| Assessment: How do you know? | Are the learners able to sequence an event from their own life |
| Lesson Agenda | Sequencing events: |
| | • Present simple sequence to class – get them to explain the sequence of coming into class |
| | • Split class into two groups |
| | o Group 1: Pictures with sentences of going shopping |
| | o Group 2: Photographs with sentences of cricket match |
| Mini-Lesson | During morning ring – discuss steps of coming into the classroom |

**PRACTICAL TIPS!**
<table>
<thead>
<tr>
<th>Hook/Motivation/ Connection</th>
<th>Allow learners to choose the group they would like to be in, and for later they can then decide on their own event they would like to sequence</th>
</tr>
</thead>
</table>
| New Material                | Key Points:  
|                             | - First  
|                             | - Next  
|                             | - Then  
|                             | - Last  |
|                             | Method (how will you reach several learning modalities?)  
|                             | a. Auditory – discussion of coming into events  
|                             | b. Visual – use of photographs and pictures |
| Model                       | Teacher(s) will be...  
|                             | Explain sequencing of coming into class  
|                             | Students will be...  
|                             | Engaged in this discussion |
| Guided Practice/Partner or Table work | Students will be...  
|                             | In groups order the event correctly  
|                             | Examples/Questions/ Reinforcement  
|                             | For homework as a project – create their own sequence  
|                             | How will students share out?  
|                             | - They can show the class their sequence  
|                             | - Learners who battle with oral presentations, can do a recording |
| Independent Practice/Assessment | Students will be...  
| Writing                     | Project: Create their own sequence of their own choice  
| Graphic Org                 | Independent Work Station: Complete sequencing at the work station  
| XProject                    | Teacher 1 will be...  
| XIndependent Work Station   | Monitoring group 1 while busy with their sequencing event  
| Teacher 1                   | Teacher 2 will be...  
| Teacher 2                   | Monitoring independent work |
Differentiation Notes (small groups, special modifications, etc.):

- **Group 1** (advanced learners): Write out own sequence story
- **Group 2** (In-between learners): Order and number sequence story

**Differentiation Checklist:**

- **Modalities:** visual [ ] auditory [ ] kinaesthetic [ ]  
  Process: [ ]
- **Resource:**
- **Product:**
- **Other Support:**
- **Enrichment:**

**Notes:**
Case Study 2: Intermediate Phase

| Learning Objective: What are they learning? | Creative writing: Descriptive writing about a myth/legend |
| Assessment: How do you know? | Learners will submit their written story |

<table>
<thead>
<tr>
<th>Lesson Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain myths and legends</td>
</tr>
<tr>
<td>2. Ask class to discuss myths and/or legends they may have heard about or know about</td>
</tr>
<tr>
<td>3. Discuss the differences and similarities</td>
</tr>
<tr>
<td>4. Show learners how to plan – using one of their myths/legends</td>
</tr>
<tr>
<td>5. Give learners a template for planning</td>
</tr>
<tr>
<td>6. Allow learners to act out in groups</td>
</tr>
</tbody>
</table>

| Mini-Lesson | Read a story about a myth or legend, or watch a video |
| Hook/Motivation/Connection | Story or video on a myth or legend (If possible; use one that the learners enjoyed discussing and show an appropriate video) |

<table>
<thead>
<tr>
<th>New Material</th>
<th>Key Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Beginning</td>
<td></td>
</tr>
<tr>
<td>• Middle</td>
<td></td>
</tr>
<tr>
<td>• End</td>
<td></td>
</tr>
<tr>
<td>• Use of animals as characters</td>
<td></td>
</tr>
<tr>
<td>• Sentences: Linked coherently</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method (how will you reach several learning modalities?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. Auditory: Discussions</td>
</tr>
<tr>
<td>d. Visual: Use of video</td>
</tr>
<tr>
<td>e. Kinaesthetic: Acting out</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Teacher(s) will be...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitating the discussion of myths and legends</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students will be...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussing different legends</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guided Practice/Partner or Table work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be... Developing their own plan for their own myth or legend</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples/Questions/Reinforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completing the plan first, and then write out their story.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How will students share out?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either by writing it, or acting it out.</td>
</tr>
</tbody>
</table>
### Independent Practice/Assessment

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Teacher 1 will be...</th>
<th>Teacher 2 will be...</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Writing</td>
<td>Students will be...</td>
<td>Guiding both groups</td>
<td></td>
</tr>
<tr>
<td>Graphic Org</td>
<td>Either write out their own story</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Develop story into a play</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Work Station</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Closing

Hand in written story, or act out story.

### Homework/Reinforcement

### Differentiation Notes (small groups, special modifications, etc.):

- Group 1 (advanced learners): Provide plan, with few cues
- Group 2 (In-between learners): Provide planning template with more cues.

### Differentiation Checklist:

**Modalities:** visual X auditory X kinaesthetic X  
**Process:**

- Resource:  
- Product:  
- Other Support:  
- Enrichment:  

- **Resource:**  
- **Product:**  
- **Other Support:**  
- **Enrichment:**  
### Case Study 3: Senior Phase (Grade 8)

#### Learning Objective: What are they learning?
- Data handling

#### Assessment: How do you know?
- Development of a simple multiple choice type questionnaire and organizing and summarizing data

#### Lesson Agenda

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1. | Ask learners about their own interests  
  a. Why and why are they not interested in those certain topics  
  b. Get them to create a picture of the results in groups  
  2. Individually, decide on something they would like to find out more information about by asking questions of their peers |

#### Mini-Lesson
- Getting learners involved in a questionnaire about their interests

#### Hook/Motivation/Connection
- Use of their own interests

#### New Material
- Key Points:  
  - Developing a multiple choice questionnaire  
  - Organizing and summarizing data – in picture form

#### Method (how will you reach several learning modalities?)
- f. Auditory: Discussion  
  - g. Visual: Picture organization of data

#### Model
- Teacher(s) will be...  
  - Working with the whole class during the introduction  
- Students will be...  
  - Engaged based on their own interests

#### Guided Practice/Partner or Table work
- Students will be...  
  - In groups they will create their own questionnaire  
- Examples/Questions/Reinforcement
  - Using their questionnaire to find out the information  
- How will students share out?
  - Create a power point presentation to show to the class  
  - Create a written report.
<table>
<thead>
<tr>
<th><strong>Independent Practice/Assessment</strong></th>
<th>Students will be...</th>
<th>Teacher 1 will be...</th>
<th>Teacher 2 will be...</th>
</tr>
</thead>
<tbody>
<tr>
<td>XWriting</td>
<td>Create a written report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XGraphic Org</td>
<td>Create a power point presentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Independent Work Station</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Closing**                      |                      |                     |                     |
| **Homework/Reinforcement**       |                      |                     |                     |

**Differentiation Notes (small groups, special modifications, etc.):**

Group 1 (advanced learners):

Group 2 (In-between learners):

Group 3 (Advanced learners):

**Differentiation Checklist:**

Modalities: visual ☐ auditory ☐ kinaesthetic ☐ Process: ☐

Resource: ☐

Product: ☐

Other Support: ☐

Enrichment: ☐

Notes:
Resources for “SECTION 7: PRACTICAL APPROACHES TO CURRICULUM DIFFERENTIATION FOR AUTISM”


Department of Education (2011). GUIDELINES FOR responding to LEARNER diversity IN THE CLASSROOM through curriculum and assessment policy statements Pretoria: Department of Education

Department of Basic Education (2012). National Curriculum Statement: Mathematics: Grade R-3; Foundation Phase. Pretoria: Department of Education


Department of Basic Education (2012). National Curriculum Statement: Mathematics: Grade 7-9; Senior Phase. Pretoria: Department of Education

Department of Basic Education (2012). National Curriculum Statement: English First Language: Grade R-3; Foundation Phase. Pretoria: Department of Education

Department of Basic Education (2012). National Curriculum Statement: English First Language: Grade 4-6; Intermediate Phase. Pretoria: Department of Education

Department of Basic Education (2012). National Curriculum Statement: English First Language: Grade 7-9; Senior Phase. Pretoria: Department of Education
SECTION 8: PRACTICAL APPROACHES: CURRICULUM DIFFERENTIATION
FOR LEARNERS WITH HEARING IMPAIRMENT

8.1. Phonics/ Speech Sounds
Phonics is taught in Grades 1, 2 and 3. Deaf children, depending on the hearing loss, may not hear the sounds. Consult the audiogram of the learner and the audiogram which indicates the speech sounds.

Teaching phonics would need the support of additional or a different approach. The lesson should be repeated more than once.

AIM: Teaching n and l. These sounds are often substituted; this is because they present identical mouth shapes.

See page 1- follow the instructions and exercise
See page 2: follow the instructions and exercises

- The sound is prolonged;
- The sound is repeated; nananana
- The syllable is alternated; namanama
- Na la na la – this is an important skill as n and l are frequently incorrectly substituted for each other
- Ta na la – this requires fine control of the tongue. Ensure the sounds are correctly produced in order to re-programme the speech pattern, and try to get as many syllables on one breath stream as possible.

See page 3: The educator first touches a sequence of sounds, then the child responds with the pattern he/she has seen. When the educator touches the nose, the child produces an n (because n is produced out of the nose.

When the educator touches the mouth, the child produces the l (because the l is produced out of the mouth.

When the educator touches the vowel sounds on either side of the face, the child produces the corresponding vowel.

Consult any speech books for examples of various speech sounds. These exercise will help the production of speech but also train the residual hearing to identify sounds.
8.2. Practical Strategies
LESSON PHONICS

Build words with n and l.

<table>
<thead>
<tr>
<th>n.................................</th>
<th>........n.................</th>
<th>.........................n</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>banana</td>
<td>man</td>
</tr>
<tr>
<td>note</td>
<td>seventeen</td>
<td>seven</td>
</tr>
<tr>
<td>nail</td>
<td>fantastic</td>
<td>green</td>
</tr>
<tr>
<td>nag</td>
<td>honest</td>
<td>baton</td>
</tr>
<tr>
<td>nose</td>
<td>raincoat</td>
<td>rain</td>
</tr>
</tbody>
</table>

Use the words in sentences.

Encourage the learners to repeat the words before sounding the words.

Make sure the learners are able to sound the vowels and know the rules of the silent ‘e’.

Games can be played using the sounds.

Suggestion:

Work in small groups.

Revise previous sounds before introducing new sounds.

Link the phonics with the speech sounds.

NB. The speech sounds will help with lip reading and also help learners pronounce words correctly.
LESSON: POETRY  GRADE: 4

(READING AND VIEWING; LANGUAGE USAGE; VOCABULARY DEVELOPMENT)

INTRODUCTION: (In groups) Learners are instructed to do a semantic mapping /web of the word elephant.

```
Big ears  huge
trunk
fat
short tails

Elephant

eat grass    working
```

With the words/ideas, the learner formulates sentences – orally or written.

The educator expands on the word ‘elephant’; mentioning the different things elephants can do; what are working elephants. This information can also be elicited from the learners.

Use a data projector for the presentation of the poem. This will allow the deaf learner to look at the poem directed and not look down on the page and miss the reading thereof.

The educator reads the poem. The educator asks for the meaning of some words. If the explanation is incorrect, correct immediately as it will affect the understanding of the poem.

Reference: Work book Gr. 4 English (FAL) Book 2
Questions:

1. What are the elephants doing with the trunks?
   ..................................................................................................................

2. How many elephants are in the picture?
   ..................................................................................................................

3. For an elephant, what are handy things?
   ..................................................................................................................

4. As written in the poem, where can an elephant work?
   ..................................................................................................................

5. Look at the picture of the elephant. What shape would you say is the elephant’s ear?
   ..................................................................................................................

6. How many elephant feet are in the picture?
   ..................................................................................................................

7. Why do you think the elephants feel gay?
   ..................................................................................................................

8. Give another meaning for gay?.................................................................

9. What is the opposite of play? .................................................................

10. Circle the correct answer.

    Elephants are herbivores, carnivores, omnivores.

...............................................................................................................................

Lessons that can be developed from this lesson are:

(Use YouTube/Google to find pictures, accounts of elephants in Africa and India)

1. Write your own poem of an elephant or any other animal.
2. Language usage: synonyms; antonyms
3. Write facts about elephants;

**LESSON: LANGUAGE**

*Reference: Work book Grade 6 Book 2*

**LOOK AT THE PICTURE**

1. Describe what you see.
2. Record the descriptions the learners provide.
3. Underline all the nouns.
4. Where there are adjectives, underline them in a different colour.
5. Where there are no adjectives, ask the learners to provide suitable adjectives.

**Introduce nouns associated with water.**

For example: dams; boreholes, streams, rivers,

Teach the singular of the nouns

Dam – dams
Borehole – boreholes
Stream- streams
River – rivers

**Introduce verbs associated with water.**

For example: need; rain; run; store, waste, evaporates.

Use the verbs for conjugation and tenses.
Conjugation:

One person           many people
I need               We need
You need             you need
He needs             They need
She needs            They need
It needs             They need
I (Cindy) need water.  We (the family) need water.
You (David) need water. You (the family) need water.
Sipho needs water.    The boys need water.
Sinazo needs water.   The girls need water.
The dog needs water.   The dogs need water.

