



Republic of Zambia

**MINISTRY OF EDUCATION, SCIENCE, VOCATIONAL TRAINING AND EARLY  
EDUCATION**  
Special Education  
**BRAILLE SYLLABUS**  
GRADES 8 and 9



**PREPARED AND PUBLISHED BY THE CURRICULUM DEVELOPMENT CENTRE  
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# VISION

Quality, life long education for all which is accessible, inclusive and relevant to individual, national and global needs and value systems.

## **PREFACE (draft)**

The syllabus was produced as a result of the Curriculum review process carried out by the Ministry of Education, Science, Vocational Training and Early Education under the auspices of the Curriculum Development Centre (CDC). The curriculum reform process started way back in 1999 when the Ministry of Education commissioned five (5) curriculum studies which were conducted by the University of Zambia. These studies were followed by a review of the lower and middle basic and primary teacher education curriculum. In 2005 the upper basic education National survey was conducted and information from learners, parents, teachers, school managers, educational administrators, tertiary institutions traditional leaders civic leaders and various stakeholders in education was collected to help design a relevant curriculum. The recommendations provided by various stakeholders during the Upper Basic Education National survey of 2005 and National symposium on curriculum held in June 2009 guided the review process.

The review was necessitated by the need to provide an education system that would not only incorporate latest social, economic, technological and political developments but also equip learners with vital knowledge, skills and values that are necessary to contribute to the attainment of Vision 2030.

The syllabus has been reviewed in line with the Outcome Based Education principles which seek to link education to real life experiences that give learners skills to access, criticize analyze and practically apply knowledge that help them gain life skills. Its competences and general outcomes are the expected outcomes to be attained by the learners through the acquisition of knowledge, skills, techniques and values which are very important for the total development of the individual and the nation as a whole.

Effective implementation of Outcome Based Education requires that the following principles be observed: clarity of focus, Reflective designing, setting high expectations for all learners and appropriate opportunities.

It is my sincere hope that this Outcome Based syllabus will greatly improve the quality of education provided **at..** as defined and recommended in various policy documents including Educating Our Future`1996 and the `Zambia Education Curriculum Framework `2013.

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C. N. Sakala (Mrs.)

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**Ministry of Education, Science, Vocational Training and Early Education**

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## **INTRODUCTION**

Learning to read and write is very cardinal for all learners. Braille reading and writing play a very important part (role) in the Visual impairment daily life. It is for this reason that the two should be given emphasis in the school curriculum.

The work in this syllabus was based on the British Braille Primer for 2005 edition, this syllabus should therefore be used side by side with the British Primer. The braille primer is used for training teachers in braille in higher institutions of learning. However, it does not state the type of braille to be taught at different levels of learners in school. This edition has tried to suggest braille expected to be taught at different grade levels (8 and 9) to learners with visual impairments. Specific reference pages for each topic from the braille primer have been cited. It is also advisable that the topics are taught side by side with the related topics of the content subjects.

Finally, the sequence in which the syllabus is written may not necessarily be the best. The teacher is free to use his/her own discretion depending mainly on the related topics in the content subjects as well as the learner's cognitive ability.

### **TIME ALLOCATION**

Three (3) periods of 40 minutes each should be allocated per week.

**ASSESSMENT**

There are no final examinations for this subject; however, class exercises to enhance braille reading and writing should be given.

**RATIONALE**

Learners with visual impairments highly depend on the tactile sense to learn. Though Information Computer Technology is becoming quite useful, it cannot replace Braille. Learners with visual impairments should be taught Braille to enable them compute other subjects.

**Grade 8**

<b>Competences</b>	<b>General outcome</b>
Ability to apply braille in content subjects Ability to understand materials in society that are in braille	Write and read braille correctly

TOPIC	SUB – TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
8.1 Braille Equipment	8.1.1 Assembling of braille equipment	8.1.1.1 Identify different types of Braille equipment	Braille board, pocket frame, writing frame, Perkins Braille, etc.	Recognition of braille equipment	Appreciation of braille equipment in writing
8.2 Mathematical symbols	8.2.1 Basic computation symbols	8.2.1.1 Identify some braille computation symbols	Ordinal Numbers: (4,500,000) Computation symbols: (+ - = ÷ < > ≠) Time: (18:00, 12:15 pm, 10:30 am) Dates: (1 <sup>st</sup> December 2012 1/12/2010, 1.12.2010)	Identification of computation symbols	Appreciation of Mathematical symbols in computations
8.2 Braille Writing and Reading	8.2.1 Special signs	8.2.1.1 Recognise special signs	<b>5 Common Wordsigns:</b> and for of the with.  article A with any of the 5 common wordsigns. The semicolon (;) Capital letter sign	Recognize the 5 special common words	Appreciation of short abbreviations
	8.2.2 Simple Upper Wordsigns	8.2.2.1 Identify Simple Upper Wordsigns	and for of the with as  Groupsigns  Exclamation mark          Query	Identification of Simple Upper Groupsigns	Self esteem in communication
		8.2.2.2 Recognise Simple Upper Wordsigns	<b>Wordsigns</b> e.g. B – but, C – can, D – do	Ability to read wordsigns	Awareness of simple Wordsigns

