



**REPUBLIC OF KENYA**

**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**

**CURRICULUM DESIGNS**

**PRE-BRAILLE ACTIVITIES**

**PRE – PRIMARY 1 & 2**



**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**

First Published in 2017

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**ISBN: ISBN: 978-9966-31-735-3**

Published and printed by Kenya Institute of Curriculum Development

## **Foreword**

The Basic Education Curriculum Framework (BECF) outlines the vision and mission for the curriculum reforms. The Vision of the curriculum reforms is to develop ‘an engaged, an empowered and ethical citizen’ while the mission is to ‘nurture the potential of every learner’.

The framework adopts a Competency Based Curriculum and has identified seven core competences, namely; communication and collaboration, critical thinking and problem solving, creativity and imagination, citizenship, digital literacy, learning to learn, and self-efficacy. It provides a variety of opportunities for identification and nurturing of learner’s potentials and talents in preparation for life and the world of work. It is geared towards making learning enjoyable.

The curriculum designs are developed to enable implementation of the Basic Education Curriculum Framework. The design contains the National Goals of Education, outlines the Early Years Education (EYE), subject general and specific learning outcomes. It also suggests a variety of learning experiences, assessment, resources and links the topics to values, Pertinent and Contemporary Issues (PCI) and to other subjects.

It is my hope that all educators in Early Years Education level will anchor their delivery of Basic and Teacher education on these Curriculum Designs.

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## **National Goals of Education**

The Framework will be anchored on the National Goals of Education.

Education in Kenya should:

### **1. Foster nationalism, patriotism, and promote national unity**

Kenya's people belong to different communities, races and religions and should be able to live and interact as one people. Education should enable the learner acquire a sense of nationhood and patriotism. It should also promote peace and harmonious co-existence.

### **2. Promote social, economic, technological and industrial needs for national development**

Education should prepare the learner to play an effective and productive role in the nation.

#### **a) Social Needs**

Education should instil social and adaptive skills in the learner for effective participation in the family, community, national, regional and international development.

#### **b) Economic Needs**

Education should prepare a learner with requisite competences that support a modern and independent growing economy. This should translate into high standards of living for every individual.

#### **c) Technological and Industrial Needs**

Education should develop in the learner necessary competences for technological and industrial development for the nation in tandem with global trends.

### **3. Promote individual development and self-fulfilment**

Education should provide opportunities for the learner to develop to the fullest potential. This includes development of one's interests, talents and character for positive contribution to the society.

**4 Promote sound moral and religious values**

Education should promote acquisition of national values as enshrined in the Kenya Constitution. It should be geared towards developing a self-disciplined and ethical citizen with sound moral and religious values.

**5. Promote social equity and responsibility**

Education should promote social equity and responsibility. It should provide inclusive and equitable access to quality and differentiated education; including for learners with special educational needs and disabilities. Education should also provide the learner with opportunities to develop and practice shared responsibility and accountability through community service learning.

**6. Promote respect for and development of Kenya's rich and varied cultures**

Education should instil in the learner appreciation of Kenya's rich and diverse cultural heritage. The learner should value own and respect other people's culture as well as embrace positive cultural practices in a dynamic society.

**7. Promote international consciousness and foster positive attitudes towards other nations**

Kenya is part of the interdependent network of diverse peoples and nations. Education should empower the learner to respect, appreciate and participate in the opportunities within the international community. Education should also enable the learner to operate within the international community with full knowledge of the obligations, responsibilities, rights and benefits that this membership entails.

**8. Promote positive attitudes towards good health and environmental protection**

Education should inculcate in the learner the value of physical and psycho-social well-being for self and others. It should promote environmental preservation and conservation, including animal welfare, for sustainable development.

**Core Competencies for Basic Education**

***Communication and Collaboration.***

**Communication** is the act of transferring information from one place to another, whether vocally, visually, or non-verbally. The discipline of communication focuses on how people use messages to generate meanings within and across various contexts, cultures, channels, and media. The discipline promotes the effective and ethical practice of human communication.

Spitzberg (1988) defines communication competence as the ability to interact well with others in terms of accuracy, clarity, comprehensibility, coherence, expertise, effectiveness and appropriateness. On the other hand Friedrich (1994) suggests that communication competence is best

understood as "a situational ability to set realistic and appropriate goals and to maximize their achievement by using knowledge of self, other, context, and communication theory to generate adaptive communication performances."

In this respect, it can be argued that being able to communicate effectively as intended is the most important of all life skills. How well information can be transmitted and received is a measure of how good our communication skills are. Developing communication skills helps in all aspects of an individual's life.

Parks (1985) maintains that communicative competence can effectively be measured by determining if, and to what degree, the goals of interaction are achieved. He emphasizes three interdependent themes: control, responsibility, and foresight; and argues that to be competent, learners must not only 'know' and 'know how,' but rather they must also 'do' and 'know that we did'. He defines communicative competence as the degree to which individuals perceive they have satisfied their goals in a given social context without jeopardizing their ability or opportunity to pursue their other subjectively more important goals.

A useful framework for understanding communication competence was designed by Spitzberg and Cupach (1984). They propose a model that can be used to understand communication referred to as the component model of competence. The model asserts that communication competence is mutually defined by the interdependency of the cognitive component (concerned with knowledge and understanding), the behavioural component (concerned with behavioural skills), and the affective component (concerned with attitudes and feelings about the knowledge and behaviours) by interactions in an interpersonal encounter within a specific context.

This then implies that education at each level should endeavour to enhance the learner's acquisition of effective communication skills through which they can interact and express themselves during the learning process. In this respect, it would be prudent to be cautious when deciding on the language to be used as a medium of instruction at the early year's education level. It is also important to take cognizance of appropriate modes of communication for learners with special educational needs.

**Collaboration** is the process of two or more people or organizations working together to realize shared goals. Collaboration may require leadership, although this can be social within decentralized or egalitarian groups or teams that work collaboratively in relation to gaining greater resources, recognition and motivation. Strategies for effective communication enhance the attainment of greater collaboration among groups that ultimately increase the success of teams as they engage in collaborative problem solving. Collaboration is also present in opposing goals exhibiting the notion of adversarial collaboration, though this is not a common case for using the word. Collaborative learning is a system in which two or more people co-operate in a learning experience to share and contribute to each member's understanding of a topic and to complete a given task. Collaborative learning is designed to help learners learn from each other and can be an important aspect of the school curriculum. Lesson plans for collaborative learning may vary greatly. Sometimes teachers will build a lesson designed specifically to teach collaborative learning and teamwork. There are

many team building games and activities that can be done in a classroom that force learners to work together to complete a task. Other collaborative learning exercises are designed around a particular school subject. For instance, in a speech class, a teacher might put learners up into teams and have them work together to make a presentation on a subject together. In this scenario, learners can learn just as much as if they were developing a presentation on their own, but they get the added benefit of learning how to collaborate.

### *Self-efficacy*

Self-efficacy is a person's belief about his or her capabilities to perform tasks or assignments that can change and transform his or her life. It determines how the person feels, thinks, behaves and motivates themselves. Self-efficacy has the potential to determine four major processes namely cognitive, motivational, affective and selection processes.

A strong sense of self-efficacy enhances a learner's accomplishment and personal well-being in many ways. Learners with high assurance in their capabilities approach difficult tasks as challenges to be mastered, rather than as threats to be avoided. Self-efficacy fosters intrinsic interest and deep engrossment in activities. Learners set themselves challenging goals and maintain a strong commitment to them.

Self-efficacy as a competence will enable learners to develop and nurture intra-personal skills and values such as self-awareness, self-esteem, confidence and personal integrity. These competencies will enhance the learner's ability to heighten and sustain efforts in the face of failure and effectively manage stressful situations. A learner with a strong sense of self-efficacy will be courageous and bold enough to set and pursue personal educational, family, community, entrepreneurial, professional, and career goals in all forms of employment that will lead to personal accomplishment (British Council, 2016). An efficacious learner will be aware of the resources at their disposal and will take personal responsibility for the use, care, management, protection and preservation of these resources.

A learner with strong self-efficacy will be internally motivated to establish and maintain healthy interpersonal relationships. They will demonstrate interpersonal relationship skills such as assertiveness, empathy, effective communication, negotiation skills, non-violent conflict resolution skills and peer pressure resistance skills. Creative and critical thinking that leads to effective decision making and problem solving is based on a strong sense of self-efficacy (British Council, 2016). Capacity building of teachers and parental engagement are two crucial factors that would determine acquisition of self-efficacy. The school will be expected to provide opportunities for parents to be empowered and engaged in the affairs and welfare of their children's education.