Another lesson is the tenses using the verbs.

<table>
<thead>
<tr>
<th>To run</th>
<th>Now/present</th>
<th>Finished /past</th>
<th>Later/future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Run</td>
<td>ran</td>
<td>Will run</td>
</tr>
<tr>
<td></td>
<td>runs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>do not run</td>
<td>Did not run</td>
<td>Will not run</td>
</tr>
<tr>
<td></td>
<td>does not run</td>
<td></td>
<td></td>
</tr>
<tr>
<td>?(question)</td>
<td>Do .... run?</td>
<td>Did ..... run?</td>
<td>Will ..... run</td>
</tr>
<tr>
<td></td>
<td>Does .... run?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Streams and rivers run into the sea.
2. The water runs into the dam.
3. The water ran into the dam last year.
4. The water will run into the dam if it rains.
5. The streams and rivers do not run into the sea.
6. The water does not run into the dam.
7. The water did not run into the dam.
8. The water will not run into the dam if it does not rain.
9. Do streams and rivers run into the sea?
10. Does the water run into the dam?
11. Did the water run into the dam?
12. Will the water run into the dam?
These sentences are formulated from the verbs using tenses.
This could be an exercise for homework

LESSON: MATHEMATICS (GRADE 6/7)

PREVIOUS LESSON(S) WOULD BE TEACHING VOLUME.

Instruction: Design a questionnaire to find out how much water is used in a household by individuals according to the following activities:

1. Brushing your teeth
2. Drinking (tea, coffee, cold drink must be included)
3. Wash your face
4. Cooking

Let 5 people do your questionnaire

For example:

QUESTIONNAIRE

Name: ................................................................. Date: .................................

<table>
<thead>
<tr>
<th>activity</th>
<th>Measurement in ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much water do you use to brush your teeth?</td>
<td>250 ml</td>
</tr>
<tr>
<td>How much water do you drink? (including tea, coffee or cool drink)</td>
<td>1000ml</td>
</tr>
<tr>
<td>How much water do you use to wash your face?</td>
<td>500ml</td>
</tr>
<tr>
<td>How much water is used for cooking</td>
<td>750ml</td>
</tr>
<tr>
<td>What is the total amount of water used?</td>
<td>2500ml</td>
</tr>
</tbody>
</table>

1. On a graph (of your choice) illustrate the amount of water used by each person.
2. Calculate the total amount of water of the 5 people involved in the survey.
3. Who used the most water?
4. Who used the least water?
5. Are there people who used the same amount of water? Name them?
6. Which activities used the most water?
7. Which activities used the least water?

This task allows for mathematical calculations but also reading skills. This is a form of mathematical literacy.
**LESSON: MATHEMATICS (GRADE 2/3)**

Previous lesson would be “The Elephants” and “Shapes”

Revision: Name the shapes

Introduction of the new lesson: Look for shapes in the classroom. Go for a walk around the school and look for shapes in the environment.

Work in groups: With cut outs of shapes (different colours) or plastic shapes ask each group to design an animal e.g. elephant or any other animal you have introduced at some stage in previous lessons.

Learners record how many different shapes were used.

<table>
<thead>
<tr>
<th>Animal</th>
<th>Shapes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>![Shape 1] ![Shape 2]</td>
</tr>
<tr>
<td></td>
<td>![Shape 3] ![Shape 4]</td>
</tr>
<tr>
<td></td>
<td>![Shape 5] ![Shape 6]</td>
</tr>
<tr>
<td></td>
<td>![Shape 7] ![Shape 8]</td>
</tr>
</tbody>
</table>

Learners are encouraged to make different animals using the shapes.
Resources for “SECTION 8: PRACTICAL APPROACHES: CURRICULUM DIFFERENTIATION FOR LEARNERS WITH HEARING IMPAIRMENT”

Let’s Speak Beautifully: A speech workbook for hearing-impaired children: Zelda Isaacson Ph.D.

Guidelines for Responding to Learner Diversity in the Classroom Through Curriculum and Assessment Policy Statements (2011)
# Dominican School for Deaf Children

## Speech Assessment

<table>
<thead>
<tr>
<th>Name:</th>
<th>D.O.B:</th>
<th>Age:</th>
<th>Therapist:</th>
<th>Date:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>I.</strong></th>
<th><strong>Vowels</strong></th>
<th><strong>Consonants</strong></th>
<th><strong>I:</strong></th>
<th><strong>D.O.B:</strong></th>
<th><strong>Age:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>wʌn</td>
<td>eleven</td>
<td>iːlevən</td>
<td></td>
<td></td>
</tr>
<tr>
<td>two</td>
<td>tuː</td>
<td>twelve</td>
<td>twelv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>three</td>
<td>θriː</td>
<td>thirteen</td>
<td>θɜːtiːn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>four</td>
<td>fɔː</td>
<td>fourteen</td>
<td>fɔːtiːn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>five</td>
<td>faiv</td>
<td>fifteen</td>
<td>faftiːn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>six</td>
<td>siks</td>
<td>sixteen</td>
<td>sikstɪn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>seven</td>
<td>sevən</td>
<td>seventeen</td>
<td>sevəntɪn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eight</td>
<td>eɪt</td>
<td>eighteen</td>
<td>eɪtiːn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nine</td>
<td>nain</td>
<td>nineteen</td>
<td>noantɪn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ten</td>
<td>ten</td>
<td>twenty</td>
<td>twentiː</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>II.</strong></th>
<th><strong>Days</strong></th>
<th><strong>Consonants</strong></th>
<th><strong>I:</strong></th>
<th><strong>D.O.B:</strong></th>
<th><strong>Age:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>mændei</td>
<td>Friday</td>
<td>fraideɪ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>tjuːzdəi</td>
<td>Saturday</td>
<td>sætədeɪ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>wenzdəi</td>
<td>Sunday</td>
<td>sandəd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td>θɜːzdəi</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### III.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. blue</td>
<td>bluː</td>
<td>7. grey</td>
</tr>
<tr>
<td>2. white</td>
<td>wait</td>
<td>8. green</td>
</tr>
<tr>
<td>3. red</td>
<td>red</td>
<td>9. brown</td>
</tr>
<tr>
<td>4. orange</td>
<td>orɪŋ</td>
<td>10. black</td>
</tr>
<tr>
<td>5. pink</td>
<td>pɪŋk</td>
<td>11. yellow</td>
</tr>
<tr>
<td>6. purple</td>
<td>pɜːpəl</td>
<td></td>
</tr>
</tbody>
</table>

### IV.

My name is Basil.

*mai neɪm iz bæzəl*

I have two friends.

*aɪ hæv tuː frendz*

They are Carmen and David.

*dɪə aː kæːmən ænd dɛvəd*

She has very long hair.

*she ʰæz vərɪː lɔŋ hɛːr*

He sits on a yellow chair.

*hiː sɪts ɒn ə jeləʊ tʃɛr*

We all like green jelly.

*wjuː ɔːl laɪk greɪn dʒelɪ*
Dont mix up these sounds!

The sound comes out of your nose when your tongue is pressed up.

The sound must come out of your mouth — your tongue touches just behind the two spotty teeth.

This pussy cat drank all her milk; now she’s sleeping — pretend to lap milk out of a bowl — see your tongue moving.

4. The letter 'n' looks like a wide tongue. Remember to make your tongue wide.

and... isn’t it funny... the letter ‘l’ looks like a long narrow tongue, and that is what you need to make an ‘l’ sound.

and... even funnier, the letter ‘r’ looks like a nose and it comes out of your nose.

5. Press with your tongue and say.
See how quickly you can find the way out. Trace with your finger. Say these as you find your way.

1. **n** (along sound)
2. **namana na etc.** Make as many 'na' sounds on one breath stream as you can.
3. Do the same with **namana ma etc.** See that both 'n' + 'm' are long, strong sounds.
4. **na la nala etc.** Be sure that the 'n' comes out of your nose & the 'l' comes out of your mouth.
5. When you can do all of the other drills, see if you can say: **tanala tahala tahala** many times on one breath.
Say all these sounds with \( \text{Mama} \) – and say her name ten times before you start.
SECTION 9: PRACTICAL APPROACHES: CURRICULUM DIFFERENTIATION FOR LEARNERS WITH VISUAL IMPAIRMENT


Young children start learning about their environment by looking at objects and pictures. Reading and writing of letters follow only later when the child has already learnt a lot through visual and audio communication. For the child with a visual impairment the world can be very dull if we do not provide the necessary stimulation.

A person with normal vision learns 80% of what they know by incidental learning of which a lot is graphically communicated. The visually impaired child needs to be exposed to the same variety of experiences, but with reduced visual complexity so that they are enabled to gain the same knowledge through senses other than vision, without reducing everything to “non-visual” experiences.

It is important to remember that graphic information cannot be scanned at a glance. The learner needs to be taught to explore text, graphics, objects and shapes systematically. Additional time will be needed and graphic material need to be presented simpler and often in a very different way. Sometimes it is not possible to make a meaningful two-dimensional graphic representation and an object needs to be used for concept development.

This does not mean that the visually impaired learner is a slow learner. They only use different methods and deserve suitably adapted material and methodologies.

Blind and partially sighted learners enjoy pictures as much as learners with normal vision. It is a good idea to provide tactile pictures in children’s books for blind learners even if they are not needed for content.

Content

Visually impaired learners are taught the same curriculum, content, knowledge, skills, understanding of concepts and tasks as other learners. The only difference is that we need to make LTSM and assessment accessible.

Reasons for adaptation of LTSM and assessment

- To make knowledge, skills, understanding of concepts and tasks accessible
- To make tasks meaningful
- To give the visually impaired learner an equal opportunity

LTSM

- Textbooks are usually not adapted, except for foundation phase where the material is primarily graphic.
- In classroom teaching, learners should be exposed to the original exercises and try to do as many of the original questions as possible. They should be encouraged to make simple drawings with found materials, string, glue, prestik, wikkistix, wax crayons (can feel the wax on paper), the perkins brailler or in any other way possible.
General principles underlying adaptation

1. Only adapt if it is necessary to provide access.
2. Assess the same skills, knowledge and concepts as in the original task or lesson so that the same assessment objective is reached.
3. Keep the same level of difficulty as the original question/task.
4. Keep the balance in terms of weighting and content as in the original.
5. Avoid requiring a disproportionately large amount of time for relatively small tasks or few marks.
6. Replace material only when it is essential to provide access for the visually impaired candidate to meet the same assessment objective.
7. Guard against complete removal of visual material.

Approaches to adaptation

Sometimes it might be necessary to use more than one of the approaches listed below to adapt the tasks successfully.

1. Picture or diagram simplified or shown differently to reduce visual complexity
2. Picture/diagram replaced with written description
3. Picture/diagram supplemented with written description
4. Picture/diagram replaced with real item or model
5. Unnecessary picture/diagram removed
6. Amount of information reduced
7. Measurements altered
8. Inherently visual material replaced with equivalent non-visual material
9. Question/task that requires blind learner to draw, replaced/reversed or written explanation accepted as response

Assessment

- Distinguish between formal (external examinations or tests for promotion/progression purposes) and informal (not for promotion purposes or diagnostic) assessment. Formal assessment should be adapted or modified according to the agreed principles.
- In classroom/informal assessment, learners can be given or allowed to use objects to find or show an answer or to use prestik to indicate their choice of answer.
- In external or formal assessment, this is not practical, because the learner cannot ‘record’ the answer in a ‘successfully’ by using prestik to indicate their answer in multiple choice questions, or by using string to draw a graph.
- In some countries, learners are given an assistant who then makes a drawing according
to the learner’s instructions or records the learner’s answers. Even in classroom assessment this will be difficult and time consuming without a class assistant or two.

Quality braille

- Learners should always be given an accurate representation in the correct braille code of what is in the original document.
- The layout must be clear so that the document can be quickly scanned to find specific information.

Graphic material

- Diagrams and graphs must be clear, large enough and uncluttered as possible. Keep the braille reader in mind when producing tactile graphics.
- Start with tactile material at a very young age.
- Remember that learners need to be taught how to read diagrams, tables and graphs. Blind learners use both hands and all fingers.
- Keep the important facts/content/question in mind when designing the graphic.
- Omit unnecessary information or parts of the diagram or irrelevant sections of a map.
- Use a larger and clearer scale or size.
- Write the heading, legend/key and transcriber’s notes (for braille) above/before the diagram or graph. Avoid making unlabelled graphics.
- Place labels in a manner that leaves the reader in no doubt as to what is being identified. Labels are always written horizontally.
- Keep in mind the knowledge level, skills and age level of the readers.
- Draw graphics in two dimensions where possible.
- A 3D picture can also be split into different 2D pictures. Complicated drawings can be split into different drawings if it will make the drawing visually more accessible.
- Avoid lines that are too close together and will be hard to distinguish.
- Do not expect blind learners to identify things like flowers, people, animals, etc. if they are not labelled. Replace these with symbols or write a label/key naming the flower or animal. Sometimes it is helpful to label drawings even for partially sighted learners.
- Use different textures to differentiate between objects, e.g. water and land in maps or finding objects that are the same.
- Present information in an informative way, not as a guessing game.
- Do not say ‘can you tell what this is?’ Rather say, ‘This is a drawing of a church. You will see the steeple at the top’. Give the learner a starting point or point of reference to make sense of the drawing.