TOPIC	SUB – TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
8.4 Upper Groups	8.4.1 Five Upper Groups	8.4.1.1 Identify Five Upper Groups	ch gh sh th wh (with h) The apostrophe	Recognition of the groups	Self confidence in braille reading
	8.4.2 Four Upper Groups	8.4.2.1 Identify Four Upper Groups	ed er ou ow (2 with e & 2 with o)  The colon (:) Quotation marks (“ ”)	Identifying the four groups	Critical thinking in languages
	8.4.3 Last Four Upper Groups	8.4.3.1 Identify Last Four Upper Groups	st ar ing ble  hyphen	Identifying the last four upper groups	Appreciation of the groups
8.5 Measurement	8.5.1 Measurement symbols	8.5.1.1 Identify Braille symbols in Mathematics	Decimals (4.5, 0.005) Degree (45 ° ) Percentage ((%, 5%) Ratio (2 : 5) Area (cm <sup>2</sup> ) Volume (cm <sup>3</sup> , m <sup>3</sup> ) The Line Sign	Identifying Mathematical symbols	Problem solving in Mathematics

TOPIC	SUB – TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
8.6 Lower Signs	8.6.1: Lower groupsigns	8.6.1.1 Describe Lower Groupsigns at the beginning of a word or Braille line	At the beginning of a word or braille line: ( <u>Be con dis com</u> ) The dash (--) Word division: (Lusaka Internat- ional) Shortforms ( <u>bec</u> , <u>bec beh</u> )	Identifying lower groupsigns	Awareness of the lower groupsigns
		8.6.1.2 Identify Lower Groupsigns in the Middle of a word	In the Middle of a Word (two repeated letters): <u>ea bb cc dd ff gg</u>  Round brackets or Parentheses		
		8.6.1.3 Discus Lower Groupsigns in any part of a word	In any part of a word: <u>en in</u>		
	8.6.2 Lower Wordsigns	8.6.2.1 Discus Lower Wordsigns That Must be Spaced From All Other Signs	Spaced From All Other Signs: <u>be were his was</u> With highen or dash	Identifying lower wordsigns	Awareness of the lower wordsigns

TOPIC	SUB - TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
		8.6.2.2 Identify Lower Wordsigns That Must be Spaced From All Others but May in Some Cases be in Contact with Punctuation Signs	Spaced From All Others but May in Some Cases be in Contact with Punctuation Signs:  <u>enough in</u>	Identifying lower wordsigns	Awareness of the lower wordsigns
		8.6.2.3 Identify Lower Wordsigns That May Only be Used Adjoining the Word That Follows	Adjoining the Word That Follows to <u>into by</u>  Shortforms: td for today tm for tomorrow		
8.7 Typing	8.7.1 Typewriter functions	8.7.1 Describe how the typewriter functions	Key board functions, typing of words and passages	Demonstrating the use of key board functions	Problem solving in various subjects
8.8 Graphs and charts	8.8.1 Line graphs, Bar graphs, etc	8.8.1.1 Interpret graphs	Embossed graphs and charts in various subjects	Tracking and locating information on graphs	Problem solving related to orientation
8.9 Measurement	8.9.1 Measurement symbols	8.9.1.1 Discuss Braille symbols for measurements	Distance (km, m, and cm), Capacity (l), weight (kg), Height (m), Temperature (°C) Raised clock faces Abacus, Braille rulers Straight line drawing	Identifying braille symbols	Analysis in calculations