### ***Critical Thinking and Problem Solving***

An important outcome of quality education is teaching learners how to think critically. The British Council (2015) identifies three types of thinking: reasoning, making judgements, and problem solving. It is possible for learners to reason in an uncritical way. When learners are empowered with critical thinking, they avoid being subjective, and use logic and evidence to arrive at conclusions. Critical thinking also facilitates exploring new ways of doing things and learner autonomy. Learners learn that for every issue there are multiple perspectives that they can explore, rather than a rigid recall and regurgitation of information.

Critical thinking is important for lifelong learning. It helps learners to have an open mind and be ready to listen and appreciate information and opinions that may sometimes conflict with their earlier held beliefs and positions. Critical thinking and problem solving are useful for learners of all ages and in all the subjects and disciplines offered in the basic education curriculum. For example, in the sciences learners need to think critically about observations and patterns to develop ideas on how to solve problems. These competencies are also important for solving problems in their lives and communities, and will ultimately help them to fulfil their potential, which is the vision for the basic education curriculum. This will contribute to addressing the unemployment challenge in Kenya.

Critical thinking and problem solving will be developed through age appropriate activities and programmes in the school curriculum. For example, at pre-primary school level learners can be asked to come up with the best ways of using and keeping their books, stationery and other personal items safe. At the other end of the basic education spectrum, learners can be asked to come up with the best ways of addressing the challenge of scarce resources such as water in the school and community.

### ***Creativity and Imagination***

Creativity and imagination refers to the ability to form new images and sensations in the mind, and to turn them into reality (British Council, 2016). It is the ability to imagine things that are not real, to form pictures in the mind of things that one has not seen or experienced, and turn those pictures into real things. It also refers to the act or power of forming mental images of things that are not present to the senses, or that are never wholly perceived in reality, and creating physical representations of those images. Imagination only exists or happens in the mind, and it remains in the mind. Creativity and imagination on the other hand, is characterized by the ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions. It is a phenomenon whereby something new and valuable is formed.

In educational terms, creativity and imagination refers to the ability of learners and their teachers to form images and ideas in their minds, and turn them into real, visible creations. Learners who are imaginative and creative are able to make life interesting for themselves and others around them. They are able to use the knowledge, skills and values acquired in the learning process to create new ideas that result in products that add value to their lives and to the lives of others around them. The competence based curriculum recognizes this hidden ability in learners. It will therefore,

inspire learners' imagination by presenting knowledge in ways that encourage learners to think as individuals. It will create scenarios that help learners to engage in imagination and encourage them to develop creations steered by the imagination. Their ability to imagine will be stretched through exposure to challenging situations that help to expand their thinking and creativity skills. The curriculum will also create room for innovative ways of teaching as well as creating an environment conducive to learning that offers all learners opportunities to explore their full potential in and through creativity and imagination.

### ***Citizenship***

Historically, human beings have always formed communities based on a shared identity. Such identities are forged in response to a variety of human needs, which might be economic, political, religious or social. As group identities grow stronger, those who hold them in commonality with others organize themselves into communities, articulate their shared values, and build governance structures to support their beliefs. The individuals in these communities identify themselves as citizens.

Citizenship is the state of being vested with the rights, privileges, and duties of a citizen. It creates a sense of belonging and attachment to one's nation. A sense of citizenship helps to equip young people to deal with situations of conflict and controversy knowledgeably and tolerantly. They are able to understand the consequences of their actions, and those of the adults around them.

Global citizenship is a way of living which recognizes that our world is an increasingly complex web of connections and interdependencies. One in which our choices and actions may have repercussions for people and communities locally, nationally or internationally. It nurtures personal respect and respect for others, wherever they live. It encourages individuals to think deeply and critically about what is equitable and just, and what will minimize harm to our planet.

### ***Digital Literacy***

Digital literacy can be described as having the knowledge, skills and behaviours which are necessary to effectively and safely use a wide range of digital content and devices. Such devices include mobile phones, smart phones, tablets, laptops and desktops among others. All these fall within the category of network enabled devices. Digital literacy focuses mainly on network enabled devices and should not be confused with computer literacy skills. However, traditional forms of literacy and computer literacy are enhancers in the acquisition of digital literacy skills.

Individuals are presumed to be digitally literate if they possess a broad range of digital skills and knowledge, and have a basic understanding of the potential uses of computing devices. Digital literacy skills also include being able to use computer communication networks, being able to engage in online communication and social networks, being aware of and adhering to ethical behaviour protocols, being aware of societal issues raised through digital media, and being able to search, evaluate and use information channelled through digital platforms. Furthermore, the digital

literate individual should also have the ability to safely and securely use technology while being able to assess the nature of the information acquired in order to support and enhance the environment (British Council, 2015). Digital literacy as a competence therefore encompasses knowledge and skills concerning the appropriate application of a variety of hardware platforms such as computers, tablets and mobile devices, and their software including but not limited to web search or internet application software. Digital literacy is a dynamic competence due to the fast-changing world of information communication technology and the ongoing development of technological devices as well as their related software. This is an area in which there is constant innovation and development as the industry attempts to keep up with a globally increasing demand for efficient and effective communication technologies.. Currently, digital literacy is considered as one of the main core competencies for learning and life in the 21<sup>st</sup> century. It challenges existing thinking and practice while leading to a more innovative, creative and often transformational learning.

### ***Learning to Learn***

Learning is a continuous process that begins at birth and continues until death; it is the process through which we use our experience to deal with new situations and to develop relationships. As a concept, it involves far more than thinking as it incorporates the whole personality – senses, feelings, intuition, beliefs, values and will. If we do not have the will to learn, we will not learn and if we have learned, we are actually changed in some way. If the learning makes no difference it can have very little significance beyond being random ideas that float through our consciousness.

Learning to learn is the ability to pursue and persist in learning, to organise one's own learning by the effective management of time and information, both individually and in groups. This competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn helps learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts. There are four pillars of learning: Learning to know, learning to do, learning to be and learning.

### **Learning Outcomes for Early Years Education**

By the end of early years' education, the learner should be able to:

1. Demonstrate basic literacy and numeracy skills for learning.
2. Communicate appropriately using verbal and/or non-verbal modes in a variety of contexts.
3. Demonstrate appropriate etiquette in social relationships.
4. Apply creativity and critical thinking skills in problem solving.
5. Explore the immediate environment for learning and enjoyment.
6. Practice hygiene, nutrition, sanitation, safety skills to promote health and wellbeing.
7. Demonstrate the acquisition of emotional, physical, spiritual, aesthetic and moral development for balanced living.
8. Demonstrate appreciation of the country's rich and diverse cultural heritage for harmonious co-existence.
9. Apply digital literacy skills for learning and enjoyment.

**Essence statement**

Pre Braille activities are intended to promote prerequisite skills for beginners to develop the tactile sense which lay the foundation for formal instruction for Braille code. The skills are needed in order to effectively read and write Braille.

**Preamble**

Education for learners with visual impairment requires that the learners are provided with opportunities to utilize the remaining senses. This calls for the teacher to employ various teaching and learning strategies and resources to meet unique needs of each individual learner.

The teacher as well as the learner is therefore expected to make use of resources such as print and electronic media, assistive devices, technology and braille material, resource person and interact with realia in the environment.

The vital role of the learner in the learning process has also been recognized. In connection, the teacher is strongly advised to employ participatory approaches to learning in order to tap and in-cooperate the learner's experiences.

The teacher for learners with visual impairment should;

- a) Possess positive attitude towards the learners with visual impairment.
- b) Exercise great patience and commitment when teaching.
- c) Be competent in learning areas.
- d) Be competent and proficient in English, Kiswahili and Mathematics Braille Notation.