Instructions for blind learners

Blind learners do not write in books or on answer sheets. They use loose sheets of special braille paper and a Perkins Brailler on which they write everything. In the classroom, these loose sheets must be filed in a special, larger braille file.
• Remember to change the general instructions of a braille question paper, as well as the instructions for individual adapted questions.

• **Do not use any of these:**
  - Start EACH section on a NEW page
  - Rule off after each section.
  - Leave a line after EACH answer.
  - Answer all the questions in the spaces provided.
  - Write ALL the answers in the ANSWER BOOK.
  - Do ALL drawings in pencil and label them in blue or black ink.
  - Place a cross in the box next to the correct answer.
  - Circle the letter above the correct word.
  - Write the question number above each answer.
  - Answer SIX questions as follows in the ANSWER BOOK
  - Answer SECTION A on the attached ANSWER SHEET and place it in the BACK of your ANSWER BOOK.

Memorandum
• Make sure the memorandum is adapted according to the adapted questions and is used for marking braille answers.

9.2. Visual Impairment Lesson Differentiation Examples

**Picture or diagram simplified or shown differently**

**Foundation Phase:**

**Grade 1 Mathematics**

*Find the picture that is the same as the one in the first box.*

![Illustrations of animals](image)

**Adaptation:**
Find the picture that is the same as the first one. Is it 2 or 3 or 4?

a. 

[Images of a circle, a square, a triangle, and another circle]

b. 

[Images of an upward arrow, a downward arrow, an upward arrow, and a rightward arrow]

---

**Grade 3 Mathematics**

*Help the puppy to find his way to his kennel.*

The puppy runs to the tree.
He feels thirsty and runs to the dam to drink water.
He runs to the bus and then to his kennel.

A) Draw arrows on the grid to show how he ran.

B) How many blocks did he run altogether?
**Adaptation:**

*Help the puppy to find his way to his kennel.*

Study the blocks carefully and follow the instructions.

The puppy runs to the tree.

He feels thirsty and runs to the dam to drink water.

He runs to the bus and then to his kennel.

<table>
<thead>
<tr>
<th>tree</th>
<th>puppy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>↓</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>dam</th>
<th>bus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A) How many blocks did he run altogether?

B) If the puppy is still thirsty when he gets to his kennel, describe how he would run back to drink some more water?

**Grade 2 Maths**

*Use the picture of the coins to answer the question below.*

The above coins make a total of ____.

**Adaptation:**

12. Use the picture of the coins to answer the question below.
The above coins make a total of _____.

**Grade 2 Mathematics**

*Use the graph to complete the sentences below.*

<table>
<thead>
<tr>
<th>Number of learners</th>
<th>Giraffe</th>
<th>Springbuck</th>
<th>Rhino</th>
<th>Elephant</th>
<th>Lion</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>9</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>8</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>7</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>6</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>5</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>4</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>3</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>2</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
<tr>
<td>1</td>
<td><img src="image1.png" alt="Giraffe" /></td>
<td><img src="image2.png" alt="Springbuck" /></td>
<td><img src="image3.png" alt="Rhino" /></td>
<td><img src="image4.png" alt="Elephant" /></td>
<td><img src="image5.png" alt="Lion" /></td>
</tr>
</tbody>
</table>

1. The least favourite animal is the _____.
2. There are five more _____. than rhinos

**Adaptation:**

Note: The labelling on the horizontal axis can be written using two lines to fit in longer labels.

*Use the graph to complete the sentences.*
Questions

23.1 The least favourite animal is the _____.

23.2 There are five more ____ than rhinos.

---

Grade 4 English HL

a. Which sport do most children like?

b. Which sport do children like least?

c. How many children like soccer?

d. How many children like netball?

e. How many children like running?

f. How many children like swimming?
Adaptation:

For some partially sighted learners the drawings are too squashed together and too abstract and for blind learners it will make no sense.

Always write the heading above the graph.

The sports children like most

<table>
<thead>
<tr>
<th>Sport</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soccer</td>
<td>90</td>
</tr>
<tr>
<td>Netball</td>
<td>80</td>
</tr>
<tr>
<td>Swimming</td>
<td>40</td>
</tr>
<tr>
<td>Running</td>
<td>50</td>
</tr>
</tbody>
</table>

a. Which sport do most children like?
b. Which sport do children like least?
c. How many children like soccer?
d. How many children like netball?
e. How many children like running?
f. How many children like swimming?
Intermediate Phase

Grade 6 Mathematics ANA

Examine the map below and answer the questions that follow.

1. What is the time difference in hours between Cape Town and Rio de Janeiro?

2. If it is 11:00 a.m. in Rio de Janeiro, what is the time in Cape Town?

Adaptation: There are too many lines and shades and numbers.

1. Examine the map below and answer the questions that follow.

The questions remain unchanged.

Grade 6 Mathematics
86. The clocks below show the times in different countries. If it is 06.10 p.m. in Berlin, it is 5.10 p.m. in London.

<table>
<thead>
<tr>
<th>Country</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Town</td>
<td>Monday 5.10 p.m.</td>
</tr>
<tr>
<td>London</td>
<td>Monday 12.10 p.m.</td>
</tr>
<tr>
<td>Bangkok</td>
<td>Monday 6.10 p.m.</td>
</tr>
<tr>
<td>Berlin</td>
<td>Monday 6:10 p.m.</td>
</tr>
</tbody>
</table>

86.1 If the clock in Berlin shows Tuesday 9:30 a.m., write down what the time will be in Bangkok? (1)

86.2 The time in London is 2 hours behind South Africa. Draw the hands on the clock of the time it will be in Cape Town when it is 5:10 p.m. in London. (1)

Adaptation:

86. The clocks below show the times in different countries at the same moment. If it is 06.10 p.m. in Berlin, it is 5.10 p.m. in London.

Show separate pictures.

<table>
<thead>
<tr>
<th>Berlin</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday 6:10 p.m.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bangkok</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday 12:10 p.m.</td>
<td></td>
</tr>
</tbody>
</table>
86.1 If the clock in Berlin shows Tuesday 9:30 a.m., write down what the time will be in Bangkok? (1)

86.2 The time in London is 2 hours behind South Africa. Describe where the hands on the clock will be in Cape Town when it is 5:10 p.m. in London. (1)

**English HL Grade 4**

*Use the map below to answer Questions 13 and 14.*

13. Circle the letter of the correct answer.
13.1 Where do the children catch the bus after school?
   A Park Street  
   B Short Street  
   C South Street  
   D North Street (1)

13.2 Which family lives the furthest from the hospital?
   A Jonathan family  
   B Smith family  
   C Seema family  
   D Naidoo family (1)
14. Neeshi is a nurse at the hospital and has left her bag at home with her mother, Mrs Seema. Neeshi must fetch her bag from home. Choose the best road that Neeshi must follow from the hospital to fetch her bag from home.

Turn right into Long Street, then ...
(Circle the letter of the correct answer.)

A left into North Street.
B right into South Street.
C right into Short Street.
D left into Park Street. (1)

Adaptation: The blind learner cannot circle the correct answer, because they do not write on an answer sheet. Instead, they write the correct answer down.

Questions remain unaltered.

Write 5 – 8 sentences about the picture below.

Adaptation:
It is not necessary to describe all of what is happening in the picture. This is creative writing and if we describe too much, we would be giving the learner words and sentences which the learner with vision is not provided with. But we do not want to deny the learner from visualising.

Write 5-8 sentences about this picture.
A little girl is reading a book to a boy who is lying in bed. They are both smiling.
Grade 4 Mathematics

Data

Sort the fruit and answer the questions.
1. a. How many apples are there?
   b. How many bananas are there?
   c. How many strawberries are there?
   d. How many naartjies are there?

2. Draw a pictograph and answer the questions.
   a. Do the children like apples or bananas more?
   b. Do the children like strawberries or naartjies more?
   c. What is the most popular fruit?
   d. What is the least popular fruit?

Adaptation for the blind learner

Choose fruit that are easier to distinguish when drawn in braille and label them. Provide a legend and change the question requiring learners to draw a pictograph.

Sort the fruit and answer the questions.
1. How many apples are there?
2. How many bananas are there?
3. How many pineapples are there?
4. How many pears are there?

2. This is a pictograph of the fruit. Look at the pictograph and answer the questions.

a. Do the children like apples or bananas more?
b. Do the children like pears or pineapples more?
c. What is the most popular fruit?
d. What is the least popular fruit?
9.3. Visual Impairment Environment Differentiation

Accommodating diversity in the classroom

Modifying the classroom to assist those who are blind or partially sighted to make the most of their vision/loss of vision

- In most cases the partially sighted child should sit in the centre-front of the class. However, if the child has vision loss in one eye, they may prefer to sit to one side of the room.
- Learners with field vision loss prefer to sit at the back to increase the field of vision.
- Avoid glare from desktops or shiny paper.
- Some children may need their own desk lamp to provide an even light source.
- In group time have the child sit close to the teacher or to the demonstration.
- Lift the book up off the table, bringing it closer, rather than leaning downwards.
- Use appropriate low vision aids and braille assistive devices.
- Check size and distance of objects/material.
- A sloping desk top or bookstand may be helpful for low vision learners.
- Make sure that lighting in corridors and on stairs is adequate.
- Mark glass doors to make them more visible.
- Avoid sharp protrusions on furniture and fittings.
- Position classroom displays at an appropriate height and in good light.
Extra space

- Learners may require extra desk workspace as well as additional storage in the classroom, to accommodate their equipment and bulky braille and large print materials.
- Perhaps two desks and a storage cupboard would be helpful.

Safety in the classroom

- With some help initially, the blind child will become familiar with the layout of the classroom and learn to find his/her way around independently. If you move any furniture, you must show them the changes.
- Teach the other learners to be tidy and not to leave things on the floor.
- Chairs should be pushed in and there should be no obstacles on the floor.
- Doors need to be wide open/completely closed. A half open door is dangerous for a visually impaired learner.

Verbal prompting and description

Teachers can assist learners with visual impairment by:
- saying the information as they write it on the board
- describing what the other children are doing
- using the child’s name when talking to them and talk about what you are doing.
- warning the student about what is going to happen and explain sudden noises.
- providing a commentary on any class activity that the child with low vision cannot get close enough to see and the blind learner cannot see.
- giving clear directions, don’t talk about ‘here’ or ‘there’
- using words like ‘look’ and ‘see’ and to talk about colour
- asking the child if they need help rather than assuming they do. The child needs to become independent.
- not leaving the child unless they know where they are
- not pushing or steering the child; let them take your hand or elbow

Visual fatigue

Visual fatigue can be a problem for many children with low vision. The symptoms include avoidance of visual activity, headaches, increase in nystagmus (eye wobble), loss of concentration, sore eyes/rubbing eyes, double vision, watering eyes

Activities should be organised to provide opportunities for ‘eye rest’ for example:
- alternate reading and writing activities with oral work
- allow time for a variety of non-visual tasks
- encourage children to close and rest their eyes occasionally
- look away from the task
- look out the window to change the focus of the eyes

Time

- When a child is compelled to use senses other than vision to learn it can take longer.
- A blind child may need more time to complete some tasks and achieve the same results as their peers.
- Some apparently easy tasks may be difficult for a blind child (e.g. finding a book on a shelf)
- Depending on how capable the child is the workload may need some adjustment.
Organisational skills

- These skills are some of the most essential skills for a blind and partially sighted child to develop.
- Without good organisational skills, they may have difficulty succeeding in school.
- Constantly promote the idea of ‘a place for everything and everything in its place’ so the learner does not waste time searching for belongings.
- Teach methodical and effective filing of their work.

9.4. Literacy & Numeracy for learners who are blind/visually impaired

Preparation for reading readiness

Visually impaired children read in the same way as sighted children, but they might lack the same range of experiences and therefore special attention needs to be given to three particular areas of development.

- Development of hand skills

Both blind and partially sighted children will benefit from developing stronger hands. Many of them are also behind in fine motor development and find it difficult to write.

Playing: Sorting, matching and stacking toys, blocks or shapes according to size, shape, thickness and texture

Threading activities: Prepare the learner for number concepts, ordering, sequencing (in spelling and maths) and patterns.

Grasping activities: Picking up stones, popping bubble wrap, squeezing toys, holding paper for cutting, cutting paper, clay and sponges, putting shapes in a sorter, building with blocks, stringing beads, taking objects out of a bag, tying knots, buttoning a shirt, handling small objects, using a paint brush

Using both hands (very difficult for visually impaired learners): Tearing paper, tracing around a stencil or object, stringing small beads, holding a cup in one hand and putting beads in with the other hand, holding a ball of wool in one hand and pulling off with the other hand, holding paper flat and drawing on it with the other hand, finger painting while holding the paper still

Finger strength: Stretching elastic hair bands, squeezing soft toys, pinching play dough to make texture or toy, putting clothes pegs on a line or container, finger painting, sponge painting, crumpling paper

Rotary motion: Opening taps, opening door, opening jar with lid, scooping sand, mixing food, pouring, digging

- Access to books and early literacy

Both partially sighted and blind learners lack experience of books, because it is an effort to see clearly. Learners with normal vision see books, magazines, advertisements, TV and many other media in the everyday life and have easy access to learning from these experiences. For visually impaired learners we have to bring tactile books, music, rhythm, repetition and listening to stories to the child to gain similar experiences.
Reading stories: Read and tell stories and describe the pictures, what is in the pictures, have a little tea party if that is in the story, make a bag of surprise objects that appear in the pictures.