TOPIC	SUB - TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
8.10 Information Computer Technology	8.10.1 The Computer	8.10.1.1 Describe the use of the key board functions	Speech devices: Dolphin pens, Thunder, Computer, Key board functions, typing of words and passages	Establishing orientation of functions	Creativity to daily living
	8.10.2 The Perkins Braille	8.10.2.1 Describe the functions on the Perkins Braille	Key board functions, typing words and passages		
8.11 Braille Writing and Reading	8.11.1 Roman Numbers	8.11.1.1 Identify some Roman Numbers	Roman Numbers: II IV LV CM	Identifying roman numerals	Problem solving involving roman numerals
8.12 Composite Signs	8.12.1 Initial Wordsigns	8.12.1.1 Identify Wordsigns with dot 5	Dot 5 and D – M Dot 5 and N – U	Identifying initial composite wordsigns	Awareness of initial composite wordsigns
		8.12.1.2 Identify last group with dot 5	Dot 5 with W, Y, <u>the</u> , <u>ch</u> , <u>th</u> , <u>wh</u> , and <u>ou</u>		
		8.12.1.3 Identify Wordsigns with Two Dots 4 5	Two Dots: 4 5: U, W, <u>the</u> , <u>th</u> , <u>wh</u>		
		8.12.1.4 Identify Wordsigns with Three Dots 4 5 6	Three Dots 4 5 6: c, h, m, s, w		
	8.12.2 Final Groupsigns	8.12.2.1 Identify 1 <sup>st</sup> Group of final Groupsigns	-ance, -ence, -sion, -tion, -less, -ness	Identifying final composite groupsigns	Awareness of final group of composite groupsigns
8.12.2.1 Identify 2 <sup>nd</sup> Group of final Groupsigns		-ound, -ong, -ount -ment			
8.12.3.1 Identify 3 <sup>rd</sup> Group of final Groupsigns.		-ful -ity -ation -ally u for us, w for will			

TOPIC	SUB - TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
8.13 Graphics Interpretation	8.13.1 Maps in Social and Development Studies	8.13.1.1 Describe Maps in Social and Development Studies	Locating features on maps: Map of Zambia Map of Africa Map of the World Zambia and its neighbours ( political, relief, physical)	Tracking of information on graphs	Creativity to daily living
	8.13.2 Diagrams, models and charts in Integrated Science	8.13.2.1 Discuss diagrams, models and charts in Integrated Science	The human skeleton, Different systems such as blood circulation		
	8.13.3 Diagrams and charts in various subjects	8.13.3.1 Discuss embossed diagrams in various subjects	Diagrams and charts in subjects taken by the learners	Showing ability of tracking and orientation	Creativity to daily living
8.14 Mathematical symbols	8.14.1 Integers	8.14.1.1 Demonstrate Braille symbols for Integers	Positive and negative signs	Identifying the number line	Application to problems on number lines
	8.15.1 Number Bases	8.15.1.1 Discuss symbols for Number Bases	Base 5 Base 10 Base 2	Identifying number bases	Appreciation of number bases
8.16 Graphics interpretation	8.16.1 Geometrical Shapes	8.16.1.1 Identify various geometrical shapes, including different lines	Rectangles, triangles etc, vertical, horizontal, and parallel	Tracking various geometrical shapes and lines	Appreciation of the various shapes

**Grade 9**

<b>Competences</b>	<b>General outcome</b>
Ability to apply braille in content subjects Ability to understand materials in society that are in braille	Write and read braille correctly

TOPIC	SUB - TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
9.1 General Rules	9.1.1 Contractions that may not be used	9.1.1.1 Discuss Contractions that may not be used	a) In bridging components of a compound: <u>car</u> horse <i>not</i> <u>car</u> horse b) bridging a prefix and remainder of a word: read <u>mi</u> t <i>not</i> <u>read</u> mit c) if it upsets pronunciation of syllables: ast <u>h</u> ma <i>not</i> <u>ast</u> hma d) end of braille line: pro-fessor	Selecting the right contraction	Applying rules to reading and writing
	9.1.2 Choice of Contractions	9.1.2.1 Explain Choice of Contractions	Greatest number of words: <u>thence</u> <i>not</i> <u>thence</u> or <u>thence</u> Upper Group sign in preference for a lower: <u>meddle</u> <i>not</i> <u>meddle</u> <u>effort</u> <i>not</i> <u>effort</u>	Identifying preference contractions	Awareness of preference contractions
		9.1.4.1 Identify words starting with 'cong'	'cong', contact <u>con</u> <i>not</i> <u>ong</u>	Identifying words with 'cong'	Problem solving in daily activities