**Subject General Learning Outcomes**

- a) Develop finger dexterity in readiness for Braille reading and writing
- b) Apply pre- braille skills in readiness for Braille reading and writing
- c) Manipulate braille writing equipment and materials in readiness for writing

**PRE - PRIMARY 1**

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
<b>1.0 FINGER DEXTERITY</b>	<b>1.1 Gripping</b> <b>Suggested time:</b> <b>(8 lessons)</b>	By the end of the sub-strand the learner should be able to: a) Identify assorted objects to be used in gripping activities; (k) b) Assemble assorted objects to be used in gripping activities; (s) c) Use fingers to hold objects with a firm grip; (s) d) Stir and mash assorted objects to strengthen the finger muscles; (s) e) Appreciate the use of fingers in gripping objects. (a)	<ul style="list-style-type: none"> <li>• Learner could be shown the assorted objects for identification, talk about the objects in pairs in small groups and as a whole class.</li> <li>• Learner could be guided to assemble different objects to be used in gripping activities.</li> <li>• Learner would press and release the assorted objects repeatedly</li> <li>• Learner could be guided to carry out stirring and mashing activities</li> <li>• Learners could listen to, and sing songs related to mashing and stirring</li> </ul>	<ol style="list-style-type: none"> <li>1. Name the assorted object that you can feel on the table</li> <li>2. Why is it important to take part in activities that involve the fingers?</li> </ol>
<b>Core-Competencies to be developed</b> <b>Communication and collaboration:</b> this can be developed through learners working in pairs and groups to practice gripping activities.				
<b>Link to PCIs: ESD-DRR:</b> this could be achieved through learners observing safety precautions while working in Stirring and Gripping activities.  <b>Values:</b> learners while working in pairs and groups promote the values of sharing, tolerance, respect and responsibility.			<b>Links to other subject(s):</b> Environmental Activities, Language activities, Psychomotor and Creative Activities	

	<p><b>Suggested Community Service Learning:</b> Visit a nearby workshop and take part in holding and assembling small objects and other materials.</p> <p><b>Non-Formal Activity to support learning through application:</b> learners engages in games and sporting activities that involve use of fingers</p>
	<p><b>Suggested Resources</b> Sponges,, blocks, soft balls, containers, pounding stick, water, leaves, paper, keys and locks, plastic bottles, bottle tops</p>
	<p><b>Suggested Assessment</b> - Observation, Oral questions and Answers,</p>

### Suggested Assessment Rubrics

<b>Exceeding expectations</b>	<b>Meeting expectations</b>	<b>Approaching expectations</b>	<b>Below expectations</b>
Learner is able to identify and assemble objects in a manner that the objects can be reached easily and hold the object with a firm grip, stir the objects to produce a mixture and mash the objects to make powder or paste and even mould using the paste.	Learner is able to identify and assemble objects in a manner that the objects can be reached easily, and holds the objects with a fine grip, stir the objects to make a mixture and mash the objects to make powder or paste.	Learner is able to identify and assemble objects in a manner that the objects can be reached easily, and holds the objects with a fine grip, stir the objects to make a mixture and mash the objects to make powder or paste with assistance.	Learner has difficulties in assembling objects in a manner that the objects can be reached easily, and unable to hold the objects with a fine grip, or stir the objects to make a mixture and mash the objects to make powder or paste.

<b>Strand</b>	<b>Sub-strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Key Inquiry Question(s)</b>
	<b>1.2 Fine Muscle Strengthening</b>	By the end of the sub-strand the learner should able to: a) Model to strengthen fingers muscles; (s) b) Lace to strengthen finger muscles; (s)	<ul style="list-style-type: none"> <li>Learner could be guided in modelling objects while in small groups and as a whole class</li> <li>Learner could be guided in lacing/stringing on the lacing boards,</li> </ul>	1. Name the material that can be used for squeezing and releasing activities?



<p><b>Suggested time:</b> <b>(10 Lessons)</b></p>	<p>c) Squeeze and release objects to strengthen fine muscles; (s) d) Button and unbutton to strengthen fine muscles; (s) e) Thumb press to strengthen fine muscles; (s) f) Appreciate the use of songs, games and sports activities in fine muscle strengthening. (a)</p>	<p>shoes and clothes and practice the activity in pairs</p> <ul style="list-style-type: none"> <li>• Learner could be shown how to squeeze and release hard and soft objects</li> <li>• Learners could be guided on how to button and unbutton shirts and blouses.</li> <li>• Learners could be guided on how to thumb press on different items like buttoning board.</li> <li>• The learner could listen to and sing songs, recite poems related to finger games , finger raking and clapping of hands</li> </ul>	<p>2. Why is it important to squeeze and release objects? 3. Why is it important to take part in finger games?</p>
<p><b>Core-Competencies to be developed</b> <b>Communication and collaboration:</b> this could be achieved through learners working in pairs and groups, singing songs and reciting poems. <b>Imagination and creativity:</b> this could be developed through involving learners in modelling and finger games. <b>Self efficacy – :</b> this could be achieved when learners are involved in buttoning , unbuttoning and lacing activities.</p>			
<p><b>Link to PCIs - Life skills:</b> - this could be achieved by involving learners in lacing, buttoning and unbuttoning activities. <b>Value:</b> by working in pairs and groups, learners would develop the values of sharing, respect and tolerance.</p>		<p><b>Links to other subject(s):</b> psychomotor and creative activities, language activities, Environmental activities, mathematical activities</p>	
<p><b>Suggested Community Service:</b> Visit a nearby tailoring shop to manipulate and familiarize themselves with buttoning and unbuttoning shirts, blouses and other clothes. <b>Learning Non-Formal Activity to support learning through application:</b> learners could be involved in singing games, and other activities that help in strengthening fine muscles.</p>			
<p><b>Suggested Resources:</b> Plasticine, marbles, lacing boards, buttoning boards, pressing boards, strings\lacing boards, blouses, shirts, shoes.</p>			
<p><b>Suggested Assessment:</b> Observation, Oral questions and Answers,</p>			

## Suggested Assessment Rubrics

Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations
Learner is able to model, lace, squeeze and release objects, button and unbutton, use the thumb to press objects, do finger games and finger raking, demonstrate creativity and innovation in modeling activities.	Learner is able to model, lace, squeeze and release objects, button and unbutton, use the thumb to press objects, do finger games and finger raking with ease.	Learner is able to model, lace, squeeze and release objects button and unbutton, use the thumb to press objects do finger games and finger raking with assistance.	The learner has difficulties in fine muscles strengthening activities like modeling, lacing, squeezing and releasing objects, buttoning and unbuttoning, using the thumbs to press objects and do finger games and finger raking.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
	<b>1.3 Dexterity Activities</b>  <b>Suggested time:</b>  <b>(10 Lessons)</b>	By the end of the sub-strand the learner should able to: a) Identify objects to be used in dexterity activities; (k) b) Sort objects according to shape and texture; (s) c) Group and pair alike objects (s) d) Put pegs on a pegboard; (s) e) Use and store materials appropriately to prevent accidents, destruction and loss; (s)	<ul style="list-style-type: none"> <li>Learners could be guided to identify objects that can be used in dexterity activities</li> <li>Learners could be asked to touch, explore and sort objects according to shape and texture.</li> <li>In pairs or groups learners would sort and group materials according to shape and texture.</li> <li>In pairs learners could be involved in pegging activities for enjoyment and strengthening finger dexterity.</li> </ul>	<ol style="list-style-type: none"> <li>How can you sort different objects?</li> <li>Why do you need to take care and store materials appropriately?</li> </ol>

		f) Appreciate, care and storage of learning materials used for dexterity activities. (a)	<ul style="list-style-type: none"> <li>• Learners could be guided on how to use materials carefully to avoid injuries and accidents.</li> <li>• Learners could be guided on how to store materials appropriately to avoid destruction and loss.</li> <li>• Learner could sing songs about proper use, care and storage of learning materials</li> </ul>	
<p><b>Core-Competence to be developed</b></p> <p><b>Communication and collaboration:</b> this could be achieved by involving learners in pairing and grouping activities.</p> <p><b>Critical thinking and problem solving:</b> Engaging learners in sorting and grouping activities will stimulate their thinking and solving problems.</p> <p><b>Self-efficacy:</b> involve learners in various finger dexterity activities like pegging</p>				
<p><b>Link to PCIs: ESD-DRR:</b> this could be achieved through learners observing safety precautions in use and storage of learning materials.</p> <p><b>Values:</b> learners while working in pairs and groups promote the values of Sharing, respect and responsibility.</p>			<p><b>Links to other subject(s):</b> psychomotor activities, Language activities, mathematical activities</p>	
<p><b>Suggested Community Service Learning:</b> recite poem to members of community about importance of proper care and storage of materials</p> <p><b>Non-Formal Activity to support learning through application:</b> learners could sing songs that encourage dexterity activities</p> <p><b>Suggested Resources:</b> Peg boards, pegs, cereals/ grains, bottle tops, soil, small stones, texture boards, different fabrics.</p>				
<p><b>Suggested Assessment:</b> Observation, Oral questions and Answers,</p>				

**Suggested Assessment Rubrics**

<b>Exceeding expectations</b>	<b>Meeting expectations</b>	<b>Approaching expectations</b>	<b>Below expectations</b>
Learner is able to identify objects to be used, sort objects according to shape and texture, group and pair alike objects, put pegs on board and store learning materials appropriately with speed and accuracy.	Learner is able to identify objects to be used, sort objects according to shape and texture, group and pair alike objects, put pegs on board and store learning materials appropriately.	Learner is able to identify objects to be used sort objects according to shape and texture group and pair alike objects, put pegs on board and store materials with assistance	Learner is unable to do activities like sorting objects according to shape and texture, group and pair alike objects, put pegs on board and store learning materials.