Tactile books: Blind children also need some accessible visual/tactile stimulation. There are lovely tactile books available from different suppliers. You can put a tactile object on the cover for easy identification, put printed braille in the book, teach them there is a front and back cover, turn the book to show which way is the right way to read the book.

- **Increase in life experience**

To learn to read, it is important for all visually impaired children to understand basic concepts that other children learn simply by copying or observing.

Educational excursions: Take learners on outings to a shop, the post office, a hospital, the library, a dentist, a farm (Grade 3 Life Skills Book 2- Lesson on Milk)

**Beginning with large print**

Text is easier to read when it is large
The smaller the text gets the harder it is to see for any child but especially the child with low vision.
The only way to find the correct size, is to let the learner try out different printouts.

Partially sighted learners could experience:

- Poor acuity – sharpness, distance or near vision affected, some can see quite small print, but not at a distance and others experience the opposite
- Central vision loss – used for detecting fine detail, difficulty with reading, writing
- Peripheral vision loss – quite effective with detail, but difficulty finding things, moving around, finding the place or space to write answer or to read
- Interrupted vision – patches of poor vision, need to ‘scan’ to see the whole
- Low contrast problems – clarity and contrast often more important than size
- Lighting sensitivity – some prefer lighter, others darker environment
- Impaired eye movements – Nystagmus, continuous eye movement, difficulty focussing, others difficulty with focusing both eyes on the same thing
- Colour loss – difficulty in distinguishing detail in pictures, maps and diagrams

**Choosing the font, font size and contrast**

- Choose the font according to the eye condition, learner’s functional vision, input of specialists and testing different formats with the learner.
- Arial 18 bold is accessible for most learners, but make sure that it suits the learner. In foundation phase font could perhaps generally be bigger.
- In maths learners struggle to distinguish between a 3, 5, 6 and 8. Make sure you give them the correct font and font size. It is not one size fits all.
- Partially sighted learners find it difficult to read cursive writing, rather use computer generated material
Beginning with braille

Methods that can help blind learners to overcome some of the limitations that blindness imposes:

• Most of what children learn - almost 80% - is through the visual processing of information. Blind learners use their sense of touch to learn what sighted people learn when they use vision.
• The learner must have as many concrete experiences as possible.
• A hands-on approach is the best way of helping blind learners to get to know their environment.
• Use real-life objects whenever possible.
• Give the learners enough time for completing tasks.
• The learners need to learn by doing.
• In general, work from the part to the whole.
• They need to understand them as a meaningful whole, and not just as small, unrelated parts.
• Stabilise parts of an activity to prevent movement or bumping things over.

What is Braille?

• Braille is a reading system. It is a translation of print material. It is not another language.
• Braille is a system of raised dots that represent letters and numbers (and other codes) that people who are blind can feel.
• People, who are blind, read braille with their fingertips.
• Braille has codes for words, numbers and music and is used in most languages around the world.

A Braille cell

The braille cell consists of 6 dots.

If you don’t give a blind child dots, they can’t read.

The Braille Alphabet
Braille = Literacy
Literacy = Education
Education = greater opportunities and potential for employment

Braille should be shared with others. It is beneficial if people involved with a braille using child, can also learn braille. For example, teachers, parents, family and friends can all learn braille to assist the blind child. People with normal eyesight read braille with their eyes.

**Preparation for reading readiness**
Start implementing techniques for teaching Braille reading as early as possible. Basic skills for reading readiness:

**Tactile discrimination**
- Begin with large three-dimensional objects that are very different from one another (blocks, balls, toys)
- Sort into pairs that are the same
- Find the same shape but different in size
- Find the shape that is different or the odd one out
- Do sorting activities with for example bottle tops; keys; buttons and beads
- Let them sort different textures. You can be creative and make your own learning aids by pasting different fabrics onto cardboard: rough and smooth; hard and soft sticky and slippery.
- Do exercises on pegboards using pegs of different sizes.
- Sort and fit different sized nuts and bolts.
- Sort shapes into sorting boxes or toy

**Finger dexterity**
- Put beads and blocks into boxes.
- Handle smaller and smaller objects such as paper clips and small nails.
- String beads
- Copy patterns on a pegboard.
- Peg clothes pegs onto a coat hanger or hang some washing on a line
• To develop both hands, encourage learners to do all the activities with each hand in turn and then with both hands together. Braille readers use both hands to read and write.

Hand and finger movements
• Encourage learners to use both hands when they are ‘looking at’ a page.
• Once they start tracing along lines, stress the use of both hands and all four fingers of both hands (except thumbs). Some learners, however, find it difficult to use all their fingers. Learners will eventually develop their own styles of hand movement and may favour certain ‘lead’ fingers and the other fingers are the ‘detectives’ or the assistants.
• Learners can follow the edge of a ruler ‘to see how the fingers travel when following a line of braille.’
• Encourage smooth, even, tracking movements of both hands across the lines.

Light finger touch
• Encourage learners to apply light touch when examining materials tactually. “They need to develop a light touch – lighter as a feather – tell the child to ‘tickle’ the dots. Hands need to be relaxed.”

Posture
• Learners should be sitting as comfortable as possible.
• Feet should be firmly on the floor.
• Elbows should be on the same height or a little higher than the top of the table.
• Put books under the feet or on the chair if necessary.

9.4.1. Teaching literacy
Some things to remember
• The visually impaired learner sees the individual braille cell or letter in large print, rather than the whole word as a unit.
• The braille reader actually identifies the number of dots, the shape in which they are arranged. It is critical for recognition of the braille character.
• Braille and many large print readers must recognise individual characters in a series, remember them, and then integrate them to read the whole word.
• Reading rates may or may not be slower. Reading braille, large print or using a magnifier is more time consuming, requires more time and effort, requires more concentration and memory skills and may cause fatigue or may create barriers to a pupil’s motivation to read.
• A person with normal vision quickly skims or scans a page or picture to find the place. It helps them to read effectively. These will often take more time for a pupil with impaired vision and support from a sighted person is needed. Reading materials must be adapted and made accessible in advance.
• Developing good handwriting may require additional time and attention and some children may go on to use a laptop for much of their work, especially in high school, if it is allowed. In South Africa there are specific rules for external examinations.
• Pictures and graphics used in any activity, needs to be adapted or simplified to make the task accessible without undermining the level of difficulty and the learning outcomes of the exercise.
• Many technology solutions exist for accessing information via computer. Text on computer can be output through speech, large print, or braille, depending on the software and hardware available. Some learners might also benefit from any combination of braille, large print, regular print, optical devices, and technology.

9.4.2. Teaching numeracy
Mathematics and calculations are part of everyone’s daily life and it should be the same for visually impaired learners. There is no reason why they cannot do the same mathematics as children with normal vision, but the learning material needs to be accessible and supported by the right teaching aids. Some experts say that we are born with ‘number sense’ and logical reasoning, but this also relies heavily on visual skills. It is much easier to compare differences and likenesses in amount, size, shape, height, length, etc. when you have normal vision. A visually impaired child must explore the same things systematically in parts before there is a concept of the group or object. They will not automatically look for differences and similarities if not told to do so.

Some suggestions:

• Create opportunities and encourage children to explore groups of objects with one or two hands (beads, coins, sweets, buttons, toys, building blocks) to compare the size or texture.
• Practise matching number of objects to number of fingers.
• Talk about numbers: how many, how many more or less, how many more are
• Remember, the functional vision of partially sighted learners, differ and we need to cater for each individual’s needs. Let them assist you in selecting a font and font size with numbers that are easy to distinguish. A 6 can easily be misread as an 8 or a 5 or a 3 for example. The norm is to work in Arial.

Arial 18 point bold: 6

• Make sure of size and weight of the operational signs: +, ÷, x, -, <, >, =, %, ½, ¾
• To teach proper layout of written work, it is better to use grid paper. Exercise books with grid lines are available at most stationery shops. It helps learners align hundreds, tens and units or long multiplication and many other concepts.
• For solving maths word problems, we sometimes require and assume that the learner has the necessary "general" knowledge inherent in the word sum. There may, however, be gaps in the general knowledge of visually impaired learners.
• Number rods, counting or building blocks, pegboards and an abacus are useful for teaching numbers, ordering and sequencing.
• Focus on concept development first and then method, avoid ‘recipes’ or rote learning.
• The number line is useful for working on operations, relationships, fractions, and decimals. It is very useful to stretch a number line across the top of the learner’s desk.
• Use flashcards in braille and large print for working on the basic operations.
• To teach addition to young children, cubes that attach to each other (Unifix cubes) can be an effective aid. When teaching multiplication and division, use the 100 and multiplication boards provided in the toolkit, overlaid with braille or large print.
• Sets of fraction circles and fraction strips are ideal for teaching the concept of fractions.
• It is much easier for people with normal eyesight to estimate distance or length, but it is an important skill for learning independent mobility skills. They need additional practice.
• Visually impaired children cannot see a whole calculation in one go, taking in place values at a glance or see that there are brackets around one part of an equation. They may need longer to work out which operations feature in the calculation before applying the rules.
• Some children like to use a blob of Prestik against question numbers to keep track of which ones they have answered, or to mark part of the page that they need to refer back to later on.
• Learning multiplication tables is an even more valuable skill for a child with visual impairment, who struggles to see number sentences or equations in their entirety.
• Talking calculators are not only useful for learners who are blind, but also for those who are partially sighted. Use earphones in class and in exams. Make sure that the calculator fits the learner’s ability to key in calculations.
• A picture paints a thousand words? Yes, if you can see the whole picture at once, but a graph, pie chart, histogram or table presents a huge challenge to a learner who can only see a small part of it at once, or if he or she is exploring the tactile diagram by touch. Partially sighted children find it more difficult or impossible to distinguish between particular colours or two different shades of the same colour or different textures. Many diagrams need to be simplified to be accessible for both blind and partially sighted learners.
• Reduce the number of data entries without compromising the learning outcomes. You can still achieve the learning outcome by simplifying the data set and reducing the number of questions.
• Use bold lined graph paper for partially sighted learners. Two dimensional and three-dimensional shapes
• Position, direction and 3D shapes are all very difficult concepts for visually impaired learners, and yet, they need to develop good spatial understanding. 2D drawings of 3D shapes present a particular challenge to children with a visual impairment. It takes much more effort to explore a three-dimensional shape by touch alone to work out how many faces, edges and vertices it has, whether it is regular and finally what it is.
• Use low vision and tactile geometry sets. Developing a secure understanding of a right-angled turn or rotation, a 180 degree “half turn” and a full 360-degree rotation or one revolution is essential for mathematics but also for spatial orientation, understanding instructions for simple directions within a room and becoming independent in orientation and mobility. They also need to understand north, south, east and west.
Braille pictures and conceptual development

Written communication and the curriculum are increasingly image-dependent.

The world’s first blind astronomer, Dr Kent Cullers, said it this way in his book, Touch the Universe: “It has often been said that a picture is worth a thousand words. Well, for the first time in my career, I get the picture.” http://www.youcandoastronomy.com

- Pictures provide the first step to literacy for sighted children.
- It is a link from the three-dimensional world to a two-dimensional representation.
- Not only do graphics provide the first step in braille literacy, graphics also allow learners to continue into the most advanced academic tasks, from counting to advance mathematics and science.
- Just as a sighted child is attracted to pictures and then drawn to reading print, the blind child responds in the same way to tactile images.
- It allows access to the full curriculum, textbooks, recreational activities and standardised examinations.
- It gives access to map reading, use of electronic devices, building mental images and spatial awareness.

