

# TERM THREE

## WEEKLY LESSON NOTES – B7

### WEEK 4

<b>Week Ending:</b> 7 <sup>th</sup> OCT, 2022	<b>DAY:</b>	<b>Subject:</b> Computing						
<b>Duration:</b> 50mins	<b>Strand:</b> Communication Networks							
<b>Class:</b> B7	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction to Programming						
<b>Content Standard:</b> B7.4.1.1.1 understanding of the concept of programming	<b>Indicator:</b> B7.4.1.1.1 Demonstrate the correct use of programming terminologies	<b>Lesson:</b> 1 of 2						
<b>Performance Indicator:</b> Learners can use of programming terminologies correctly		<b>Core Competencies:</b> CI 6.3: DL5.1:						
<b>Reference:</b> Computing Curriculum P.g. 19								
<b>Keywords:</b> Algorithm, source code, compiler, data type, variable, constant, conditional, array, loop, function, class								
<b>Activities For Learning &amp; Assessment</b>								
<table border="1"> <thead> <tr> <th style="width: 60%;">Activities For Learning &amp; Assessment</th> <th style="width: 20%;">Resources</th> <th style="width: 20%;">Progression</th> </tr> </thead> <tbody> <tr> <td> <p><b>Starter (5 mins)</b></p> <p>Ask learners questions to review what they already know about programming.</p> <ul style="list-style-type: none"> <li>What makes your computers and phone work?</li> <li>Do you know how your favorite game was developed?</li> </ul> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35 mins)</b></p> <p>Guide learners to list the terminologies relating to programming to aid recall. E.g. data type, variable, conditional array, etc.</p> <p>In groups, learners explain each of the terminologies listed above.</p> <ul style="list-style-type: none"> <li>Data type is a classification that specifies which type of value a variable has and what type of mathematical, relational or logical operations can be supplied to it without causing an error. Types of data include integral, floating point, character string and composite types</li> <li>Variable is a value that can change, depending on conditions or on information passed to the program.</li> <li>Loop is a sequence of instructions that is continually repeated until a certain condition is reached.</li> </ul> <p>Develop a puzzle or game that will aid understanding the concept of programming.</p> <p><u>Assessment</u> Explain the following as used in programming. i. constant,</p> </td> <td> <p>Pictures and videos</p> </td> <td> <p>List the programming terminologies in alphabetical order or grouping to aid recall.</p> <p>Explain each of the terminologies.</p> </td> </tr> </tbody> </table>			Activities For Learning & Assessment	Resources	Progression	<p><b>Starter (5 mins)</b></p> <p>Ask learners questions to review what they already know about programming.</p> <ul style="list-style-type: none"> <li>What makes your computers and phone work?</li> <li>Do you know how your favorite game was developed?</li> </ul> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35 mins)</b></p> <p>Guide learners to list the terminologies relating to programming to aid recall. E.g. data type, variable, conditional array, etc.</p> <p>In groups, learners explain each of the terminologies listed above.</p> <ul style="list-style-type: none"> <li>Data type is a classification that specifies which type of value a variable has and what type of mathematical, relational or logical operations can be supplied to it without causing an error. Types of data include integral, floating point, character string and composite types</li> <li>Variable is a value that can change, depending on conditions or on information passed to the program.</li> <li>Loop is a sequence of instructions that is continually repeated until a certain condition is reached.</li> </ul> <p>Develop a puzzle or game that will aid understanding the concept of programming.</p> <p><u>Assessment</u> Explain the following as used in programming. i. constant,</p>	<p>Pictures and videos</p>	<p>List the programming terminologies in alphabetical order or grouping to aid recall.</p> <p>Explain each of the terminologies.</p>
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ii. algorithm, iii. compiler  <b>Reflection (10 mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.  Take feedback from learners and summarize the lesson.		
<b>Homework/Project Work/Community Engagement Suggestions</b>		
<ul style="list-style-type: none"> <li>List and explain, with practical examples, the terminologies relating to programming in alphabetical order</li> </ul>		
<b>Cross-Curriculum Links/Cross-Cutting Issues</b>		
None		
<b>Potential Misconceptions/Student Learning Difficulties</b>		
Learners may not easily understand the concepts and terminologies under programming		

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<b>Content Standard:</b> B7.4.1.1.1 understanding of the concept of programming	<b>Indicator:</b> B7.4.1.1.2 Demonstrate understanding in the use of data types (e.g. float, integer, string, char, etc.)	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can use of programming terminologies correctly		<b>Core Competencies:</b> CI 6.3: DL5.1:
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<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5 mins)</b></p> <p>Using questions and answers, revise the terminologies of Programming with learners.</p> <ul style="list-style-type: none"> <li>Define the Following; <ol style="list-style-type: none"> <li>Algorithm</li> <li>Source Code</li> <li>Compiler</li> </ol> </li> </ul> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35 mins)</b></p> <p>Briefly explain what data type is.</p> <p>Guide learners to identify and list the various data types such as float, integer, string, char, etc.</p> <p>In groups, learners explain and give uses of each of the data types listed above.</p> <ul style="list-style-type: none"> <li>Integer (int): Numeric data type for numbers without fractions. Example: All whole numbers e.g. 50, 400, 30 etc.</li> <li>Floating Point (float): Numeric data type for numbers with fractions. Example: All numbers with points in them e.g. 101.1, 0.7, 405.8 etc.</li> <li>String (str or text): Sequence of characters, digits. Example: hello, 0244443344 etc.</li> <li>Character (char): Single letter, digit, punctuation mark, symbol, or blank space. Example: a, I, !</li> </ul> <p>In Groups, learners develop key questions around daily activities to identify the data type. For example, the first name of your best friend is written as a string data type</p> <p><b>Reflection (10 mins)</b></p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p>	<p>Pictures and videos</p>	<p>Learners should be able to</p> <ol style="list-style-type: none"> <li>Identify the various data types.</li> <li>Explain what data types are.</li> <li>Explain the function and importance of data types.</li> </ol>

Take feedback from learners and summarize the lesson.		
<b>Homework/Project Work/Community Engagement Suggestions</b>		
<ul style="list-style-type: none"><li>• Develop three (3) questions based on daily activities to identify the data types</li></ul>		
<b>Cross-Curriculum Links/Cross-Cutting Issues</b>		
None		
<b>Potential Misconceptions/Student Learning Difficulties</b>		
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