Strand	Sub stand/ Sub	Specific learning outcomes	Suggested learning experiences	Key inquiry question(s)
<b>2.0 BRAILLE READING SKILLS</b>	<b>2.1. Letter Recognition</b>  <b>Suggested time: (10 Lessons )</b>	By the end of the sub-strand the learner should be able to: a) Recognize dots of the braille cell; (s) b) Recognize letters of alphabet in braille; (s) c) Enjoy participating in letter recognition activities in and out of class. (a)	<ul style="list-style-type: none"> <li>Learners could be guided to identify position of dots in a braille cell.</li> <li>Learners could be guided to recognize letters of the alphabet on Braille cards</li> <li>In pairs learners could be engaged in a game of recognizing letters of the alphabet.</li> </ul>	<ol style="list-style-type: none"> <li>How many rows and columns are there in a braille cell?</li> <li>Which letters of the alphabet are on the braille cards?</li> </ol>
<b>Core Competences to be developed</b>				
<b>Communication and collaboration:</b> – this would be achieved through learners being involved in ‘braille cards’ games in pairs and groups				
<b>Imagination and creativity:</b> this could be achieved by involving learners in sorting and matching activities involving letters of the alphabet.				
<b>Link to PCIs:</b> <b>Life skills:</b> - this could be achieved by involving learners in sorting and matching activities involving letters of the alphabet.			<b>Link to Values:</b> by working in pairs and groups learners would develop the values of sharing, respect and tolerance.	
<b>Links to other subjects :</b> Language activities, environmental activities, psychomotor and creative activities			<b>Suggested Community Service Learning activities:</b> Visit a library with braille material to interact with braille materials.	
<b>Suggested Non formal Activity to support learning:</b> Learners could be engaged in group games involving recognition of letters.			<b>Suggested assessment:</b> Questions and Answers, Observation, portfolio.	
<b>Suggested Learning Resources:</b> Braille papers, braille machine, stylus, slate, peg boards, braille cards.				

### Suggested Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Learner is able to recognize the position of dots in a braille cell, identify all letters of alphabet in braille with speed and accuracy.	Learner is able to recognize the position of dots in a braille cell, identify all letters of alphabet in braille.	Learner is able to recognize position of dots in a braille cell, recognize some letters of alphabet in braille with assistance.	Learner has difficulties in recognizing letters of alphabet even with assistance.

Strand	Sub stand	Specific learning outcomes	Suggested learning experiences	Key inquiry question(s)
<b>3.0 BRAILLE WRITING SKILLS</b>	<b>3.1 Pattern Writing</b>  <b>Suggested time:</b>  <b>(14 lessons )</b>	By the end of the sub-strand the learner should able to: a) hold braille writing equipment correctly; (s) b) make simple lines pattern in braille;(s) c) enjoy participating in pattern writing activities in class. (a)	<ul style="list-style-type: none"> <li>Learners could be guided to hold Braille writing equipment and materials correctly in readiness for making line patterns in Braille</li> <li>learner could be guided to make simple line patterns in Braille</li> <li>In pairs learners could practice making simple line patterns in Braille.</li> </ul>	<ol style="list-style-type: none"> <li>How do you position braille writing equipment correctly?</li> <li>How do you make simple patterns in braille?</li> </ol>
<b>Core Competences to be developed:</b>				
Critical thinking and problem solving: this would be achieved by involving learners in making variety of patterns				
Communication and collaboration: through learners working in pairs and groups.				
<b>Link to PCIs:</b> ESD: this could be achieved through learners observing safety as they keep the equipments.			<b>Link to Values:</b> Responsibilities, respect, unity	
<b>Links to other subjects :</b> Psychomotor and creative activities			<b>Suggested Community Service Learning activities:</b> Visit a resource centre and learn how braille patterns are made	

Suggested Non formal Activity to support learning: learners could be involved in group activities involving making different patterns using letters of the alphabet.	<b>Suggested assessment:</b> Questions and answers, observation, portfolio
<b>Suggested Learning Resources:</b> Braille papers, braille machine, stylus, slate.	

### Suggested Assessment Rubrics

<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaches Expectations</b>	<b>Below Expectations</b>
Learner is able to hold braille writing equipment correctly, make various simple line patterns in braille with speed and good order.	Learner is able to hold braille writing equipment correctly, make various simple line patterns in braille.	Learner is able to hold braille writing equipment correctly, make simple line patterns in braille with assistance.	Learner is unable to hold braille writing equipment correctly nor make simple line patterns in Braille even with assistance.

Strand	Sub stand	Specific learning outcomes	Suggested learning experiences	Key inquiry question(s)
	<b>3.2 Forming letters</b>  <b>Suggested time:</b> (16 lessons )	By the of the sub-strand the learner should able to: a) form letters of the alphabet in braille; (s) b) enjoy forming letters of alphabet in braille. (a)	<ul style="list-style-type: none"> <li>• Learner could be guided to sing rhymes related to letter formation in braille</li> <li>• Learners could be guided to form letters of alphabet in braille</li> <li>• learner could sing rhymes related to letter of the alphabet as they form letters in braille on the pegboard, slate or braille machines</li> <li>• In pairs and small groups learners could practice letter formation.</li> </ul>	How do you form letters of alphabet in braille?
<p><b>Core Competences to be developed:</b>  <b>Communication and collaboration:</b> this could be achieved when learners are working in pairs and singing songs related to letters of the alphabet.  <b>Self efficacy</b> - as they form letters of the alphabet in Braille self esteem is developed.</p>				
<b>Link to PCIs: ESD,</b> safety when using braille equipment			<b>Link to Values:</b> Responsibilities, respect, unity	
<b>Links to other subjects :</b> Psychomotor and creative activities, mathematical activities, language activities			<b>Suggested Community Service Learning activities:</b> Visit a resource centre to see the braille writing equipment and other materials	
<b>Suggested Non formal Activity to support learning:</b> learners could sing songs, recite poems related letters of the alphabet.			<b>Suggested assessment:</b> Oral Questions and answers, observation, portfolio	
<b>Suggested Learning Resources:</b> Braille machine, slate and stylus, pegboard, braille papers				



## Suggested Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Learner is able to form the letters of the alphabet in braille with speed and accuracy.	Learner is able to form the letters of the alphabet in braille accurately.	Learner is able to form the letters of alphabet in braille with assistance	Learner is unable to form the letters of the alphabet in Braille.

Strand	Sub Stand	Specific Learning Outcomes	Suggested Learning Experiences	Key inquiry Question(s)
	<b>3.3 Writing Practice</b>  <b>Suggested time:</b>  <b>(12 lessons )</b>	By the end of the sub-strand the learner should be able to:  a) Write letters of the alphabet in braille; (s) b) Use braille equipment and materials for writing braille; (s) c) Enjoy participating in braille writing activities in class.	<ul style="list-style-type: none"> <li>Learner could be guided to write letters of the alphabet in braille.</li> <li>Learners could be encouraged to copy letters of the alphabet in braille</li> <li>In pairs and in small groups learners could practice making patterns of letters of the alphabet</li> </ul>	<ol style="list-style-type: none"> <li>Which letters can you identify on these braille cards <b>B H J</b></li> <li>What equipment would you use when writing braille</li> </ol>
<b>Core Competences to be developed:</b> <b>Communication and collaboration:</b> this could be achieved when learners are working in pairs and singing songs related to letters of the alphabet. Critical thinking and Problem solving is demonstrated as they make patterns of letters hence building self esteem.				
<b>Link to PCIs:</b> Citizenship – social cohesion and integration is promoted when learners work together in pairs and groups			<b>Link to Values:</b> Responsibilities, respect, unity	
<b>Links to other subjects :</b> Psychomotor and creative activities, language activities, mathematics activities.			<b>Suggested Community Service Learning activities:</b> Visit a resource centre and learn more about letter writing in braille.	

<b>Suggested Non formal Activity to support learning:</b> learners could be involved in group activities, role playing related to writing letters of the alphabet.	<b>Suggested assessment:</b> Oral Questions and answers, observation, portfolio
<b>Suggested Learning Resources:</b> Braille machines, slate and stylus, pegboard, braille papers	

### Suggested Assessment Rubrics

<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaches Expectations</b>	<b>Below Expectations</b>
Learner is able to use the braille writing equipment and material in writing the letter of the alphabet with speed and accuracy.	Learner is able to use the braille writing equipment and material in writing the letter of the alphabet accurately.	Learner is able to use the braille writing equipment and material in writing the letter of the alphabet with assistance.	Learner has difficulties using the braille writing equipment and material and cannot write the letters of the alphabet.