Building mental images

The learning process:

```
Concrete                  3-dimensional
                 ↓
Manipulative
                 ↓
Abstract                 2-dimensional, solid drawing
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Challenges

- Teaching concepts involving three-dimensional objects, especially when trying to create 3-D objects in a two-dimensional drawing is difficult. Let them handle the real cylinder and feel it and talk about it. Much of the subject terminology relies heavily on ‘sighted’ concepts. In mathematics and physics, the concept of ‘shadow’ or ‘shading’ is unavoidable. Teaching quadratic and other graphs makes a lot more sense to blind learners if they can plot the graph on large, embossed grids with prestik, or on a homemade graph board with pegs and rubber bands or string. The ability to ‘see’ the connection between a graph and its equation can be helpful to both partially sighted and braille learners.
- When teaching symmetry paper folding can be a lot of fun and makes a lasting impression.
- When teaching measurement, perimeter and area it is best to progress from measuring real life objects to two-dimensional drawings.
- Use manipulatives for introducing translations, reflection, rotation, line of symmetry and tessellations. Take two congruent two-dimensional shapes and place them on top of each other. Then slide them, flip them and rotate them. For tessellations use a number of congruent triangles or squares that can tessellate and let the learners discover how it works. Let them use all kinds of shapes and find out for themselves, which shapes tessellate, and which ones do not tessellate. Then move on to the textbook tactile representation.
- Be innovative and creative. Allow learners to discover as much as possible before you just ‘spoon feed’ them.
- A child with little or no vision may have fragmented understanding of the world, colour, sky, clouds, mountains, buildings, small insects and many other things. This can affect academic performance, social inclusion and career development.
- Concept building happens in all subjects. Focus on them and make sure the learner understands. Understanding is more important than the number of questions completed.

**Concept development**

*Example 1: Grade R Workbook 1 (Braille)*

<table>
<thead>
<tr>
<th>Learners use their bodies to compare sizes. (The teacher is big and I am small).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare a big plate and a small plate; a big block and a small block; a big bead and a small bead or any other available objects.</td>
</tr>
<tr>
<td>Dough/Clay: make a big ball; make a small ball.</td>
</tr>
<tr>
<td>Sort shapes: put big circles in one container and small circles in another container.</td>
</tr>
<tr>
<td>Put a small circle on top of a big circle and discuss the difference in size.</td>
</tr>
<tr>
<td>Open your book. (You may help them if necessary.)</td>
</tr>
<tr>
<td>Use both hands and scan the page from the top to the bottom in zigzag movements. Cover the whole page. (You may have to help by putting your hands over the learner's hands and guiding them over the page.)</td>
</tr>
<tr>
<td>What do you see? What do your hands find?</td>
</tr>
<tr>
<td>Are the two circles the same size?</td>
</tr>
<tr>
<td>Put your finger on the big circle.</td>
</tr>
<tr>
<td>Put your finger on the small circle.</td>
</tr>
<tr>
<td>How many circles are there?</td>
</tr>
<tr>
<td>Put your finger on the circle and count: &quot;one&quot;.</td>
</tr>
<tr>
<td>Move your finger to the other circle and count: &quot;two&quot;.</td>
</tr>
<tr>
<td>String some small beads.</td>
</tr>
</tbody>
</table>
Example 2: Grade 3 Mathematics – Numbers between 500 and 600

This is a very good example of concept development, in this case hundreds, tens and units. For the teacher of the visually impaired child, it involves some preparation, more time spent with the learners and the topic and appropriate tools or teaching aids to make sure learners can access the exercise and understand the graphic, concept and notation.

Spend enough time with the hundred squares, the bars of ten and the unit blocks, the teacher will have to print flash cards in braille and the graphics are simplified and presented differently.
Example: Grade 3 Mathematics Workbook

Measuring circles

Work with a partner.

Materials: 10 circular objects of different sizes like a plate, a glass, sticky tape roll, a bottle cap, string and scissors

1. Choose one of the round objects to measure with the string.
2. Cut a piece of string the exact length that just fits around the object.
3. Now take the same string and stretch it across the circle. Count how many times it fits across.
4. Do the same with other circular objects.
5. Write what you notice.

| The distance around a circle is called the circumference. |
| The distance across a circle is called the diameter. |

This is a very good exercise for visually impaired children for concept development, developing finger dexterity and skills of daily living (cutting, holding and measuring). The only adaptation is that the diagram needs simplification for the blind learner. Use the specialized measuring equipment for visually impaired persons. Let them work in pairs if they struggle. Do not accept excuses like “I cannot see this thing”. Working together develops social skills, patience, tolerance, good manners and teamwork. Discuss what working together teaches them, whether they like it and why or why not.
3-D objects are one of the most difficult things for a visually impaired child. The drawings in this table have no meaning really for them. Use a set of wooden or plastic (bought) 3-D bodies. This exercise takes much, much longer for a visually impaired learner. Be patient, because if a learner is gifted enough to study mathematics at university, this work is essential. Let them use prestik to help them count the faces, vertices and edges.

Example: Grade 6 Home Language Workbook

What a lovely story to teach a blind child about lengthening shade as the sun moves along its path. They can all experience the shade ‘moving’ during the course of the day. In the mornings we sit on this side of the house and in the afternoon we move around when it is hot.
The man who bought the shade

Let’s Speak

What do you think of the title of this worksheet?
Do you think this story will be about something that really happened?
Now look at the pictures and think about which country this folk tale comes from.

Let’s Read

There was once a man who was very rich. Unfortunately, he was also a very mean, nasty man. He was so mean and nasty that all the people in the village were afraid of him. No one dared to go near his house and no one dared to speak to him. One scorching hot day the mean man fell asleep in the shade under a tree outside his house.

When he woke up he found a young man next to him, also enjoying the shade.

Rich man:
What are you doing here? Go away, this is my shade!

Young man:
This can’t be your shade. The tree belongs to the village.

Rich man:
Huh! This tree and its shade belong to me!

Young man:
Then sir, please sir, I would like to buy the shade of your tree.

Rich man:
You can buy my shade for five pieces of gold.

Young man:
Here you are, sir, take the gold. Thank you, sir. I am now the owner of this shade.

The mean man put the gold into his pocket, chuckled to himself and went back into his house.

Later the sun began to set and the shadow of the tree grew longer and longer until it covered the mean man’s house. Then the young man walked boldly into the house.
Sensory efficiency, including visual, tactual and auditory skills

We have dealt with some therapeutic interventions in developing visual and tactile skills for reading and writing, but we must not forget the partially sighted learner and make sure that we address the following:

**Visual efficiency:** The partially sighted child also needs to learn to track movement and to respond to visual cues in the environment. Train them how to use their magnifiers and other electronic assistive devices properly.

**Tactual skills:** Both blind and partially sighted learners rely heavily on tactual skills. It takes repetition to tactually understand a concept that sighted people learn by a glance.

**Auditory skills:** The development of good auditory skills helps with orientation and mobility, like crossing streets. It also helps to use their auditory skills to pick up social cues and respond appropriately and to use auditory learning materials. For blind learners, it is vital to be able to listen carefully when they use computers with JAWS.

Let us look at examples from the curriculum.

Example: Grade 2 Home language workbook (Translated in 11 languages)

Lesson: My family
Fun

Choose a gift for everyone in your family.

Tick each gift when you have given it to a family member.

You must use up all the gifts.

Say: I will give the chocolates to my mother because she likes sweet things.

Adaptation:

To the teacher: Make a surprise bag with gifts. Include things like lovely smelly soap on a rope, chocolates, a toy for a boy, a toy for a girl, sweet smelling flowers, hand cream, etc. Make sure there are enough for each child to pick something.

Fun

Make turns to choose a gift for someone in your family from the surprise bag.

Say what you picked, to who you will give it and why.

I will give the chocolates to my mother because she likes sweet things.

Example: Grade 3 Home Language Workbook - We try to eat well

Let’s read
Read the story. Then circle the words with the ee- and ea- sounds.

I like to eat the vegetables from our garden. The garden is around our house. We grow green beans and peas to eat.
We also grow potatoes and tomatoes. 
I pull out the weeds each week. 
I water the plants when it does not rain.

Adaptation: 
To the teacher: Make a display on the table with different vegetables like carrots, beans, cabbage, tomatoes, peas, radish, cauliflower, etc. Keep a knife handy to cut the vegetables so that learners can taste them. 
Activity: Go to the discovery table. Touch and smell the vegetables. You may also taste. Say what each vegetable is and whether you like to eat it.

Example: Grade 3 Mathematics Workbook 
Fractions

Adaptation: 
In the schools for visually impaired learners most of the learners are in the hostel. If they are not, it is a good idea for the sake of teaching skills of daily living and social skills to arrange for a day for them to all eat lunch in class. 
Ask for a volunteer to bake a pie for lunch for your class. Discuss the size of the pie or pies and divide the children accordingly.
This can be a good opportunity to integrate subjects (life skills, language, maths).

Let’s do

1. Teach the learners how to lay the table with the correct utensils and serviettes.

2. Eat like a “Cool Kind Kid”
   - Wash your hands and face before sitting down.
   - Always sit up straight at the table and place the napkin on your lap.
   - Wait to begin eating until everyone is seated and has been served.
   - Stay seated without wiggling in your chair.
   - Use your utensils and do not lick your fingers, pick your teeth or put your elbows on the table.
   - Say, “Excuse Me”, and ask permission to leave the table.
   - Don’t put too much food on your fork and chew with your mouth closed.
   - Do not talk with your mouth full.
   - Say “May I please” and “Thank you” if you would like more food. Do not reach over the table.
   - Do not burp, slurp or say negative things about the food.
   - Help clear the table and say thank you for the food.

Example: Grade 3 Mathematics Workbook

![Image](image.png)

Veronica’s garden.
Veronica draws a diagram of the garden she wants to plant.

a. What is the perimeter of the area where she plants her herbs? _______

b. Which two sections have the same perimeter? What is their perimeter?
   _______ and _______ have a perimeter of _______ m.

c. She needs a fence around the whole garden. The fencing costs R50 per meter. How much will the fence cost?

Adaptation:

Decide to make a little herb garden as a group. You can also decide to plant vegetables to teach them about a sustainable lifestyle, but make sure to plant the vegetables in the correct season and that they are fast growers and producers. Do the soil preparation (it is part of the curriculum),
measure it out, buy the plants or ask for cuttings or donations from parents and friends. It is not only a skill of daily living they are learning, but also sensory perception, motoric development and socializing (working together, planning together and sharing). They can even draw the plan of their little garden with the Perkins brailler, developing their graphic skills.

Similar tasks can be developed in any learning area for any grade up to Grade 12.

Practical examples of best practices

Example 1: Classroom with desktop magnifiers
Example 3: Teaching Maths and Sciences

1. Bar graphs
Tables in braille
Data handling – pie charts, tables, etc.
Using a specially designed and made graph board with a grid, holes and pegs

Using a ‘stencil’ for graphs
Using a model of the ear to gain an understanding of the parts in 3D
Reading the braille graph of the ear in 2D – Grade 12 Exams
Resources for “SECTION 9: PRACTICAL APPROACHES: CURRICULUM DIFFERENTIATION FOR LEARNERS WITH VISUAL IMPAIRMENT”

1. Early literacy development- Tricia D’Apice & Gillian Gale, Royal Institute for Deaf and Blind, Australia (RIDBC)
2. What teachers need to know – Kinash, S & Paszuk, A (2007), Presented by RIDBC
5. Faster braille reading: Preparation at the Reading Readiness Level, Myrna R Olson as quoted in: A teachers’ guide to the special educational needs of blind and visually handicapped children, Sally S Mangold, editor. American Printing House for the Blind
6. Grade R Teachers’ Guide – DBE
8. Teaching maths to pupils with vision impairment - rnib.org.uk/curriculum
11. DBE WORKBOOKS – GRADE R – 9
12. DBE ANNUAL NATIONAL ASSESSMENTS
SECTION 10: DIFFERENTIATED ASSESSMENT FOR LEARNERS WITH BARRIERS TO LEARNING

10.1. Assessment: An Introduction

WHAT IS ASSESSMENT?
- Assessment is a process of collecting, analysing and interpreting information to assist teachers, parents and other stakeholders in making decisions about the progress of learners.
- Classroom assessment should provide an indication of learner achievement in the most effective and efficient manner by ensuring that adequate evidence of achievement is collected using various forms of assessment.

WHAT IS DIFFERENTIATED ASSESSMENT?
- Differentiated assessment that is different in some way to the standard delivery.
- Differentiated assessment involves accommodations and adaptations.
- Differentiation in assessment and accommodations are designed to equalise opportunities for all learners by addressing barriers which learners may experience.
- Support for learners is to enable them to give a true account of their knowledge and/or skills;
- The standard of assessment must not be compromised, nor should the learner be given an unfair advantage over his or her peers;

10.2. Accommodations in Foundation, Intermediate & Senior Phases

1. The primary focus of the early years of Basic Education is to develop the essential foundational skills and competencies necessary for the senior years of high school.

2. In addition, it is the intention that as many learners as possible should be able to cope independently in the school environment.

3. If a learner is not achieving as expected for a specific grade, early intervention is critical. Such intervention will prevent the learner from falling significantly behind before individual support is sought.

4. The provision of accommodations does not mean that attempts to remediate the difficulties are halted. Rather the two processes should work concurrently, with the desirable goal being that the learner may eventually no longer need the support measures.

5. In these phases, accommodations granted to learners should be seen as temporary measures which are part of a process of ascertaining what strategies assist the learner by addressing the barrier(s) to learning that he/she is experiencing and with the passage of time may no longer be necessary.

6. Dependent on the specific barriers to learning experienced, some learners may require accommodation measures throughout their school career.
7. All learners who have been assessed and found eligible should have access to the full range of accommodations listed in the policy, in all grades from Gr 1 to 9.

