DIGITAL CONTENT FOR TEACHER SUPPORT

Module 4	Assessment in CBC
Session 4	Linking real world to teaching and learning
Session Code	TS 4.4
Video Title	Linking teaching and learning to real-life situations
Online Link to Video	https://ele.ncdc.go.ug/course/view.php?id=39
Full Access	www.ncdc.go.ug
Assessment Available	Yes
Time Commitment	60 minutes
Other Relevant materials	Video, pdf, slides, website links
Key words	competency-based learning, Scenario-based learning, scenario-based activity, learner-centred, real-life

1) Session Overview

This session highlights the focus of competency-based learning. It explores the importance of linking teaching and learning to real-life. You will discover practical strategies such as use of scenarios in teaching and learning to enhance learner conceptualisation of real-life situations. It will enable you help the learner to transfer learning from the classroom to the community. The guidance in this session is supported by two main theories; Constructivism theory and Kolb's Experiential Learning Theory.

Enjoy the reading.

2) Session Outcomes

By the end of this session, you will be able to;

i) understand the benefits of linking teaching and learning to real-life situations.

ii) create learning activities that enable learners to link concepts learnt in your subject to real-life situations.

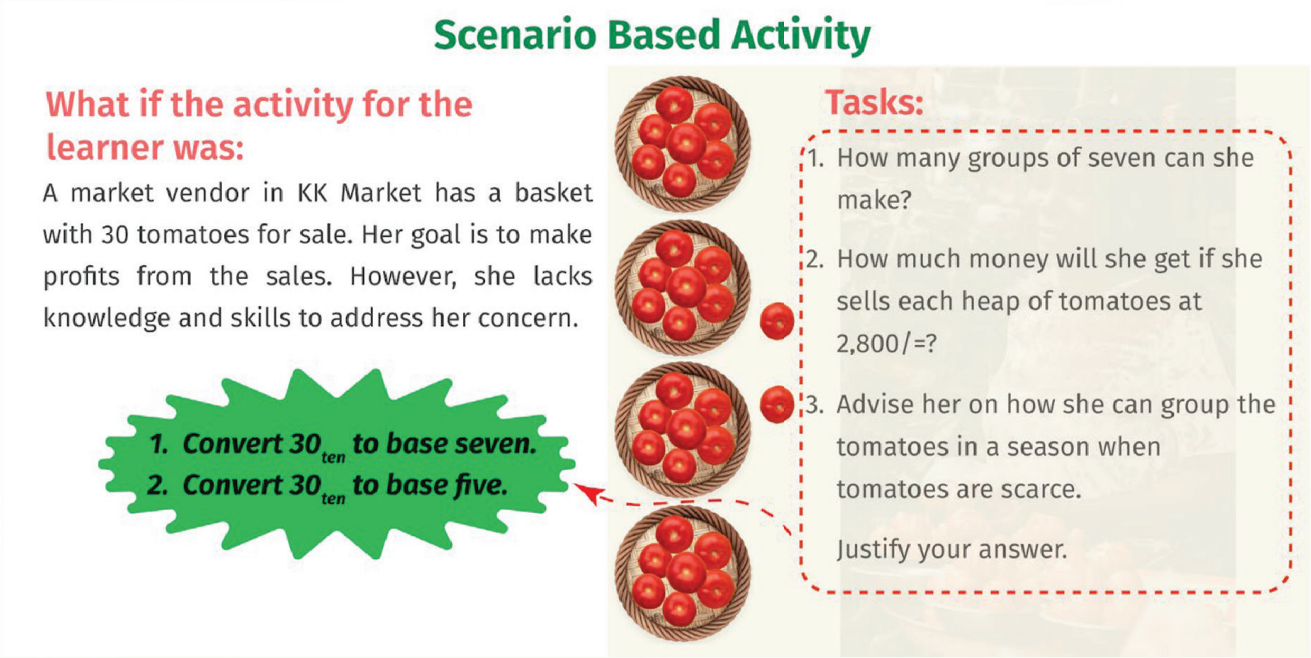
iii) develop skills in creating and using scenario-based learning activities.