## **PRE PRIMARY 2**

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
<b>1.0 BRAILLE READING SKILLS</b>	<b>1.1 Tracking and Tracing</b>  <b>Suggested time:</b>  <b>(8 Lessons )</b>	By the end of the sub-strand the learner should able to: a) Identify manipulative objects with two hands in preparation for tracking and tracing; (k) b) Move fingers from left to right and back and from top to bottom while tracking and tracing the lines; (s) c) Recognize space between Braille lines; (k) d) detect ends in Braille lines; (s) e) Trace single and double lines in braille; (s) f) Appreciate the importance of keeping fingers on Braille lines without removing them. (a)	<ul style="list-style-type: none"> <li>• Learner could be guided to identify manipulative objects and use them safely with two hands.</li> <li>• In pairs or groups learners could be guided to move fingers from left to right and from top to bottom.</li> <li>• learner to practice keeping fingers on Braille lines without removing them , tracing single and double lines</li> <li>• Learner could sing songs and recite poems related to tracking and tracing.</li> </ul>	<ol style="list-style-type: none"> <li>1. Name some of the manipulative objects used in pre Braille reading skills?</li> <li>2. Why is it important to move fingers from top to bottom, left to right?</li> <li>3. How can you move fingers when tracking and tracing Braille lines?</li> </ol>
	<p><b>Core-Competence to be developed</b>  <b>Communication and collaboration:</b> –this would be achieved as learners work in pairs and groups activities during singing and reciting poems related to tracking and tracing  <b>Self efficacy</b> - as they track and trace various tactile lines self esteem is developed.</p>			
	<p><b>Link to PCIs :</b> Life skills -this would be demonstrated as learners observe safety in moving and tracking activities  <b>Values:</b> as learners work in groups they gain values of sharing, tolerance responsibility.</p>	<p><b>Links to other subject(s):</b> – environmental activities, psychomotor and creative activities, language activities.</p>		

	<p><b>Suggested Community Service Learning Non-</b> visit a nearby workshop and manipulate objects with two hands by tracking and tracing objects found in the workshop. They could also visit the transcriber’s resource room to touch braille lines drawn on a braille paper.</p> <p><b>suggested non formal Activity to support learning through application:</b> learners play games involving tracking and tracing various patterns of braille lines.</p>
	<p><b>Suggested Resources:</b> Wooden blocks, Brailled cards , coins, different geometrical shapes and objects in the classroom like tables ,chairs the notice board and cubes and cuberithm boards, braille paper, brailons, tractor paper, spur wheel, drawing mat</p>
	<p><b>Suggested Assessment:</b> Observation, Oral questions and Answer</p>

### Suggested Assessment Rubrics

Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations
Learner is able to manipulate objects with two hands, move fingers from left to right and from top to bottom, recognize space between Braille lines and detect ends in Braille lines repeatedly with ease and speed.	Learner is able to manipulate objects with two hands, move fingers from left to right and from top to bottom, recognize space between Braille lines and detect ends in Braille lines.	Learner is able to manipulate objects with two hands, move fingers from left to right and from top to bottom, recognize space between Braille lines and detect ends in Braille lines with support.	Learner has difficulties in performing tracking and tracing activities even with support.

Strand	Sub-strand (Suggested time)	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
	<p><b>1.2 Hand movement</b></p> <p><b>Suggested time:</b></p> <p><b>(8 Lessons)</b></p>	<p>By the end of the sub-strand the learner should able to:</p> <p>a) Identify materials to be traced; (k)</p> <p>b) Assemble material to be traced; (s)</p>	<ul style="list-style-type: none"> <li>Learners could be guided to identify materials to be traced.</li> <li>Learner would be guided to assemble materials to be traced.</li> <li>Learner could be guided to demonstrate consistent curvature of</li> </ul>	<ol style="list-style-type: none"> <li>Name the materials to be used in tracing?</li> <li>Which fingers could be used to trace a Braille line and objects?</li> </ol>

		<p>c) Display consistent curvature of fingers; (s)  d) Maintain consistent forward hand movement in pre Braille reading activities; (k)  e) Appreciate the use of fingers in pre Braille reading activities. (a)</p>	<p>fingers in pairs in small groups and as a whole class.</p> <ul style="list-style-type: none"> <li>• Learner could be guided to maintain consistent forward hand movement in pre- Braille reading activities.</li> <li>• Learner could be guided to use the lead finger and detective fingers to trace a Braille line, coins and other objects. The pinky finger to detect the end of a Braille line.</li> <li>• Learner could be guided to practice forward hand movement individually, in pairs and in small groups repeatedly.</li> <li>• Learner could listen to and recite poems related to finger activities.</li> </ul>	<p>3. How can you trace a Braille line on a braille paper?  4. How can you detect the end of a Braille line?</p>
<p><b>Core-Competence to be developed</b></p> <p><b>Communication and collaboration:</b> As they work in pairs, small groups and as a whole class in demonstrating curvature of fingers in tracing Braille lines and objects</p> <p><b>Learning to learn:</b> Learner develops the desire to continuously seek more knowledge and skills through experience</p> <p><b>Self-efficacy:</b> Learner develops self-awareness, self-esteem and self-confidence while identifying, exploring and manipulating objects</p>				
<p><b>-Link to PCIs:</b> ESD: safety – Care and storage of braille materials is emphasized. Life skills-self-esteem and self-awareness is promoted during the learning activities.</p> <p><b>Values:</b> respect, sharing values are developed as learners work in groups</p>			<p><b>Links to other subject(s):</b> mathematical activities, Environmental activities, Language activities.</p>	

	<p><b>Suggested Community Service Learning/:</b> Visit a tailoring shop nearby and identify materials that could be used in tracing or visit the transcriber’s resource room and interact with the braille cards, braille books and other equipment</p> <p><b>Non-Formal Activity to support learning through application:</b> learners could engage in games involving tracking lines and patterns on a on braille paper or braille materials.</p>
	<p><b>Suggested Resources:</b> Braille cards, Braille book, braille papers, tape measure, thermoform machine, embossers, Brailier, drawing mat, spur wheel.</p>

### Suggested Assessment Rubrics

<b>Exceeds expectations</b>	<b>Meeting expectations</b>	<b>Approaching expectations</b>	<b>Below expectations</b>
Learner is able to identify and assemble materials to be traced, maintain consistent hand movement, display consistent curvature of fingers and use lead finger and detective fingers in pre-Braille reading activities and use pinky finger to detect end of Braille line with speed and ease.	Learner is able to identify and assemble materials to be traced, maintain consistent hand movement, display consistent curvature of fingers and use lead finger and detective fingers in pre-Braille reading activities and use pinky finger to detect end of a Braille line.	Learner is able to identify and assemble some materials to be traced, maintain consistent hand movement with assistance, display consistent curvature of fingers occasionally and use lead finger and detective fingers in pre-Braille reading activities with support and use pinky finger to detect end of a Braille line.	Learner has difficulties in identifying and assembling materials to be traced, cannot maintain consistent hand movement and is unable to display consistent curative of fingers.

Strand	Sub-strand (Suggested time)	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
	<b>1.3 Braille Book Orientation</b>  <b>Suggested time:</b>  <b>(5 Lessons)</b>	By the end of the sub-strand the learner should be able to: a) Position a Braille book on the desk; (s) b) Differentiate between left and right hand in book orientation; (s) c) Scan pages of a Braille book from right to left using hands; (s) d) Appreciate use of both hands in Braille book orientation. (a)	<ul style="list-style-type: none"> <li>• Learners could be asked to work in pairs to position a Braille book on the desk</li> <li>• Learner could be guided to take part in an exercise involving directionality, for example left hand movement right hand movement</li> <li>• Learner could work in groups to practice turning pages of a Braille book from right to left and turn left to right</li> <li>• The teacher could work with learner individually to scan pages of a Braille book first with one hand and then with both hands</li> <li>• Learner could role play scanning of an entire page of a book first with one hand and then with both hands</li> </ul>	<ol style="list-style-type: none"> <li>1. Why should you hold a Braille book correctly?</li> <li>2. Why is it important to train use of both hands in scanning pages of a page of a Braille book?</li> </ol>
<p><b>Core-Competence to be developed</b></p> <p><b>Communication and collaboration:</b> –through group work, learners are able to collaborate and develop communication skills.</p> <p><b>Learning to learn:</b> – learners would acquire skills of scanning pages using one hand and both hands</p> <p><b>Citizenship:-</b> through working in groups learners would develop teamwork spirit and boost self esteem.</p>				
<p><b>Link to PCIs:</b> life skills-self-awareness and self-esteem is developed through communication with others when working in groups.</p> <p><b>Values:</b> learners develop values of sharing, respect, tolerance as they work together.</p>			<p><b>Links to other subject(s):</b> Language activities, psychomotor activities, environmental activities</p>	
<p><b>Suggested Community Service Learning</b> Visit a nearby library to practice appropriate ways of holding braille books correctly, turning pages and scanning entire pages with both and one hand.</p>				



	<b>Non-Formal Activity to support learning through application:</b> learners could participate in storage of braille books as they maintain safety skills.
	<b>Suggested Resources;</b> Braille books, Braille cards, Braille papers

<b>Exceeding Expectations</b>	<b>Meeting expectations</b>	<b>Approaching expectations</b>	<b>Below expectations</b>
Learner is able to locate edges and identify pages of a Braille book and even open pages of a Braille book with speed and accuracy.	Learner is able to locate edges and identify pages of a Braille book with accuracy.	Learner is able to locate edges and identify pages of a Braille book and even open pages of a Braille book with assistance.	The learner has difficulties in locating edges and identifying pages of a Braille book without support.