8. However, notwithstanding point 7, it needs to be recognised that foundational skills such as writing and reading may be attained at different stages and teachers should not use the policy as a way of reneging on their responsibility to apply remedial strategies and interventions to support learners who need more time to master skills.

9. Any accommodations awarded need to be reviewed regularly by the SBST and specifically at the end of each phase. The DBST must be informed of any changes. Accommodations approved in Grade 9 must be approved by DBET.

10. The SBST must ensure that the list of learners who have been granted accommodations is forwarded to the Examination Section at the District Office for monitoring and support purposes and to be considered during the promotion meetings at the end of each year.

11. The District-based Assessment Committee must appoint an Appeals Committee which will review appeals received and are accompanied with comprehensive documentary proof, on a regular basis and ensure that a decision is communicated within a period of two months.

10.3. Types of Assessment

1. Classroom assessment should be both informal and formal. In both cases, it is important that learners know what knowledge and skills are being assessed.

2. Informal (assessment for learning) or daily assessment is the monitoring and enhancing of learners’ progress. This is done through teacher observation and teacher-learner interactions. It should be used to provide feedback to the learners and teachers, close the gaps in learners’ knowledge and skills and improve teaching. Informal assessment builds towards formal assessment and teachers should not only focus on the formal assessment.

3. Formal assessment (assessment of learning) provides teachers with a systematic way of evaluating how well learners are progressing in a particular subject and in a grade. Teachers must ensure that assessment criteria are very clear to the learners before the assessment process. This involves explaining to the learners which knowledge and skills are being assessed and the required length of responses. Examples of formal assessments include projects, oral presentations, demonstrations, performances, tests, examinations, practical demonstrations, etc.

4. The forms of assessment used should be appropriate to the age and the developmental level of the learners in the phase. The assessment tasks should be carefully designed to cover the
content of the subject. The design of these tasks should therefore ensure that a variety of skills is assessed as contemplated in Chapter 4 of the various Curriculum and Assessment Policy Statements.

5. School Based Assessment must be guided by assessment components as specified for each subject in Chapter 4 of the Curriculum and Assessment Policy Statements as contemplated in Chapter 4 of the Curriculum and Assessment Policy Statements.

6. School-Based Assessment (SBA), Practical Assessment Tasks and end-of-year examinations are designed to address the content competencies, skills, values and attitudes of the subject, and to provide learners, parents and teachers with results that are meaningful indications of what the learners know, understand and can do at the time of the assessment. Recording of learner performance is against the assessment task and reporting is against the total mark obtained in all tasks completed in a term.

<table>
<thead>
<tr>
<th>Phase</th>
<th>School-Based Assessment Component %</th>
<th>End-of-year examination %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Phase (Gr R – 3)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Intermediate Phase (Gr 4 – 6)</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Senior Phase (Gr 7 – 9)</td>
<td>40</td>
<td>60</td>
</tr>
</tbody>
</table>

10.4. Assessment of Learners Who Experience Barriers to Learning
The following range of alternate assessments provide a mechanism for learners with the most significant cognitive disabilities, and for other learners who experience barriers to learning who may need alternate ways in which to demonstrate whether they have attained knowledge, concepts and skills. It also provides a mechanism that ensures that these learners are included in an educational accountability system.

Mechanisms for Assessment Differentiation
### 10.5. Differentiated Assessment as Part of Differentiated Teaching

- Differentiated assessment means assessment that is different in some way to the standard delivery. Differentiated assessment involves accommodations and adaptations. The purpose of differentiated assessment is to enable a learner who has barriers to learning to be able to show what he/she knows and can do, and thus close the gap between current performance and perceived ability.

- An accommodation is designed to mitigate the negative effects of a barrier to learning on the performance of a learner in a set school task, test, or examination, without changing the construct being measured by the given assessment task.

- An adaptation is an alternate assessment task designed to enable learners with intellectual disabilities or other difficulties to demonstrate academic progress and achievement in their

<table>
<thead>
<tr>
<th>Adaptation of questions</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Time</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Digital Player/Recorder</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Braille</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer/ voice to text/ text to voice</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Enlarged Print</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handwriting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Medication/food intake</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral examination</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Personal assistant</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompter</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reader</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rest Breaks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scribe</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Separate Venue</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sign Language Interpreter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spelling</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcription of Braille</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video/DVD recorder/ Webcam</td>
<td>Yes</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
### 10.6. Three Types of Alternate Assessments

<table>
<thead>
<tr>
<th>Types of Alternate Assessment</th>
<th>Alternate Assessments Based on Alternate Attainment of Knowledge (content, concepts &amp; skills)</th>
<th>Alternate Assessment Based on Modified Attainment of Knowledge (content, concepts &amp; skills)</th>
<th>Alternate Assessments Based on Grade-level Attainment of Knowledge (content, concepts &amp; skills)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which Learner is it for</td>
<td>For learners with a significant cognitive disability. Working WITH grade level content. They may be in Special or Ordinary Schools</td>
<td>For learners with disabilities who are working ON grade-level content.</td>
<td>For learners with disabilities or learning difficulties. They need equal opportunities to demonstrate their attainment on the same grade-level content.</td>
</tr>
<tr>
<td>Assessment</td>
<td>On the grade-level content but at reduced depth, breadth, and complexity (achievement based on what is determined as a high expectation for these learners)</td>
<td>They may require more time to master the content (measures learner’s mastery of grade level content)</td>
<td>Adapted papers e.g. Braille, enlarged font, MP3, etc.</td>
</tr>
<tr>
<td>Who do you target</td>
<td>Learners with intellectual disability who are currently enrolled in special and ordinary schools.</td>
<td>Learners with moderate intellectual disability, who are deaf, some learners on skills programmes, etc.</td>
<td>Learners who are blind, have communication disorder, physical disabilities, dyslexia or hearing loss.</td>
</tr>
</tbody>
</table>

**Please Note:** The application of the above measures can only be determined after the protocols as outlined in the SIAS Policy have been applied and an Individual Support Plan is in place for a learner and Form DBE 125 (Curriculum Differentiation Schedule) has been completed and approved by the District-based Support Team (DBST) with the consent of the parents.

### 10.7. Types of Accommodations

The following accommodations must be available to all learners who are deemed eligible to receive them and be available for all subjects taken by such learners all of their subjects:

**10.7.1 Additional Time**
1. The amount of additional time granted per category of impairment is in the table that follows:

<table>
<thead>
<tr>
<th>Impairment</th>
<th>Additional Time that may be made available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Disability/Repetitive Strain Injury</td>
<td>5 to 10 minutes per hour to accommodate slower writing speed.</td>
</tr>
<tr>
<td>Learning Disability</td>
<td>20 minutes per hour for perusal / formulating/ writing/ checking answers.</td>
</tr>
<tr>
<td>Chronic Pain</td>
<td>15 minutes per hour for standing and/or moving around.</td>
</tr>
<tr>
<td>Vision Impairment</td>
<td>Double time for learners who are blind, and time and a half for learners who have low vision.</td>
</tr>
<tr>
<td>Hearing Loss</td>
<td>20 minutes per hour for perusal/ formulating/ writing/ checking answers.</td>
</tr>
<tr>
<td>Any other disability not identified in the above list</td>
<td>may use the above-mentioned time allocation, not exceeding 20 minutes per hour.</td>
</tr>
</tbody>
</table>

2. A learner may be granted extra time as he/she has a barrier to learning, which prevents the completion of tasks/examinations within the standard time allocated. This barrier could be a slow handwriting speed or a processing difficulty, for example.

3. Candidates who have been granted additional time must be seated in a specific area of the examination venue according to the amount of extra time they have and where they will not be disrupted when the rest of the cohort exit an examination.

4. The amount of extra time per hour that each candidate has been granted should be indicated on a sticker affixed to the relevant desk.

5. The extra time candidates must be informed as to their specific finish times and be given the appropriate time warnings as the end of the examination approaches.

6. Candidates who have been granted extra time need not make use of the full extra time but they must remain in the exam room for the standard time set for the paper.

7. The additional time must be provided in all subjects that the learner is writing.

8. The candidate is entitled to have a rest break, should it be required/requested, if the addition of the extra time makes the exam session longer than 3 hours.
10.7.2. Use of a reader is something needed on who appoints the readers and scribes

1. A learner may be granted the use of a reader if there is a significant discrepancy between the learner’s chronological age and reading age.
2. A reader is appointed to read, as directed by the candidate, a) any part of the examination paper and b) any part of the candidate’s answers. Text may only be re-read at the request of the candidate.

10.7.3. Use of a scribe

1. A learner may be granted the use of a scribe if his/her writing speed is very slow, if the writing is illegible or if the use of a computer is not an option for accommodating the aforementioned two barriers.
2. A scribe is appointed to write the candidate’s answers to questions verbatim.

10.7.4. Use of a personal assistant

1. A personal assistant is appointed to aid a candidate who is unable to do certain basic tasks involved in an examination for him/herself (such as turning a page or manipulating equipment in a practical examination).
2. For the NSC, there has to be an invigilator where a personal assistant is being used.
3. The personal assistant may not do scribing or reading duties.

10.7.5. Use of a prompter

1. A prompter is used when a learner is easily distracted. The prompter refocuses the candidate’s attention by using a verbal cue (“Focus on your work.”) or a physical cue (tap on the shoulder or desk).
2. The prompter must not communicate with the candidate beyond what is outlined above.

10.7.6. Use of a computer

1. A computer is used if a learner has writing that is illegible, a very slow speed when writing by hand, or some other difficulty that makes handwriting not viable.

10.7.7. Braille and Large Print Material

1. Learners from Grade 1 up to Grade 4 receive most assessments in uncontracted Braille, making use of the Home Language Braille codes.
2. All assessments in Grade 5 -12 are produced in contracted Braille.
3. Enlarged examination papers must be provided for learners with visual impairments. The specific font size required will be determined by the nature of the impairment. Such papers can be provided in hard copy or in electronic format.
4. The optician/ophthalmologist should recommend the specific font size or screen interface that each individual learner requires.
5. All learners with visual impairment receive additional time as stipulated in the table above.
6. Learners with visual impairment may also be eligible to receive any of the other accommodations, e.g. Use of a reader, Scribe, Prompter, Computer, Handwriting concession, Spelling concession, Medication and food intake, Rest breaks, and Ad hoc support.

10.7.8. Handwriting Accommodation

1. This accommodation will be provided to learners whose handwriting is very difficult to read and for whom the use of a computer is not appropriate.

10.7.9. Spelling Accommodation

1. This accommodation is granted to learners experiencing a Specific Learning Disability, including dyslexia, where there is a significant discrepancy between the chronological age of the learner and spelling age of the learner, and the learner’s ability to express his/her thoughts adequately is thus compromised (a significant discrepancy between chronological age and spelling age is considered to be at least two years, seen within a holistic evaluation of the learner profile.)
2. A spelling accommodation will not be granted where the primary area of difficulty is with the language of learning, teaching and assessment due to the fact that this is not the home language of the learner (National Policy pertaining to the Conduct, Administration and Management of the National Senior Certificate Examination, page 76).
3. A spelling flag/sticker is affixed to the front cover of the examination answer booklet together with the accommodations approval letter. This indicates to the marker that spelling errors must be ignored so long as the words are phonetically correct.

10.7.10. Medication and food intake

1. Learners may need to take medication during an examination and/or have access to food and beverages used to maintain sugar levels and treat low blood sugars.
2. Rest breaks should also be applied for in conjunction with this accommodation. The time taken to eat and/or drink will then be added on to the standard examination time.

10.7.11. Rest Breaks

1. A rest break is granted to a learner who is not able to remain seated and writing for the duration of the examination. This could be due to a back problem, for example.
2. The rest break is a period of time when the learner is not required to be at his/her desk but must remain in the examination venue. Rest break time does not count as extra writing time
3. The rest break time used will be added to the examination session.

10.7.12. Specific Equipment

1. The DBST or the Director: Assessment and Examinations, as appropriate, must be notified of and grant approval for, the use of any specific equipment required by a learner in order for him/her to show what he/she knows and can do.
2. Such equipment must not give a learner any advantage over his/her peers.
3. Should such equipment be a source of distraction for other learners the use of a separate venue must be requested.

10.7.13. Ad-hoc support/Emergency Accommodations

1. This refers to support that may be required in cases of pregnancy or due to unforeseen circumstances such as trauma, hospitalisation or imprisonment immediately prior to or during an assessment or external examinations.