Example One

Look at the following examples of tasks used in a knowledge-based-curriculum:

1) Convert 30_{ten} to base seven.
2) Convert 30_{ten} to base five.

Instead of merely tasking learners to convert from one base to another, competency-based teaching and learning relates these concepts to real-life situations as shown in Figure 1.



When answering Task 1, the learner is converting from base ten to base seven. The learner will figure out the number of heaps created and the remainders.

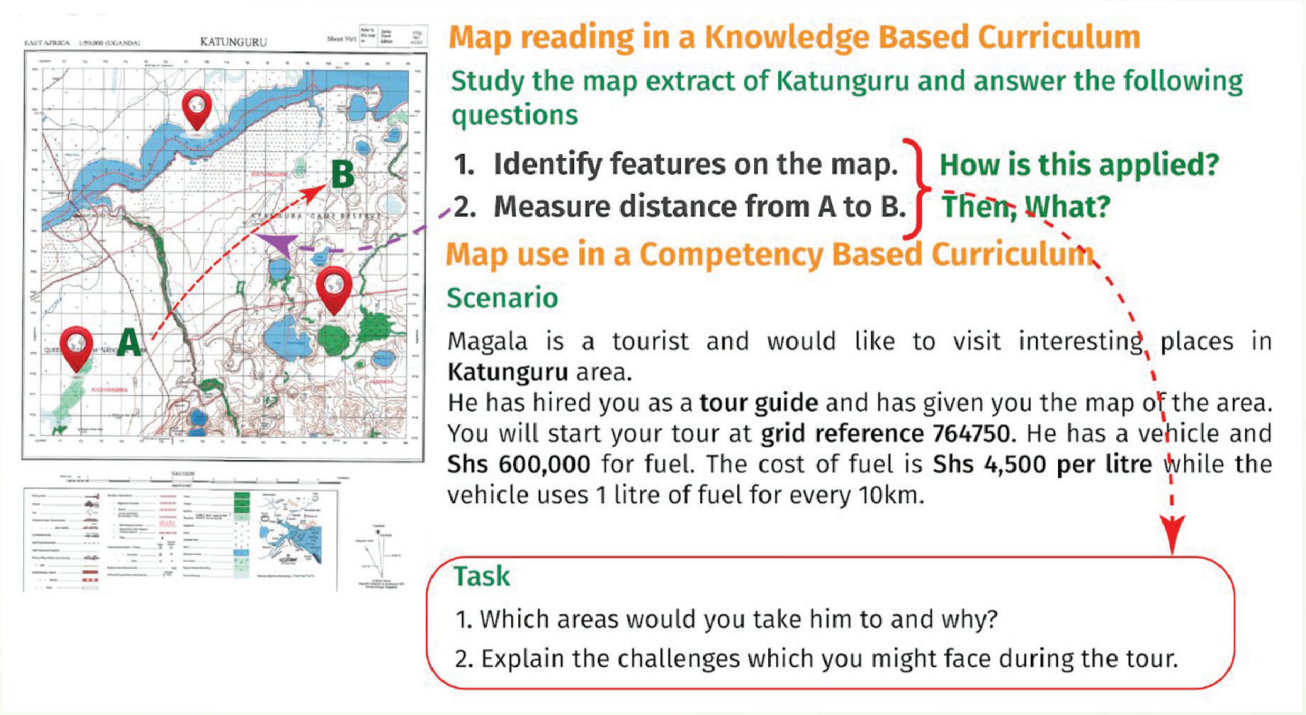
While answering Task 2, the learner is expected to know that tomatoes are more expensive during periods of scarcity and the price per heap should stay constant. What changes are the numbers per heap. The learner needs to show that the profits made when tomatoes are sold in heaps of seven are higher than those made when heaps containing more than seven tomatoes are sold.

The learner will use heaps of discrete numbers to compute the amount of money the market vendor gets. How they treat the remainder is a point of interest.

To answer Task 3, the learner should know that making heaps with fewer tomatoes results in more heaps, hence more money. Then he/she can guide on heaping in 6s, 5s or 4s.