<b>Strand</b>	<b>Sub Strand</b>			
<b>2.0 BRAILLE WRITING SKILLS</b>	<b>2.1 Orientation to slate, stylus, eraser and Braille paper</b>  <b>Suggested time:</b> <b>(6 Lessons)</b>	By the end of the sub-strand the learner should able to: a) Identify slate, stylus, eraser and Braille paper; (k) b) Position slate for Braille paper insertion; (s) c) Insert and remove paper from the slate; (s) d) Recognize the Braille cell on the slate; (k) e) Appreciate braille writing equipment in preparation for pre-braille writing skills. (a)	<ul style="list-style-type: none"> <li>• Learner could be guided to identify slate, stylus, eraser and braille papers.</li> <li>• Learner could be guided to position slate for Braille paper insertion.</li> <li>• Learner could be guided to practice insertion and removal of paper from the slate individually and in pairs.</li> <li>• Learners could be guided to position the slate and identify Braille cells</li> <li>• Learner listen to songs, recite poems related to orientation to slate, stylus, eraser and Braille activities.</li> </ul>	<ol style="list-style-type: none"> <li>1. What are some of the materials in pre Braille writing skills?</li> <li>2. Why is it important to position the slate and stylus correctly when doing pre Braille writing activities?</li> <li>3. How do you identify a Braille cell on a slate?</li> <li>4. How do you insert or remove Braille paper from the slate?</li> </ol>
<b>Core-Competence to be developed</b>				

	<b>Critical thinking and problem solving:</b> – as the learner inserts and removes Braille paper from the slate, they identify and position slate and stylus in order.	
	<b>Link to PCIs :</b> Life skills – learner would maintain safety measures while handling stylus and slate.  <b>Values:</b> by working in pairs and groups learners would develop the values of sharing, respect and tolerance.	<b>Links to other subject(s):</b> language activities mathematical activities, psychomotor and creative activities.
	<b>Suggested Community Service Learning</b> visit a resource centre (Education Assessment and Resource Centre) and practice pre Braille writing skills  <b>Non-Formal Activity to support learning through application:</b> learners could engage in games involve slate and stylus	
	<b>Suggested Resources:</b> stylus, slate, Braille paper, eraser	

### Suggested Assessment Rubrics

<b>Exceeding expectations</b>	<b>Meeting expectations</b>	<b>Approaching expectations</b>	<b>Below expectations</b>
Learner is able to identify and position the slate, stylus and the Braille paper, insert and remove paper from the slate, recognize the Braille cell on the slate and even make some dots with ease.	Learner is able to identify and position the slate, stylus and the Braille paper, insert and remove paper from the slate and recognize the Braille cell on a slate.	Learner is able to identify and position the slate, stylus and the Braille paper, insert and remove paper from the slate, recognize the Braille cell with assistance.	Learner is able to identify the slate and stylus but has difficulties in positioning the slate, stylus and the Braille paper, inserting and removing paper from the slate, and even recognizing the Braille cell.

<b>Strand</b>	<b>Sub-strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Key Inquiry Question(s)</b>
	<b>2.2 Orientation to Braille writing machine</b>	By the of the sub-strand the learner should able to:	<ul style="list-style-type: none"> <li>Learner could be guided to identify the Braille machine.</li> </ul>	1. Name the keys of a Braille writing machine?

	<p><b>(Suggested time: (12 Lessons)</b></p>	<p>a) Identify the Braille machine; (k)  b) identify the six keys, space bar, line spacer, back spacer and carriage on a braille machine; (k)  c) Insert and remove the paper from the Braille machine; (s)  d) Appreciate the importance of orientation to Braille writing activities. (a)</p>	<ul style="list-style-type: none"> <li>• Learner could be guided to identify the keys on a braille machine.</li> <li>• Learner could be shown the process of insertion and removal of Braille paper from the Braille machine.</li> <li>• In pairs or groups learners could practice insertion and removal of Braille paper from the Braille machine</li> <li>• Learners could sing a song related to orientation to Braille writing machine activities.</li> </ul>	<p>2. How do you insert and remove Braille paper from the Braille machine?  3. Why is it important to identify the keys of the Braille machine?</p>
<p><b>Core-Competence to be developed</b></p>				
<p><b>Communication and collaboration:</b>—this could be achieved through pairing and working together during class activities</p>				
<p><b>Critical thinking and problem solving:</b> – this is developed as the learner inserts and removes Braille paper from the slate, as they identify and position slate and stylus</p>				
<p><b>Link to PCIs:</b> Life Skills: this is demonstrated through learners maintaining Safety of the braille machine and braille materials.</p> <p><b>Values:</b> by working in pairs and groups learners would develop the values of sharing, respect and tolerance.</p>			<p><b>Links to other subject(s):</b> language activities, Mathematics activities psychomotor and creative activities.</p>	
<p><b>Suggested Community Service Learning/</b></p>				
<p>Visits a Resource Centre and learn more on orientation to Braille writing machine.</p>				
<p><b>Non-Formal Activity to support learning through application:</b> learners could participate in storage of braille machine</p>				
<p><b>Suggested Resources:</b> Braille machines, Braille papers.</p>				

## Suggested Formative Assessment

<b>Exceeding expectations</b>	<b>Meeting expectations</b>	<b>Approaching expectations</b>	<b>below expectations</b>
Learner is able to identify the Braille writing machine and identify dot keys and space bar, place fingers on correct keys 1,2,3,4,5 and 6 on the Braille machine, insert and remove paper from Braille machine with speed and ease	Learner is able to identify the Braille writing machine and identify dot keys and space bar, place fingers on correct keys 1,2,3,4,5 and 6 on the Braille machine, insert and remove paper from Braille machine	Learner is able to identify the Braille writing machine and identify some keys and the space bar, place fingers on correct keys 1,2,3,4,5 and 6 on the Braille machine, insert and remove paper from Braille machine with assistance	Learner is able to identify the Braille writing machine but has difficulties in identifying keys and space bar, placing fingers on correct keys 1,2,3,4,5 and 6 on the Braille machine, inserting and removing paper from Braille machine.

<b>Strand</b>	<b>Sub-strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Key Inquiry Question(s)</b>
	<p><b>2.3 Body posture</b></p> <p><b>Suggested time:</b></p> <p><b>(3 Lessons)</b></p>	<p>By the end of the sub-strand the learner should able to:</p> <p>a) Position the Braille Machine/ slate on the desk; (s)</p> <p>b) Keep back straight while seated on a chair, place feet on the floor; (s)</p> <p>c) Keep wrist above keys on a braille machine, keep fingers slightly curved and on appropriate keys of the braille machine; (s)</p> <p>d) Use thumbs only to hit the space bar on a braille machine; (s)</p> <p>e) Appreciate the importance of appropriate body posture in Pre-Braille writing activities. (a)</p>	<ul style="list-style-type: none"> <li>• Learner to be guided to position the machine/slate in readiness to Braille writing activities.</li> <li>• Learner could be guided while seated on a chair to place feet on the floor appropriately, keep back straight.</li> <li>• Learners could be guided to keep wrists above keys, keep fingers slightly curved and on appropriate keys.</li> <li>• Learners would be shown and advised to use thumbs only to hit the space bar.</li> <li>• Learner could listen, sing and recite poems related to appropriate body posture.</li> </ul>	<ol style="list-style-type: none"> <li>1. How would you hold stylus in readiness to writing?</li> <li>2. How would you move to the next line on a slate?</li> <li>3. Which finger of the dominant hand would you use to guide the point of stylus?</li> </ol>