2. The DBAC must discuss the matter telephonically with the PBAC and obtain approval to grant the accommodation. In instances where the PBAC officials cannot be contacted, the DBAC should make the decision and inform the PBAC with supporting evidence within 24 hours or within 3 days in emergency cases. The original decision may be changed by the Head of the assessment body or his or her representative if no valid documents are presented within 3 working days.
3. Such support could include arrangements for the examination to be written in a venue other than the standard one and/or for the assessment to be postponed until the next examination or assessment period.

10.7.14. Separate Venue

1. A separate venue is a quiet environment away from the main examination centre and must meet the minimum requirements to be approved as an examination venue. It must have its own invigilator.
2. The use of a separate venue is either i) to assist an individual learner for medical, emotional or learning difficulty reasons or ii) to prevent possible disturbance of others by the learner concerned.
3. If the use of the separate venue will involve talking (such as for to a scribe or reader) only one candidate may be in each separate venue.
4. If a separate venue is needed for the use of computers, or for learners with anxiety disorders, then 3 or 4 candidates may be in one venue.
10.7.15. Digital recorder, video recorder, web-cam

1. A recording of the entire examination proceedings must be made whenever a separate venue is utilised. This recording must be submitted with the examination script.
2. The recording device must be tested prior to its use in each examination and the battery life checked. Should the battery power be low, new batteries must be inserted to the device prior to the examination.
3. Digital recordings need to be copied to a CD at the end of each examination and submitted with the candidate’s answer booklet.
4. This requires the use of a separate venue. The examination proceedings must be recorded by the invigilator on a digital recording device.

10.7.16. Sign Language Interpretation

1. The electronic access to examination papers is in the process of being implemented. This will ensure the standardisation of the quality of interpretation. In the interim, schools will continue utilising interpreters where necessary.
2. In time, all school-based summative assessments need to be made available to learners in digital form.
3. This will ensure the standard of the sign language interpretation in each subject provided that there are subject specialists available who have mastered all subject specific Sign Language terminology.
4. Question papers should therefore be transferred onto a PowerPoint.
5. There should not be any simplification of the language in the paper in order to ensure that the standard is not compromised.
6. The question as it appears in the PowerPoint should be signed by a Deaf adult or a CODA (child of a deaf adult) on a video podcast and the slide should be inserted into the PowerPoint.
7. The learner then can see the written version as well as the signed version of the question on the laptop screen and he/she has the option to use the version he/she feels most comfortable with.
8. The learners can then easily go back to previous questions to review their answers.
9. Learners should record their answers in answer booklets.
10. Learners who experience secondary barriers, such as with writing, should be granted an accommodation to sign the question on the webcam on the laptop. These signed answers can later be transcribed or marked if the teacher/marker is fluent in South African Sign Language (SASL).
11. This method is totally objective as every learner gets the same question paper and can go back and forth as needed.
12. In this way the learner’s subject knowledge is tested, instead of his knowledge of the second language.
13. The standard of the question paper is not lowered by the simplification of language.
14. Each learner can work at his/her own pace.
15. In Grade 12 the person signing the paper will not be a Grade 12 subject teacher.

16. In the absence of an electronic paper and where an interpreter is provided, the integrity and the standard of the examination must be safeguarded by putting the following measures in place:

   a. The person allocated to interpreting duty during the exam session needs to be an interpreter only and may not be an invigilator as well.

   b. An interpreter information form needs to be developed by the Provincial Director: Exams and Assessment to be completed, including the name and personal particulars (including the ID Number) of the interpreter for the exam session. In cases where a paper is long and requires extensive interpretation, a second interpreter may be required for which the form must also be completed. The form must also indicate the time slots in which interpretation was provided by each interpreter. This will avoid irregularities.

   c. There needs to be a clear explanation of the interpreter’s role in the exam centre which is forwarded to the school which has applied for the accommodation, before the commencement of the exam.

   d. There needs to be an allocated seat and standing place for the interpreter in each venue so that if an external monitor comes in, it is immediately clear who the interpreter is.

   e. All interpreters need to sign a Code of Ethics which highlights the standards which are to be upheld.

   f. All interpreters are to be provided with clear guidelines on HOW to interpret in exam settings without inadvertently giving answers to learners.

   g. All interpreters must be competent in signing the specific subject content.
Assessment support for learners who experience barriers to learning

**Policy Statement**


Regulations pertaining to the National Curriculum Statement Grades R-12

**When**

As early as the Foundation Phase or at least by end of October of their Grade 10 year, except in a situation where the need arises at a later stage.

Re-evaluated in each new phase.

**Guidelines**

> Assessment accommodations / concessions

Learners who experience barriers to learning and assessment; Grades R-12

Learners who request immigrant status for assessment purposes; Grades 4-12

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**WHAT**

Policy makes provision for curriculum and assessment differentiation in the classroom which will assist learners to achieve their full potential during assessments.

The minimum requirements for achieving grades, as spelled out in the National Curriculum Statement (Grades R - 12), may not be compromised. The curriculum is flexible, learner-based and learner paced.

**WHEN**

Identified as early as the Foundation Phase or at least by the end of October of their Grade 10 year.

**WHO**

- Deaf and hard of hearing
- Deaf-blindness
- Visual impairment: Blindness and partial sightedness or low vision
- Physical impairments
- Difficulty with expressing one's own knowledge in written form, in particular difficulty with spelling and/or grammar.
- Difficulty with numbers and numerical concepts.
- Learning Difficulty: understanding, interpreting, transferring knowledge or skills, receptive or expressive language, spelling, grammar.
- Speech or communication impairments
- Behavioural problems, Anxiety, ADD/ADHD

**HOW**

- Braille
- Oral examination
- Additional time
- Prompter
- Enlarged print
- Sign language interpreter
- Handwriting
- Spelling
- Scribe
- Video/DVD recorder/Webcam
- Rest breaks
- Reader
10.8. Diagrammatic Representation of the Assessment Differentiation Process Flow

1. The diagrams below are provided to show the manual and system process flow.
2. This diagram applies to Gr R – 9 only

Note: It is up to the District staff to follow up with schools who have not supplied the required or appropriate documentation.
School-based Identification and Decision making process (SNA 1 and 2)

Learner identified as additional support needs by class/subject teacher. Teacher renders support SNA I. Should support not suffice, refer to...

Complete SNA2 to decide whether support suffices. Teacher presents case and SBST provides further support on ISP.

EVIDENCE (supporting documentation)
medical-, psychological-, test reports; individual support reports, study permit etc.), including a report of support rendered to the learner submitted by school to the DBST.

Should support sill not suffice the SBST submits a request (approval for Ass. Acc.) via the principal to the DBST.

Applications for immigrant learners are submitted directly from the SBAT to the District Assessment Coordinator.

DBST
Evidence is presented and discussed by the DBST may decide to recommend ASSESSMENT ACCOMMODATION.

CAPTURING OF APPLICATIONS ON SA- SAMS
Assessment Accommodation applications go to DBAC that will open the application for the capture on the Electronic Accommodations Portal.

E-mail sent to school giving them permission to capture the application electronically on SA SAMS.

After the application is captured electronically at school, DBAC will “recommend” or “not recommend” on Portal.

After the application for immigrant learners is captured electronically at school, Assessment Co-ordinator will “recommend” or “not recommend” on Portal.

Assessment Coordinator chairs the District Concessions / Accommodations Committee. This committee includes Senior Psychologist, Learning Support Coordinator, and may involve curriculum or any other official that may be able to assist them in evaluating a particular case. They will meet at least once per month to engage in a verification process where the recommendations per application are approved/not approved by the committee. If the application is declined, a reason must be supplied (less than 500 characters). This motivation or reason will be copied into the applicable letter which will be sent via email to the school (automatic process).

Letter e-mailed to school (Grade 1 - 9)

Gr 1--12 recommendations presented to Provincial Accommodations Committee for approval and sign off. Outcome letter made available on SA SAMS.

Manager: Learning Support/ Senior Psychologist captures the final approval/ not of all applications on Portal during or after the Committee meeting.
10.9. Glossary of Terms Used

“Curriculum and Assessment Policy Statements” - means the policy documents stipulating the aim, scope, content and assessment for each subject listed in the National Curriculum Statement Grades R – 12.

“Formal Assessment Task (assessment of learning)” – means a systematic way of assessment used by teachers to determine how well learners are progressing in a grade and in a particular subject;

“Informal Assessment Task (assessment for learning)” – means the building towards formal assessment;

“Immigrant candidate” - means a learner as contemplated in paragraph 4(1)(a) of the policy document, National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12;

“Learner who experiences barriers to learning” – means any learner who has difficulties in accessing the curriculum due to several factors that serve as barriers;

Accommodation - (Reasonable accommodation) refers to necessary and appropriate modification of, and adjustments to, the environment, assessment format and/or curriculum format, as well as allowing the use of assistive devices and technology, where needed in a particular case, to allow learners with disabilities or those who experience specific barriers to learning, access to the curriculum and the possibility to show what they know and can do on an equal basis with others. The cognitive demand of the curriculum and the assessment is the same as that for learners who do not experience barriers to learning.

Adaptations – alteration of the curriculum and/or assessment tasks for individual learners who experience specific barriers to learning.

Alternate assessment – measures performance through an assessment task which is modified and/or specifically designed for learners who experience specific barriers to learning. Both curriculum and assessments may be modified.

Concession – Concessions refer to permission given to candidates who experience barriers related to deafness, aphasia, dyslexia and a mathematical disorder, such as dyscalculia as set out in Regulation 16 of the Regulations pertaining to the conduct, administration and management of the National Senior Certificate examination, to be exempted from certain subjects or sections of the curriculum content.

Differentiated assessment - assessment that is different in some way to the standard delivery. Differentiated assessment involves accommodations and adaptations.

“school-based assessment” – means all formal assessment, including examinations, conducted by the school throughout the year on a continuous basis. In Grade 12 the School-Based Assessment component is all the formal tasks including the mid-year and September examinations, but not the end-of-year National Senior Certificate examination;
“teacher file” - means the recording and planning documents used by the teacher, namely the formal programmer of assessment, evidence of learner assessment/performance, all formal assessment tasks and marking guidelines, annual teaching plan/work schedule, textbook used and other resources,

“recording” (Recording Sheets & Schedules) Recording is a process in which the teacher documents the level of a learner’s performance. In South African schools, this should indicate the progress towards the achievement as stipulated in the Curriculum and Assessment Policy Statements of all subjects listed in the National Curriculum Statement Grades R - 12.

“reporting” (Report Cards) Reporting is a process of communicating learner performance to learners, parents, schools and the other stakeholders such as the employers, tertiary institutions, etc.
Resources for “SECTION 10: DIFFERENTIATED ASSESSMENT FOR LEARNERS WHO EXPERIENCE BARRIERS TO LEARNING”


Curriculum and Assessment Policy Statements for all subjects listed in the *National Curriculum Statement Grades R – 12*;

The Curriculum and Assessment Policy Statements for all subjects listed in the *National Curriculum Statement Grades R – 12*;

National policy on the conduct, administration and management of the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF).


*White Paper on the Rights of Persons with Disabilities* (2015), Section 6.4.1.2 which states that persons with disabilities must have access to inclusive learning opportunities throughout their lives where they learn with peers without disabilities in barrier-free settings. This includes having access to reasonable accommodation measures and specialised support.
SECTION 11: IMPLEMENTING CLASSROOM SUPPORT & THE INDIVIDUAL SUPPORT PLAN (ISP)

11.1. Classroom Support: An Introduction

An inclusive education and training system is organised so that it can provide various levels and kind of support to learners and teachers. Teachers should identify learners who have difficulties through observation and classroom screening (Landsberg & Matthews, 2016:102). Teachers is the most important vehicle for inclusion and are responsible for providing classroom support.

11.2. Mathematics Activities

FOUNDATION PHASE

A positive attitude towards Mathematics should be developed and relate it to real life. Present exercises in a concrete way and encourage critical thinking. Use concrete LTSM e.g. counters & always relate operations to learner’s actual environment by making use of pictures from the environment. It is important for learners to practise Mathematics every day.

Use the following steps to identify mathematical errors

- Ask the learner how she/he got the answer- when you ask question you are trying to identify the root cause of the problem so that you can support the learner.
- Watch the learner answer the question- here you are observing the process
- Look at the answer the learner gets- the product
- Watch common errors- signs, symbols, reversals

<table>
<thead>
<tr>
<th>Mathematics Errors</th>
<th>Classroom Support</th>
</tr>
</thead>
</table>
| **Reversals** (reversing direction of numbers) e.g. L for 7, 6 for 9, E for 3 | • Highlight 6 and 9 in different colours  
• Highlight L and 7 in different colours  
• Highlight E and 3 in different colours  
• Put this numbers on the wall  
• Use flash cards to show the difference  