This practical approach reflects the concept of "number bases" in mathematics, demonstrating its real-world application.

Example Two



As you have seen, competency-based learning emphasises the practical application of knowledge contrary to the conventional teaching and learning methods which focus on theoretical knowledge and **rote memorisation**. Competency-based teaching and learning aims to enhance learner engagement, achievement of learning outcomes, and skill development by aligning educational practices with industry standards.

3) Benefits of Competency-Based Learning

i) Develops problem-solving abilities of the learners for real-life problems.

ii) Avails learning experiences that stick with learners.

iii) Enhances critical thinking and decision-making skills.

iv) Increases engagement and motivation.

v) Bridges the gap between theory and practice.

vi) Encourages active learning and deeper understanding.

vii) Supports competency-based and problem-based learning approaches.

4) Characteristics of Competency-based Learning

i) **Realistic and Contextual** – Situations in learning activities reflect real-world challenges relevant to the learner.
ii) **Problem-Solving Oriented** – A learner analyses information to make informed decisions in order to solve problems.
iii) **Learner-Centred** – Focuses on learner's active participation and engagement rather than passive learning.
iv) **Decision-Driven** – Requires a learner to make decisions using acquired knowledge and skills.
v) **Goal-Oriented** – Designed with clear learning outcomes and competencies in mind.
vi) **Reflective and Feedback-Driven** – Provides opportunities for learners to receive feedback and reflect on their decisions.
vii) **Flexible and Adaptable** – Can be adjusted to different skill levels, disciplines, and learning environments.
viii) **Encourages Collaboration** – This may involve teamwork and discussions to solve the presented challenge.

5) How to Create Scenarios

Creating scenarios requires careful planning to ensure they are realistic, engaging, and aligned with learning outcomes. Below are suggested steps you can follow:

i) Define the learning outcome. Carefully study the learning outcomes in the syllabus and identify what the learner must be able to do at the end of the lesson.

ii) Identify contexts within the environment that relate to what you want the learner to do. The context should mirror actual problems/contexts a learner may face outside the classroom.

iii) Create an activity that links the intended learning outcome to the contextual problem with clear tasks to the learner.

6) Conclusion

Competency-Based Learning is a powerful instructional approach that enhances learner engagement, critical thinking, and real-world problem-solving skills. You can create meaningful experiences that bridge the gap between theory and practice by integrating realistic scenarios into the learning process.

Effective implementation of competency-based teaching and learning requires careful planning, alignment with learning outcomes, and thoughtful assessment strategies to ensure learners achieve desired competencies. Despite challenges such as time constraints and resource limitations, competency-based teaching and learning can successfully adapt to various educational contexts with the right strategies.

By embracing the CBC, educators can foster more profound learning experiences, better prepare learners for real-world challenges, and enhance the overall effectiveness of teaching and learning.

FURTHER READING

Theories that Support Competency-based Learning

a) **Constructivism**

Constructivism theory in Scenario-Based Learning (SBL) emphasizes that a learner actively constructs knowledge through real-life experiences, problem-solving, and reflection. Instead of passively receiving information, the learner engages in interactive scenarios, make decisions, and learn from the feedback. This approach fosters critical thinking, innovativeness and immediate feedback, allowing the learner to gain deeper understanding and related skills. By solving real-life problems, SBL aligns with constructivist principles, ensuring that knowledge is actively constructed, contextually relevant, with the learner gaining higher order thinking skills (HOTS).

b) **Kolb's Experiential Learning theory**

Kolb's Experiential Learning Theory (ELT) aligns with Scenario-Based Learning (SBL) by ensuring that the learner is guided through a four-stage cycle:

i) Concrete Experience (engaging a learner in real-life problem situations),
ii) Reflective Observation (allowing the learner to analyse the outcomes of their own decisions through feedback),
iii) Abstract Conceptualization (supporting the learner to relate their own experiences to learnt knowledge), and
iv) Active Experimentation (allowing the learner to apply the learnt knowledge and skills in new problem situations).

SBL uses the above cycle to promote development of competences and generic skills.

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