<p><b>Core-Competence to be developed</b>  <b>Communication and Collaboration:</b> this would be achieved as they work in pairs, small groups and as a whole class to position their body parts.  <b>Learning to learn:</b> this is demonstrated as learner desires to explore and manipulate the Braille writing equipment.  <b>Self-efficacy:</b> Learner develops self-awareness, self-esteem and self-confidence while positioning the body parts to suit posture in pre-Braille writing activities.</p>	
<p><b>Link to PCIs</b> Life skills: learners would appreciate benefits of appropriate body as well gain self-awareness of body parts.  <b>Value:</b> by working in pairs and groups learners would develop the values of sharing, respect and tolerance.</p>	<p><b>Links to other subject(s):</b> Environmental activities, language activities, psychomotor activities</p>
<p><b>Suggested Community Service Learning:</b> visit a resource room and practice appropriate sitting body posture when writing braille.  <b>Non-Formal Activity to support learning through application:</b> learners could take part in role play activities for appropriate sitting body posture when writing braille.</p>	
<p><b>Suggested Resources:</b> Slate and stylus, braille writing machines, chairs, tables, desks.</p>	

### Suggested Assessment Rubric

Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations
The learner is able to sit on a chair in an upright position with feet together on the ground, set the Braille writing machine/slate, position the fingers and wrists and even hit the space bar with the thumb appropriately with speed.	The learner is able to sit on a chair in an upright position with feet together on the ground, set the Braille writing machine/slate, position the fingers and wrists and even hit the space bar with the thumb appropriately.	The learner is able to sit on a chair in an upright position with feet together on the ground, set the Braille writing machine/slate, position the fingers and wrists with assistance.	The learner has difficulties sitting on a chair in an upright position with feet together on the ground, cannot set the Braille writing machine/slate, or position the fingers and wrists without assistance.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
	<p><b>2.4 Slate and stylus activities</b></p> <p><b>Suggested time:</b></p> <p><b>(6 Lessons)</b></p>	<p>By the end of the sub-strand the learner should be able to:</p> <p>a) Hold the stylus correctly; (s)</p> <p>f) Use index finger of the dominant hand to guide point of the stylus; (s)</p> <p>b) Make easy to feel dots on braille paper at random; (k)</p> <p>g) Move to the next Braille line on a slate; (s)</p> <p>c) Appreciate the use of slate and stylus in braille writing activities. (a)</p>	<ul style="list-style-type: none"> <li>• Learner to be shown slate and stylus for identification and talk about the equipment in pairs, small groups and as a whole class.</li> <li>• Learner could use index finger of the dominant hand to guide point of the stylus.</li> <li>• Learner could practice using index finger of the dominant hand to guide point of the stylus for mastery.</li> <li>• Learner could be guided to make easy to feel dots on the Braille paper using the stylus</li> <li>• Learner could be guided to move to the next Braille line by placing fingers on the current Braille line and then identify where to begin on the next line.</li> <li>• Learners could listen to and sing songs related to slate and stylus and making dots on the braille paper.</li> </ul>	<ol style="list-style-type: none"> <li>1. How would you hold stylus in readiness to writing?</li> <li>2. How would you move to the next line on a slate?</li> <li>3. Which finger of the dominant hand would you use to guide the point of stylus?</li> </ol>
<p><b>Core-Competence to be developed</b></p> <p><b>Communication and collaboration:</b> this could be achieved as they work in pairs, small groups and as a class in identification of a slate and stylus and when practicing making dots using slate and stylus.</p> <p><b>Learning to learn:</b> this could be observed as learners desire to explore and manipulate slate and stylus.</p>				

	<b>Self-efficacy:</b> this could be demonstrated as learners develop self-awareness, self-esteem and self-confidence while identifying, exploring and manipulating slate and stylus.	
	<b>Link to PCIs and LIFE SKILLS-</b> learners could acquire self esteem when they use body parts in slate and stylus activities. <b>Values:</b> by working in pairs and groups learners would develop the values of sharing, respect and tolerance.	<b>Links to other subject(s):</b> language activities, psychomotor and creative activities, mathematical activities.
	<b>Suggested Community Service Learning:</b> visit a nearby workshop to participate in making stylus locally while maintaining safety precautions.	
	<b>Non-Formal Activity to support learning through:</b> learners could demonstrate to others embossing of dots using slate.	
<b>Suggested Resources:</b> Slate and stylus, pieces of wood, wires.		

### Suggested Formative Assessment

Exceeds expectations	Meets Expectations	Approaches Expectations	Below Expectations
Learner is able to move to the next Braille line on a slate, hold stylus, use index finger on the dominant hand to guide point of the stylus and make easy to feel dots on a Braille paper following a Braille line with ease.	Learner is able to move to the next Braille line on a slate, hold stylus, use index finger on the dominant hand to guide point of the stylus and make easy to feel dots on a Braille paper.	Learner is able to move to the next Braille line on a slate, hold stylus, use index finger on the dominant hand to guide point of the stylus and make easy to feel dots on a Braille paper with assistance.	Learner has difficulties moving to the next Braille line on a slate and even holding stylus, using index finger on the dominant hand to guide point of the stylus and cannot make easy to feel dots on a Braille paper.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question(s)
	<b>2.5 Braille Writing Machine Activities</b>  <b>Suggested time:</b>	By the end of the sub-strand the learner should able to: a) Identify the keys on Braille writing machine (k) b) Relate keys on Braille writing machine and dot numbers (k)	<ul style="list-style-type: none"> <li>Learner could be guided to identify the keys on the Braille writing machine.</li> <li>Learner could be asked to show correspondence between keys on the Braille machine and the</li> </ul>	<ol style="list-style-type: none"> <li>How can you produce easy to feel dots?</li> <li>What is your experience when feeling dots?</li> </ol>

	<b>(6 Lessons)</b>	c) Press keys on the Braille writing machine to produce easy to feel dots (s) d) Feel dots embossed on the Braille writing paper (s) e) Appreciate use of Braille writing machine (a)	corresponding dots numbers for example key number one on the left hand side correspond to dot 1. <ul style="list-style-type: none"> <li>• Learner could be guided to place their fingers appropriately on the keys of the Braille writing machine and press the keys to produce dots that can be easily felt.</li> <li>• Learner demonstrate pressing of keys while mentioning the corresponding dot number.</li> <li>• Learners could be encouraged to talk about their experiences in feeling the dots and using the Braille writing machine.</li> </ul>	
<p><b>Core-Competence to be developed</b>  <b>Communication and collaboration</b> :- this could be achieved through working in pairs and talking about using the Braille writing to produce easy to feel dots.  <b>Learning to learn</b>: –learners would acquire knowledge and writing skills while using the Braille machine.  <b>Self efficacy</b>: – learners acquire skills that enable the learner to use the Braille writing machine .</p>				
<p><b>Link to PCIs: life skills</b> - learners would observe safety measures while using and sharing braille machines, braille papers and braille cards.</p> <p><b>Values</b>: by working in pairs and groups learners would develop the values of sharing, respect and tolerance.</p>			<p><b>Links to other subject(s)</b>: language activities, psychomotor and creative activities.</p>	
<p><b>Suggested Community Service Learning</b>: Visit a nearby assessment centre and access different types of Braille writing machines.</p>				



	<b>Non-Formal Activity to support learning through application;</b> learners could demonstrate to others insertion and release of braille papers from machine and how to make easy to feel dots.
	<b>Suggested Resources:</b> Braille machine, Braille papers, and Braille cards.

### Suggested Assessment Rubrics

<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaches Expectations</b>	<b>Below Expectations</b>
Learner is able to identify the keys and relate them to dot numbers on a Braille writing machine, press to produce easy to feel dots continuously on a Braille line with speed and ease	Learner is able to identify the keys and relate them to dot numbers on a Braille writing machine, press to produce easy to feel dots.	Learner is able to identify some of the keys and relate some of them to dot numbers on a Braille writing machine, to produce easy to feel dots with assistance.	Learner has difficulties in identifying the keys and relating them to dot numbers on a Braille writing machine, can press the machine to produce easy to feel dots but cannot relate the dots to numbers.