• Practice the correct number formation  
• Use VAKT (Visual, Auditory, Kinaesthetic and Touch) when providing instruction. (Learners need to see, hear, touch the number- use concrete resources) |


### Sign Confusion
(tendency to confuse plus $+$ sign and multiplication $\times$ sign)
- Use different colours for different signs
- Teach learners to STOP-THINK-USE the correct sign
- Create a story to differentiate the signs

### Carrying & Borrowing
(unable to carry a number over to the tens, forgets to borrow from tens to hundreds etc.)
- Make use of small bundle sticks
- Make use of bottle caps until the learner understand the concepts
- Use place value cards

### Careless mistakes
(the learner focusses on completing the task and does not think before answering the question)
- Self-checking
- Ask the learner to verbalise the sum

### Lack of knowledge
(no knowledge and skills for Mathematics)
- Teach the Mathematics jargon
- Use appropriate, familiar names and products.

(Adapted from, *Towards Inclusive Classrooms, Canada South Africa Teacher Development Project in collaboration with Mpumalanga Department of Education, 2005*).

### CASE STUDY (FOUNDATION PHASE)
Karabo never completes his tasks in Mathematics and he writes 6 for 9 he is always in a rush to complete his tasks.

- Identify the errors
- What kind of classroom support will you provide for Karabo?
- Design an Individual Support Plan (ISP) for Karabo

**Memorandum**
1. Reversals
2. If it occurs frequently design an ISP for Karabo
INDIVIDUAL SUPPORT PLAN

NAME OF LEARNER: Karabo Grade: 2

<table>
<thead>
<tr>
<th>Area(s) in which support is needed</th>
<th>Target to be achieved</th>
<th>Strategy of intervention</th>
<th>Responsible person</th>
<th>Timeframe</th>
<th>Review date</th>
<th>Comment on progress made in achieving targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reversals</td>
<td>Write numbers correctly.</td>
<td>Highlight the numbers 6 and 9 in different colours.</td>
<td>Teacher</td>
<td>Within two weeks.</td>
<td>30 May 2017</td>
<td>After consistent practice, Karabo is able to differentiate between 6 and 9.</td>
</tr>
</tbody>
</table>

Karabo can write the numbers on air, on the sand, trace the correct number.
**Scenario**

Jack is in Grade 3 and still has a difficulty in doing Maths sums without using counters. His sums are however always correct when he uses counters. He is going to Grade 4 next year. Ms Jones, a Grade 4 teacher, does not allow learners to use counters. I want to prepare him for Grade 4. How can I get him to do the sums without using counters?

**Memo**

Find alternative ways to make Jack still to feel motivated to learn Maths. Allow Jack to use counters but you can ask Jack to draw counters on the sheet to represent counters, this strategy be used in Grade 4 while introducing him to more advanced strategies in counting.

**INTERMEDIATE PHASE & SENIOR PHASE**

Learners are often still dependent on practical examples and LTSM. If learners are unable to solve mathematical problems abstractly they must be allowed to use concrete examples first, but they should proceed to a more abstract level in every instance where they find a solution on their own without relying on LTSM. Errors can be corrected by first explaining solutions to similar problems and then asking learners to look for their own miscalculations. Errors should be discussed with the learners, who must try another way of solving the problem with a view to discovering their Errors. Teachers should strive to develop positive attitude to Mathematics and develop problem-solving abilities that apply to everyday life.

**ACTIVITY 1 (FOUNDATION PHASE)**

You learnt about common errors that are usually made by learners in Mathematics in the Foundation Phase. Mrs Keto teaches a Grade 1 class of 50 learners. She knows all the learners’ abilities and when she plans her lesson, she tries to accommodate all the learners by differentiating during planning, activities and assessment. During assessment she realised that five of her learners are still **reversing** numbers when writing answers. They write 6 for a 9, E for 3, S for 5. What kind of classroom support do you think is appropriate for learners in Mrs Keto’s class? Design an ISP for Karabo.

**Recommendations:**

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MEMO
Refer to similar strategies used in Case study 1

ACTIVITY 3 (INTERMEDIATE & SENIOR PHASE)
CLASSROOM SUPPORT
What are your personal challenges in terms of classroom support in your Mathematics class?

Memo
Reversals, sign confusion, carrying, borrowing, horizontal addition, carelessness etc.

Follow the following steps to identify mathematical errors

- Ask the learner how she/he got the answer- when you ask question you are trying to identify the root cause of the problem so that you can support the learner.
- Watch the learner answer the question- here you are observing the process
- Look at the answer the learner gets- the product
- Watch common errors- signs, symbols, reversals

11.3. Language Activities

ACTIVITY 1
Discuss & list the signs you have identified in learners who are struggling to read
(Foundation phase, Intermediate phase & Senior phase)

Share good practice that you use in your classroom to support learners who are struggling with reading.

Memo
Teachers will share good practice they use in class e.g.
Language experience approach-
The teacher builds on the learner’s knowledge, experiences and language. The teacher asks the learner to tell a story using his/her own words and thoughts. The teacher writes down the learner’s words on a piece of paper or chalkboard. The teacher reads the sentence back to the learner and ask the learner if that is what he/she wanted to say. The learner reads the story and answers the questions about what he/she read. The learner is able to remember the sentences because it is her/his own words, that way the teacher builds the learner’s vocabulary. Then the learner can draw
pictures to accompany the story. (Janet Learner, 2003)

Paired Reading- learner read in pairs, the reader should be paired with a competent reader (parent, competent reader, teacher etc.). This helps learners achieve fluency along with a better understanding and memory of what they are reading. It encourages learners to read for enjoyment and it is a support strategy for learners who struggle to read. (Alberta Education, 1998)

Phonics Approach- the teacher teaches sound-symbol relationship, learners are taught names, sounds of the vowels, consonants and blends and then use the knowledge to sound out the word that they are reading. (Janet Learner, 2003)

Read Around- when learners come across a word that they do not know, they read around it. For example, skip the word and read to the end of the sentence, go back and read the whole sentence again, look at the beginning of the word for letter-sound clues, think- what word would fit here? Try out the word in a sentence, does this word sound right? does it make sense? Does this word match the letter words clues? Look at the picture for a clue, ask someone (Alberta Education, 1998).

Participants can search for more strategies on the internet.

CLASSROOM SUPPORT IN LANGUAGE

CASE STUDY (INTERMEDIATE & SENIOR PHASE)

What are your personal challenges in terms of classroom support in your English class?

Memo
Reading, Spelling, Punctuation, Capitalization, Omission, Insertion, Substitution, Repetition, Mispronunciation, Word by word reading, Reversals etc.

GROUP ACTIVITY 1
Discuss & list the signs you have identified in learners who are struggling to read (Foundation phase, Intermediate phase & Senior phase)

Share good practice that you use in your classroom to support learners who are struggling with reading.

Memo
Participants share good practical examples that they use at their respective schools.
**CLASSROOM SUPPORT IN LANGUAGE**

<table>
<thead>
<tr>
<th>Reading Errors</th>
<th>Classroom Support (Memo)</th>
</tr>
</thead>
</table>
| **Omission** (leave out one or two sounds when reading or part of a word) e.g. onkey for donkey. | • Call the learners attention to the error made  
• Teach scanning  
• Teach sound letter relationship and then blends |
| **Addition & Insertion** (add a sound or sounds in the middle of the word or at the end of a word) | • Draw attention to the insertion or addition  
• Teach difficult words before the child attempts the reading  
• Provide pre-knowledge of the story |
| **Substitution** (replace a word with another e.g. house for home) | • Use flashcards for words that presents difficulty  
• Revise the problematic sounds |
| **Repetition and regressions** (read the word again or go back and try it again) | • Use easier and interesting material  
• Develop adequate sight vocabulary |
| **Mispronunciation** (pronounce words incorrectly especially when influence by mother tongue) | • Use recorded reading lesson  
• Use easier interesting material  
• Develop adequate sight vocabulary |
| **Word by word reading** (reading each word slowly instead of reading fluently with all words flowing together) | • Give learner experience and practice in group reading  
• Record learner and let him/her listen  
• Teach learner to read in phrases |
| **Reversals** (reverse sound or word when reading e.g. b for d, no for on, deb for bed) | • Ask the learner to sound out the first letter of the word  
• Use diagrams or actions to show the learner the correct spelling  
• Use sight words cards for the words that are often reversed e.g. pit/dib, bed/deb |

**INDIVIDUAL ACTIVITY (5 MIN)**

**Grade 3 English Spelling Test**

<table>
<thead>
<tr>
<th>Incorrect Spelling</th>
<th>Correct Spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deb</td>
<td>Bed</td>
</tr>
<tr>
<td>Cta</td>
<td>cat</td>
</tr>
<tr>
<td>eeg</td>
<td>egg</td>
</tr>
<tr>
<td>Shift</td>
<td>fish</td>
</tr>
<tr>
<td>geith</td>
<td>gate</td>
</tr>
<tr>
<td>ingkh</td>
<td>ink</td>
</tr>
<tr>
<td>seven</td>
<td></td>
</tr>
</tbody>
</table>
Identify the error, interpret the error, recommend classroom support for the learner.

<table>
<thead>
<tr>
<th>Spelling Errors</th>
<th>Classroom Support (Memo)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mother tongue influence</strong>- additional &quot;h&quot;</td>
<td></td>
</tr>
<tr>
<td>Gheith instead of gate</td>
<td>Use the word in context</td>
</tr>
<tr>
<td>Thabl- table</td>
<td></td>
</tr>
<tr>
<td>Ingkh- ink</td>
<td></td>
</tr>
<tr>
<td><strong>Unable to spell</strong></td>
<td>Practice spelling words daily</td>
</tr>
<tr>
<td>Khnmgl instead of king</td>
<td>Use common words</td>
</tr>
<tr>
<td><strong>Mispronunciation</strong></td>
<td>Use the word in a sentence to provide context</td>
</tr>
<tr>
<td>Ven-van</td>
<td>Speak clearly when saying the word</td>
</tr>
<tr>
<td>Ander-under</td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from, Towards Inclusive Classrooms, Canada South Africa Teacher Development Project in collaboration with Mpumalanga Department of Education, 2005)

**FOUNDATION PHASE**

**Spoken Language**

Read stories to familiarize learners with the formulation of written language & language structures. Reading also extends vocabulary, discuss stories by question and answer, learners act stories out, depicts events in the story.

**INDIVIDUAL ACTIVITY**

**ENGLISH**

Gifted learners also require classroom support from teachers, when the teacher identified those kind of learners in the classroom she/he is able to plan for those learners.

**CASE STUDY (FOUNDATION PHASE)**

Primrose is five years old in a Grade R class, but she can already read and write. She is curious and asks many questions about anything she reads and what she has seen on television. She is excited to engage in mathematical activities and completes the tasks before all the other learners then disrupts all the other learners in class. Sometimes the behavior that the learners presents in class can be a result of under stimulation.

What kind of classroom support will you provide for Primrose?
Answer
Primrose is a gifted learner
Teachers need to design an ISP, with challenging activities to challenge her more.

Case study (INTERMEDIATE PHASE)
John is in Grade 6 and he struggles to read and spell, the teacher gave him this piece of poetry to read and write (English Home Language Activity Book, Page 60)

<table>
<thead>
<tr>
<th>Correct Spelling</th>
<th>Incorrect Spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>A bad case of the sneezes</td>
<td>A bat case of sniz</td>
</tr>
<tr>
<td>Last night I had a sneeze</td>
<td>Last nite I hat a sniz</td>
</tr>
<tr>
<td>I was really feeling ill</td>
<td>I was reely filin ill</td>
</tr>
<tr>
<td>I went to see the doctor</td>
<td>I went to si the doctor</td>
</tr>
<tr>
<td>Who prescribed a pinkish pill.</td>
<td>Who prescribe a pinkish pill</td>
</tr>
<tr>
<td>At eight o’clock I went to bed</td>
<td>At eigt o’clock I went to deb</td>
</tr>
<tr>
<td>I then turned out the light</td>
<td>I then trnt out the liht</td>
</tr>
<tr>
<td>I used up one whole box of tissues</td>
<td>I used up one hole box of tissues</td>
</tr>
<tr>
<td>By sneezing throughout the night</td>
<td>By snizzing thruout the nite</td>
</tr>
<tr>
<td>I sneezed and sneezed throughout the night.</td>
<td>I snizzed and snizzed thruout the nite</td>
</tr>
<tr>
<td>I didn’t get much rest</td>
<td>I did not get rust</td>
</tr>
<tr>
<td>So that’s the reason, teacher</td>
<td>So that’s the reason , teacher I that I field my spelin test</td>
</tr>
<tr>
<td>That I failed my spelling test</td>
<td>Bruce Lansky</td>
</tr>
<tr>
<td>(Adapted from Grade 6 Activity Book)</td>
<td></td>
</tr>
</tbody>
</table>

- Identify the errors, which language error did John make?
- Which kind of classroom support will you provide for John?
- Design an ISP for John

11.4. What is an Individual Support Plan (ISP)?
This is a plan that is designed by the teacher in collaboration with the SBST for learners who experience diverse support needs. It is planned and it can change if it is not successful. SIAS policy encourages teacher to use the ISP if they identified learners who needs individual support (DoBE, 2014). Teacher play a crucial role in providing the ISP.

Steps in compiling Individual Support Plan (ISP)
- Assessing the present level of functioning
• Formulating the outcomes
• Selecting the curriculum content
• Selecting teaching methods & strategies
• Selecting teaching & learning strategies that the learner should acquire
• Selecting learning & teaching support material
• Implementing the ISP
• Assessing learners progress
• Evaluation of ISP

1. Assessing the present level of functioning

When assessing the learner’s present level of functioning consider the following:

Establish the present level of functioning in the curriculum by using baseline assessment techniques (observation, asking questions, error analysis etc.) in a particular learning area. Assess relevant factors (personal & contextual) that affects the learner whether intrinsic or extrinsic.

List the areas in which support needs to be provided: Communication, Learning, Behaviour and social competence, Health Wellness and Personal care: Classroom and school; Family, home & community (See SNA1, DoE (2015))

<table>
<thead>
<tr>
<th>Area (s) in which support is needed</th>
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11.5. Classroom Support Self-Reflection Questions

Teachers need to do self-reflection constantly in order to develop their confidence and improve their teaching. These are some questions to help you reflect on your practice as a teacher.

Self-reflection questions

Am I providing adequate support to each learner in my class?
| **Are my teaching methods appropriate to support the type of learners in the classroom?** |
| Can I design an Individual Support Plan (ISP) for a learner who is unable to add even numbers? |

**Practical application questions**

| **Are my expectations for the learners realistic depending on their needs?** |

My classroom is on the second level of the school building. I have a learner in a wheelchair. How do I support him?

**Analysis and consolidation**

| **What is my understanding of classroom support?** |

How can I make sure that all stakeholders involved in educating learners provide adequate support to learners experiencing barriers to learning? |
Resources for “Section 11: IMPLEMENTING CLASSROOM SUPPORT & THE INDIVIDUAL SUPPORT PLAN (ISP)”