TOPIC	SUB - TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
9.2 Composite Punctuation Signs	9.2.1 Punctuation Signs	9.2.1.1 Identify Punctuation Signs	- Compound quote signs (opening and closing quote), - Square Bracket Signs [ ] -Dash (-), double dash (----) -The Ellipsis (...), -The Asterisk (*) -The Dagger (†)	Identifying Punctuation Signs	Awareness of Punctuation Signs
9.4 Braille Compositi- on signs	9.4.1 Order of Braille composition signs	9.4.1.1 Discus Order of braille composition signs	Order: 1.Open bracket or open quote sign, 2. Italic sign, 3.Letter or numeral sign, 4. Apostrophe 5. Capital or decimal, 6. Accent	Ability to use the composition signs	Application in daily life
	9.4.2 The Numeral Sign	9.4.2.1 Discuss Special Print symbols	Ampersand (& The commercial “at” @  <u>and/or</u> Ditto mark (")	Ability to read and write special print symbols	

TOPIC	SUB - TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
	9.5.1 The Letter and Capital Signs	9.5.1.1 Discuss the Letter Sign to denote sections and sub-sections	Designations and Initials (a) (b) A B Roman Numbers v. v-x Sub-sections Xa (b)	Ability to identify the letter sign	Awareness of the letter sign
	9.6.1 The Italic Sign	9.6.1.1 Discuss The Italic Sign	The Italic sign E,g <i>The Times</i> - More than three words - and of the people	Ability to use the Italic Sign in a word or sentence	Problem solving and analysis in the use of italic sign
	9.7.1 The Accent and Line Signs; Poetry Layout	9.7.1.1 Discuss Accent and Line signs	The Accent sign The Line sign Poetry layout	Ability to write poetry correctly	Critical thinking in daily life
9.8 Proper Names and Print Abbreviations	9.8.1 Proper Names	9.8.1.1 Discuss Proper Names	Contractions of proper names: <u>Will More</u> <u>Robert Child</u>	Ability to identify contractions of proper nouns	Application to reading articles in daily life

TOPIC	SUB - TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
	9.8.2 Print Abbreviations	9.8.2.1 Discus Print Abbreviations	St. John's St Hon. Sec.	Ability to use print abbreviations	Awareness of print abbreviations
9.9 The use of the Capital Sign	9.9.1 Capital Sign	9.9.1.1 Discus the use of the Capital Sign in several settings	Capital letter, Capitalised word; JOHN, Capitalised passage, Capital sign with Print abbreviations, and Capital sign with capital roman number	Identifying the capital sign in different settings	Awareness of capital signs in different settings
9.10 Unit Abbreviations	9.10.1 Unit Abbreviations	9.10.1.1 Identify unit Abbreviations	3 ft. (3 feet), 12p (12 pence) £20 (20 pounds) \$26 (26 pounds)	Ability to use unit abbreviations	Problem solving involving unit abbreviations
9.11 Word Division	9.11.1 Word division	9.11.1.1 Explain general rule on Word division	Divde between syllables: imm-ly Un- <u>perc</u> vg etc Hyphenated words: well-behaved re-new	Ability to identify divided words	Awareness of divided words

TOPIC	SUB TOPIC	Specific Outcome	CONTENT		
			Knowledge	Skills	Values
9.12 Layout of Test papers	9.12.1 Headings	9.12.1.1 Discuss writing of Headings	Headings	Ability to write headings	Awareness of headings
	9.12.2 Paragraphs	9.12.1.1 Discuss writing of Paragraphs	Paragraphs	Identifying paragraphs in passages	Awareness of paragraphs in passages
	9.12.3 Page Information lines	9.12.3.1 Discuss writing of Page Information lines	Different types of lines	Ability to use page Information lines	Critical thinking of print abbreviations



**Scope and sequence chart for Grades 8 – 9**

<b>TOPIC</b>	<b>GRADE 8</b>	<b>GRADE 9</b>
Braille Equipment	Assembling of braille equipment	
Mathematical symbols	Basic computational symbols, Unit Abbreviations	
Braille Writing and Reading	Special signs Simple Upper Wordsigns	Contractions that may not be used Choice of contractions
Upper groupsigns	Five Upper Groupsigns Four Upper Groupsigns	Word division
Measurement???		
Information Computer Technology	The Computer Perkins Braille	
Braille Writing and Reading	Roman numerals	
Composite signs	Initial Wordsigns Final Groupsigns	Composite Punctuation signs Braille Composition signs Proper names and Print Abbreviations Layout of Test papers
Graphics Interpretation	Maps in Social and Development Studies Diagrams, models and charts in Integrated Science Diagrams and charts in various subjects	