<b>Strand</b>	<b>Sub-strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Key Inquiry Question(s)</b>
	<b>2.6 Safe use of Braille Writing Equipment and Materials</b>  <b>Suggested time:</b> <b>(2 Lessons)</b>	By the end of the sub-strand the learner should be able to: a) Identify appropriate ways of using the braille writing equipment and materials safely; (k) b) Care for braille writing equipment and materials for safe use; (s) c) Store braille writing equipment and materials appropriately for safety; (s)	<ul style="list-style-type: none"> <li>Learners could be guided to identify appropriate ways of using the braille writing equipment and materials safely.</li> <li>Learner could be guided to demonstrate ways of caring for various braille writing equipment and materials such as covering a Braille writing machine.</li> <li>Learner could be asked to work in pairs and demonstrate proper storage of Braille writing equipment and materials in the designated place in the classroom, cupboard or resource room.</li> </ul>	<ol style="list-style-type: none"> <li>Which are the appropriate ways of keeping the braille writing equipment and materials safe?</li> <li>Why should we take proper care of braille writing equipment?</li> </ol>

		d) Appreciate the importance of safe use, care and storage of braille writing equipment and materials. (a)	<ul style="list-style-type: none"> <li>In pairs or groups learners could talk about the importance of safe use, care and storage of braille writing equipment and materials.</li> </ul>	
<p><b>Core-Competence to be developed</b>  <b>Communication and collaboration</b> – this could be achieved through learners working in pairs and groups</p> <p><b>Learning to learn</b> –learners would acquire more knowledge and writing skills while using the Braille machine.</p> <p>Imagination and creativity – learners could come up with creative ways of care and storage of braille wring equipment and this could promote the self esteem.</p> <p><b>Suggested community services learning:</b> Learner to visit Educational Assessment Resource Centre (EARC) or resource room to get guidance from the officers.</p>				
<p><b>Link to PCIs</b> Life skills: learners would appreciate benefits of safe use of braille equipment.  <b>Value:</b> by working in pairs and groups learners would develop the values of sharing, respect and tolerance.</p>			<p><b>Links to other subject(s):</b>  Language activities, environmental activities, psychomotor and creative activities.</p>	
<p><b>Suggested Community Service Learning/Non-Formal Activity to support learning through application</b>  Visit neighbourhood home or schools to learn on how to take care of braille equipment and materials.</p>				
<p><b>Suggested Resources:</b> Slate, stylus, Braille writing machine, cupboards, lockers Braille kits.</p>				
<p><b>Suggested Assessment:</b> Observation, oral questions and answers.</p>				

### Suggested Assessment Rubrics

Exceeding expecting	Meeting expectations	Approaching expectations	Below expectations
Learner is able to use , care for and store braille writing equipment safely and efficiently as a routine.	Learner is able to use , care for and store braille writing equipment safely.	Learner is able to use , care for and store braille writing equipment safely with assistance.	Learner has difficulties in using , caring for and storing braille writing equipment safely.

Strand	Sub stand	Specific learning outcomes	Suggested learning experiences	Key inquiry Question(s)
<b>3.0 BRAILLE READING SKILLS</b>	<b>3.1 Letter Recognition</b>  <b>Suggested Time:</b>  <b>(7 lessons)</b>	By the end of the sub-strand the learner should able to: a) recognize letters of alphabet in braille; (s) b) enjoy participating in letter recognition activities in braille. (a)	<ul style="list-style-type: none"> <li>Learners could be guided to recognize letters of alphabet in braille.</li> <li>In pairs or small groups learners could practice recognition of letters of alphabet in braille.</li> <li>Learners could be guided to recognize letters of the alphabet written on braille cards.</li> </ul>	Which letters are written on the braille cards MU, YZ, RW, P,B
<b>Core Competences to be developed</b>				
Communication and collaboration – this would be achieved through learners being involved in ‘braille cards’ games in pairs and groups Imagination and creativity: this could be achieved by involving learners in sorting and matching activities involving letters of the alphabet.				
<b>Link to PCIs:</b> Life skills: - this could be achieved by involving learners in sorting and matching activities involving letters of the alphabet.			<b>Link to Values:</b> by working in pairs and groups learners would develop the values of sharing, respect and tolerance.	
<b>Links to other subjects :</b> Language, environmental, psychomotor and creative activities			<b>Suggested Community Service Learning activities:</b> Visit a library with braille material to interact with braille materials	
<b>Suggested Non formal Activity to support learning:</b> Learners to engage in group games involving recognition of letters			<b>Suggested assessment:</b> Questions and Answers, Observation, portfolio	
<b>Suggested Learning Resources:</b> Braille papers, braille machine, stylus, slate, peg boards, braille cards				

### Suggested Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Learner is able to recognize letters of alphabet in braille with ease and accuracy	Learner is able to recognize letters of alphabet in braille accurately.	Learner is able to recognize some letters of alphabet in braille but requires assistance to recognize all letters accurately.	Learner is unable to recognize letters of alphabet in Braille.

Strand	Sub Strand	Specific learning outcomes	Suggested learning experiences	Key inquiry question(s)
<b>4.0 BRAILLE WRITING SKILLS</b>	<b>4.1 Letter Formation</b>  <b>Suggested time:</b> <b>(4 lessons)</b>	By the end of the sub-strand the learner should be able to: a) form letters of alphabet in braille; (s) b) Enjoy participating in letter formation activities in braille. (a)	<ul style="list-style-type: none"> <li>Learners could be guided to form letters of alphabet in braille using slate, stylus or braille machine</li> <li>Learners could be guided to practice forming letters on the pegboard.</li> <li>In pairs and small groups learner could practice letter formation in braille</li> <li>Learner could be guided to recite and sing rhymes related to letter formation</li> </ul>	Which dots form the following letters of alphabet? D, F, E, I, M,U, R,W?

#### Core Competences to be developed:

**Communication and collaboration:** – this could be achieved through learners working in pairs and groups.

**Learning to learn:** –learners would acquire knowledge and writing skills while participating in letter formation activities in braille.

**Imagination and creativity:** – learners could come up with creative ways of mastering letter formation.

<b>Link to PCIs:</b> Life skills: - this could be achieved by involving learners in sorting and matching activities involving letters of the alphabet.	<b>Links to other subjects :</b> Psychomotor and creative activities
<b>Link to Values:</b> by working in pairs and groups learners would develop the values of Love, unity, respect	<b>Suggested Community Service Learning activities:</b> Visit a resource room and learn more about letter formation
<b>Suggested Non formal Activity to support learning:</b> learners could be involved in role playing on letter formation	
<b>Suggested assessment:</b> Oral Questions and answers, observation, portfolio	
<b>Suggested Learning Resources:</b> Braille paper, braille machine, slates, stylus, cuberthm, board, pegboard, pegs	

### Suggested Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Learner is able to form letters of alphabet in braille with ease and accuracy.	Learner is able to form letters of alphabet in braille with accuracy.	Learner is able to form letters of alphabet in braille with assistance.	Learner is unable to form letters of alphabet in braille even with assistance.

Strand	Sub stand	Specific learning outcomes	Suggested learning experiences	Key inquiry question(s)
	<b>4.2 Writing Letters of the Alphabet:</b>  <b>Suggested time:</b> <b>(16 lessons )</b>	By the end of the sub-strand the learner should be able to: a) write letters of the alphabet in braille; (s) b) use braille writing equipment and materials to write letters of the alphabet; (s)	<ul style="list-style-type: none"> <li>Learners could be guided to write letters of the alphabet in braille.</li> <li>Learners could be guided to copy letters of the alphabet from the braille cards.</li> <li>Learners could be guided in pattern making using letters of the alphabet in braille.</li> </ul>	How do you write the following letter of the alphabet W, R, Y, Z, M, N, P, V, X?

		c) enjoy participating in letter writing activities in braille. (a)	<ul style="list-style-type: none"> <li>In pairs and small groups learners could be guided to make patterns using letters of the alphabet in braille.</li> <li>In pairs and small groups learners could write letters in braille and appreciate each other's work.</li> </ul>	
<p><b>Core Competences to be developed:</b></p> <p><b>Communication and collaboration:</b> this could be achieved through learners working in pairs and groups.</p> <p><b>Learning to learn</b> –learners would acquire knowledge and writing skills while participating in letter writing activities in braille.</p> <p><b>Imagination and creativity</b> – learners could come up with creative ways of mastering letter writing.</p>				
<p><b>Link to PCIs:</b> Life skills: - this could be achieved by involving learners in sorting and matching activities involving letters of the alphabet.</p>			<p><b>Link to Values:</b> by working in pairs and groups learners would develop the values of unity, respect</p>	
<p><b>Links to other subjects :</b> Psychomotor and creative activities, language, mathematical activities.</p>			<p><b>Suggested Community Service Learning activities:</b> Visit a resource centre and learn more about letter formation</p>	
<p><b>Suggested Non formal Activity to support learning:</b> learners could involved in in group activities on writing letters of alphabet.</p>			<p><b>Suggested assessment:</b> Oral Questions and answers, observation, portfolio.</p>	
<p><b>Suggested Learning Resources:</b> Braille paper, braille machine, slate, stylus, braille cards.</p>				

### Suggested Assessment Rubrics

Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Learner is able to write letters of the alphabet in braille with ease and accuracy.	Learner is able to write letters of the alphabet in braille with accuracy.	Learner is able to write letters of the alphabet in braille with assistance.	Learner has difficulties in writing letters of the alphabet in Braille.